



2020 Midwest Modified Rules

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Quick List 2020 Updates: Quick Change Rear End Allowed

- 1 Communications
 - 1.1 All competitors must have a RACECEIVER 1600 in car radio to compete at the Raceway.
- 2 Frames
 - 2.1 Factory production complete full American passenger frames only.
 - 2.2 Frame rails must extend to a point beyond the base of driver's seat.
 - 2.3 Rear clip may be fabricated out of tubing.
 - 2.4 Front and rear pick-up loop required; otherwise bumpers or other pick-up point will be used.
- 3 Bodies
 - 3.1 See IMCA Northern SportMod Body Dimensions.
 - 3.1.1 **Exceptions:** No spoilers, no spoiler sides, no MD3 noses, no nose wings.
 - 3.2 Window opening must be a minimum of at least 12 inches on all 4 corners.
 - 3.3 Body may extend 1" past the tire on both sides. Max. deck height 39 inches,
 - 3.4 No reverse hood rake
- 4 Wheel Base
 - 4.1 Minimum 108 inches, Maximum 112 inches both sides.
- 5 Roll Cage
 - 5.1 Must consist of continuous hoops not less than one and one-half inches outside diameter and must have a wall thickness of at least .095 inch.
 - 5.2 Must be frame mounted in at least six (6) places.
 - 5.2.1 Body mounted roll cages not acceptable.
 - 5.3 Must consist of configuration of front and rear hoops connected by tubing on sides or side hoops in a manner deemed acceptable by the inspector.
 - 5.4 Driver's head must not protrude above cage with helmet on while strapped in driver's seat.
 - 5.5 Roll cage must have a 3/16-inch inspection hole in non-critical area.
 - 5.6 Must have at least three (3) horizontal bars at driver's door welded to front and rear of roll cage members.
- 6 Weight
 - 6.1 Minimum weight is 2500 pounds with driver after race. No tolerance.
 - 6.2 All lead weight must be mounted securely, with 2 weight clamps & 1/2 inch bolts.
 - 6.3 Lead must be painted white & have your car number on the lead.
 - 6.4 Cars running aftermarket transmissions must weigh 2550 after race with driver and must have 50 pounds of added weight mounted in front of mid plate.
- 7 Wheels
 - 7.1 Wheel width must not exceed eight (8) inches.
 - 7.2 No aluminum wheels.
 - 7.3 Bead locks allowed on right rear only.
 - 7.4 Any foam or plastic type mud cover allowed on right side wheels.
 - 7.5 Inner mud plug only on L.R.
- 8 Tires
 - 8.1 American Racer G-60 only. Tires may be grooved & siped.
- 9 Differential / Rear End
 - 9.1 Any passenger car type or truck rear end may be used.
 - 9.2 Quick-change rear ends allowed.
 - 9.3 Floater rear ends are allowed.
 - 9.4 Rear end must be non-cambered.
 - 9.5 Rear end must be centered in chassis.
 - 9.6 Safety hubs allowed.
 - 9.7 Inspection hole in housing required.
 - 9.8 Solid steel axles and one piece drive flanges only.



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10 Brakes

- 10.1 Disc or drum brakes may be used front and rear.
- 10.2 No aluminum disc or brake calipers allowed.
- 10.3 Brakes must be operational on all four (4) wheels
 - 10.3.1 Must lock up all four wheels during inspection.

11 Fuel System

- 11.1 Gasoline only.
- 11.2 No oxygen bearing additives.
- 11.3 No pressurized fuel systems.
- 11.4 No electric fuel pumps
- 11.5 Fuel cells mandatory.
 - 11.5.1 Maximum capacity of 22 gallons.
 - 11.5.2 Must have new style screw on lip with flapper in top.
 - 11.5.3 Fuel cells must be encased in an approved metal container of no less than 20-gauge steel or 1/8 inch aluminum.
 - 11.5.4 Must be mounted using four, two (2") inch by 1/8" inch metal straps, two in each direction.
 - 11.5.5 Fuel cells must be mounted between frame rails as far forward as possible
 - 11.5.6 Bumper must be equipped with a drag loop extending below bottom of the cell.

