

2012 MIS LATE MODELS

1-17-2012

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.

MIS may change any rule at any time in an effort to reduce the cost of racing, maintain equal competition, or improve safety.

INDEX:

1. SEATS
2. SAFETY BELTS
3. DRIVING COMPARTMENT
4. DRIVER'S ATTIRE
5. APPEARANCE
6. WHEELBASE AND TREAD WIDTH
7. CHASSIS
8. ROLL CAGE
9. SUSPENSION
10. SPINDLES AND HUBS
11. STEERING
12. REAR END
13. BRAKES
14. ENGINE LOCATION
15. ENGINES
16. EXHAUST
17. CLUTCH, TRANSMISSION, DRIVESHAFT
18. RADIATOR
19. FUEL AND FUEL CELL
20. BODY AND APPEARANCE
21. WEIGHT
22. WHEELS
23. TIRES
24. RADIOS
25. TOW HOOKS
26. BATTERY
27. TRANSPONDER
28. CHAMPIONSHIP POINTS
29. TEAM DRIVING
30. MIS MEMBERSHIP

1. SEATS

Approved aluminum driver's seat required. Seat must be fastened to frame/roll cage and located to give adequate distance from driver's arm to door bars. Shoulder supports on right and left sides of seat and head support on right are required. Full containment seats recommended.

2. SAFETY BELTS

Minimum 3-inch wide lap belt, 3-inch 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.

Belts must be dated **2008** or newer. 6-point belts (double crotch strap) are recommended.

3. DRIVING COMPARTMENT

Cockpit must be completely sealed off from engine compartment and fuel cell.

Padding required around driver including steering post

Securely mounted fully charged fire extinguisher with visible dial type gauge required, (fire systems recommended).

Ribbon or mesh type window net required, with belt buckle release located at top/front.

Clearly labeled push-pull or toggle type kill switch accessible from both sides of car required.

No suspension components including stabilizer bar can be adjustable from the driving compartment.

4. DRIVER'S ATTIRE

Complete approved fire retardant driving suit and gloves required. Eye protection and a Snell SA-**2005** (SFI 31.1 **2005**) helmet or newer required. SFI-38.1 Head and Neck restraints **mandatory**. Fireproof shoes recommended. **MIS officials will inspect items related to safety, but ultimately it is the responsibility of the driver to monitor, maintain and update his safety equipment.**

5. APPEARANCE

A professional appearing paint job in an attractive color required. All lettering must be professional and in good taste. Numbers: 18" on both doors, and roof, readable from the right side. **MIS wants to promote our drivers as much as we can, and to aid in this process we recommend that the driver's name appear on the rocker panels.**

1" square rub rails allowed, mounted within 3" of ends & ends must be tapered and capped.

6. WHEELBASE & TREAD WIDTH

Min. wheelbase 104". Max. tread width 65", measured center to center of tires at spindle height (front and rear).

7. CHASSIS

Tube or stock stub allowed. Frame rails must be a min. 2" x 3" x .125" wall tubing. Min. ground clearance 3 1/2" with driver.

8. ROLL CAGE

All roll cage tubing must be at least 1 3/4" x .090" wall. Welded gussets required on all joints. At least four evenly spaced horizontal door bars required on left, and three on right side. X-configuration on right side, counts as one bar.

All door bars must be mounted to the frame rails and the main roll cage uprights. Door bars must be connected with a minimum of two equally spaced vertical tubes. Left side door bar deflector plates of at least 1/8" steel required. Diagonal bar in top hoop required. Floor pan under driver must be heavy-gauge steel.

9. SUSPENSION

Conventionally mounted 5" springs or coil over type suspensions.

Steel or aluminum bodied, non-adjustable shocks, FROM LIST BELOW OF APPROVED SHOCKS:

AFCO: SERIES 13T, R, S, 21

BILSTEIN: SERIES SZ, SN

CARRERA: SERIES 62, 65, 67

PRO: SERIES A, AC, TA (STEEL), PG

QA1: SERIES 21, 50

ARS: SERIES 2000

GENESIS: SERIES GSO

INTEGRA: SERIES 431

Manufacturers components must be used, valving optional. Post race shock disassembly is the responsibility of the owner/crew chief. Bring tools or make arrangements.

