



**4- or 6-Cylinder Modified**

**2024**

## **General**

- a. This class has been developed to permit those desiring to try stock car racing at a controlled cost. Races for this division will run counterclockwise only.
- b. All modifications must be safe and are subject to inspection by a Track Official.
  - i. Any modification deemed unsafe must be corrected prior to being allowed to enter the track for racing or practice.
- c. Any car body damage sustained during a race must be repaired as soon as possible to maintain a good-looking racecar.
- d. If you are building a car for the first time, please contact [mcdasandsspeedway@gmail.com](mailto:mcdasandsspeedway@gmail.com) to speak to an MCDA representative before building.

## **Car Eligibility**

- a. 1980 and newer four- or six-cylinder passenger car, front wheel drive only
- b. No turbo chargers, no nitrous and no super chargers.
- c. Maximum overall length, bumper to bumper, is 192" and weight must be at least 2,350 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.

## **Safety Requirements**

- a. Fire suits are mandatory.
- b. A fire extinguisher that is 2 lbs. or more, BC rated for metal with a gauge must be mounted in a quick release bracket and is required to be within reach of the driver.
- c. A racing seat is required and must be attached to the roll cage and bracket with no less than 4 bolts.

- d. A 5-point harness is required. All 5-point harnesses must be well maintained and approved and inspected by the Tech inspector for integrity.
- e. All helmets and belts are required to have a date tag and must pass an inspection by the Tech Inspector or other Track Official.
- f. Leather or racing gloves required. No mechanics gloves allowed.
- g. Leather boots or racing boots required. No athletic shoes allowed.
- h. Roll cage padding is required in the driver compartment. Must cover all areas within reach of driver.
- i. A Full-face helmet is mandatory. SA2010 or newer helmet recommended. DOT mandatory. Neck braces are recommended. Eye protection is mandatory.
- j. 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.
- k. Tech Inspector and Sands Speedway Ownership (SSO) have the final say on any safety related items/decisions.

### **Body and Glass**

- a. All glass must be removed except the front windshield. stock windshield, Plexi-glass (Lexan), or reinforced screen is permitted with Minimum three windshield bars mounted in front of driver, if using Plexi-glass (Lexan), 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. Firewalls must stay in stock location and all holes must be sealed with a minimum of 20-gauge steel.
- e. A detachable steering wheel is allowed.
- f. All exterior trim including lights, body moldings, etc., must be removed.
- g. All doors must be welded securely shut.
- h. Hood and trunk must be secured with hood pins. No other latching devices permitted unless approved by technical inspection.
- i. 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.

- j. Stock chassis outer frame must remain intact but are allowed to be reinforced with a minimum of 1 ½" by 2" tubing .065" wall thickness.
  - i. All reinforcement must connect to the stock chassis at the stock engine cradle, A, B and C pillars and the rear cross member with a minimum of 4 contact points per section.
  - ii. All contact points must be welded and all 90° corners must be gusseted.
- k. A diagonal brace through the center of the passenger section is required.
- l. Bumpers may be welded or, at a minimum, chained to the mounting brackets to stop the chance of losing a bumper on the track.
  - i. Bumper ends must be capped and may have supplemental attachments to fenders to prevent crumpling.
- m. 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.
- n. Rub bars are optional but must be 1" square tubing and mounted flush with the car body. The ends must be tapered and capped.
- o. A rear-view mirror and drivers' side mirror are required. Drivers' side mirror must not protrude out past the body line.
- p. Pedal blocks for short drivers and those with disabilities must be approved by Track officials.
- q. The car may have a horizontal bar, with a maximum of 1 ¾" 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.
- r. A front and rear sun visor no bigger than 7" are allowed.
- s. Opera windows may be closed on two door cars.
- t. Skirting is allowed.
- u. Fenders may be trimmed for tire clearance and rust. All sharp edges must be removed or rolled to prevent any cutting of the tires.

### **Fuel Cell**

- a. Cars with the stock fuel tank must retain the stock fuel pump in the stock location.
- i. Modifications to the stock tank are subject to approval from the Tech Inspector or other Track Official for safety.

- b. Cars without fuel pumps are required to have a fuel cell with a minimum capacity of 8 gallons.
- i. It must be mounted behind the rear axle to no less than 10" from the track surface and no less than 10" from the back panel of the car.
- ii. A firewall of a minimum 20-gauge steel is required to separate the driver from the cell.
- iii. No bottom draw fuel cells are allowed.
- c. Cars with fuel pumps must install a shutoff switch, clearly marked with an orange background, in easy reach of the driver and safety personnel.
- d. No rubber fuel line along or through the body or through the interior of the car.
- e. A rear mounted fuel cell is HIGHLY RECOMMENDED.

