

2025 Dwarf Car Rules for Star Speedway

***If these rules do not specifically say that you can do it, you cannot do it!! Always contact tech when rules or parts are in question.**

Safety:

A- All safety equipment must be approved by Speedway.

B- Each driver must wear an SFI rated and approved full fire suit, with a recommended minimum rating of 3.2A5 or 8856-2000. It is HIGHLY RECOMMENDED that SFI rated undergarments including top, bottom, and socks be used.

C- SFI rated and approved fire-retardant racing gloves and shoes are mandatory. Gloves and shoes must be in good condition and free of holes, rips, grease, oil, etc.

D- Full-faced helmets carrying a rating of SNELL 2015 or higher are MANDATORY. "SA" (Special application) helmets only. A face shield or other acceptable eye protection must always be worn during any event.

E- All cars must have a battery cutoff switch. This battery cutoff must kill entire car. The battery cutoff switch must be clearly labeled on/off. All switches must be labeled.

F- Aluminum racing seats are mandatory; Full containment seats are highly recommended. The seat must be securely fastened to the roll cage and frame members and not the floorboards. The seat must have a headrest on both sides.

G- Seat belts must be a minimum of 3" wide unless passing over a head and neck restraint system where they must be 2" wide or less. All must be minimum 5-point with a metal-to-metal central quick release and approved by NEDCS Officials. All belts must be SFI Certified and no older than 5 years or past expiration 2 date stamped on belts. Belts with visible wear and/tears will not be permitted. All mounting locations are subject to inspection.

H- Roll bars must be padded in the driver's area along with the center of the steering wheel.

I- A minimum of a 2 ½ lb. fire extinguisher with a gauge must be accessible to both the driver and the tracks safety crew. On-board fire suppression systems are Highly Recommended

J- Two (2) driveshaft loops to enclose the driveshaft are mandatory, no less than 2" wide and ¼" thick must be placed around the front and rear of the driveshaft and attached to the floor or cross member. All driveshafts MUST be painted white, with the car number on it.

K- SFI sprint car style window net on both windows or SFI rated Arm restraints highly recommended.

BODY

A. 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. NO open top cars (roadsters, convertibles)

B. Modified appearing body styles such as IMCA or DIRT Modifieds are NOT ALLOWED. No down force noses allowed.

C. Body must be 5/8 scale, stock appearing. Maximum overall height 50" top to ground. Maximum body width 40".

- D.** Must have grill shell or simulated open radiator matching original body style, any material, Grill shell or simulated open radiator must not have more than a 20-degree pitch when measured at any time on a level surface with no driver in the car.
- E.** Doors, windows, and cowlings must retain stock appearance. Hood louvers allowed for cooling but must maintain stock contours. No fenders, wings or spoilers.
- F.** Engine compartment must conform to scale and match contour of body. Whole may be cut for breather clearance only. Ram air induction system prohibited.
- G.** Must have closed trunk lid or fully enclosed trunk access panel conforming to original bodylines. Louvers allowed no holes.
- H.** 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.
- I.** Body contour must be formed by frame and roll cage. Roof hatch entrances are allowed and strongly recommended.
- J.** Driver's door must be operational and equipped with secure latch.
- K.** Fasteners on hood, trunk, or panels must be positive, locking type.
- L.** 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.
- M.** 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.

FRAME AND ROLL CAGE

- A.** Maximum frame width 34", minimum 30".
- B.** Main frame members will be a minimum of 1" x 2" x .120" wall rectangular steel tubing or DOM steel minimum 1.5" x 0.120" round tubing. Mainframe rail consists 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.
- C.** Main frames will have a minimum of three (3) cross members between firewall and the back seat fabricated out of the same material as frame rails. The alternate material may be steel angle with minimum .125" x 1.5" x 2". Cross 3 bracing in floor under driver strongly recommended. The rear frame rails at rear roll bar must be 34" maximum and 30" minimum outside dimension.
- D.** 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.
- E.** 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 a 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.
- F.** Mandatory a steel bar with a minimum size of 1" x .065" from doorpost to doorpost under the dash.
- G.** No down tube frame cars allowed. Any bars from cowl area to snout must remain below the upper line of hood.

- H. Classic pickups may have two (2) bars going from upper rear roll cage down to rear clip.
- I. 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.
- J. Maximum total length 124" bumper to bumper.
- K. Firewall and driveshaft tunnel must be minimum 22-gauge magnetic metal and must separate engine compartment and driveshaft tunnel from cockpit. Engine protruding into cockpit must be enclosed.
- L. Seat must be high-backed aluminum, racing type. All cars will have a permanent bar located behind the top of seat at shoulder level. The 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.

M. Bumpers

1. Front maximum width 46". Bumper height 6" to 8" with 2 bar loops. Ground to top of bumper: 12" minimum, 16" maximum. Bumper may not extend more than 12" forward of front tires.
2. Rear maximum width 60" with 3 vertical bars. Bumper height 6" to 8" with 2 bar configurations. 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. At the end of rear bumpers, add bumperettes' to each side for safety.
3. Bumpers must be hollow with max wall thickness of .125
4. All bumpers are not to be in contact with the track surface.

