

# 2017 MIDWEST MOD RULES

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FRAMES - Factory production complete full American passenger frames only. Frame rails must extend to a point beyond the base of driver's seat. Rear clip may be fabricated out of tubing. Front and rear pick-up loop required; otherwise bumpers or other pick-up point will be used.

BODIES – SEE IMCA NORTHERN SPORT MODS for rear sail panel rules. Exceptions: no spoilers, no spoiler sides, no nose wings.

RULE CLARIFICATION: Bodies: MD3 nose not allowed ,no nose wings ,window opening must be a min. of at least 12 inches on all 4 corners. Body may extend 1" past the tire on both sides. Max. deck height 39 inches. Rear Sail Panels: MUST MEET IMCA NORTHERN SPORT MOD RULES. No reverse hood rake

WHEEL BASE- 108 inches Minimum, 112 inches maximum both sides.

ROLL CAGE - 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. Must be frame mounted in at least six (6) places. Body mounted roll cages not acceptable. 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. Driver's head must not protrude above cage with helmet on while strapped in driver's seat. Roll cage must have a 3/16-inch inspection hole in non-critical area. Must have at least three (3) horizontal bars at driver's door welded to front and rear of roll cage members.

WEIGHT - Minimum weight is 2500 pounds with driver after race, No tolerance. All lead weight must be mounted securely, with 2 weight clamps & 1/2 inch bolts. Lead must be painted white & have your car number on the lead. **CARS RUNNING AFTERMARKET TRANSMISSIONS MUST WEIGH A MINIMUM WEIGHT OF 2550 AFTER RACE WITH DRIVER & MUST HAVE 50 POUNDS OF WEIGHT MOUNTED IN FRONT OF MIDPLATE.**

WHEELS - Wheel width must not exceed eight (8) inches. No aluminum wheels. Bead locks allowed on right rear only. Any foam or plastic type mud cover mounted on right side wheels. Inner mud plug on L.R. only.

TIRES - American Racer G-60 only. Tires may be grooved & siped.

DIFFERENTIAL/REAR END - Any passenger car type or truck rear end may be used. No aluminum. Full spools permitted. No quick-change devices allowed. Floater rear ends are allowed.

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

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

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

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

**ENGINE LOCATION** - 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.

Engine - stock engine must be same make as car. MAXIMUM Size of engine block: 350 gm .060 max. 351 windsor ford .060 max. 360 chrysler .060 max. Harmonic balancer on G.M. min. 8 inch. Smaller engine allowed, **NO STROKER ENGINES ALLOWED.** OEM firing orders cannot be changed. No Bee Hive or high performance valve springs allowed. 9 to 1 compression max.

Heads - 76 c.c. minimum, stock, no performance heads (no double humps, no 292 or 041 castings, no LT1, no bowtie, no center bolt valve cover, or aftermarket allowed.) No porting or polishing, no screw in studs with shoulder, no guide plates, 1.94/1.60 valves maximum. No 2.02/1.60 allowed. 305 heads on 305 only.

Camshaft - Hydraulic camshafts only & must pull at least **15 inches of vacuum at 1000 rpm. no tolerance.** Hydraulic flat tapped cam .430 maximum lift at valve, **stock 1.5 ratio rockers only no tolerance.** No polylocks, No roller cams, no roller tip or roller rockers allowed. Lifters stock type only, no Rhoades, anti-pump up, high revolution, etc. Stock Type Wire Clip.

Crankshaft and rods - Stock appearing, no light weight rods, no h-beam rods. Press fit rods only, No floating rods. 5.7 rod on G.M. max. Aftermarket eagle scat, ect. Crankshaft stock type ok. No lightening of any kind to crankshaft. 3.48 stroke max.

Intake manifold - Only intakes allowed Edelbrock 2101, Ford 2121 or 2181, Chrysler 2176 or 3776 intake must be unaltered.

Pistons – cast or hypereutectic flat top 4 valve relief only. No JE, Ross or etc. No high performance parts allowed.

**BALANCER** - No Modifying of Harmonic Balancer. Must be minimum 8".

TRACK HAS OPTION TO ENFORCE THESE RESTRICTIONS WITH A CUBIC INCH PUMP GAUGE OR BY VISIBLY CHECKING PARTS AND PART NUMBERS. DISQUALIFICATION AND LOSS OF POINTS IF FOUND ILLEGAL.