### **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 the 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.

### **Roll Cage**

- a. Six-point racing roll cage MINIMUM with a one-piece main hoop behind the drivers' position.
- b. Driver door protection and a halo bar are required.
- c. All mounting points must be completely welded to the chassis with a 4" by 4" by 0.125" steel contact plate.
- d. Door bars must come to the driver side skin and gusseted with two vertical bars between each door bar.

- e. No less than three door bars on the driver side and tube door bars on passenger side.
- f. All roll cage material must be 1 3/4" by .095".
  - i. No pipe fittings, no galvanized pipe, no exhaust pipe or conduit pipe is allowed.
- g. All 90° corners must be gusseted.
- h. 1/8" steel plate required between the A and B pillars on the driver side door bars from top to bottom of rocker panel.
- i. All welds must be electrical, must look safe and professional.
- j. Roll bar padding is mandatory for all bars that may come in contact with the driver.
- k. A 5/16" hole must be drilled in each outbreak of the main hoop for inspection.
- l. All cars must have a 1 3/4" by .095" minimum size bar running from the roll cage to the strut tower on each side.
- m. A bar from the strut tower to the front bumper is also recommended.

### **Battery**

- a. The battery may 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.

### **Brakes**

- a. Must have all four working brakes.
- b. No emergency brakes allowed.
- c. No individual shut off devices allowed.

### **Exhaust System**

- a. Aftermarket mufflers and headers are allowed.
- b. No part of the exhaust may go through the driver compartment.
- c. Any loss of a muffler is cause for a Black Flag to be given.
- d. Exhaust must remain underneath the car at all points and must exit on the passenger side, driver's side or from the rear of the vehicle.
- e. It is discouraged to run the exhaust in the direction of fuel lines or the fuel tank.
- f. The finished exhaust must have a turn down at the end that points at the racing surface.

- g. **MUFFLERS MUST BE UNDER 100 DECIBALS at 100'! NO EXCEPTIONS!**

### **Steering and Suspension**

- a. Modifications to the suspension is allowed per the following:
  - i. Minimum ride height must not be less than 4 ½" from the track surface with the driver inside.
- b. Race springs may be heat cut. Use of race springs is permitted.
- c. Shocks must be stock, or stock-style race shocks mounted in stock brackets.
- d. Weight jacking buckets or screw jacks are allowed.
- e. NO bolt type screw jacks allowed.
- f. Camber of tires is allowed.
- i. No lowering or raising by cutting the brackets of any support of the camber permitted.
- ii. Hondas are permitted offset ball joints for camber.
- g. Rear axles can be changed but must maintain +/- 2" in width to the original.
- h. The steering wheel and assembly may be replaced with a racing steering wheel and assembly.

### **Cooling System**

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

### **Tires and Wheels**

- a. All wheels must be steel, no more than 7" in width, and exactly the same size with no less than 4" of backspacing.
- b. No wheel spacing or shimming allowed.
- c. Aftermarket racing wheels **ONLY**.
- d. Tires to be made by a major manufacturer.
- e. The use of tire softener is not permitted.
- f. All tires are to be marked new or used at the beginning of the race season.
- g. Four (4) new tires are permitted on the first race.
  - i. Only one (1) new marked tire per week after the first race.
- h. Speedway Item No. 91645551 spring spacers are allowed.

## **Engine and Transmission**

- a. 4-Cylinder may interchange GM to GM, Dodge to Dodge, Toyota to Toyota, etc.,
  - i. No replacement parts made specifically for racing.
  - ii. Computers may be adjusted or interchanged with performance chips or boxes.
  - iii. No engine permitted that is designed specifically for racing.
- b. 6-Cylinder owners must install an engine for that make.
  - i. No changing computers or wiring harnesses.
  - ii. No high-performance parts.
  - iii. Transmission must be mounted to the engine without an adapter plate or brackets that would change the stock location of the engine and transmission.
  - iv. Clutches must be stock replacement.
  - v. No devices that are specifically designed for racing.
  - vi. No racing torque converters.

## **Transponders**

- i. No farther forward than 12" behind the center of the rear axle.
- ii. Not to be placed any higher than 12" off the track surface.

**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.**