N. Nerf Bar

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

Suspension

- A. No torsion bar suspension system of any type is allowed. No leaf springs. No birdcage type rear linkage. Straight front axles are prohibited.
- B. 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.
- C. No shock with exterior dampening adjusters allowed.
- D. No driver shall have the ability to adjust the suspension from inside the car.
- E. Front suspension must not extend rearward past the most forward panel of the firewall.
- F. Rear trailing arm/radius rod specifications
 1. Arms may have a maximum length of 30"
 2. Torque absorbing devices are permitted
 3. Maximum 3 radius rods or 3 links suspension
- G. Anti-roll (sway) bars are permitted.

Steering

- A. All steering components must have safety fasteners such as cotter pins or self-locking nuts.

- B. Manufactured quick release steering wheel hubs mandatory.
- C. Rack and pinion is mandatory.

Brakes

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

Wheels and Tires

- A. Steel wheels only, minimum wall thickness .090", 13" only. Wheel width maximum 8".
- B. Offset wheels are allowed.
- C. American Racer tires only and can be purchased through New England Dwarf Car Series. Contact Ryan Lawliss for purchase. Tires will be durometered.
- D. The use of any tire chemical (conditioner, softener, etc.) is prohibited.
- E. Tires used for qualifying, must be used for feature.

Engine

- A. Any 4-cylinder 600CC motorcycle engine manufactured by Suzuki or Honda. Newer than 2010 for Suzuki and 2012 for Honda.
- B. 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.
- C. No engine can be modified to be less than the original stock configuration O.E.M specifications.
- D. No increasing or decreasing of motor stock stroke in any way. No auxiliary starters. No Turbo
- E. 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.
- F. Charging system optional. Battery powered ignition system only. Alternator cover allowed.
- G. Engines must be front mounted in engine compartment.
- H. 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.
- I. O.E.M fuel injection must remain stock other than secondary throttle blades, which may be removed.
- J. Aftermarket air boxes are allowed.
- K. Engine must be cooled by original intent. May use extra fan or oil cooler.
- L. Carburetor/Fuel injection boot must fasten directly to head in the stock intake port location.

- M.** No porting, grinding, polishing, or changing stock configuration of intake or exhaust ports allowed. Casting part numbers must be visible upon inspection.
- N.** Header must attach directly to head in stock exhaust port location. Engine exhaust must include muffler and exit rearward.
- O.** Oiling system may not include a dry sump system. Oil pan modifications for clearance allowed. Aluminum oil pans are acceptable.
- P.** Cylinder cranking compression maximum 220 p.s.i per cylinder average of 4 cylinders, no variance, measured with a compression gauge, after ten (10) compression revolutions of cranking, 15-45 minutes following feature event. Compression pressure is limited to factory stock compression pressures.
- Q.** Carburetors or fuel injections may be removed or held in the fully 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.
- R.** E.C.M is allowed to be flashed.

Battery

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

Fuel System

- A.** Electric fuel pump allowed. Maximum fuel pressure of 50 p.s.i.
- B.** Fuel cell mandatory, maximum 5 gallons, located in trunk.
- C.** Petroleum based automotive gasoline is the only fuel. No alcohol, no methanol, no nitrous oxide, or any other fuel additive may be used.
- D.** Reinforced or steel braided line must be used in all high-pressure areas.

Drive Train

- A.** Must use steel drive shaft from transmission to automotive rear end. Minimum 2.50" x .083" or 2"x .120".
- B.** Quick change rear ends are allowed. Must be steel tubes with individual axles and bearing type hubs. Gears are not allowed to be changed once your main event starts.
- C.** Rear must be locked or have a solid spool. Magnetic Steel Axles.

Set-up Specifications

- A.** Maximum outside tire width 60 1/2" measured from outside of rim on first inner bead.
- B.** 73" wheelbase plus or minus 1".
- C.** Frame ride height must not let car bottom out on track.
- D.** All cars will weigh a minimum of 1255 lbs. with driver and safety gear.
 - 1.** Left side weight rule 53% with driver and safety gear in the car.
- E.** No weight outside of car body, i.e., on Nerf bars. (All weights must be inside frame rails).
- F.** Hubs front and rear, no more than 1/2 "difference from frame rail right to left. (Car is to be centered in hubs)

G. Any tech official has the right to change weight and/or percentages if necessary.

*Car numbers (INCLUDING ANY LETTER) must be minimum 12" in height and must be displayed on each door and roof in a manner that is legible along with a 4" number on the front and rear of the car. It is recommended that any letters that are part of your registered number be a contrasting color to assist officials in identification and legibility from race control.

****One 4" Peep Mirror is ALLOWED. If any Official determines 'mirror driving' is occurring, the mirror on that said car will be confiscated and lose the right to use a mirror for the remainder of the race season.***

****Working Transponders AND Receivers are required at all times while on the track. Transponder is to be mounted in front of the right rear tire area, center of axle tube, six inches forward.***