

## HUMBOLDT SPEEDWAY 2023 MID WEST MODIFIED RULES

**COMMUNICATIONS:** All competitors must have a RACECEIVER 1600 in car radio to compete at Humboldt Speedway.

**FRAMES** - Factory production complete full American passenger frames only and cannot be altered in any way except for what is allowed within these rules. 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, No Tolerance. Rear Sail Panels: MUST MEET IMCA NORTHERN SPORT MOD RULES. Or can meet Power I midwest mod rules Sail panels may have no more than four (4) inch bow from top to bottom. A maximum 29 inches of sail panel along the roof and maximum eight (8) inches tall at rear of decking and must be a straight line from back edge of roof to back edge of deck when the sail panel is held flat. No more than 3 inches past deck. Must match both side no cut outs.No reverse hood rake. Car cannot exceed 78 inches at its widest point. All Dash access panels must be easy to open, Clips, Body Bolts or D-zues Fasteners only. No Screws of any kind. Rear access panels for Pull-Bar inspection must be made in such a way that the Pull-Bar can be seen easily and completely.

**WHEELBASE-** 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 the cage with helmet on while strapped in the driver's seat. Roll cage must have a 3/16-inch inspection hole in a 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 the 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. No Weight Added to Rear Axle, No Heavy weight axle tubes (max .250 wall) (clarification). Weight MUST be displayed on the left front door by the A-pillar.

**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. No weight other than balance weights can be added to the wheel .

**TIRES** - American Racer G-60 only. Tires may be grooved & siped. Wheel spacers cannot be larger than the hub flange diameter, aluminum spacers only. American Racer G-60 KK704, SWS 299-499, 8" Asphalt take off tires. All tires must durometer 50 at all times.

**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. Brake pads cannot be altered.

**FUEL SYSTEMS** - Gasoline only. No additives or fuel scents allowed. No oxygen bearing additives. (clarification) 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 the bottom of the cell. No electric fuel pumps. Fuel will be tested, the number used will be "0". The test number must be 0 or a negative number when tested. Any fuel tested that goes to a positive test number will be a DQ. This will be done on a dig-a-tron tester.

**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 the width of the 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. Belts must be mounted to the cross bar going left to right behind the seat, they CAN NOT be mounted to the bar going to the rear of the cage/chassis. Belts must be a 5-point type, crotch belt must be worn. Seat belt material should be at least three (3) inches wide AND CANNOT BE OLDER THAN 3 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.

**OPTION A ENGINE** - 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 B Hive or high-performance valve springs allowed 9 to 1 compression max.

OPTION B ENGINE - Must be unaltered 602 with additional IMCA cable-lok system or USRA seals. 602 GM Crate must run 6000 chip. Carb rule will be the same as Option A. Engine must pull 15" minimum vacuum at 1000 RPM.

HEADS: 76 c.c. min. stock, no performance heads (no double humps, no 292, 041 castings, no lt1., no bowtie, no center bolt valve cover, or aftermarket allowed.) No porting or polishing, 194/160 valves max. no 202/160 allowed. 305 heads on 305 only!!!!!!

CAMSHAFT- Hydraulic camshafts only and must pull at least 15 inches of vacuum at 1000 rpm. No tolerance. Hyd. Cam 430 maximum lift at valve, stock 1.5 ratio rockers only no tolerance. No roller cams, no roller tip or roller rockers allowed. Lifters stock type, no Rhoades, anti-pump up, high revolution, etc. Stock Type Wire Clip. Crankshaft and rods Stock appearing, no light weight no h- beam rods. Aftermarket eagle scat, etc. Stock types ok No lightening of any kind to crankshaft 3.48 stroke max. Press fit rods only, No floating rods, 5.7 rod on G.M. max Pistons flat top 4 valve relief only Hypereutectic 4 valve relief pistons ok. no je, ross or etc. No high-performance parts allowed. Intake manifold: Only intakes allowed are GM 2101, 2701 ford 2121 or 2181, Chrysler 2176 or 3776.

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.

