

2021 LIL' RASCALS DWARF RULES

A. General Rules:

- 1. Cars must have a paid Riverside Speedway registration.
- 2. All Riverside Speedway vehicles are subject to inspection at any time.
- 3. Approval of a Riverside Speedway vehicle by the inspector shall mean only that the vehicle is approved for participation in a competitive event and shall not be construed in any way to mean that the inspected Riverside Speedway vehicle is guaranteed mechanically sound. Be it fourth declared that the inspector shall not be liable, nor shall the sanctioning body, for any mechanical failure not for any loss, injuries or death resulting from same.
- 4. All Riverside Speedway drivers shall be liable for his or her personal safety equipment. Such approved safety equipment pertaining to vehicle safety or driver equipment is highly recommended to prevent injury, bodily harm or loss of life due to the sport.
- 5. 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 accepted and complied with these rules. NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATION OF OR COMPLIANCE WITH THESE RULES AND REGULATIONS. They are intended solely 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. Any interpretation or deviation of these rules is left to the discretion of tech and the decision is final. NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM SUCH DEVIATION OF SPECIFICATIONS.
- 6. If these rules don't specifically say what you can do, you can't do it!! Always contact technical inspectors when rules or parts are in question.
- 7. All rules are subject to change by the tech team. It is the responsibility of the competitor to obtain, and become familiar with the current general rules pertaining to the division in which he/she chooses to participate in. Any item not covered in the Riverside Speedway rules section must be stock or approved in writing by the director of competition or technical official. If any item being considered for use in this division is not addressed in these rules, competitors are required to contact Riverside Speedway for a judgement as to acceptability. The rules and/or regulations set forth hereafter are designed to provide for the orderly conduct of racing events, and to establish minimum acceptable requirements for such events. All participants are deemed to have obtained, read and understood a copy of the current rules, and complied with these rules. No express 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 an official. All rule clarification letters from the previous season are void and cannot be used for the 2020 race season. It is highly recommended that you carefully read your rulebook and know what it contains. You are responsible for knowing the rules. Track reserves the right in the interest of competition to make changes as needed.

B. BODY

- 1. 1928-1948 American made production vehicles only. 5/8 scale, two door sedans, coupes, or pickup trucks. These are to be known as Classic Modified or Dwarf body styles.
- 2. Modified appearing body styles such as IMCA or DIRT Modifieds are NOT ALLOWED.
- 3. Body must be 5/8 scale, stock appearing. Maximum overall height 50" top to ground.
- 4. Must have grill shell or simulated open radiator matching original body style, any material.
- 5. Doors, windows, and cowlings must retain stock appearance. Hood louvers allowed for cooling but must maintain stock contours.
- 6. Engine compartment must conform to scale and match contour of body. Hole may be cut for breather clearance only. Ram air induction system prohibited.
- 7. Must have closed trunk lid or fully enclosed trunk access panel conforming to original bodylines. Louvers allowed no holes.
- 8. No fenders.
- 9. No wings or spoilers.
- 10. Body will be metal construction, 26 gauge steel or .040" aluminum minimum. Fiberglass or plastic shells allowed. All exposed edges must be folded or trimmed over. Legends cars may be allowed under local rules.
- 11. NO open top cars (roadsters, convertibles)
- 12. Maximum body width 40"
- 13. Body contour must be formed by frame and roll cage. Roof hatch entrance are allowed and strongly recommended.
- 14. Drivers door must be operational and equipped with secure latch.
- 15. Fasteners on hood, trunk, or panels must be positive, locking type.
- 16. Car number must be minimum 12" in height and 2" stroke. Must be displayed on each door and roof. A 4" number on the front and rear of the car.
- 17. Windshield must be lexan, wire mesh, or protective bars. NO GLASS. All other cockpit areas must remain open. Deflectors may be used in front of the driver and may be no wider than roll bar area.
- 18. It is recommended that if using rivets to attach body panels they should be riveted to tabs that are welded onto cage instead of drilling multiple holes in roll cage.

B. FRAME AND ROLL CAGE

- 1. Maximum frame width 34", minimum 30".
- 2. Main frame members will be a minimum of 1" x 2" x .120" wall rectangular steel tubing only. Mainframe rail consist of the length between the front lower a-arm cross member and the rear main roll bar upright. No aluminum allowed in cage or frame.
- 3. Main frames will have a minimum of three (3) cross members between firewall and back of seat fabricated out of the same material as frame rails. Alternate material may be steel angle with minimum .125" x 1.5" x 2". Cross

bracing in floor under driver strongly recommended. Rear frame rails at rear roll bar must be 34" maximum and 30" minimum outside dimension.

