



**2019**

**Mini Stock**

**Rules**



# **SUNSET SPEEDWAY 2019 MINI STOCK RULES**

## **DISCLAIMER**

*The rules and/or specifications set forth herein are designed to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such events. By making application for a competitor permit, it is deemed that the competitor agrees to become familiar with these regulations and abide by the directions set forth and prescribed by Management. No express or implied warranty of safety shall result from publications of, or compliance with these rules and/or specifications. They are intended as a guide for conduct of the sport and are in no way a guarantee against injury or death to participants, spectators or others.*

## **THE INTERPRETATION OF THESE RULES WILL BE SOLELY THE JUDGMENT OF THE TRACK OFFICIALS & TECH STAFF IN CHARGE AND THEIR DECISION WILL BE FINAL.**

- Any part of the car not specifically mentioned or covered in these rules must remain STOCK. Stock parts are those found in the OEM PARTS BOOK (original equipment manufacturer), not those found in high performance or off-road racing books.
- Any cars being teched will be allowed to have only one driver and two mechanics present in the tech area. Any harassment from any driver or crew member to the tech staff (or any other track official) may result in an automatic disqualification, thus forfeiting all money earned that night

## **DISQUALIFICATION DECISION FOR ANY REASON WILL BE DEEMED FINAL.**

## **TECHNICAL SPECIFICATIONS**

- The word stock when used herein, shall mean unaltered, as factory available and produced by the OEM for the make, model and year of the car being raced.
- That excludes all aftermarket "High Performance" parts, and all decisions and rulings shall be based on data obtained from the Canadian Service Data Book and other OEM Specification Book.
- The Mini Stock division is for the individual participating in the sport of car racing for a hobby. The rules and restrictions are designed to prevent the costs from getting out of hand, giving each individual a fair and competitive chance in this division...
- The Mini Stock division is open to any 2010 & older approved 4 cylinder automobile having a factory listed wheelbase of no more than 104" and engine no larger than 2500cc.
- Cars may be front or rear wheel drive.
- **Not allowed:** convertibles, 4 wheel drives, trucks, BMW, Audi, Saab turbo or supercharged engines, VVT or variable valve timing, rotary engines.
- No mid or rear engine cars.

## **1) BODY AND APPEARANCE**

- Body must be stock in appearance to the original vehicle, with no chopping, channeling or sectioning allowed.
- Aluminum body panels allowed below window line.
- Body must be complete with all doors, fenders, quarter panels, hood, trunk and roof as well as both bumpers.
- All chrome moldings, door handles, nameplates and lights must be removed.
- All doors must be welded or bolted shut to the satisfaction of the tech inspector.
- No open roofs. If open sunroof, it must be covered with minimum 20 gage steel.
- Original wheel arches may have minimal trimming.

- Inner splash aprons in the front fenders may be removed.
- Trunk floor and inner wheel arches on rear fenders and quarter panels must be retained but can be replaced with 22 gauge magnetic steel.
- Absolutely no bars shall extend outside of body panel including the grille and bumper, with the exception of side scrub rails.
- Scrub rails cannot extend any further forward than the rear of the front wheel opening, and no further rearward than the front of the rear wheel opening. (No sharp edges) Maximum 1 "x 2" welded or bolted to the roll cage. If bolting on scrub rails, use carriage bolts (chrome bumper type, rounded heads), or if using hex head bolts, recess them to the inner face of the scrub rail.
- V type Lexan scrub rails allowed.
- Stock body mounts may be removed.
- Cars must not be excessively rusted and must be presentable in appearance.
- Breather tubes allowed out the back
- The tech committee will reject cars that are considered unsafe or improperly prepared.

#### **Bumpers**

- Bumpers must be stock for the make being run.
- Reinforcing behind the bumpers allowed.
- Maximum 1 3/4" outside diameter with maximum .095" wall thickness (roll cage tubing) or equivalent.
- Bumpers must be mounted in stock position with no sharp edges exposed.
- No cut-offs.
- Bumper shocks may be welded.
- Chrome steel type bumpers must be welded and chained, to prevent bumpers from falling off onto the race surface and creating a hazardous condition during a race meet.
- All cars must be equipped with chains, front and rear, strong enough to be lifted by a tow truck for towing purposes and must be accessible from outside of car.
- Front nose and side skirts minimum ground clearance 4".

#### **Paint & Lettering**

- Only those cars that are registered members of Sunset Speedway Mini Stock division are permitted to pre-number their car.
- Numbers must be on the roof reading from the passenger side and in the center of each door, in large (minimum 24") letters in a color that clearly contrasts the paint job of the car.
- Sponsor's name and logo may be placed any other place on the car.
- Block type numbers 6" high, white in color, must be displayed on the upper right hand side of the windshield to make it easier for line-up purposes.
- Vulgar words and expressions are not permitted.

