



JUNIOR LIMITED RULES- 2019

The rules 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 rules shall govern the condition of all events, and by participating in these events, all participants are deemed to have complied with these rules. NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATIONS OF OR COMPLIANCE WITH THESE RULES AND/OR REGULATIONS. They are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to a participant, spectator or official.

The race director shall be empowered to permit reasonable and appropriate deviation from any of the specifications herein or impose any further restrictions that in his opinion do not alter the minimum acceptable requirements. NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM SUCH ALTERATION OF SPECIFICATIONS. Any interpretation or deviation of these rules is left to the discretion of the officials. Their decision is final.

No driver under the age of 12 or over the age 16 or holding a license in any other division will be allowed to compete in this division.

- 1. SAFETY EQUIPMENT:** Rules apply at all times car is on track. Snell-rated SA2010 or SA2015 helmet required. Roll bar padding required in driver compartment. *Recommended: Fire retardant padding.* SFI-approved full fire suit required. Fire retardant gloves, shoes and neck brace (or head and neck restraint) required. Right and left seat head supports required if using head and neck restraint system. *Recommended: Fire retardant head sock and underwear, collapsible steering shaft.* Driver-side window net required, minimum 16 inch by 20 inch ribbon or mesh style, and must be mounted to roll cage so latch is at top front of window. Maximum four inch tall visor attached to window net. Minimum three inch (two inch with head restraint system) wide SFI-approved five point safety belt assembly required, must be mounted securely to main roll cage. *Recommended: Safety belts no more than two years old.* Kill switch required within easy reach of driver and must be clearly marked 'OFF' and 'ON'.
- 2. FRAME:** (see frame drawing) 1978-1987 OEM midsize GM metric full frame only. Minimum wheelbase 107 inches, maximum 109 inches, both sides, maximum one inch difference from side to side. Frame must be full and complete, cannot be widened, narrowed, shortened, lengthened, or be cut, bent, or altered to change suspension brackets, except upper control arm brackets on front end. All frame bolt holes must remain in OEM location. Front frame horns may be removed in front of steering box. Front frame may be cut for radiator clearance. Frame may be notched for seat clearance. Transmission crossmember mounts may be removed, no further forward than frame welds. Rear of frame, behind upper shock mounts, may be replaced with round, square, or rectangular tubing. No part of frame or body can be lower than five inches from ground except front crossmember. No underslung or other frame alterations allowed. See www.imca.com for OEM frame dimensions.
- 3. ROLL CAGE:** Must consist of continuous hoops, minimum 1.5 inch O.D. tubing, with a minimum wall thickness of .095 inch for main cage. Cages must be steel or chrome-moly. Main cage no further forward than rear of engine and no further back than front edge of rear tire. Four bars, two per side, may extend from main roll cage to main frame points in front of the upper control arms. These bars may have two additional braces per side to the main frame. Six bars may extend from the main cage to the rear. X-bracing is allowed. Driver's head must not protrude outside cage with helmet on. Roll cage must be securely supported and braced with minimum one cross bar in top halo. All bars forward of cage must be lower than hood.
- 4. DOOR BARS:** Minimum three driver side door bars required, minimum 1.5 inch O.D. and .083 inch wall thickness, must be parallel to ground and perpendicular to driver, and welded to front and rear of roll cage. Minimum two passenger side door bars required, must have at least one cross door bar, horizontal or angled, and one horizontal top door bar. Steel door plate, 18 gauge or .049 inch, required.