12 Bumpers

- 12.1 Bumpers must be used front and rear.
- 12.2 Front bumper must be mounted on frame end and be of a semicircle configuration with the bottom loop parallel to the ground.
- 12.3 Front bumper must be ten (10") inches high from bottom bar to top of top bar.
- 12.4 Material must be steel pipe and have minimum outer diameter of one and one-quarter inch, and maximum outer diameter of two-inch.
- 12.5 Rear bumpers may be constructed of pipe or square tubing, but must not have sharp edges.
- 12.6 Rear bumpers and nerf bars must not extend beyond width of rear tire.
- 12.7 Bumpers must be able to support car when lifted by wrecker.

13 Seat and Seat Belts

- 13.1 Racing seat mandatory.
- 13.2 All cars must be equipped with an approved quick release type seat belt and shoulder harness securely fastened to frame and roll cage.
- 13.3 Seat belt material should be at least three (3) inches wide AND NOT BE OLDER THAN 2 YEARS.
- 13.4 Seat and steering wheel may be located to suit driver's taste, but must be kept on left side of car. No center steer.

14 Engine Location

- 14.1 Rear of engine (bellhousing flange) must be at least 72 inches forward from the centerline of the rear axle. The center of the crankshaft must be within two and one-half (2 1/2) inches of centerline of the ball joints.

15 Engine

- 15.1 Stock motor must be same make as car.
- 15.2 Maximum size of engine block:
 - 15.2.1 350 GM .060 max.
 - 15.2.2 351 Windsor Ford .060 max.
 - 15.2.3 360 Chrysler .060 max
 - 15.2.4 Smaller engines allowed
- 15.3 No stroker engines allowed.
- 15.4 OEM firing orders cannot be changed
- 15.5 No B Hive or high performance valve springs allowed
- 15.6 9 to 1 Maximum compression allowed.
- 15.7 Must always pull 15 inches of vacuum at 1000 rpm.
 - 15.7.1.1 No tolerance.
- 15.8 Heads
 - 15.8.1 Stock heads, no performance heads (no double humps, no 292,041 castings, no LT1, no Bowtie, no center bolt valve cover, or aftermarket allowed.)
 - 15.8.2 76 c.c. minimum
 - 15.8.3 No porting or polishing,



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- 15.8.4 No screw in studs with shoulder
- 15.8.5 No guide plates,
- 15.8.6 194/160 valves max. No 202/160 allowed.
- 15.8.7 305 heads on 305 only.
- 15.9 Camshaft
 - 15.9.1 Hydraulic camshafts only
 - 15.9.2 430 maximum lift at valve,
 - 15.9.3 Stock 1.5 ratio rockers only
 - 15.9.4 No poly locks, No roller cams, no roller tip or roller rockers allowed.
- 15.10 Lifters
 - 15.10.1 Stock type. No Rhoades, anti-pump-up, high revolution, etc.
- 15.11 Crankshaft and Rods
 - 15.11.1 Aftermarket (Eagle, SCAT, ect.) stock type ok
 - 15.11.2 No lightening of any kind to crankshaft
 - 15.11.3 3.480" stroke max.
 - 15.11.4 Stock appearing, no light weight, no h-beam rods.
 - 15.11.5 Press fit rods only
 - 15.11.6 No floating rods
 - 15.11.7 Maximum 5.7" rod on G.M.
- 15.12 Pistons-
 - 15.12.1 Flat top 4 valve relief only
 - 15.12.2 Hypereutectic 4 valve relief pistons ok.
 - 15.12.3 No high performance parts allowed. (JE, Ross etc.)
- 15.13 Balancer
 - 15.13.1 No Modifying of Harmonic Balancer.
 - 15.13.2 8.9 lbs. min.
 - 15.13.3 Harmonic balancer on G.M. min. 8"
- 15.14 Intake manifold
 - 15.14.1 These are the only intakes allowed
 - 15.14.1.1 GM 2101 or 2701, Ford 2121 or 2181, Chrysler 2176 or 3776
 - 15.14.2 Intake must be unaltered.
- 16 Shocks
 - 16.1 One steel, nonadjustable, unaltered shock per wheel only
 - 16.2 No take apart shocks.
 - 16.3 No external gas ports of any kind (No screws, No Schrader valves, None)
 - 16.4 All shock mounts, including screw jack type, must be welded.
 - 16.5 No external or internal bumpers or stops.
 - 16.6 No coil over, air, or remote reservoir shocks.
 - 16.7 No Schrader valves or bladder type valve allowed.
 - 16.8 Front half of any shock may be shielded.
 - 16.9 One or all shocks may be claimed per event for \$75 each.
- 17 Front Suspension
 - 17.1 Front suspension must match frame and be in stock location.
 - 17.2 Parts must be replaceable from stock OEM type parts from same type suspension.
 - 17.2.1 **Exception:** Upper A-Frame and A-Frame Mount.
 - 17.2.1.1 Tube type upper A-Frame may be used. Fabricated A-Frame mount may be used but must be in stock location.
 - 17.3 Lower aftermarket A-Frame can be used but must be in stock location.
 - 17.4 No fabricated spindles
 - 17.5 Adjustable strut bars can be used on front end only.
 - 17.6 No coil over shocks allowed.
 - 17.7 Steering box must be stock OEM type and be in stock location.
 - 17.7.1 No rack and pinion steering.
 - 17.8 Adjustable sway bars allowed.
- 18 Rear Suspension - Two Options
 - 18.1 Aftermarket three link design or multi-leaf spring design.
 - 18.2 All components must be steel