- 4. Roll cage must be DOM steel minimum 1.25" x .083" (.095" recommended) in all cars. A cross brace or diagonal brace in the hoop over the driver's head is mandatory.
- 5. All cars must have cage bars installed across door openings on both sides. Bars should be welded in place as part of roll cage. Minimum size 1" x .065" (1.25" x .095" recommended) cars with bars mounted on doors should have full door frame and a minimum of two (2) horizontal crossbars. Minimum 1" x .083". Cars with bars mounted on doors must have 1/4" x 2" steel stops welded in on each side of the opening, totaling a minimum of 4" on each end of the door. Steel plate on driver's door bars recommended.
- 6. Mandatory a steel bar with a minimum size of 1" x .065" from doorpost to doorpost under the dash.
- 7. No down tube frame cars allowed. Any bars from cowl area to snout must remain below the upper line of hood.
- 8. Classic pickups may have two (2) bars going from upper rear roll cage down to rear clip.
- 9. Driveshaft tunnel will have two 360 degree loops between firewall and seat back, must be fabricated of minimum .1875" x 1.5" steel bars 1"x .095" steel tube highly recommended.
- 10. Maximum total length 124" bumper to bumper.
- 11. Firewall must be metal and must completely separate engine compartment from cockpit. Engine protruding into cockpit must be enclosed.
- 12. Seat must be high-backed aluminum, racing type. All cars will have a permanent bar located behind top of seat at shoulder level. Bottom of seat will not be more than 65" back measured from upper ball joint. Seat may be tilted back for added driver head clearance, however, no portion of the seat may be back more than 74" as measured above.

13. Bumpers

- a. Front maximum width 46". Bumper height 6" to 8" with 2 bar loop. Ground to top of bumper: 12" minimum, 16" maximum. Bumper may not extend more than 12" forward of front tires.
- b. Rear maximum width 60"with 3 vertical bars. Bumper height 6" to 8" with 2 bar configuration. Ground to top of bumper: 12" minimum, 24" maximum (push bar hoop) no wider than the body. May not extend more than 8" behind rear body panels.
- c. Bumpers must be hollow with max wall thickness of .125

14. Nerf Bar

- a. Full length Nerf bars between front and rear tires are mandatory maximum outside diameter of 1.25" and maximum .125" thickness, must be hollow.
- b. Nerf bars will extend to tread width and may extend out 1" in rear only.

C. Suspension

- 1. No torsion bar suspension system of any type is allowed.
- 2. No leaf springs.

4 updated 12/13/20

- 3. Coil over shocks are the only allowable means of supporting the chassis. One shock and spring per wheel only. Shock and spring may be rocker arm actuated with one push rod per shock and spring. Shock and spring must remain as one unit. Spring must be mounted over the body of the shock.
- 4. Straight front axles are prohibited.
- 5. No shock with an exterior dampening adjusters allowed.
- 6. No driver shall have the ability to adjust the suspension from inside the car.
- 7. Front suspension must not extend rearward past the most forward panel of the firewall.
- 8. Rear trailing arm/radius rod specifications
 - a. Arms may have a maximum length of 30"
 - b. Torque absorbing devices are permitted
 - c. Maximum 3 radius rods or 3 links suspension
- 9. No birdcage type rear linkage.
- 10. Anti roll (sway) bars are permitted.

D. Steering

- 1. All steering components must have safety fasteners such as cotter pins or self locking nuts.
- 2. Manufactured quick release steering wheel hubs mandatory.
- 3. Rack and pinion is mandatory.

E. Brakes

- 1. All four wheels must have working calipers and rotors.
- 2. Rotors and calipers
 - a. Steel rotors mandatory .250" minimum thickness.
 - b. Steel OEM calipers or aluminum calipers.
- 3. Cutting and scalloping of rotors will be allowed with no rotor surface being less than 3/4" in width.
 - a. Drilling of rotors is permitted.
 - b. Adjustable brake bias and wheel shut off allowed.
 - c. Competition type master cylinders allowed.

F. Wheels and Tires

- 1. Steel wheels only, minimum wall thickness .090", 13" only. Wheel width maximum 8".
- 2. Offset wheels are allowed.
- 3. American Racer marked DWARF and Hoosier 790 tires are allowed. American Racer can be purchased at Riverside Speedway.
- 4. Tires will be durometered.