No bump-stops or coil bind set-ups. Maximum allowed is one spring rubber per spring. Maximum of one shock / spring per wheel. Rear suspension must be solidly mounted with heim joints only, (no rubber bushings). No lift bar, fifth coil or other spring-loaded/hydraulic suspension device allowed. No rear stabilizer bars.

10. SPINDLES & HUBS

Any steel spindle allowed. Aftermarket hubs with 5/8" wheel studs required, long enough for threads to show on outside of lug nuts. No gun-drilled studs permitted. No weight penalty for wide five hubs.

11. STEERING

Rack & Pinion or steering box with center link style only. No electric power steering units. Quick release steering wheel hub required. Steering column must incorporate a minimum of two U-Joints. Collapsible steering shaft recommended.

12. REAR END

Stock or rear spur gear type quick change units with steel tubes: no mini type quick change, maximum camber 1/2 degree. Spool, Detroit Locker (ratchet type), and Torque Sensing, differentials are permitted. One-piece straight spline drive plates only. Drain plugs must be safety wired. **Magnetic steel axles only.**

13. BRAKES

Four wheel brakes required at all times. Single, dual, or four piston (steel or aluminum) calipers with maximum retail price of \$190. Maximum diameter 12 1/4" rotors. No drilling or drilled rotors permitted. Self centering or floating rotors are NOT permitted. Rotors must be solidly/rigidly bolted. No floating caliper brackets, ABS units or brake recirculation systems. Only one brake bias adjusting unit per car.

14. ENGINE LOCATION

GM engines must be located so that the center of the furthest forward spark plug hole is no more than 2" behind the front axle centerline. Ford and Chrysler allowed 4" engine set back, as measured above. Crankshaft centerline: 10" minimum ground clearance.

15. ENGINES

Limited Concept Engine-

Two valves per cylinder. No aluminum blocks or heads. GM & Ford - 362 CID maximum, Chrysler - 373 CID maximum, (add 20 lbs for cid over 362).

All engines must meet the following specifications regardless of manufacturer: Stock or stock replacement cast iron unaltered heads with factory valve angles (no angle milling, porting, polishing, acid dipping allowed). GM Bowtie numbers 14011058, 10134392, (casting number 14011034 and 12480034), World Products Sportsman II numbers 011150, 011250 allowed. Ford 351N and 352N heads, World Products Windsor Sr. 053040 allowed. Chrysler 5249769 and 4529446 heads allowed. Casting numbers must be visible on all heads. Gasket matching not permitted. Maximum 2.02-inch intake and 1.6-inch exhaust valves required. Flat top pistons required. A minimum of zero deck height required. 10.8 to one maximum compression ratio. Connecting rods must be magnetic steel with rod journal minimum diameter 1.900".

Oil pan minimum depth 6.5". 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. Valve spring retainers are the only titanium parts allowed. No radius edge lifters allowed. Lifters must be able to rotate in their bores. No roller or mushroom cam/lifters. Maximum valve lift - .600" (measured at retainer). OEM style rocker arm mounting required. Firing order may not be altered. Ignition system may not be computerized, programmable or have memory circuits. No magnetos, crank trigger, multiple coil or programmable ignition systems allowed. Production type steel crankshaft with normal configuration counter weights. No dry-sump or vacuum systems of any kind allowed. External single stage oil pump allowed on Ford engines. OEM type, mechanical fuel pump, in original location, required. If beehive valve springs are used, the competitor may be required to switch valve springs on two valves at time of inspection to conventional springs for valve angle measurements.

Carburetor: Holley 4412-2 bbl. Holley 4412 Carburetor Rework Guidelines:

Body of Carbs: No polishing, grinding, or drilling of holes allowed. Gasket surfaces may be machined for improved sealing. The choke may be removed, but all screw holes must be permanently sealed. Choke horn may not be removed. Boosters may not be changed, including no additional holes. Height, size, and shape must remain standard and unaltered. Venturi area must not be altered in any manner. Casting ring must not be removed. Base plate must not be altered in shape or size. Butterflies must not be thinned or tapered. Screw ends may be cut even with shafts, but screw heads must remain standard. Throttle shafts must remain standard and must not be thinned or cut in any manner. Any attempt to pull outside air other than straight down through the venture is not permitted. No aftermarket metering blocks

permitted. Jets may be changed. No dial-a-jet devices. No addition of any material, such as epoxy, may be added to carb or parts except to seal vacated external screw holes. EXCEPTION: epoxy allowed on boosters of 4412-2 bbl at main body. Double throttle return springs required. Air cleaner required. Air boxes allowed with cowl inlet only.