- 5. BODY:** (See diagram) No composite or plastic body panels allowed except roof rock guard and hood scoop. Body and interior deck must be same width, front to rear, and parallel to OEM frame. Aluminum nose panel must be flat. Maximum 2.250 inch side fins allowed on aluminum nose. IMCA-approved plastic nosepieces allowed. Nose must be mounted in an approved manner and can extend no higher than front top of hood. Nose piece must remain inside confines of front bumper (exception is plastic valance), be same width front to back, and be no lower than four inches below frame horns. Cooling holes allowed. Engine compartment must remain open (no side panels). Hood must cover radiator, be level or sloped down at front, enclosed and maximum two inches above interior deck at rear. No reverse hood rake allowed. No panel in front of right door to engine compartment. No inner panels. No complete or half-car covers, rear tail cover allowed in personal pit area only. Must have front and rear roof support posts. Driver and passenger side windows must have at least 12 inch opening (height and width). Full size, fiberglass or aluminum roof only (see diagram). No dished roofs allowed. Driver roof hatch allowed. Maximum 1.5 inch rolled down rock guard allowed on roof front. Maximum four inch roof sides allowed. Maximum one inch ridge down sides of roof. Maximum one inch rear roof stiffener (must face down). Solid sail panels must resemble all aspects of drawing and may not extend ahead of back of seat. Rear spoiler NOT ALLOWED. No fins, lips, wings or vortex generators allowed. Maximum four inch plastic skirting allowed on bottom of doors and quarters. Car number must be minimum four inches thick and 20 inches tall and clearly visible, on both sides and roof of car; six inches tall on front and rear.
- 6. DRIVER COMPARTMENT:** Must have minimum three windshield bars in front of driver. Lexan or aluminum cowl panel in front of driver can be no wider than cockpit and no further back than steering wheel. Floor pan must be metal or aluminum and cover entire driver compartment. Aluminum high-back seat only, must be securely bolted, using minimum 0.375 inch bolts, to roll cage and support system. Bottom of seat can be no lower than bottom of frame rail. Driver must be sealed off from track, driveline, engine, fuel cell, canisters and pumps. No oil coolers allowed in driver compartment. No devices that would enable driver adjustment to alter wheelbase or for weight jacking while car is in competition. No mirrors of any kind.
- 7. FRONT SUSPENSION:** All components and mounts must be steel, unaltered OEM, in OEM location, and match frame. All A-frame bushings may be aftermarket, but no offset or bearing type. No sway bars or jack bolts allowed. Exceptions are: adjustable spring buckets are allowed. OEM upper A-frame mount may be moved or replaced (*OEM material no longer required*) with aftermarket steel non-adjustable mount matching upper A-frame bolt on design. OEM upper A-frame may be replaced using aftermarket upper A-frame, may display "IMCA approved" decal. Upper solid steel shock mount may be maximum four inches above frame. Lower A-frame mount may be notched for clearance. OEM or OEM replacement ball joints allowed, may be tacked in. No suspension stops of any kind allowed.
- 8. STEERING:** All components must be steel, unaltered OEM, in OEM location and match frame. Exceptions are: tie rod adjusting sleeve may be replaced with 5" steel tube, replacement spindle with Speedway Motors raised cast - part number 91034501; bolt on OEM spindle savers allowed; steel steering shafts and knuckles only. Steering quickener (optional), steering wheel and quick release (required) may be aluminum. Power steering pump and reservoir must remain one unit. Driver compartment steering may be modified, must be kept on left side. No rack and pinion.
- 9. SHOCKS:** One unaltered steel, nonadjustable, OEM mount shock, in OEM location, per wheel. All shocks must completely collapse at any time. No external or internal bumpers or stops. Mounting spacers and weld or screw-on shock ends allowed. No coil-over shocks, air shocks, remote reservoir shocks, or shock covers. No Schrader or bladder type valve allowed. The following steel bodied, factory welded, non rebuildable shocks allowed in OEM stock mounting position.
 - 1-PRO-SS100, SS201, and SS200 Street Stock Shock
 - 2-QA1 - EC Series Shock Mount
 - 3-DOETSCH TECH - 0101, 0102, and 0103 Street and Hobby Shock
 - 4-OEM or OEM Replacements (But no OEM Bilstein)
 - 5-One or all shocks may be claimed per event for \$50 each,