G. Engine

- 1. Any 4 cylinder 600CC motorcycle engine manufactured by Honda, Suzuki, Yahama, or Kawasaki.
- 2. All cars will have an approved service and repair manual for year, make, and model engine being used, this will be a part of tech.
- 3. Engine must not be anything newer than 2007.
- 4. Effective January 1, 2020 no engine can be modified to be less than the original stock configuration O.E.M specifications.
- 5. No increasing or decreasing of motor stock stroke in any way.
- 6. Gasoline only.
- Must have working transmissions, clutch, and starter with all parts in place. Complete clutch assembly must remain in engine. External reverse boxes allowed. No air controlled shifting devices. All gears in transmission must work.
- 8. Charging system optional. Battery powered ignition system only. Alternator cover allowed.
- 9. No auxiliary starters.
- 10. Engines must be front mounted in engine compartment.
- 11. Engine setback: The "square of the engine" (rear fins of the jugs) may not extend rearward more than 17" from the center of front spindle. No part of the engine or transmission may extend rearward more than 21" from center of front spindle.
- 12. No aftermarket fuel injection, turbo, nitro or nitrous oxide.
- 13. O.E.M fuel injection must remain stock.
- 14. Stock air box is mandatory.
- 15. Engine must be cooled by original intent. May use extra fan or oil cooler.
- 16. Carburetor/Fuel injection boot must fasten directly to head in the stock intake port location.
- 17. No porting, grinding, polishing or changing stock configuration of intake or exhaust ports allowed. Casting part numbers must be visible upon inspection.
- 18. Header must attach directly to head in stock exhaust port location.
- 19. Engine exhaust must include muffler and exit rearward.
- 20. Oiling system may not include a dry sump system. Oil pan modifications for clearance allowed.
- 21. Aluminium oil pans are acceptable.
- 22. Cylinder cranking compression maximum 220 p.s.i per cylinder average of 4 cylinders, no variance, measured with a Snap-On compression gauge, part number EEPV303A, with adapters EEPV304A, EEPV306A, or MT26J200, after ten (10) compression revolutions of cranking, 15-45 minutes following feature event. Tools provided by Riverside Speedway. Compression pressure limited to factory stock compression pressures.

6 updated 12/13/20

- 23. Carburetors or fuel injections may be removed or held in the full open position to allow for: full air flow. All four (4) spark plugs must be removed before checking compression. A booster pack will be allowed to assist with engine cranking if the engine appears to crank at a slow rate.
- 24. Unaltered factory E.C.M must remain. No fuel monitoring devices, modules, et

E. Battery

- 1. Battery has to be located outside of driver's compartment, not secured with rubber strap.
- 2. A direct manual cutoff switch wired to ground circuit will be installed on the front dash within 6" of the corner formed by the front door and the dashboard. The emergency electrical cut off switch will be clearly marked.

F. Fuel System

- 1. Electric fuel pump allowed.
- 2. Fuel cell mandatory, maximum 5 gallons, located in trunk.
- 3. GASOLINE ONLY, no fuel additives allowed. NO ALCOHOL ALLOWED.
- 4. Reinforced or steel braided line must be used in all high pressure area(s).
- 5. Maximum fuel pressure of 50 p.s.i.

G. Drive Train

- 1. Must use steel drive shaft from transmission to automotive rear end. Minimum 2.50" x .083" or 2"x .120".
- 2. NO quick change rear ends.
- 3. Rear must be locked or have a solid spool.

H. Set-up Specifications

- 1. Maximum outside tire width 60 1/2" measured from outside of rim on first inner bead.
- 2. 73" wheelbase plus or minus 1".
- 3. Frame ride height must not let car bottom out on track.
- 4. All cars will weigh a minimum of 1240 lbs. with driver and safety gear after the race. Empty car weight minimum 950lbs (no ballast, no fuel).
 - a. Left side weight rule 53% with driver and safety gear in the car. After 3 feature wins, left side weight will drop from 53% to 51%. Plus 50 lbs.
- 5. No weight outside of car body, i.e. on Nerf bars. (All weight must be inside frame rails).
- 6. Hubs front and rear, no more than 1/2 " difference from frame rail right to left. (Car has to be centered in hubs)

I. Safety

- 1. Fire extinguisher or fire bottle system MANDATORY.
- 2. Driver uniform will consist of:
 - a. Fire suit (single layer minimum, one or two piece)

7 updated 12/13/20

- b. Fireproof gloves
- c. Fireproof shoes
- d. Approved helmet with Snell rating of 2005 or higher. Full face helmet MANDATORY
- e. Head and neck restraint systems RECOMMENDED (i.e. Hans, Hutchinson or any other restraint deemed acceptable by tech officials).
- 3. Car must be equipped with 5 point harness, no more than 3 years old, with a minimum of 2"belts.
- 4. No two way radios. One way communication from officials only is MANDATORY. Scanners mandatory.
- 5. No mirrors allowed.