Carb Adaptor: 1 5/8" max thickness with gaskets. Original orientation of carb to engine required. Bores must be straight (not tapered, angled beveled or grooved). No part of carb adaptor may protrude into intake manifold. If spacer/adaptor consists of more than one piece, all holes in each piece must match in size and configuration.

Intake Manifold: Edelbrock Victor Jr. 2975 (GM), 2915, 2920 (Chrysler), 2921, 2980, 2981 (Ford). Plenum and port configuration must remain as-produced. No porting modifications, including gasket matching. No spacer/adaptor plates between intake manifold and cylinder heads.

Crate Engine: Ford, Chevy, and Mopar crate engines allowed. Engine set back for each will be as stated above, 2" for Chevy, 4" for others. Carburetor: Holley 650-HP P/N 80541-1 required. No modifications allowed, no epoxy on boosters. Ford crate engines must run 1.50 to 1 ratio rocker arms. GM part number 88958604, must be used as produced. Only permitted updates are 1.6 rockers, 1 5/8" tall carb spacer (as above), and small balancer.

Certification and sealing will be required from REDI in calendar year 2010, 2011 or 2012, phone 608-276-5554. Cost for certification at time of printing is \$425 plus gas, and includes fresh oil, filter & new spark plugs (all engines will be run with spec spark plug, REDI carb and gas.) Additionally, new dist cap, rotor and plug wires may be installed and billed for if needed. **Maximum compression ratio allowed is 9.6 to 1.**

All crate engines: may not be altered from factory specs. Any evidence of tampering with engine components will result in disqualification, confiscation, fine, and suspension for balance of season. Tech staff reserves the right to impound motors for inspection or dyno testing. Factory/Certification Seals may be removed by Officials for tech purposes, allowing for more in-depth technical inspection throughout the season. **New GM crate motors purchased under MIS guidelines (inspected and sealed prior to delivery) will not need to be certified.**

LS Spec Engine: Wegner Automotive Research 5.3L engine only, must be used as produced. Maximum 3 1/2" set back as measured above. Must use 4412 2 bbl carb with adapter/spacer plate supplied in engine package. This engine package will be run on a trial basis, with base weight of 2850 lbs. Weight or other parameters may be adjusted during the racing season to maintain competitive balance.

16. EXHAUST

Headers allowed on all engines, maximum retail price \$650. No Tri-Y Headers or Merge-Collectors allowed on any engine. NO custom, one of a kind or homemade headers. Cast iron manifolds allowed with no alterations. Exhaust may remain under car body. If so it must exit behind driver, beneath car, pointing downward. Exhaust may exit out right side door as follows: must exit rear of driver, must not point up, must be no more than 12" off the ground, and end must be braced flush to body panel in a way to prevent it becoming a tire cutting hazard. All cars 95-decibel maximum.

17. CLUTCH, TRANSMISSION & DRIVESHAFT

Standard transmission with all gears operating required. Made-for-racing clutch required, two disk 5 1/2" minimum. Carbon clutch not permitted. Internal clutch transmissions not allowed. Minimum diameter of driveshaft is 2 1/2", with safety hoop required on front half. Driveshaft must be painted a bright reflective color. **No shifting allowed on restarts.**

18. RADIATOR/COOLING

Metal radiator mounted in front of engine, between frame horns. Fan protection and overflow tank located in engine compartment required. Water pump must be stock type in stock location. Antifreeze is not allowed.

19. FUEL & FUEL CELL

Fuel cell complete with 1/8" steel can, bladder, foam and rollover valve required. All vents must be valved to eliminate leakage. Fuel cell must be mounted behind rear axle, between frame rails. Rear protection or ASA bar must extend below bumper or frame, be lower than bottom of cell, and be braced back to main frame. Bottom of fuel cell must be min. 10" from the ground. Filler spout: must be accessed through deck lid, may be extended, but not connected to bodywork. Aeroquip or equivalent gas line required, must be located outside driver's compartment in protected location. Gasoline only, must meet specific gravity of manufacturer. Over tail chassis: max 15 gal. cell (25" x 18" x 10")

20. BODY & APPEARANCE

Five Star, ARP or equivalent only. No Mustang or Camaro bodies allowed.

