

# Proposed Mini Stock Rules

## 2020

### **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 or entry for an event, 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.*

**IF IT DOESN'T SAY YOU CAN DO IT, ASK THE TECH DIRECTOR FIRST. 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. Stock parts are those found in model/year OEM part books as used by general public.
- Any cars being teched/inspected 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 (no payout).**

### **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 an engine no larger than 2500cc.
- Cars may be front or rear wheel drive.
- Not allowed: convertibles, 4-wheel drives, trucks, BMW, Audi, Saab turbo, V-Tec, turbo or supercharged engines or rotary engines.
- No mid or rear engine cars.

### **GENERAL RULES**

- The rules and/or regulations set forth herein provide for the orderly conduct of racing events and to establish minimum acceptable requirements of such events. These rules shall govern the condition of all such events. All participants are deemed to have complied with these rules. No expressed or implied warranty of safety shall result from publications of or compliance with these rules and/or regulations. Speedway rules are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to a participant.

- \*Speedway Officials shall be empowered to permit minor deviations from any of the specifications herein or impose any further restrictions that in his/her opinion does not alter the minimum acceptable requirements. No expressed or implied warranty of safety shall result from such alteration of specifications.
  - \*Speedway reserves the right to update, modify, and/or delete rules at any time deemed necessary to ensure safety, fair competition or any other reason that may be appropriate.
  - \*Any interpretation or deviation of these rules is left to the officials. Any decision of and by Speedway Officials is final.
  - Upon admittance to a restricted area, all participants must conduct themselves in a manner not detrimental to stock car racing. Profanity in front of race fans, officials, management, profane signs or writing on cars, etc., will not be tolerated and may subject the offending party to penalties. Conduct in Social Media deemed detrimental to Sunset Speedway, or sponsors may subject the driver and/or team to sanctions. UNSPORTSMANLIKE CONDUCT AND/OR CONDUCT DETRIMENTAL TO THE SPORT OF AUTO RACING WILL NOT BE TOLERATED.
  - Verbal or physical abuse of officials, including improper language or actions will result in sanctions from the series.
  - Fighting will not be tolerated. Drivers will be held responsible for the conduct of all persons connected with their car, and violations will be dealt with accordingly. Any person from a crew, including the driver, going to another pit area where any altercation erupts, will be considered at fault and will be subject to penalties.
  - Any driver who, in the judgment of track officials, engages in rough driving, deliberately running into, blocking or swerving in front of another car - may be subject to penalties. Any car intentionally blocking the track will subject the owner and driver to immediate and indefinite suspension from the series.
  - Any driver who intentionally causes a caution condition, without safety being an issue, by stopping, spinning, or any other action, is subject to a 1-lap penalty.
  - Any competitor that finishes in the top 5 may be required, at their expense, to remove the intake, heads, and/or oil pan for inspection purposes.
  - \*All cars must go through technical inspection prior to car taking to the track for practice. Cars will be weighed with driver, and may be done prior to or after qualifying and prior to or after the feature. Reading of designated scales will be official.
  - **If transponders are used at your track, they must be mounted 90° from the furthest forward point of the front nose. Let us know if you will need to rent a transponder.**
1. **SAFETY** will continue to be our number one priority – i.e. belts, fuel cell, on track. We will be working to ensure safety continues to be a non-issue.
- 1.1. Safety: In the pits and on the track, takes precedence over all else.
- 1.2. **Driver Protection:** Drivers are required to wear full coverage; one or two-piece Nomex fire suits which are S.F.I 3.2A/1 rated, SFI3.2A/5 is highly recommended. Fire retardant gloves are mandatory SFI 3.3/1. Driver helmets must conform to Snell **SA-2010** or higher SA standards and have a certification sticker visible inside the helmet. **Head & Neck (SFI 38.1) restraint is mandatory (i.e. Hans, NecksGen or similar).**
- 1.3. **Belts and Harness:** A quick-release 5-point safety harness with a 3" wide lap and a minimum 2" shoulder harness, and 2" width anti-submarine harness in good condition are mandatory. Shoulder harnesses must be mounted and secured at the driver's shoulder height. Belts must be securely fastened to the frame, cross-member or roll cage by means of a suitable reinforced mounting, in such a manner that all fittings are in direct line with the direction of pull. Belts may not be any older than 3 years (manufacturer's date). Belts with new style SFI tags expire at the end of the month indicated on tag. All belts and mounting will be subject to inspection and approval.
- 1.4. **Fire Control:** All entries **must at least have** a CSA approved 2 ½ lb. fire extinguisher with either a steel or aluminum head mounted in a steel mounting bracket and must be bolted down, and within driver's reach with seat belts fastened. Extinguisher must be serviced each year and dated no earlier than January 1<sup>st</sup> of the current year.

