

SPEED TOUR SPRINTCARS 2022+



VII. CAR SPECIFICATIONS

A. Engine Specifications

1. CID

Engine Specification and Relation to Total Minimum Weight

3.1.1 Must be piston driven, cam in block, production based engine. No superchargers, turbos or nitrous oxide allowed.

3.1.2 Minimum Weights-

1550 lb minimum 360 CID with 23* +/- 2* heads (2 3/16" restricted injection)

1550 lb minimum 360 CID more than 23* +/- 2* heads (2" restricted injection)

1625 lb minimum 410 CID (1 7/8" restricted injection)

3.1.2 2" of total restriction on all combinations

3.1.3 Any engine that has been pumped by NSRA verifying the CID and is still sealed will not be pumped in a post race technical inspection.

3.1.4 Engines may be pumped for size and cars may be weighed for compliance at any time at the discretion of the Race Director. Engines may be sealed by a technical official.

3.1.5 After being pumped for size to eliminate the need for pumping at subsequent

3.2 Blocks -Must be American or Canadian Made. Big Blocks not approved.

3.3 FUEL AND FUEL SYSTEMS

3.3.1 Fuel must be alcohol only with no performance enhancing additives of any kind or nitrous oxide.

3.3.2 All cars must be equipped with 1/4 turn **fuel shutoff** in driver's compartment within easy reach, fuel shutoff must be clearly marked as to "on" and "off" positions. It is recommended that the valve be accessible from the outside of the car.

3.3.3 The manufacturer for their intended use must approve **fuel cells** and/or bladders. They

must be enclosed in a container constructed of steel, aluminum, or fiberglass of a minimum .063 thickness, or other approved sprint car tail tank.

3.3.4 Fuel **cell vent** must have a check valve.

C. CAR CONSTRUCTION

1. Size

The wheelbase must be at least 84 inches and no more than 90 inches. The overall length will be limited to a maximum of 14 feet.

The overall width will be limited to a maximum width of 78 inches from the outside left front or rear tire to the outside of right front or rear tire.

The tread must be at least 47 inches center to center.

2. Weight

All cars must meet minimum weight as listed above with the driver. Any ballast used must be securely bolted within the confines of the frame tubes no farther than 16" forward of the front engine mount and no further rearward than the back of the seat. All ballast must be painted white and clearly marked with the car number.

3. Off-Set

The maximum chassis offset allowed, for both front and rear wheels is four (4) inches (8 inches overall) measured to the inner wheel bead seat.

- a. The outside of the right rear wheel at the outside bead seat of the wheel cannot exceed 43 inches from the centerline of the rear axle center section.
- b. The outside of the left rear wheel at the outside bead seat of the wheel cannot be less than 31 inches from the centerline of the rear axle center section.
- c. The outside of the right front wheel cannot be more than 43 inches from the centerline of the chassis. (See illustration A)

4. Four-Wheel drive

No four-wheel drive cars will be allowed.

5. Weight Jackers

Driver-adjustable suspension and/or weight jackers will not be allowed inside or outside of the cockpit.

6. Nose Assembly

The front part of the body, known as the nose assembly, shall not be wider than the parallel lines of the body, may not exceed the width of the frame of the car and must have a minimum of 58 square inches of forward facing opening.

The nose assembly may not extend forward beyond the confines of the front bumper.

7. Cockpit Opening

The cockpit opening must be at least five hundred (500) square inches, located directly behind the engine compartment and measured on a plane parallel to the ground and level with the uppermost part of the body or windscreen.

8. Air Deflectors

Any air deflector that is used to direct air for cooling shall be completely inside the confines of the nose and the solid sides of the nose shall cover this deflector. This deflector will not be moveable.

9. Oil Tanks

Oil tanks, water radiators, oil coolers and any remote engine accessories or forward facing scoops must be within the confines of the mainframe tubes. Oil tanks mounted forward of the firewall must be behind the front axle and forward of the front engine mounting plate.

Oil tanks mounted behind the engine plate/firewall may be mounted outside the main frame providing they do not protrude more than eight (8) inches from the mainframe tubes. For the purpose of this rule the frame tube will be considered a straight line between the front and rear attachment point.

Cylindrical oil tanks mounted outside the frame, behind the engine plate/firewall, must be mounted as close to the frame as practical.

10. Radiators

No water radiators or oil coolers are to be placed above or besides the cockpit opening.

11. Chassis Centerline

The engine driveline and rear axle center section must be mounted on the chassis centerline. The engine must be mounted in a vertical position. A maximum of one degree from vertical and 1/2-inch offset from center will be allowed. The driver shall be seated directly behind the engine and on the centerline of the chassis. The tail tank and the car's bodywork must be on the centerline of the chassis.

12. Cockpit

A suitable guard must shield all revolving parts inside the cockpit. Open drive shafts must have adequate restraining loops fore and aft. These restraints should be a minimum of one (1) inch tubing or equivalent materials. The U-joints must have shields of a minimum 1/8-inch steel or aluminum.

a. Torque-Arms

Torque arms located within the driver's compartment must be restrained with safety loops of adequate strength.

b. Torsion Bars

Chassis using front torsion bars May not have the bar tubes below the horizontal centerline of the front spindles.