**SHOCKS:** One steel, nonadjustable, unaltered shock per wheel only. NO Take Apart Shocks. No external gas ports of any kind (No screws, No Schrader valves, No ports). All shock mounts, including screw jack type, must be welded. No external or internal bumpers or stops. No coil over, air, or remote reservoir

shocks. No Schrader valves or bladder type valve allowed. Front half of any shock may be shielded. One or all shocks may be claimed per event for \$75 each.

\*FRONT SUSPENSION-FRONT SUSPENSION MUST MATCH FRAME AND BE IN STOCK LOCATION. PARTS MUST BE REPLACEABLE FROM STOCK OEM TYPE PARTS FROM SAME TYPE SUSPENSION EXCEPT UPPER A-FRAME AND A-FRAME MOUNT. TUBE TYPE UPPER A-FRAME MAY BE USED. FABRICATED A-FRAME MOUNT MAY BE USED BUT MUST BE IN STOCK LOCATION. LOWER AFTERMARKET A-FRAME CAN BE USED BUT MUST BE IN STOCK LOCATION. NO FABRICATED SPINDLES. ADJUSTABLE STRUT BARS CAN BE USED ON FRONT END ONLY. STEERING BOX MUST BE STOCK OEM TYPE AND BE IN STOCK LOCATION. NO RACK AND PINION STEERING. NO CENTER STEERING. ADJUSTABLE SWAY BARS ALLOWED.

\*REAR SUSPENSION-TWO OPTIONS: AFTERMARKET THREE LINK DESIGN OR MULTI-LEAF SPRING DESIGN. ALL COMPONENTS MUST BE STEEL. ALL MOUNTS AND BRACKETS MUST BE WELDED OR BOLTED SOLID. YOU MAY NOT RUN A DAMPENING SHOCK ABOVE THE REAR END.

A). THREE LINK DESIGN REQUIREMENTS: MUST USE MINIMUM 16 INCH CENTER TO CENTER OF HEIMS LOWER TRAILING ARMS BOTH SIDES NEEDS TO BE THE SAME, (1/2 INCH TOLERANCE) , NO SWING ARMS. SOLID PULLBARS ARE REQUIRED, NO SPRING BARS, RUBBER BUSHINGS OR ANY TYPE OF TORQUE DEVICE. PULLBAR MUST BE MOUNTED SOLID (NO RUBBER OR ANY TYPE OF CUSHION IN THE MOUNTING BRACKET) MUST BE LOCATED AT TOP CENTER OF REAR END HOUSING AND REMAIN CENTERED ON HOUSING OVER DRIVE SHAFT (1 INCH TOLERANCE LEFT TO RIGHT). MAY USE MINIMUM 23 INCH LONG PANHARD BAR LOCATED BEHIND REAR END HOUSING OR MINIMUM 19 INCH LONG J-BAR MOUNTED TO A STEEL PINION BRACKET. MEASUREMENTS ARE FROM CENTER OF HEIM JOINT TO CENTER OF HEIM JOINT. MAY MOUNT REAR SPRING DIRECTLY OVER AXLE HOUSING OR USE COIL COVER ELIMINATORS (SLIDERS). LOWER SPRING PERCH OR COIL COVER MOUNT MUST BE WELDED TO REAR END HOUSING. NO BIRDCAGES OR FLOATING MOUNTS ALLOWED. MUST USE STEEL UPPER WEIGHT JACK IF SPRING ARE MOUNTED OVER AXLE HOUSING. NO SHOCK TYPE ELIMINATORS.

REAR END - Any steel approved OEM passenger car or truck non-cambered rear end allowed, must be centered in chassis. All components must be steel, except lowering blocks, axle cap, and drive flange. Safety hubs (floaters) allowed. No quick-change devices. Inspection hole in housing required. Mini-spools only. Ring gear, center section and yoke cannot be lightened. Solid steel axles and one piece drive flanges only.