- 1.5. It is recommended that all teams keep at least one 10 lb. "BC" rated fire extinguisher in the pit paddock and/or on pit road.
- 1.6. **Window Net:** An approved window net must be installed in driver's side window opening. Net must be installed so it is tight. Window net anchors must be attached to roll bars, not body. Window net must be quick-release type. Net must be permanently anchored at the bottom and release at the top. Lever-latch releases are highly recommended.
- 1.7. **Steering Wheel, Column:** All cars must have the centre of the steering wheel padded. Collapsible type column mandatory, 2 u-joints acceptable and a quick release steering wheel is highly recommended.
- 1.8. **Roll Bar Padding:** All roll bars within driver's area must be covered with approved energy absorbing, flame resistant roll bar padding. No sharp edges, intrusions or bare metal near driver.
- 1.9. **Seat:** An aluminum racing seat must be used, (full containment seat highly recommended). Aluminum seats must be bolted solid, so that seat will not shift or loosen on impact. Seat must be securely mounted to frame and cage and cannot be lightened in any way or floor mounted. A minimum 6 seat bolts, min. 3/8 inch or larger will anchor the seat. An approved padded right-side headrest is mandatory and must be securely mounted.

#### **RADIOS:**

- 1.10. 1-way or 2-way radios are NOT allowed with the exception of a Receiver if your track mandates one.

## **2. BODY:**

- 2.1. Body must be stock in appearance to the original vehicle, with no chopping, channeling or sectioning allowed. Body MUST be securely attached. Body can be changed to any year, same make and model. Body must be complete with all doors, fenders, quarter panels, hood, trunk and roof as well as both bumpers. Absolutely no bars shall extend outside of body panel including the grille and bumper, with the exception of side scrub rails. Stock body mounts may be removed. Cars must not be excessively rusted and must be presentable in appearance, altered body line will not be allowed. Aluminum (.040") or steel (22 gage) side skins allowed below the side window lines but must remain stock in appearance. Hoods and trunk lids may be gutted. Aluminum or fiberglass hoods allowed and aluminum trunk lids. Tow hooks or chains front and rear. The tech committee will reject cars that are considered unsafe or improperly prepared. Cars must have complete body at the start of each race. Doors must be welded or bolted securely. Aftermarket front and rear bumper covers allowed or modifications to stock allowed as long as the appearance isn't drastically changed, this is at the discretion of the tech director.
- 2.2. **Ground Clearance:** Minimum frame height is 5" and any part of the body is 4", with driver out.
- 2.3. **Spoiler:** Rear spoiler allowed but may not extend beyond rear edge of rear deck panel and must follow the contour of the rear deck lid and must be Lexan, aluminum or stock. Maximum 5" high. No side gussets or rear vanes, no spoiler braces allowed.
- 2.4. **Scrub Rails:** Side bars must extend no further forward than the rear of front wheel opening, and no further rearward than front of the rear wheel opening, and must be mounted 1" above center of front & rear hub. Maximum 1" W x 2"H welded or bolted within 6" of both ends to roll cage with no sharp edges. When bolting on scrub rails, you must use carriage bolts (or round-headed bolts), if hex head bolts are used, they must be counter sunk. V type Lexan scrub rails allowed.
- 2.5. **Bumpers:** Must be in stock position both front and rear and securely fastened with no sharp edges exposed, no cut offs. Bumper shocks may be welded, if custom bracing is used the maximum size tubing allowed is 1 3/4" x .095 wall thickness. Bumpers must be present at the start of each race. (see rule 2.1)

- 2.6. **Windshield, Windows:** All windows must be removed, front windshield must be factory safety glass or Lexan a minimum of 1/8" thick (minimum of 2 centre braces securely mounted, mandatory with Lexan). A minimum of 4 clips to secure glass windshield, rear Lexan window optional (must be braced). Rear side windows are allowed and must be made of a minimum 1/8" Lexan. Vent windows are allowed and cannot be longer than 6" measured from the forward furthest point. All body panels and windows must be mounted and properly braced on the chassis to prevent deflection under racing conditions. Keep top 5" of windshield clear for the potential of a class sponsor decal.
- 2.7. **Paint & Lettering:** Numbers on both doors (minimum 18") and roof (minimum 24"). Numbers must contrast with body color. Your car number must be placed on the front of the car somewhere visible to Cars that are considered improperly prepared may be rejected by track officials.
- 2.8. **Mirrors:** Rear view mirror permitted inside 17"x3" max. and one 3" convex side mounted mirror allowed.