BALANCER- No Modifying of Harmonic Balancer. 8.9 lbs. Min

SHOCKS: One steel, non adjustable, unaltered shock per wheel only. NO Take Apart Shocks. No external gas ports of any kind (No screws, No Schrader valves, No ports, none) 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.

O.E.M. 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. No coil over shocks allowed either front or rear. One shock per wheel. You may not run a dampening shock above the rear-end.

Steeringbox must be stock O.E.M. 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 15-inch center to center of heims lower trailing arms both sides need to be the same, (1/2-inch tolerance), no swing arms. Solid pull-bars are required, No spring bars, rubber bushings or any type of torque device. Pull-bar 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 (1inch tolerance left to right). May use minimum 23-inch-long pan-hard 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. Maximum length rear spring 16". Minimum length rear spring 11".

REAR END: Any passenger car type or truck rear end may be used. Floater rear ends are allowed. Any steel approved OEM passenger car or truck non-cambered rear end allowed. All components must be steel drive flange. Inspection hole in housing required. Solid steel axles and one-piece drive flanges only. May have Aluminum axel caps. Quick change option is allowed and must use 10" ring gear with aluminum or steel spool, steel axle tubes, minimum one inch wide spur gears and bolt on rear cover. Safety hubs (floater) allowed. Steel axles only. All additional components must be steel, axle caps, U-joint caps, and one-piece drive flange. One inch inspection hole required in housings. No scalloped ring gears, cambered rear ends, heavyweight axle tubes (max .250" wall) or housing braces. Must have solid axels. NO gun drilled. Pinion plate must be steel. Quick change option must run the same gear they hot lapped with. Your rear cover will be sealed by the racetrack . If your seal is broken automatic disqualification for the event. ONLY way you can change your gear per night is if you break a gear & you bring it to the tech official for him to ok gear change.

CARBURETOR: 4412 Holley no modifications. Except jets and removed / not choke tower. Carb. Is subject to claim by any driver in a feature in lead lap. Claim is 250 dollars outright or 175 dollars exchange. Failure to sell /points and finish for the night, 2-weeks suspension and 50 dollar fine / no electric fuel pumps / manual only. Spacer plate for carb. From intake to carb. Only/ claim \$25 outright /\$15 exchange. Carb must have vacuum ports for testing vacuum. Carb. Spacers 1 Inch Max, NO Tapered Spacers example {HVH, Flow Design} etc.

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. Needs to be installed in a manner were tech official can see crankshaft & rods for proper inspection. If not pan will be removed for inspection.

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 race car in stationary position, driver must be able to engage race car in gear and then move forward and then backward at time of inspection. In and out” boxes are not allowed. Ballspline transmissions are not allowed. May all 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. Overall race car weight must be two thousand five hundred pounds with Driver after the Race. Approved aftermarket transmissions are Bert (Part #BERLMZ) Bert 2nd Generation are NOT allowed , Brinn (Part #70001), Falcon (Part #60100) and Race Gator (Part #140002/140002-C) and Mitchell Machine Bullet Tranny with internal clutch. Clutch must be inside of bell housing for OEM production-type transmissions. 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 flywheels are NOT permitted. Must have full-sized steel bell housing. Flywheel must bolt to the 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.

HELMETS & FIRE SUITS - Helmets are required and must always be worn when the car is on the track. Helmets must be 2010 or newer and must be Snell rated. All drivers must wear fire suits of a flame-resistant nature. Two-piece suits are allowed. Fire resistant gloves are mandatory. Fire resistant boots are highly recommended. Neck Restraint is Required. It can be a Collar or Neck Roll; A Hans Type Restraint is recommended.

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. No exhaust evac systems.

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 rearview mirrors of any kind. No radio communication or sound equipment of any kind.

GAUGES/ELECTRONICS – Mandatory MSD part #8727CT rev control box is permitted with unaltered wiring harness (max rpm setting must be 6,200) Rev control box must be easily

accessible for inspection .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.

These rules are written and interpreted by the Racetrack Tech Officials, not the Drivers. If doesnt say you can't, it does not mean you can.