



**4-Cylinder Street Tire**

**2022**

## **1. General**

- a. This class has been developed to permit those desiring to try stock car racing at an absolute minimum cost. This is a production division. Unless specifically listed in this document, you may not change or modify the car or its parts in any way. If it doesn't say you can, then you can't.
- b. If you are building a car for the first time, please contact [sandsspeedway@gmail.com](mailto:sandsspeedway@gmail.com) to speak to an MCDA representative before building.

## **2. Car Eligibility**

- a. 1980 and newer three- or four-cylinder passenger car, front wheel drive only
- b. No-turbo charger, no nitrous and no super chargers.
- c. Maximum overall length, bumper to bumper, is 192" and weight must be at least 2,450 lbs with the driver in it.
- d. Cannot have excessive rust
- e. No convertibles, vans, or four-wheel drive cars. All-wheel steering cars must disable rear steering.
- f. Cars with similar rules are eligible to run per their track rules for **one** race
- g. It is highly recommended that each racer maintains a copy of their vehicle's repair manual
- h. Tech Inspector and/or Race Day Director have final say of repairs and safety decisions. Major repairs or reconstruction must be inspected and approved.

## **3. Safety Requirements**

- a. Fire suits and a working extinguisher are required.
- b. Leather or racing gloves required. No mechanics gloves allowed.
- c. Leather boots or racing boots required. No athletic shoes allowed.
- d. Roll cage padding is required in the driver compartment. Must cover all areas within reach of driver.
- e. A helmet is mandatory. SA2010 or newer helmet recommended. DOT mandatory. Neck brace is recommended. Eye protection is mandatory.
- f. A kill switch is required within easy reach of driver and safety workers. It must be clearly marked "Off" and "On" with an orange background. It must shut off the entire car.
- g. A maximum of 4" visor attached to the window net is allowed.
- h. Tech Inspector and Sands Speedway Ownership (SSO) have the final say on any safety related items/decisions.

#### **4. Body and Glass**

- a. All glass must be removed except the front windshield. Lexan windshield is permitted, but if used, it must include bracing with a minimum of two 1/8" thick by 3/4" steel angle iron, for safety and support.
- b. Windshield cracks must be inspected by track officials for safety each race day.
- c. Structural integrity of the unibody must be maintained!
- d. Detachable steering wheel is allowed.
- e. All exterior trim including lights, body moldings, etc., must be removed.
- f. All doors must be chained, bolted, or welded securely shut.
- g. Hood and trunk must be secured with hood pins. No other latching devices permitted unless approved by technical inspection.
- h. Cars equipped with a sunroof must remove the glass and cover the roof hole with a minimum of 16-gauge steel or 12-gauge aluminum and must be welded or riveted. NO SCREWS.
- i. Bumpers must appear as stock to include covers. It may be capped with 16-gauge steel no wider than the original bumper. Bumpers may be homemade; however, homemade bumpers are not to exceed manufacture bumper thickness or width. Sides must be wrapped or capped, with rounded ends. No 90-degree corners.
- j. A tow cable, hooks or chains must be attached to the front and rear in case of towing. They must be strong enough for the car's quick removal from the track. Commercial tow loops are allowed.
- k. Rub bars (1" by 1" tubing with the ends tapered) may be used. The ends must be capped and free of sharp corners. Rub bars will not exceed 1 1/2" beyond car skin. Commercial plastic rub panels may be used. Fasteners must be counter sunk heads.
- l. A rear-view mirror inside the vehicle is mandatory. Drivers and passengers' mirrors allowed but must not protrude outside of the body line.
- m. Pedal blocks for short drivers and those with disabilities must be approved by Track officials.
- n. The car may have a horizontal bar, with a maximum of 1 3/4" OD tubing, tying the front frame horns together ahead of the radiator.
  - i. One additional OD bar (maximum of 1") may be added for radiator protection and must be behind the bumper and under the hood.
- o. A front and rear sun visor no bigger than 7" are allowed.
- p. Opera windows may be closed on two door cars.
- q. Skirting is allowed.
- r. The car must maintain its original appearance.

#### **5. Gas Tanks**

- a. Using the stock fuel tank is recommended and are required to be in stock location.
- b. Fuel cell, if used, must be securely fastened with two 1" by 1/16" straps in each direction: two front to rear and two side to side and bolted through the floor using double plates or installed in a safety construction frame.
- c. Fuel cells must be at least 10" forward from the rear panel of the car and must be in between frame rails. Cells must be at least 11" from the track surface.
- d. No bottom draw tanks allowed.
- e. No rubber gas lines along or through the body. No fuel lines through the interior of the car.
- f. Cars equipped with fuel cells must have a sealed protective 16 gauge (minimum) weldable steel barrier between the driver and the fuel cell.
- g. Minimum fuel cell size is 8 gallons.
- h. If the fuel pump is rewired directly to a switch, it must be clearly marked with orange background and must be easily reachable by the driver and safety crews, for shut off purposes.