#### **2) BATTERY**

- Battery must be securely mounted in front of the firewall OR in a sealed container behind the driver - NOT in the fuel area.

#### **3) BRAKES**

- Stock four wheel brakes in good working order are compulsory.
- OEM rear disc brakes allowed for make, model and year of chassis
- A 3 inch brake duct may be used on the right front wheel.

#### **4) INTERIOR**

- All upholstery materials, trim and padding must be removed.
- The front and rear firewalls must have all holes and openings filled with sheet metal.
- NO SHEET METAL SCREWS TO BE USED. Pop rivets or welding / brazing only.

- Any holes in the floor pan must be filled.
- Original floor pan and firewalls must be retained.
- No fuel lines or fuel filters permitted in the driver's compartment.
- Right side floor may be raised a max. of 10" to accommodate exhaust.
- All windows and glass except for the front windshield must be removed.
- No screens or half windshields.
- Windshield may be Lexan or safety glass with a minimum of 4 safety clips (No Plexiglas allowed).
- Front windshield must have 2 center braces welded to the roll cage on the interior side top and bottom.
- Only factory tinted windshield glass permitted.
- No obstruction of driver's view on the front windshield area except for the top 4" of the front windshield for a track sponsor decal.
- Front windshield braces must be on the interior side of the vehicle.
- Stock interior mirror is permitted, stock location, maximum size 3"x 17" and one (1) 3" round convex mirror on left side.

#### 5) ROLL CAGE - MANDATORY

- Cage must be minimum 1 3/4" outside diameter with minimum .095" wall thickness.
- Base of uprights must be electric welded to frame of car.
- Unibody will be welded to a steel 8"x 8" of 3/16" minimum plate which is formed and bolted or welded to floor pan.
- In a Unibody car, the rear upright bars must be connected by a side to side member just above the floor pan.
- Cage shall be braced to the rear frame kick-ups and diagonally between the rear uprights.
- Full roll cage mandatory from firewall back to the rear frame rails.
- Rear and front hoops allowed.
- All welds must be properly gusseted of no less than .095" thick.
- No pipe fittings allowed.
- All metal in driver's door bars and roll bars in the driver's area must be properly padded and taped.
- Left leg protection bar must be installed between roll cage and left front frame rail.
- Minimum 16 gauge metal between roll cage door bars and body skin on driver's side only. Minimum 40" in length by 14" high.
- No offset cages.
- Minimum 3" clearance recommended between top of driver's helmet and bottom of overhead roll bars.

#### 6) ENGINE

- Only engines that were factory available for the make, model and year being run are permitted.
- Maximum engine size is 2500cc. **No Honda VTEC or ECO TEC Engines allowed.**
- No head modifications.
- Cam lift will be inspected and must conform to the engine specs for the car.
- Maximum overbore of .030" allowed.
- Exceptions to the above engine make, model and year rule must be presented in writing to the tech official and tech supervisor for discussion and ruling through the track management.
- Double overhead cams allowed.
- Motor compression must be within 20 lbs of stock
- Adjustable cam gears allowed.

## **MOTORS ARE SUBJECT TO WHISTLING AND/OR TEARDOWN AT TECHNICAL DEPT. DISCRETION.**

- \$50.00 gasket allowance
- If motor is deemed illegal – no allowance will be paid.

### **7) COOLING SYSTEM**

- Radiator must be stock type and in stock location.
- **NO ANTIFREEZE ALLOWED**

### **8) CARBURETOR / FUEL INJECTION**

- OEM (Original Equipment Manufacturer) carburetor(s) that is/are factory stock for the engine being run is permitted.
- Fuel pump must be disabled whether ignition is on or off. Fuel shut off operated by the oil sending unit is recommended. Mr. Gasket # 7872.
- Choke accessories may be removed.
- Must use air cleaner with filter element in stock position.
- Mandatory two throttle return springs in opposite directions.
- Stock fuel injection for the make, model and year is allowed.
- Fuel injected cars must have a kill switch on both sides of the car, marked in red, which shuts off the power to the fuel pump.
- Fuel injected cars must also have a relay which shuts off power to the fuel pump on low oil pressure or loss of ignition.
- No ram air intakes.
- Air horn on air cleaner may be removed.
- No cowl induction air cleaners.
- Cars originally equipped with fuel injection may opt to use a carburetor, intake manifold, air cleaner and mechanical fuel pump from an older model of the same car.
- Mustangs allowed to use a 350 Holley Carb.