### 3. CHASSIS, SUSPENSION & ROLL CAGE:

#### 3.1. **Chassis & Suspension:**

- All suspension and frame components must be stock for the make, model and year of the car unless stated in these rules.
- No modification of stock suspension locating points allowed unless stated in these rules.
- A camber only adjustable ball joint is permitted on stock front upper control arms.
- McPherson strut front ends; the upper strut tower may be modified to obtain camber. Adjustable Caster/Camber kits are allowed. Strut tower bracing is allowed.
- Camber can be changed from factory specs on left & right front wheels.
- **FWD Cars & RWD Cars with Adjustable Rear Suspension:** Camber of the right rear cannot exceed 2" and 1" on left rear. This will be checked with a level held against the bulge of the tire @35lbs. on the right rear and @25lbs. on the left rear.
- Adjustable rods may be used on rear.
- Frame height to be a minimum 5" from the ground to the frame, and will be measured without driver in the car.
- Uni Body cars may install sub frame connectors.
- No racing or adjustable shocks or struts. No bump stops allowed.
- No load bolts allowed.
- Stock springs may be replaced with racing springs with same or similar dimensions that fit within stock mounts (no modification allowed) One spring spacer allowed on each spring, may be adjustable. Coil spring rubbers will be allowed.
- No suspension tie-downs
- Fabricated strut mounts allowed with approval of tech official.
- OEM sway bar permitted. Must be from same make but model is interchangeable. Approved adjustable sway bar links allowed, must use stock type bushing at frame mounting point.

3.2. **Wheelbase:** Wheelbase must be within 1/2" from side to side.

3.3. **Roll Cage:** A full roll cage constructed out of 1 3/4 x .095 min. round steel tubing is mandatory (old Sauble cars with 1 1/2" DOM allowed) and no square, angle iron or channel can be used anywhere including cage support. Leg protection bar must be installed on the left. A minimum of 3 horizontal door bars on the driver's side with a minimum of two vertical bars between each horizontal bar. 3 bars required on passenger side door area, "X" or "Z" type bars will be allowed on passenger side. **Front and rear hoops are mandatory at any Jukasa race.** Dash bar required, and a "Petty Bar" is recommended. Rear hoop is mandatory, front hoop is recommended, hoops are not to be outside the inside edge of the tires and must attach to the centre section of the roll cage. All uni-body cars must have the cage welded to a minimum 6" x 6" steel plates, a minimum of 3/16" thick that will be bolted and/or welded to an adequate floor pan. Uni-body cars must have a side to side bar from rear cage upright to rear cage upright just above floor pan. All welds must be electric or mig welded and approved by technical inspector. Minimum 16-gauge metal between roll cage door bars and body skin on driver's side only from rocker panel to top

door bar. Minimum 40" in length by 14" high. Minimum 3" clearance recommended between top of driver's helmet and bottom of overhead roll bars.

#### 4. BRAKES

- 4.1 Stock four-wheel hydraulic brakes in good working condition are compulsory and are subject to test and inspection. Pedal must be in original position. Four-wheel disc brakes allowed if stock for that make, model and year of chassis. Stock OEM replacement rotors allowed, can be slotted or drilled. All emergency brake handles and pedals must be non-functioning and disconnected. Metal cooling fans on the front are allowed behind rims with a maximum thickness of 18 gage **OR** one brake duct hose on each front wheel. No electric fans permitted. ABS braking system must be disabled.

#### 5. FIREWALLS & INTERIOR:

- 5.1. Original front firewall must be maintained. All upholstery materials and trim and padding must be removed. The front and rear steel firewalls must have all holes and openings filled with 22 gage steel sheet metal. Package tray and filler panels can be .040" aluminum. If car has a rear firewall the trunk floor can be removed. Right side floor may be raised up to 10" to allow for exhaust. No sheet metal screws allowed, pop rivets or welded only.