- 10. SPRINGS:** One steel, non-progressive closed end spring per wheel only. Minimum 5.5 inches (front), minimum 4.5 inches (rear) O.D. Front coil springs must be 9.5 inch free height with 0.5 inch tolerance. Rear coil springs must be 13-16 inch free height with 0.5 inch tolerance. No torsion bars or air bags.
- 11. REAR SUSPENSION:** All components and mounts must be steel, unaltered OEM or OEM replacement, in OEM location, and match frame. No jack bolts allowed. Adjustable spring buckets allowed, may be dropped as long as they remain in OEM location. If upper spring cup uses all thread, it must be securely welded to chassis. Lower spring cups must be centered on housing. Control arms may be reinforced, but cannot be shortened or lengthened, must remain OEM length. All control arm bushings must be OEM. Bushings cannot be drilled. No suspension parts may be altered or lightened. No aluminum parts allowed, other than bushings. No suspension stops of any kind allowed.
- 12. REAR END:** Must use OEM 7.5 inch GM 10 bolt rear end (bracing optional), must remain stock width. No Ford or floater rear end allowed. Housing end, from control arm mount out, may be modified with three inch tubing to accept nine inch Ford axle. If Ford axles are used, rearend must remain minimum GM width or maximum three inches wider. Steel components only. OEM mounts on lower control arms must remain in OEM location on original 7.5 inch tube housing. Aftermarket axles, mini-spools and C-clip eliminators allowed. Locked rear ends only, no torque dividing differentials allowed. No full or aluminum spools allowed. Pinion angle cannot be changed. Any gear ratio allowed but housing must remain unaltered. No quick change devices.
- 13. BUMPERS/RUB RAILS:** (see diagram) Steel bumpers must be on front and rear and welded, or mounted with minimum 0.375 inch bolts. Two bar front bumper must be minimum 1.25 inch O.D. tubing with minimum .065 inch wall thickness (maximum 0.095 inch) mounted frame end to frame end, no wider than width of material outside frame horns and with bottom loop parallel to ground. Top bar must be directly above bottom bar, minimum 6.5 inches apart, measured center to center. Rear bumper must be constructed of solid square, or minimum 1.25 inch O.D. tubing with 0.095 wall thickness, (similar to diagram), maximum six inches beyond rear deck, no wider than five inches outside of rear frame rails. If wider than five inches outside rear frame rails, must be bent forward 90 degrees, or constructed in a loop design. Must have at least one upright, minimum 1.25 inch with 0.065 wall thickness, from bumper to fuel cell guard. All bumpers and rub rails must be capped with no sharp edges. Single bar rub rail from front to rear wheel allowed on each side, no center supports allowed, maximum 1.50 inch O.D. tubing and .095 inch wall thickness, must be mounted to cage at front and rear of rub rail.
- 14. TIRES/WHEELS:** Must use unaltered Hoosier '500' Race tire, with IMCA stamped on sidewall or H500. 27 x 8 x 15 or 26.5 x 8 x 15 'stagger tire' allowed. No chemical softening, conditioning or grooving of tires. Tires may be ground or straight siped within confines of tread. All wheels must be unaltered and may display white "IMCA approved" decal and wheel manufacturer decal. Any offset allowed. May use IMCA approved bead lock, on right rear only. External steel bead lock only and it cannot make wheel any narrower than eight inches and no wider than 8.75-inches. Steel bolts only. Foam type or securely bolted plastic outer mud cover allowed on right side wheels. Outer mud cover mounting tabs and rings must be integral to the wheel or bead lock or be securely welded to wheel. Aluminum inner mud cover allowed on left rear only. No bleeder valves. Must use minimum one inch O.D. steel lug nuts and 0.625 inch studs are recommended. Aluminum wheel spacers only. Wheel adapters are treated as spacers, maximum 1.50 inches thick.
- 15. BRAKES:** Must be steel OEM, operative four wheel, drum or disc. Right front brake shut-off allowed. Must maintain minimum OEM dimensions for hubs/rotors and calipers, cannot be lightened. No oil bath front hubs. Bolt pattern may be changed. Larger studs allowed. Single or dual aftermarket master cylinders allowed. Driver adjustable dual pedal brake bias allowed. Additional proportioning valve (in-line type) allowed, must be out of driver reach. Rear rotors may be aftermarket, minimum 0.81 inch thickness (new), maximum 12 inch O.D. Vented solid surface rotors only, no scalloped or ceramic coated rotors. Rear caliper brackets must be welded to housing.