### **9) DRIVELINE**

- Stock OEM automatic or standard transmission.
- Automatic must have stock torque converter.
- Standard transmission must have all gears working with factory stock clutch assembly and flywheel.
- Flywheel to be within 1lb of stock for engine being run.
- No transmission coolers inside of driver's compartment.
- Drive shaft on rear wheel drive cars must have two 360 degree steel retaining loops minimum 1/4"x 2" positioned at the front and rear of the drive shaft within 8" of the U-joint.
- No chains.
- No aluminum drive shafts. Drive shafts must be painted white or fluorescent.
- Locked rear ends are permitted.
- Mini-spools or welding may be used to lock a rear end. If welding, be sure a professional type job is done.
- Posi-trac type rear ends may be used.

### **10) IGNITION SYSTEM**

- Must be stock OEM.
- Charging system must be working.
- Kill switch must disable ignition system.
- Stock OEM ignition and computers. **NO aftermarket computers or computer components**
- **Stock replacement wiring harnesses permitted.**

- **No HONDATA allowed.**
- **Rev Limiters may be removed.**

### 11) SUSPENSION AND FRAMES

- All suspension and frame components must be stock for the make, model and year of the car.
- No modification of stock suspension locating points allowed except for those listed below.
- The top of the right front wheel may be cambered in.
- Honda's will be allowed to use adjustable ball joints on the front upper control arms.
- On McPherson strut front ends; if no camber adjustment is available, then the upper strut tower may be modified to obtain camber.
- Check with tech official before proceeding.
- Camber of left front wheel must be within manufacturer specifications.
- Camber of the right side tires cannot exceed 2 ½ inches. The remaining 2 wheels cannot exceed 1 inch camber. This will be checked with a level from the bulge of the right side tire @35lbs. and the left side @ 25lbs.
- Solid axle rear wheel drive allowed 2 ½" left front camber
- Adjustable rods may be used on rear
- Unibody cars may install sub frame connectors.
- Frame height to be a minimum 5" from the ground to the frame, and will be measured without driver in the car.
- All steering columns must be of a collapsible type and the center of the steering wheel must be heavily padded.
- Non adjustable shocks only
- No racing springs or racing shock absorbers allowed.
- Stock springs may be replaced with stiffer or weaker springs as long as the spring retains the stock style.
- One 1" thick spacer is allowed on any or all springs. Spring rubbers will be allowed. Spring rubber to be a coil type rubber only.
- No suspension tie-downs
- Traction control devices of any kind are **NOT** permitted in any class at Sunset Speedway. If any car is caught using traction control of any kind, they will face immediate disqualification as well as a **ONE YEAR MINIMUM** suspension from Sunset Speedway.

### 12) EXHAUST

- Catalytic converters may be removed.
- Muffler is mandatory (any style).
- Exhaust pipe must exit to the outside or under the car and behind the driver.
- Exhaust pipes must be firmly mounted and have no sharp edges or protrude outside of the body line.
- Maximum exhaust pipe not to exceed 2-1/4" outside diameter.
- Single exhaust only. .
- Mustangs are allowed to run a **STOCK Header (Part # F238V)** in lieu of an exhaust manifold.

### 13) FUEL

- Petroleum based unleaded fuels only.
- The gasoline shall not be blended with alcohols, ether, or other oxygenates and it shall not be blended with aniline or its derivatives, nitro compounds or other nitrogen containing compounds.
- No lead additives allowed.
- No NOS systems.

#### 14) WHEELS

- Maximum rim width bead to bead is 7".
- Heavy duty or racing rims may be run on all four wheels.
- Left side as close to stock as possible. Right side must be within 1" of left side.
- Wheel offsets allowed (Example: 4" left side – 5" right side).
- No spacers.
- Mandatory racing wheels on right side. 13", 14" or 15" rims allowed.
- Minimum 1" nuts on all four wheels.
- No aluminum wheels allowed.

#### 15) TIRES

- All entries are required to use Hoosier #10247 (24.0/7.0-14) and #10257 (24.0/7.0-15) Tire rule in effect. 6 tires to start the season and 1 every 3 weeks after that.
- No tires to protrude outside of body. **TIRES TO BE PURCHASED FROM SUNSET SPEEDWAY ONLY – Direct purchase from supplier not available.**
- **TIRE SOAKING is NOT permitted. Tire softener, conditioner, or any other substance to treat tires is not permitted. The use of solvents to enhance is completely prohibited.**

#### 16) SAFETY EQUIPMENT

##### Fire Control

- Cars must have a 2 1/2 lb. minimum fire extinguisher with a steel or aluminum head mounted in a steel mounting bracket and be bolted down, and within driver's reach with seatbelts fastened.
- Fire extinguisher must be serviced and inspected each year and dated no later than January 1st of the current year.