#### 6.. FUEL CELL & SYSTEM:

- 6.1. Racing fuel cell in a 22-gage steel box mandatory must be mounted between the rear frame rails and bolted securely no lower than the top of the rear axle housing. Fuel cell must be separated from the driver's compartment by an all steel 22 gage firewall (see 5.1) and have a steel enclosure. There can be no openings in the firewall and any holes must be filled in with metal. The fuel cell must be firmly secured with steel straps. A fuel cell protection bar is mandatory, minimum 1 ¾ inch O.D. .095 inches thick. Steel cased fuel filters only. Gas caps must be sealed and vent must have a check valve. No copper fuel lines. Maximum fuel cell size is 15 gallons. No car will be permitted to run if any sign of fuel leakage is found. The mounting of the fuel tank is at the discretion of the tech inspector.

- 6.2. **Fuel & Fuel System:** Petroleum based unleaded fuels **or low lead AV fuel with NO alterations.** 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.

Cars equipped with a carburetor and mechanical fuel pump, neoprene or steel fuel line must be securely fastened. On cars with electric fuel pump, the fuel line must be steel or high-pressure neoprene, in good condition and must run inside a protected area or inside a steel conduit. The fuel line on the pressure side of the fuel pump must be high pressure neoprene or steel. No copper lines. No plastic or glass fuel filters. Cars with an electric fuel pump must have a kill switch marked in red, which shuts off power to the fuel pump and a relay switch which shuts off power to the fuel pump on low oil pressure or loss of ignition.

#### 7. RADIATOR:

- 7.1. Must be or resemble O.E.M. must be in stock location and include a one-litre metal overflow can mounted ahead of engine fire wall, the overflow tube must exit the body at the base of the windshield. No antifreeze allowed in cooling systems. Pressure release caps are recommended. Aluminum radiators may be used.
- 7.2. Electric fans optional with wiring exposed for inspection.

#### 8. DRIVE LINE:

- 8.1. Drive shaft/half shafts and universals **MUST** be stock steel standard production type. Painted white.
- 8.2. Steel, 360-degree retainer loops, 1/4-inch-thick x 2 inches wide or equivalent, must be positioned at the front and rear of drive shaft, and within approx. 6 inches of each U- joint if using a rear wheel drive car.
- 8.3. Posi-trac, welded rear end or mini spool allowed.
- 8.4. No aluminum driveshafts. No light weight material allowed. No REM machining or REM type processes are allowed.

## **9. TRANSMISSION/TRANSAXLE:**

- 9.1. Any stock OEM automatic or manual transmission can be used as long as it bolts up to the engine without any modifications, must sit in factory existing mounts, and must be stock. Automatic cars must have a stock torque converter. All cars must have a working reverse gear and all gears must be in working order. Transmission coolers are permitted and cannot be mounted in the driver's compartment. Bell housing must have a minimum 3/16" plate or rubber belting between the clutch assembly and the driver to protect from clutch or flywheel failure. No lightening, REM machining or REM type processes are allowed. Any gear ratio permitted.

## **10. CLUTCH & FLYWHEEL:**

- 10.1. Only a stock OEM or exact replacement clutch disc and pressure plate will be allowed. No lightweight disc or pressure plates allowed. Flywheel must be OEM steel and be stock for engine being run. Flywheel must weigh within 20% of stock OEM weight for the year, make and model of vehicle being used.

## **11. EXHAUST:**

- 11.1. Mufflers are mandatory and be able to remove for inspection. Decibel rating of 98 or less.
- 11.2. Exhaust pipes must exit behind driver ahead of the rear wheels or out the right side past the center of the door. Exhaust pipes must be securely mounted under floor pans and have no sharp edges or protrude outside of the bodyline and a maximum muffler and exhaust pipe size of 2 1/2" O.D.
- 11.3. Headers are permitted, no stepped headers or home built systems, street style header only.

## **12. WHEELS & TIRES:**

- 12.1. Racing wheels are required on both right sides and racing wheels on all four is permitted. Any backspacing/offset permitted. Maximum wheel width bead to bead is 7". Flamboro registered cars only are allowed to have 8" wheels when using American Racer tires and must weigh an extra 10 lbs. per wheel. No aluminum, mag or homemade wheels allowed. Any back spacing/offset allowed provided wheels and tires do not protrude past the body or scrub rails.
- 12.2. Minimum of 1" wheels nuts mandatory and good studs are recommended. Wheel stud threads must protrude through wheel nuts.
- 12.3. No wheel spacers permitted.
- 12.4. Tire Rule – American Racer 7" (705 compound only), Hoosier #10247 (24.0/7.0-14) & #10257 (24.0/7.0-15), DOT approved radial tires with 205R maximum 50, 55, 60,65,70,75 or 80 series tires only. No recaps, no light truck, ice or snow, specialty or racing tires allowed. Passenger car tires only and no soft compounds allowed. Tread wear rating may not be less than 200, anything less will not be allowed.
- 12.5. TIRE SOAKING is NOT permitted. Tire softener, conditioner, or any other substance to treat tires is not permitted. The use of solvents to enhance tire performance is completely prohibited.