13. Engine Cowling

The engine must be covered with a cowling or hood secured in place. The hood or cowling need not enclose the sides of the engine.

14. Floorboards/Under pan

All cars must have a floorboard or under-pan, utilizing aluminum or equivalent alloy, under the cockpit area. The under-pan should extend from the engine plate to a point six (6) inches past the leading edge of the seat.

a. Under-Pan Specifications

Under-pans may not extend rearward past the leading edge of the rear axle. Under-pans or floorboards must be bolted to the chassis in the cockpit area. The under-pan or car bottom must be flat from side to side without any aerodynamic aids. Horizontal panels must not extend below the plane of the under-pan. It is recommended that under-pans be constructed of aluminum or equivalent alloy, extending from the front of the engine to the rear engine plate. It is recommended that a fireproof absorbent pad be used under the engine.

15. Car Body Design

Body panels rigidly attached to the frame to prevent chassis flex will not be permitted. All body panels must be readily removable. Right side cockpit panels may be a maximum of thirty-six (36) inches high as measured from the top of the bottom mainframe tubes at the engine plate and projected rearward. Any hood or cowl panels higher than thirty-six (36) inches from the top of the bottom main frame tube may not extend rearward past a point twenty-eight (28) inches forward of the rear vertical (or more forward) roll cage tube. Side panes cannot extend rearward past the rear diagonal roll cage tube or brace, single panel sail panels

between the rear cage upright and brace are allowed.

16. Spill Plates

Vertical spill plates may be used on the outer edges of the hood and can be a maximum of 2 1/2 inches in height. The outside dimensions of these spill plates cannot be wider than 24 inches at the front and 30 inches at the rear of the hood. Sun visors are limited to seven inches from the top to bottom including any tabs, extensions, etc. and cannot be wider than the cage. Sun visors cannot extend above the cage.

17. Roll Cage

All cars must have a roll cage, which is integral with the frame and does not encroach upon an imaginary cylinder, 20 inches in diameter, extending through the top cockpit opening. The roll cage must be adequately braced fore and aft, and side to side, to secure it in an upright position in case of rollover. The roll cage should extend four inches above the driver's helmet when he/she is seated in the driving position.

All roll cages must be constructed of SAE 4130 seamless tubing with a minimum O.D. 1 3/8" and minimum wall thickness of .095. The roll cage must be gusseted in all four corners. For all new construction, gussets must be tubular and attached a minimum of 2 inches from the centerline of the angle being gusseted. Material must be a minimum of 1 1/16" O.D. x .095 wall thickness or 7/8" O.D. x .065 wall thickness.

18. Nerf-Bars

All cars must be equipped with rear wheel nerf-bars. The right rear nerf-bar cannot extend beyond the outside edge of the tire.

Nerf bars must be constructed from SAE 4130 alloy tubing or equivalent having an O.D. of one (1) inch, a minimum wall thickness of .065 inch and a maximum wall thickness of .120 inch. A maximum of three horizontal and/or three vertical tubes are allowed in the construction of nerf-bars. No ballast is allowed in the nerf-bar tubing.

With the exception of the exhaust system, no components or accessories may be attached to the nerf bar assembly.

19. Rear Bumper

All cars must have an adequate rear bumper for push starting.

20. Front Bumper

All cars must be equipped with a front bumper. No part of the car may extend beyond the front bumper. Front bumper may be no more than 28" from the front of front axle.

D. STEERING AND SUSPENSION

1. Engineering

The steering mechanism must be engineered and assembled in accordance with sound engineering principles.

2. Design

All highly stressed steering parts must be made from SAE 4130 steel or an alloy, specified by the manufacturer of the part as equivalent in necessary strength for its intended use.

3. Sway bars

Sway bars allowed.

4. Steering Wheel

The steering wheel hub must be padded with a resilient material or not less than three-fourths (3/4) inch thickness. Removable steering wheels incorporating a quick release mechanism are

mandatory. Pip pin type mechanisms are not allowed.

5. Steering Link Strap

The use of an approved steering link strap is recommended.

6. Traction Control Devices

No traction control devices of any kind will be allowed, mechanical or electronic. All MSD boxes/coils will be mounted on the engine side of the firewall and all wiring associated with these devices will not enter the driver's compartment at all. At the discretion of the race director the magneto of a suspicious car will be pulled off and sent in for testing by a professional. SPEED TOUR or one of its car owners will provide a magneto to the suspect car owner while the testing is being done. If it tests negative for traction control devices, SPEED TOUR will pay for the testing. If it tests positive for traction control devices the owner will pay for testing, pay back any purse monies received for the season to date and loses all points earned from SPEED TOUR previously in that season before he will be allowed to compete again with SPEED TOUR.

7. Electronics

All electronics to be removed from cars for entire race day.