## **6. Interior**

- a. All flammable materials must be removed.
- b. The factory instrument cluster may remain. If the heater core is removed, the lines must be looped inside the engine bay, they CANNOT be in the driver's compartment!
- c. The driver's seat must be changed to an aluminum, high-back racing seat attached to the roll cage, NOT just the floor. No plastic or fiberglass seats are allowed.
- d. Window nets are required on driver's window. They must be installed on a quick detach device such as a mounting kit or seatbelt latch.
- e. Four-point racing harness is mandatory, five-point strongly recommended. Must be securely mounted to the roll cage. Belts must not be out of date.
- f. Air bags must be removed.
- g. All holes in the floor and firewall must be covered by steel and securely mounted.
- h. Gutting is allowed for roll cage clearance only but must keep structural integrity.

## **7. Roll Cage**

- a. Roll cages are required. It is your responsibility to construct a cage or roll bar capable of protecting you from injury.
- b. Must have a minimum of 1 1/2" diameter by .095" wall tubing.
- c. Roll cages are recommended to be on a rail system.
- d. A minimum of a 4-point cage is required. That includes the side to side hoop and halo bar with front uprights.

- e. Roll bar must have a horizontal bar behind the driver welded at shoulder height for shoulder belt attachment.
- f. All mounting points must be welded to the frame or unibody. Any attachments to the unibody floor require a 4" by 4" by 1/8" thick plate, over the top of the floor and under the bottom of the floor (sandwiching the car floor). There must be a minimum of five 1/2" grade bolts and nuts. Two threads must come through and be welded. Along the driver's door seal, 4" by 1/8" angle iron must be used to attach the roll cage to the floor or door seal.
- g. A 4' by 18" by 1/8" steel plate is required to be attached to the driver's door or be 4" past each door edge. The plate must be bolted and welded to the A and B pillars between the door and roll cage. The bottom edge of the plate must be even with the rocker panel. The driver's door may be cut to allow for 2 or more bars. Door bars must come out to the door skin and must be braced with two vertical support bars between each door bar. All materials used must be weldable steel.
  - i. This is the minimum requirement. A 6 point (or more) full roll cage is highly recommended!
- h. Bends should be made with a bender (no kinks) or be miter cut, welded and gusseted (braced).
- i. Roll bar padding is required in the driver's area, any area within reach of the driver.
- j. Front cage support to the stock tower is strongly recommended

## **8. Battery**

- a. The battery must be relocated behind the driver's seat and must be securely mounted with steel-to-steel tie down.
- b. Batteries must be in a plastic or steel case of sufficient size to hold the entire acid content of the battery in case of rollover.
- c. Batteries cannot be lowered through the floor.

## **9. Brakes**

- a. Brakes must be stock as delivered from manufacturer with no modifications.
- b. They must be capable of locking all four wheels.
- c. Only stock proportioning valves can be used for the car as manufactured.
- d. No functioning emergency brakes allowed.

## **10. Exhaust System**

- a. 3" maximum diameter exhaust pipe with muffler is required.
- b. Catalytic converter may be removed or gutted.
- c. The exhaust system must run from the engine to a point somewhere beyond the driver.
- d. The exhaust must be pointed down and not point at the gas tank.

e. **MUFFLERS MUST BE UNDER 100 DECIBALS! NO EXCEPTIONS!**

**11. Steering and Suspension**

- a. Shocks, struts, and spring alterations are allowed.
- b. A maximum of 1 ½" of camber is allowed on the right front wheel **ONLY** and is to be measured from the bottom of the wheel bead area to the top of the wheel bead area with the diameter of wheels to be raced on.
- c. Ballast weight is allowed and must have the car number and name on it and be painted white.
- d. The rear axle may be changed but should remain +/- 2 inches in width to the original. Chopping and cutting is allowed to achieve camber.
- e. Front strut tower bar allowed.
- f. Heating and cutting of springs allowed.
- g. Minimum ride height is 5 inches which will be measured at the pinch points of the unibody frame with the driver in the car.
- h. Suspension must depress on all 4 corners of car.
- i. Spring rubbers must be secured.

**12. Cooling System**

- a. Stock or aftermarket radiators allowed.
- b. NO ANTIFREEZE! Water pump lubricant allowed.
- c. Radiators must be in stock position.
- d. An overflow container must be mounted in the engine compartment and able to hold a minimum of one US quart.

**13. Tires and Wheels**

- a. Only passenger car tires can be used. Must be "P" rated. No "LT".
- b. No shaving, grinding, buffing, or profiling. No made for racing tires, no re-caps, softening, conditioning, sanding, or grooving allowed.
- c. All tires must have a tread wear UTQG rating of 260 or higher. If there's no tread- wear clearly marked on the tire you CANNOT run it!
- d. All 4 wheels must be the same size and offset. No spacing or shimming of wheels allowed. 13, 14, 15, or 16" wheels allowed; however, no mixing of sizes is allowed.
- e. All tires on the car must be marked at the beginning of the year, new and used.
- f. One new marked tire allowed per week.
- g. 1" or larger socket size lug nuts are strongly recommended.

**14. Engine**

- a. Must be stock as delivered from manufacturer. NO MODIFICATIONS or after market performance parts allowed.
- b. Unnecessary wiring, air compressors, smog pumps, heater and air conditioning components may be removed.
- c. Cold air intakes allowed.

- d. After market exhaust is allowed in factory location.
- e. Rebuilt engines must be to stock specifications.
- f. Computer tuning allowed.

**All cars are subject to a minimum specification inspection at any time. It is the responsibility of the driver to prepare their car FREE of defects and in safe racing condition. If the car is deemed unsafe it will not be allowed to race.**