## **13. IGNITION, ELECTRONICS & CHARGING SYSTEM:**

- 13.1. Stock OEM ignition system. Cars must have a working charging system. Kill switch must disable ignition system, it must be visible, accessible and clearly marked.
- 13.2. 12-volt battery only and must be mounted securely and cannot be below the frame rails.
- 13.3. ABS, Traction/Stability control systems must be disabled.

## **14. CARBURETOR:**

- 14.1. One factory stock carburetor or twin carburetor setup for that make, model and year. Stock carburetor can be replaced with a Holley 350 cfm part #s 0-7448 or 0-80787-1. You can drill or change jet size and choke can be removed. Carburetor must fit Go-No Go tools. Any 1" spacer or any 1" adapter allowed. 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. 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 or a 350 cfm Holley Carb part #s 0-7448 or 0-80787-1.
- 14.2. Two throttle returns springs mandatory. One spring pulling in each direction.
- 14.3. Cold air boxes allowed. No 'ram air' type systems allowed.
- 14.4. If using a Ford 2.3 L EFI intake manifold you can mill inside opening down a maximum of 1" (to create a plenum) from where carb or spacer mounts. No beveling permitted.

## 15. FUEL INJECTION:

- 15.1. Stock fuel injection/throttle body for the make, model and year is allowed. Aftermarket air tube and cone filters 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. Cowl induction air cleaners are allowed. Cars originally equipped with fuel injection may opt to use a carburetor and intake manifold from an older model air cleaner and mechanical fuel pump from an older model of the same car or a 350 Holley Carb part #s 0-7448 or 0-80787-1 that fits Go-No Go tools.
- 15.2. ECM: Modifications or reprogramming your ECM is allowed (no aftermarket systems) or a factory stock ECM can be used.

## 16. ENGINES:

- 16.1. Must be 4 cylinders and original size made for that year and model of car and must be for the North American market only. Offshore options will be considered but must be approved by tech committee in writing.
- 16.2. Solid engine and transmission mounts are allowed, engine must remain in stock location.
- 16.3. No Rotary, no V Tec engines, no turbo or supercharged engines permitted. Peterborough registered cars only will be allowed non-V Tec B18 engine in 88-95 Civics.
- 16.4. Maximum overbore allowed is .040" for all engines.
- 16.5. Maximum displacement is 2500 cc (2.5 L).
- 16.6. No porting, polishing or coating allowed anywhere.
- 16.7. **8 Valve Engines** can use any lift or duration camshaft, any lifters and any rocker arms. Cam towers can be reinforced and adjustable cam gears or offset keyway is permitted. Forged pistons allowed but no light weight options allowed. Flamboro registered cars only are permitted to use an aftermarket steel 5.7" connecting rods, rods can be no lighter than stock. When Flamboro cars visit other tracks there will be a 50 lb. weight penalty for 5.7" connecting rods. Grinding on rod caps for balancing purposes only.
- 16.8. **12 and 16 Valve Engines** must use stock OEM cylinder head for engine being used. Camshaft lift and duration must conform to original engine specs, adjustable cam gears or offset keyways are permitted. OEM replacement connecting rods with stock length and weight permitted.
- 16.9. **Cylinder Compression:** Cylinder compression must within 20 psi from stock specs. Compression is checked after race with the air filter assembly on and throttle plates wide open
- 16.10. Oil coolers permitted. Must be mounted under the hood and between frame rails, not allowed to be mounted inside of car.
- 16.11. Aftermarket stock type oil pans allowed. Oil pans must have a 1" inspection hole or you will be asked to remove oil pan for inspection.

## 17. WEIGHT:

- 17.1. When adding ballast, it must be in blocks of no less than 5 pounds, bolted securely, painted white, be numbered and securely fastened with grade 8 bolts and mounted no lower than the minimum 5" height.
- 17.2. Maximum left side weight is 55.0%
- 17.3. Maximum rear weight is 48.0%
- 17.4. **ALL WEIGHTS ARE WITH DRIVER IN CAR. No fuel top up allowed post-race.**

**\*\* Car weights will be posted by each individual track.**