- 16. EXHAUST:** Must use one of following header part numbers: Schoenfeld - GM #161, #151, #151E, or GM #161CM, #151CM, #151ECM (for crate motor) with 1.625 inch tubes and three inch collector. Chrysler: #451, #461. Ford: #351, #361, #562, #562-4B. Dynatech - GM #701-16210, #701-10010. Collector and turn down length maximum nineteen inches total. No header modifications allowed. No pan evac systems, exhaust sensors, merge collectors, cross-overs, inserts, cones or balance tubes. Coated headers allowed. Schoenfeld mufflers, stamped IMCA609, IMCA930 or IMCA935, must be used if track has noise reduction rule of 98 dB or more.
- 17. FUEL SYSTEM:** Racing fuel cell required, maximum 22 gallon capacity (*Recommended: 12 gallon*), must be in minimum 20 gauge steel container. Must mount with minimum one inch square tubing or two solid steel straps around entire cell, two inches wide and 0.125 inch thick, between frame rails and behind rear axle. Fuel cell vents, including cap vent, must have check valves. If fuel cell does not have aircraft style positive seal filler neck/cap system - a flapper, spring or ball type filler rollover valve is required. *Fuel shut-off recommended.* No part of cell can be lower than protective tubing. No regulators, bypass fuel systems, pressurized, or return lines allowed. One fuel filter allowed. No cool cans. Any air cleaner allowed. No cold air boxes or ducting of any kind between engine and hood. Mechanical OEM type push rod fuel pumps only. Maximum 0.100 inch thick carburetor gaskets on all engines. Must use approved naturally aspirated, unaltered 350 c.f.m. Holley - part no. 0-80787-1. Float bowl must face forward. Any adapter, maximum one inch thick. No throttle bore adjustable carburetor spacers.
- 18. FUEL:** Gasoline only. Racing fuel allowed. No E85. No performance enhancing additives or scented additives. Fuel must pass both dielectric meter and chemical tests. Fuel sample may be taken from any car at any time.
- 19. WEIGHT:** Minimum weight limit of 2,350 pounds after race with driver in car. Ballast must not be used in driver compartment or outside body. All ballast must be securely mounted with at least two 0.5 inch bolts, painted white with car number on it. No titanium, magnesium, stainless steel, carbon fiber or tungsten components. Solid steel fasteners only.
- 20. BATTERY/STARTER:** One 12 volt battery only, must be securely mounted between frame rails and positive terminal must be covered. Aftermarket starter allowed, must bolt in OEM location and directly engage flexplate/flywheel. Car must have capability of starting without being pushed or pulled. Car must leave initial staging area on demand, unaided, or go to rear of that race.
- 21. GAUGES/ELECTRONICS:** No unapproved cameras, transmitting or listening devices (exception is one-way Race Receiver radio by officials), timing retard controls, or digital gauges (including tach). No electronic monitoring computer devices capable of storing or transmitting information except memory recall analog tach. 12 volt ignition system and HEI style ignitions only. Ford/Chrysler must use HEI distributor. No crank triggers. Any module that fits inside distributor with no alteration allowed. MUST use unaltered MSD #8728 or #8727CT rev-control and 6,200 rpm chip. No unapproved or additional ignition accessories allowed. All components must be out of reach of driver, but with rev-control easily accessible facing up or out for inspection. All wiring must be visible for inspection. Only gauges allowed are analog oil pressure, fuel pressure, brake bias, water temperature and tach. OEM type alternator with internal regulator allowed. No electronic traction control devices.
- 22. TRANSMISSION/DRIVE SHAFT:** Only OEM production transmissions allowed. No aftermarket transmissions allowed. No 'in and out' boxes or quick change devices allowed. With engine running and car in a still position, must be able to engage car in gear and move forward, then backward. Functioning shift levers must be in OEM location. Transmission fluid coolers allowed. Flywheel, flexplate and converter must be steel.