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- 18.3 All mounts and brackets must be welded or bolted solid.
- 18.4 You may not run a dampening shock above the rear end.
- 18.5 Three link design requirements
 - 18.5.1 Lower trailing arms must be a minimum 16" center to center of heims and both sides should be the same.
 - 18.5.1.1 ½" tolerance
 - 18.5.2 No swing arms,
 - 18.5.3 Solid pull bars are required.
 - 18.5.3.1 No spring bars, rubber bushings or any type of torque absorbing devise.
 - 18.5.3.2 Pull bar must be mounted solid. No rubber or any type of cushion in the mounting bracket.
 - 18.5.3.3 Pull bar must be located at top center of rear end and remain centered on housing over drive shaft.
 - 18.5.3.3.1 1" Tolerance left to right.
 - 18.5.4 May use minimum 23" long panhard bar located behind rear end housing or minimum 19" long J-Bar mounted to a steel pinion bracket.
 - 18.5.5 Measurements are from center of heim to center of heim.
 - 18.5.6 May mount rear springs directly over axle housing or use coil over eliminators (sliders).
 - 18.5.6.1 Lower spring perch or coil over mount must be welded to rear end housing.
 - 18.5.6.2 No birdcages or floating mounts allowed.
 - 18.5.6.3 Must use steel upper weight jack if springs are mounted over axle housing.
 - 18.5.6.4 Not shock type eliminators.
- 19 Carburetor
 - 19.1 4412 Holley with no modifications.
 - 19.1.1 Exception:** Jets and Removed/Not Choke Tower
 - 19.2 Carb is subject to claim by any driver in A-Feature on lead lap.
 - 19.3 Carb claim is \$350.00 outright or \$175.00 with exchange.
 - 19.3.1 Failure to sell will result in points, pay, and finish for night being forfeited, 2 week suspension, and \$450.00 fine.
 - 19.4 Carb spacers 1" Max, No tapered spacers.
 - 19.5 Spacer plate for carb from intake to carb only
 - 19.6 Spacer plate claim is \$40 outright or \$25 with exchange.
 - 19.6.1 Failure to sell will result in points, pay, and finish for night being forfeited, 2 week suspension, and \$150.00 fine.
 - 19.7 Carb must have vacuum ports for testing vacuum.
- 20 Oil Pans
 - 20.1 Extra capacity oil pans are permitted.
 - 20.2 No dry sumps allowed.
 - 20.3 Oil pump must mount in stock position.
 - 20.4 Must have 1" inspection hole above oil level for inspection.
 - 20.4.1 Inspection hole shall be installed in a manner were tech official can see crankshaft & rods for proper inspection. If not pan will be removed for inspection.
- 21 Starter
 - 21.1 Engine must have working starter and must be capable of starting car on demand.
- 22 Transmission
 - 22.1 OEM three, four, or five-speeds and automatic production-types are permitted.
 - 22.2 With engine running and racecar in stationary position, driver must be able to engage racecar in gear and then move forward and then backward at time of inspection.
 - 22.3 "In and out" boxes are not allowed.
 - 22.4 Ball spline transmissions are not allowed.
 - 22.5 Must all be clutch-operated or an OEM automatic with a coupler.
 - 22.6 May use a hand or clutch pedal operated ball valve for neutral.
 - 22.7 Aftermarket transmissions are permitted with 50 pounds of weight mounted in front of the mid-plate.
 - 22.7.1 Overall racecar weight must be 2550 pounds with driver after the race.**
 - 22.8 Approved aftermarket transmissions
 - 22.8.1 Bert (Part #BERLMZ)
 - 22.8.1.1 Bert 2nd Generation are NOT allowed
 - 22.8.2 Brinn (Part #70001),
 - 22.8.3 Falcon (Part #60100)
 - 22.8.4 RaceGator (Part #140002/140002-C)
 - 22.8.5 Mitchell Machine Bullet Tranny with internal clutch.