Minimum roof height 47". Spoiler: Single plane, 5" (measured from deck plane) x 60" (measured across rear) max.

Deck height 34.5" max. Minimum ground clearance including nose and rocker panel is 4" with driver.

All windows must be of Lexan. 12" max vent (wing) window.

Weight penalties may be assessed for bodies not conforming to Five Star guidelines, dimensions, and/or templates.

Hoods that utilize hinges must fold back all the way back to the windshield. Cam lock hood supports that hold the hood at 45 degree angle are not allowed (interfere with tech and wrecker personnel).

21. WEIGHT

Base weight for all cars - 2850 lbs., 49% min. front axle, 42% min. right side, with driver (% rules apply at all times).

GM Crate Engine and no updates - **2750** lbs

GM Crate Engine and any updates - **2800** lbs

Ford and Mopar crate engines – 2825 lbs (may be adjusted up during the season)

Gas allowance for Heats and Features is one pound per lap.

Ballast must be painted white and lettered with car number.

22. WHEELS

Aftermarket made for racing, steel wheels required. 15"x 8" maximum. Tire pressure bleeders: not allowed, remove from wheels, weld holes shut or add another valve stem. Bleeders discovered at the track, will require wheel removal and installation of 2cd valve stem. This may happen at any time, and may interfere with your hot lap time.

23. TIRES

The Hoosier F-75 right side and F-53 left side are the only tires allowed. Chemical treatment (softening) is not allowed.

The tire program is based on a bank system and two tires per night as follows:

1. Prior to weekly racing you may purchase as many tires as you like.
2. Your tire bank will start at our first race, and consist of 4 or 6 tires of your choosing (new or used), you must submit tire numbers. At the second week, you can add 4 or 2 more tires. This means that at the second event, your tire bank will have a maximum of 8 tires. After that at every week of racing, you are entitled to add two more tires to your bank.
3. At purchase, tire numbers will be recorded and entered into your bank. You do not need to run your bank tires for hot laps, but you must run bank tires for qualifying and racing.
4. You do not need to run the tires the week you purchase them.
5. The tires you qualify on will be the tires you run for all the racing events that night, and must be in your tire bank. These tires/ numbers will be declared on your tire card, and turned in to the tech building before qualifying. Tires on your card that do not match your bank will result in loss of 25 points and start at rear of all events that night.
6. If after any racing event it is discovered that a tire you ran does not match your tire card, lose of all points and money will result.
7. When someone shows up after the season has started, they will be allowed a maximum of 4 new or used tires, and will start their tire bank at point with those four tires.
8. Drivers changing cars must run tires from their bank.

24. RADIOS: All radio frequencies must be registered with MIS. All drivers must have a spotter in the designated spotter area during all racing events. This spotter must be labeled with car number or name.

25. TOW HOOKS: Tow hooks on front and rear required.

26. BATTERY: 12-volt systems max. Batteries must be securely mounted ahead of rear axle, away from fuel cell and lines. Batteries in driving compartment not allowed. Battery (negative post) disconnect switch recommended.

27. TRANSPONDER: Required. Install no more than 12" above track surface, with unobstructed path to track, and arrow pointing down. Location is mandatory: forward from center of rear axle to center of transponder is 25 1/2".

28. CHAMPIONSHIP POINTS: Your final finishing position will be determined after all applicable cars have passed thru tech. Drivers finishing behind disqualified drivers will have their finishing position adjusted upward, and points and money will be awarded based on that result.

29. TEAM DRIVING: will be allowed, maximum of two drivers per team. Championship points will be awarded to this team using the same rules as for individual driver teams. Teams wishing to do this must register as such with the promoter before the third point night of the racing season. Each driver must race a minimum of three nights.

30. MIS MEMBERSHIP: Awards at year end are based on championship points earned throughout the racing season. To be eligible for a championship and / or point fund money, a driver must purchase a MIS membership and compete a minimum of 75% of the points events. Cost for this is \$100 for Late Model drivers, and also grants you a \$5 discount on pit passes. Crew members can also purchase a membership for \$50, which also grants you a \$5 discount on pit passes.