Automatic: Any OEM automatic transmission allowed. Must use functioning, minimum 10 inch diameter steel torque converter. No direct drives, couplers, valved pumps, or bleeder style valve bodies. Must have at least one forward gear and reverse gear, gears must function. Must have an approved scattershield constructed of .125 inch by three-inch steel, 270 degrees around top of flexplate. Aluminum OEM bellhousing may be replaced with aftermarket explosion-proof steel or aluminum bellhousing. GM automatic must be used with GM engine, may be used with Ford or Chrysler engine. Stall converters allowed. Steel OEM style flexplate only, must be bolted directly to end of crankshaft. No bump starts allowed.

Drive Shaft: Steel slip-yokes only. Minimum two inch diameter, white, steel drive shaft only. 360-degree drive shaft loop required, constructed of at least 0.125 inch by two inch steel, or one inch tubing, mounted six inches back from front U-joint.

23. ENGINE COMPARTMENT: Rear of engine (bellhousing flange) must be mounted at least 70 inches forward from centerline of rear axle. Minimum 11 inch engine height from ground to center of crankshaft. One radiator allowed, steel or aluminum, 27 inches by 19 inches maximum in size, must be mounted in front of engine. Racing cap and electric fans allowed. No sprinklers. Power steering pump and reservoir must remain one unit and mount in front of engine. Side engine mounts only (OEM or 45-degree style) must be steel, aluminum mid-plate allowed. No vacuum pumps, oil coolers or remote oil filters. Belt driven, OEM style water pumps only, no aluminum water pumps on GM engine.

24. ENGINE: All engines must be able to be used in conventional passenger car without alterations. External engine casting and threaded holes cannot be altered.

BLOCK: OEM steel passenger vehicle production block only. No GM bowtie, Ford SVO or Chrysler W-2 components allowed. GM approved blocks are: 10105123, 10066034, 283, 302, 305, 307, 327, 350. Ford: 260, 289, 302, 351. Chrysler: 273, 318, 340, 360, no hemis. Maximum cubic inch limits: GM 364, Ford 363, Chrysler 370, no tolerance. Violation of cubic inch limit must be verified by removal of head and will result in disqualification, loss of all IMCA points for the season, \$1,000 fine and a 30-day suspension. No 400 or larger cubic inch parts allowed. Any flat top or dished pistons allowed, no gas ported pistons. Stroke must match block. Maximum 175 lbs. per cylinder compression, no tolerance. Compression checked with one spark plug removed, turned five engine compression revolutions (with throttle closed). Engines may be balanced and block decked. Oil filter system must remain OEM. 'Wet' sump oiling system only. No accumulators or external oil lines. OEM or OEM appearing replacement steel crankshaft only - cannot be lightened. No aerowing, bullnose, knife edge, undercut or drilling of second or third rod throws allowed. OEM or OEM cast appearing replacement steel rods only - GM must use maximum 5.7-inch rod or GM Vortec rod part number 10108688. Cap screw rods allowed. No splayed main caps. **Steel oil pans only.** Racing oil pans allowed. Mandatory one inch inspection hole in all pans - no obstructions to crank and rods. Engine bolts may be aftermarket. Fluid dampener balancer allowed. No roller bearings allowed. **CYLINDER HEADS:** Steel only. GM OEM approved head numbers are (last 3 digits): 126, 185, 336, 441, 445, 487, 487X, 493, 598, 624, 862, 882, 920, 993, 997, with valve no larger than 1.94 inch intake and 1.50 inch exhaust. May use Stock Replacement (SR) cylinder heads: Engine Quest (EQ) GM part number CH350I, (EQ) Chrysler part number CH318B, World Products Ford part number 53030 - 1.250 inch ($\pm .015$ tolerance) maximum O.D. valve springs. All SR heads must remain as produced, seat angles and valve sizes can not be changed: three angle valve job only (absolutely no casting removal in valve pocket of EQ or World Products head, for any reason). No porting, polishing, or unapproved alterations allowed to ANY cylinder head or intake, disqualification and \$250 fine if illegal. Any cast iron OEM Ford and Chrysler heads allowed with valves no larger than 2.04 inch intake and 1.70 inch exhaust. Headers must bolt directly to heads with correct numbers. No vortec, bowtie, SVO, or W-2 heads allowed. Flat milling allowed. Guide plates, screw-in shouldered studs (0.375 inch max) and polylocks allowed. No stud girdles. Steel roller tip rocker arms allowed. Chrysler may use OEM rocker arm bars. Any length push rods allowed. OEM diameter springs (GM - 1.250 inch maximum O.D.) must match heads, no beehive valve springs allowed.