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- 22.9 Clutch must be inside of bell housing for OEM production-type transmissions.
 - 22.10 Starter must bolt to engine block or factory location.
 - 22.11 One (1) forward gear and one (1) reverse gear must be in working order, plus a neutral position, and must be able to be shifted by driver.
 - 22.12 Aluminum flywheels are NOT permitted.
 - 22.13 Must have full-sized steel bell housing.
 - 22.14 Flywheel must bolt to crankshaft.
 - 22.15 Clutch must bolt to flywheel, a minimum six and one-quarter (6.25") inch clutch.
 - 22.16 Automatic and aftermarket transmissions must have a guard two-hundred seventy (270) degrees around flex plate or flywheel, and must be constructed of at least one-quarter (0.25) inch steel.
 - 22.17 Alternatively, automatic transmissions may utilize an SFI-certified aftermarket guard.
 - 22.18 Flex plates must be SFI certified.
 - 22.19 Internal clutches are not allowed except for approved aftermarket transmissions.
- 23 Drive Shaft
- 23.1 Minimum two-inch diameter, white, steel drive shaft.
 - 23.2 Steel slip-yokes only.
 - 23.3 360-degree drive shaft loop required and must be constructed of at least .25-inch by two-inch steel, or one-inch tubing, mounted six inches back from front U-joint.
- 24 Battery
- 24.1 All batteries must be mounted in a safe manner.
 - 24.2 Top of battery must be covered
- 25 Helmets and Fire Suits
- 25.1 Helmets are required and must be worn at all times when car is on the track.
 - 25.2 Helmet must meet or exceed Snell Spec SA2005, SA2010, or SA2015.
 - 25.3 All drivers must wear fire suits, gloves, shoes, and socks of a flame-resistant nature that meet or exceed SFI spec 3.2A/1.
 - 25.4 Two-piece suits are allowed.
- 26 Exhaust
- 26.1 Any collector type header allowed.
 - 26.2 Exhaust must be directed away from areas of possible fuel spillage.
 - 26.3 No zoomies.
 - 26.4 No 180 degree headers.
 - 26.5 No step down or y type headers.
- 27 Kill Switch, Fire Extinguisher, and Window Net
- 27.1 A kill switch is required within easy reach of the driver. This switch must be clearly marked OFF and ON.
 - 27.2 Weights and/or loose objects are not allowed in the driver's compartment.
 - 27.3 All cars must be equipped with quick release type window net on driver's door.
 - 27.4 No rear view mirrors of any kind.
 - 27.5 No radio communication or sound equipment of any kind, **except for required Raceceiver.**
- 28 Gauges / Electronics
- 28.1 **Mandatory:** MSD part #8727CT rev control box with unaltered wiring harness.
 - 28.2 Max rpm setting must be 6,200.
 - 28.3 12-volt ignition system only.
 - 28.4 HEI distributor only.
 - 28.5 OEM firing order cannot be changed.
 - 28.6 Ignition rotor, cap, coil and module must remain OEM appearing.
 - 28.7 No ignition boxes, remote coil or accessories.
 - 28.8 All wiring must be visible for inspection.
 - 28.9 Gauges allowed are analog oil pressure, water temperature, and tachometer.
 - 28.10 No electronic traction control.

These rules are interpreted by the Race Track and the Tech Officials, not the Drivers. If it doesn't say you can't it doesn't mean you can. Track has option to enforce these rules by any means possible. Disqualification, loss of pay, loss of points, fines, suspensions and/or other actions may be enforced if your race car is found illegal.