E. AXLES

1. General

Independent suspension is not permitted. The car's axles connecting the wheels must be of one-piece tubular construction without the capability of camber adjustment to the wheel assembly. Any other construction will be considered as independent suspension. The rear end gear assembly must be of conventional design with only one set of spur gears located behind the ring and pinion.

2. Spools

Front axle spools attached by the coping method must have the axle wrap around the spool at least two thirds of the spool diameter. Gusset plates are recommended on all spools.

3. Front Axle

All front axles must be constructed of SAE 4130 steel or a steel alloy equivalent in structural strength. Titanium front axles are not permitted.

4. Spindles and Hubs

Steel front spindles and hubs are recommended. Steel or one (1) inch aluminum torsion bar arms and stops are recommended for the right front suspension. Any car using a lug-nut type right front hub must use all six lug nuts. A 360-degree pressure plate of either 1/8-inch steel or 3/16-inch aluminum must be used between the lug nuts and the wheel face.

F. BRAKES

1. General

All cars must be equipped with a foot operable braking device to stop all wheels.

2. Master Cylinder and Brake Lines

Master cylinders not fixed to the frame must have flexible lines. Copper tubing is not allowed anywhere in the braking system.

3. Loss of Brake During an Event

If at any time during a competition it becomes evident that a car is without brakes the necessary repair must be completed before the car can continue in the competition.

G. WING

1. Total Area

Maximum Top Wing Area 3600 sq. in.
Maximum Front Wing Area 864 sq. in.

2. Dimensions

All SPEED TOUR cars' top wings will meet the following specifications:
Maximum length or width of 72" and cannot extend outside of the rear tire/wheel assemblies.

Top wing sideboard height will be a maximum of 30".

No wing rear lip (wicker bill) will exceed 1" in height.

All stages of multi-stage wings will be measured in a straight-line method and added together for a total wing area. All wing assemblies must be securely attached to the chassis of the car.

3. Obstruction of View

Sitting in the car's seat, the driver must have a minimum 135-degree of unobstructed vision on each side for a total 270 degrees. This rule pertains to all wing (airfoils) attached to the bodywork and free standing.

4. Rear wing

Airfoils mounted to suspension components will not be permitted. The top wing may not extend more than 36" beyond the centerline of the rear axle.

5. Wing Sliders

Wing sliders allowed.

6. Front Wing

- a) Top area may not be larger than six square feet.
- b) Width may be not wider than 36".
- c) Shall not extend beyond the front bumper.

H. EXHAUST SYSTEM

1. General

The angle of exhaust shall be parallel with the ground and must deflect the exhaust and heat so that it will be diverted from cars and drivers following.

2. Muffler

A muffling device will be required. All cars must meet local speedway DBA requirements. **Track will notify cars that are too loud.**

I. MISCELLANEOUS

1. Ignition

All cars must be equipped with an ignition switch located within easy reach of the driver and clearly marked "on" and "off".

2. Radios

Two-way radios are not allowed. One way race official communication is mandatory. Racecar may be purchased for \$120 (subject to cost change) or rent for \$20. After the third time renting, purchase is mandatory. Rental fee is non-refundable and applied to the maintenance of the equipment.

3. Throttle

Throttle toe straps are mandatory. In addition, a minimum of three (3) return springs must be connected to different locations on the throttle system. One spring must be on the butterfly shaft. If the throttle mechanism is the cable type, the cables must be encased to insure push-pull action. The throttle pedal must have a wide-open pedal stop.

4. Violations

Proof of any willful violation of Section VII-Car Specifications will result in loss of points and money for that program.

5. Non-Conformance

Non-conforming vehicles may be allowed to compete on a race-by-race basis at the discretion of the Technical Committee with approval of the Race Director. However, if correctable at the track with equipment on hand before the event, the vehicle will be made to conform to rules according to Car Specifications, Section VII of this Rule Book.

VIII. TIRE AND WHEEL SPECIFICATIONS

WHEELS

Maximum of four aluminum or steel Sprintcar industry standard wheels approved. Bleeders are not approved for use.

TIRES

No altering or soaking of tires approved. Siping, grooving allowed.

Stamped or marked by tech, the Right Rear Tire must be used in all races on event night, LR tire may be included as a marked tire at any given event.

Tires will be Hoosier Racing Tire.

- LF-11.0/24.0-15 2010
- RF-11.0/24.0-15 2030
- LR-26.0/13.0-15 M-20
- RR-17.0/28.0-15 M-30 or (2045 or M450 if tech approved)

IX. PURSE PAY OFF

Minimum

Pay Structure may vary per event as SPEED TOUR is always shopping sponsors and partners that also have vested interest in Sprintcar Racing in our Region.

Some events will have increased values, the minimum for any SPEED TOUR A-Feature event will be;

1st- \$1000

2nd- \$800

3rd- \$600

4th thru 18th \$450

(co-sanctioned events will use the lead sanction purse structure)

B- Main shall be determined based on contract.