INTAKE: Unaltered, approved OEM cast iron low rise, two- or four-barrel. Only unaltered (no porting or polishing) aftermarket aluminum intakes allowed are: Weiland GM #7547, #7547-1; Ford #7515, #8023 or #7516; Chrysler #8022; Edelbrock GM #2701; Ford #7121, #7181, #7183; Chrysler #2176. Cooling lines allowed on aluminum intakes. Ford may use OEM aluminum intake, no under air or hi-rise.

CAMSHAFT: Non-roller Hydraulic cam/lifters only, cannot alter lifter bores. OEM firing order cannot be changed (GM: 1-8-4-3-6-5-7-2). All makes of engines must pull 14 inches of vacuum at 1200 RPM's. Vacuum must be pulled on intake vacuum fitting, not on carburetor. No alterations of any kind may be made at time of tech. No variable duration lifters, NO V-Max lifters, No Anti Pump up lifters allowed. Stock OEM replacement lifters only. Track equipment being used for tech is final. Must be chain driven, no gear/belt drivers.

25. ENGINE CLAIMING RULES:

(A) \$550 cash and exchange claim on engine (\$25 goes to wrecker and \$25 to official for each engine)

(B) Claim does not include - 1. flywheel, 2. clutch, 3. pressure plate, 4. bellhousing, 5. breathers, 6. carburetor, 7. starter, 8. motor mounts, 9. oil/temp. sending units, 10. fan and pulleys, 11. clutch ball, 12. clutch arm, 13. throw out bearing, 14. dip stick, 15. water pump, 16. fuel pump, rod and plate, 17. distributor, 18. plug wires, 19. water outlet and restrictor, 20. headers.

NOTE: During engine claim, block and head numbers should be verified, head, intake, connecting rods and crankshaft should be visually inspected and one spark plug must be removed to check pistons prior to transfer of engines. If, at this time, an engine is found illegal, driver is disqualified and suspended from all HOT Speedway events until such time as a \$250 fine is paid, for first offense. Exchange of engines may proceed depending on circumstance. Decision to proceed is at discretion of track officials.