##### Fire Suit

- Driver's fire suit SFI3.2A/1 is **mandatory**. Recommended SFI3.2A/5.
- Driver and suit must maintain clean looking appearance.
- Fire Proof Racing Gloves are **Mandatory**
- Fire Proof contoured neck collar, balaclava, underwear, socks, shoes and Hans or Hutchins type devices are highly recommended.
- No nylon shoes allowed

##### Fuel Cell

- Fuel cell mandatory.
- Must be securely mounted in trunk area centered between the frame rails and no lower than the top of the rear axle.
- Hatchback models require a latching, accessible compartment/firewall to be constructed of 22-gage steel, to house fuel tank.
- Trunk floor must remain in car.
- Maximum fuel cell size 15 gallons.
- Neoprene or steel gas line must be securely fastened under floor.
- No plastic or glass fuel filters.
- No copper lines.
- No boat tanks.
- Gas caps must be sealed and vent must have a check valve.
- Plastic fuel cells must be placed in a metal container, minimum 22-gage steel. There must be a minimum 1" gap between the fuel cell and the steel enclosure to act as a crush area.

- A fuel cell rear wrap-around protection hoop may be used. Minimum 1 3/4" x .095" tubing.
- Gas cap must have an appropriate attaching line to prevent it from being lost.
- External electric fuel pumps allowed on fuel injection vehicles as approved by tech staff.
- Fuel cell can be no lower than rear trailing axle.
- Fuel cell must be separated from driver compartment with 22 gauge steel firewall.

**Safety Helmet**

- **A Snell 2010 SA or newer approved racing safety helmet must be worn. (MANDATORY)**
- Goggles and full face helmets highly recommended.

**Seat**

- An aluminum racing seat with headrest must be used, bolted to roll cage, not bolted to the floor.
- When mounting seat use minimum 3/8" grade 8 bolts with large washers to hold racing seat, to seat framework.
- Minimum of two bolts on the seat back and two bolts on the seat bottom.
- Seat must be positioned completely to the left of the centerline of the car.
- Headrest side plates recommended.

**Safety Belt & Harness**

- All cars must be equipped with a quick release, 5 point harness with a minimum 3" lap belt and shoulder harness of 3". Affixed to the roll cage or chassis with grade 8 bolts no less than .375 (3/8) inches in diameter.
- Shoulder belts must be mounted to the roll cage.
- **Head & Neck Restraint is MANDATORY ( eg: Hans Device)**
- Belts must be clearly dated and be no more than three years old.
- NO INERTIA OR REEL ROLL TYPE SEAT BELTS PERMITTED

**Window Net**

- Window net mandatory with minimum 3/8 inch rod. Must have quick release latch.

**Starters**

- Cars must be self-starting and have two fuel pump or ignition kill switches.
- Kill switches must be painted red and marked ON and OFF on the left and right side of the dash.

**17) WEIGHT**

**WEIGHT:**

ENGINE TYPE	MIN. WEIGHT	MAX. WEIGHT	MAX SIZE	WEIGHT PER CC
8 or 12 Valve SOHC	2100 lbs	2250 lbs	2760cc	1.15 lb/cc
16 valve SOHC	2100 lbs	2450 lbs	2300cc	1.20 lb/cc
16 valve DOHC	2200 lbs	2600 lbs	2400cc	1.30 lb/cc

A 100 lb weight break will be given for automatic transmissions.

Minimum required weight is measured with the driver in the car. A maximum left side weight of 55% and rear weight of 50% No topping up with fuel after the feature.

To equalize the field as much as possible additional weight will be added to the total actual weight of the car as follows – **Feature win: 25lbs, Second place: 15lbs, Third place: 10lbs.** This penalty weight will be added in the passenger seat location. After accumulating 100lbs in penalty weight, cars finishing in



the top two positions in the feature will lose ½% of left side each time opposed to additional weight being added. These penalties only apply to point's events only.

- **Nissan 240 SX and Dodge R/T minimum weight 2525lbs. 55% left side weight**
- **Mustangs:2400 LBS. 55% left side weight**
- Ballast weight must be securely fastened with adequate grade 8 bolts, painted white with car number on them and maintain the 5"ride height.
- Maximum left side weight is 55%.
- Maximum rear weight is 50%
- Sunset reserves the right to add any amount of weight required to any location, alter percentages or install rev limiters on any car deemed to be too fast in order to keep this class competitive and fun.
- Weight to be supplied and install by car owner
- **HEADERS – NO WEIGHT PENALTY.**

**18) Jack Stands**

- **All jack stands must be plated on the bottom**

**ALL SAFETY EQUIPMENT MUST BE WORN ANY TIME DRIVER IS IN THE RACE CARCONTACT**

**INFO:**

**Technical Director**

**Mike Brown**

**705-770-9665**

**[mike@sunsetspeedway.ca](mailto:mike@sunsetspeedway.ca)**

**Tech Specialist**

**Ben Dennis**

**705-294-0470**

**Track Owner/Operator**

**Brian Todish**

**416-543-3684**

**[brian@sunsetspeedway.ca](mailto:brian@sunsetspeedway.ca)**