CARBURETOR: 4412 HOLLEY NO MODIFICATIONS EXCEPT CHANGING JETS AND REMOVED CHOKE PLATE BUT NOT THE CHOKE TOWER. CARB. IS SUBJECT TO CLAIM BY ANY DRIVER IN A FEATURE IN LEAD LAP. CLAIM IS \$250 OUTRIGHT OR \$175 DOLLARS EXCHANGE. FAILURE TO SELL RESULTS IN LOSS OF POINTS AND FINISH FOR THE NIGHT, 2 WEEKS SUSPENSION, AND \$50 FINE PAID TO CHARITY OF RACERS CHOICE BEFORE RETURNING TO RACING. NO ELECTRIC FUEL PUMPS. SPACER PLATE FOR CARB. FROM INTAKE TO CARB. ONLY. CLAIM \$25 OUTRIGHT ON SPACER PLATE. Carb must have working vacuum port for testing vacuum. **IF NO PORT YOU WILL BE DISQUALIFIED!!!**

Carb spacers 1 Inch maximum and NO Tapered Spacers.

OIL PANS - Extra capacity oil pans are permitted. No dry sumps allowed. Oil pump must mount in stock position. MUST HAVE 1 INCH INSPECTION HOLE ABOVE OIL LEVEL FOR INSPECTION. Inspection hole

needs to be installed in a manner where tech official can see crankshaft & rods for proper inspection. **IF NO INSPECTION HOLE IT WILL BE ASSUMED YOU ARE CHEATING AND YOU WILL BE DISQUALIFIED!!!**

**STARTER** - Engine must have working starter and must be capable of starting car on demand.

**TRANSMISSION:** OEM three, four, and five-speed and automatic production-types are permitted. 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.

\* In and out" boxes are not allowed. Ball spline transmissions are not allowed. \* May be clutch-operated or an OEM automatic with a coupler. May use a hand or clutch pedal operated ball valve for neutral.

\* AFTERMARKET TRANSMISSIONS are permitted with (50) pounds of weight mounted in front of the mid-plate. Overall racecar weight must be two thousand five hundred fifty pounds with Driver after the Race.....2550

\* Approved aftermarket transmissions are Bert (Part #BERLMZ) Bert 2nd Generation are NOT allowed, Brinn (Part #70001), Falcon (Part #60100) and RaceGator (Part #140002/140002-C) and Mitchell Machine Bullet Tranny with internal clutch. \* Clutch must be inside of bell housing for OEM production-type transmissions (except as noted in Rule 14.4). \* Starter must bolt to engine block or factory location. \* 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. \* Aluminum flywheel are NOT permitted. Must have full-sized steel bell housing. Flywheel must bolt to crankshaft. Clutch must bolt to flywheel, a minimum six and one-quarter (6.25) inch clutch. \* 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. Alternatively, automatic transmissions may utilize an SFI-certified aftermarket guard. Flex plates must be SFI certified. \* Internal clutches are not allowed except for approved aftermarket transmissions.

**DRIVE SHAFT:** Minimum two-inch diameter, white, steel drive shaft. Steel slip-yokes only. 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.

**BATTERY** - All batteries must be mounted in a safe manner. Top of battery must be covered

**SAFETY** - Driver safety is a must, must have window net, racing seat belts (in date), racing aluminum seat, fire extinguisher (dry chemical only), driver must wear racing suit, gloves, neck brace or hans system, helmet must be SA 2000 rating or better.

**EXHAUST** - Any collector type header allowed. Exhaust must be directed away from areas of possible fuel spillage. No zoomies. No 180 degree headers No step down or y type headers.

**KILL SWITCH, FIRE EXTINGUISHER, WINDOW NET** - A kill switch is required within easy reach of the driver. This switch must be clearly marked OFF and ON. Weights and/or loose objects are not allowed in the driver's compartment. All cars must be equipped with quick release type window net on driver's door. No rear view mirrors of any kind. No radio communication or sound equipment of any kind.

**GAUGES/ELECTRONICS** – Mandatory MSD 8728 Soft Touch Control Box. Maximum RPM Chip 6200 required (driver may run less than 6200) or MSD part #8727CT rev control box is permitted with

unaltered wiring harness (max rpm setting must be 6200) Drivers supply own chips. 12-volt ignition system only. HEI distributor only. OEM firing order cannot be changed. Ignition rotor, cap, coil and module must remain OEM appearing. No ignition boxes, remote coil or accessories. All wiring must be visible for inspection. Only gauges allowed are analog oil pressure and water temperature and analog tachometer (memory recall allowed). No electronic traction control ALLOWED