26. POINT STRUCTURE /PROCEDURES: Refer to www.imca.com.

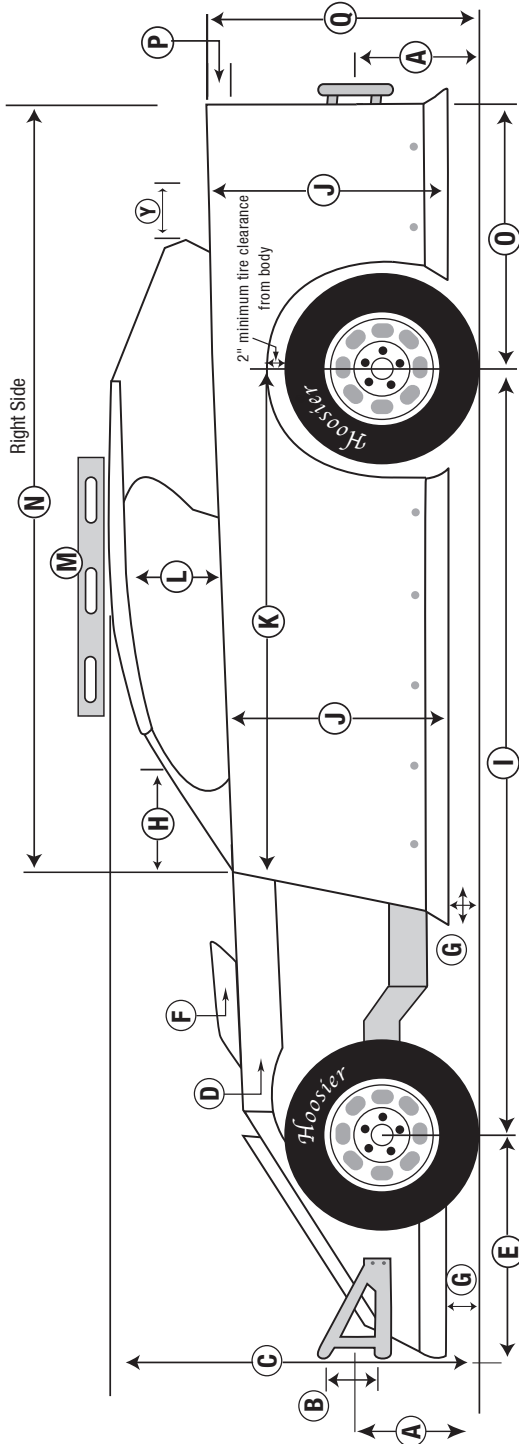
27. EIRI: (Except in rare instances) Decisions of officials are final and binding without exception.

HOT Junior Limited Dimensions For 2019

- A** 23" max. 16" min. (ground to center of bumpers, front and rear)
- B** 6.5" min. (center to center)
- C** 58" max. 42" min.
- D** Hood 5" max. drop (sides), sealed off from driver's compartment and max. 6" rake.
- E** 36" max.
- F** 6" max.
- G** 5" min. ground clearance; Door may extend max. 6" past block at bottom, both sides.
- H** 19" max., must be same on both sides.
- I** 109" max. 107" min.
- J** 31" max. 27" min.
- K** 67" min., or not past back of block at top.
- L** 18" max. 12" min. opening, both sides.
- M** With level, must have no more than 2" clearance at rear of roof and 5" at top front.
- N** 121" max. 98" min.
- O** 48" max. 31" min.
- P** Interior slope is 6" max. front to rear and flat across. If flat at front half of interior you have used up 50% of your 6" so from behind driver to rear you may only have 3". Top of interior must be flush with top of doors and quarters. Optional escape hatch from driver to passenger door allowed.
- Q** 41" max. 28" min.
- R** 24" nose must be flat and flush with sides.
- S** 67" max. 24" min., must cover radiator.
- T** 53" max. 32" min. (includes sides)
- U** 53" max. 32" min.
- V** 67" max. 55" min., measured at top of interior deck, must be same front to back.
- W** 43" max. 24" min.
- X** IMCA decal required on car.
- Y** 3" min.

REAR FILLER PANEL OPTIONAL

SAIL PANELS: Must be within confines of these dimensions and the same on both sides. Must mount within 2" of outside edge of interior deck.



All body measurements are max. unless otherwise specified. Dimensions have zero tolerance.

