



2018 RULES AND REGULATIONS

SPORT COMPACT MINI STOCK DIVISION

Saskatoon Stock Car Racing Association
(S.S.C.R.A)

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RACE DAY PROCEDURES

Policies and Statements as Related To Competition

1. These rules are designed with the intent to create fair competition. However, interpretation may require alterations of the written rule to clarify the intended. S.S.C.R.A. Officials have the right to make minor amendments to the rules as required for clarification in the interest of safety and fair competition.
2. Protest Procedure: Any infraction requiring protest **MUST** be acknowledged in writing and submitted to the Race/Technical Director within 15 minutes of the completion of the main/feature event.
3. Composite Materials: No Composite materials allowed. Titanium in the valve train only. No carbon-carbon or carbon fiber components allowed except the air box.

Non-Competition Items that have to be corrected for the next race meet.

1. Roll Cage.
2. Chassis (non-competitive modifications).
3. Any item on a car that isn't perceived to give a competitive advantage.

Competition Related Technical Procedures

Pre-Race Inspection

Items inspected at this time without driver:

1. Safety Equipment.
2. Wheel base dimensions.
3. Rear spoiler.
4. Engine set back, and center line location

Inspected with driver in car and full of fuel:

1. Weights and percentages.
2. Roof height, skirt height, nose height.
3. Fuel cell to ground clearance.
4. Crankshaft center height.

Post-Race inspection

1. Weights and Percentages with driver in the seat and both hands on the steering wheel with helmet. Allowance of weight reduction will be set determined by length of race.
2. Carburetors
3. Shocks
4. Clutch
5. Transmission
6. Suspension
7. Engine seals and rocker arms
8. Rear end

NOTE:

1. Top 5 **MUST** go to tech line or disqualification will be automatic.
2. Anyone waved to tech line after race, **MUST** go directly to the tech area, or disqualification will be automatic.

2018 Sport Compact Mini Stock Rules

Sport Compact mini-stock racing is designed for the amateur individual participating in racing as a hobby. The rules and restrictions are designed to allow an amateur to enter and gain the experience of competitive racing using the style of car driven and modifications performed by sport compact enthusiasts.

The rules in this document must be used in combination with Saskatoon Stock Car Racing Association 'General Safety Rules and General Rules'. Any variations are subject to approval of the technical committee. Any violations found are to be corrected by the next race meet for the division. Further disciplinary actions will be determined by the competition committee when warranted.

Dominating cars may be handicapped. Since this division is intended to appeal to younger fans of newer front wheel drive cars, rear wheel drive cars which display a significant advantage may also be handicapped.

1. Build Guidelines

- a) **General:** Due to the unit body construction and size of sport compact cars, with reduced crush area and strength to absorb impact, structural reinforcement of bumper mounts, suspension mounting points and other heavily loaded areas are allowed at the discretion of the Competition Committee. Suspension and tire modifications listed below are allowed to improve on-track handling and to improve parts availability and competitiveness of older cars.
- b) **Minimum Weight:**
- i) **Minimum weight: 2,000 pounds.** Weight to be measured **with** driver in car. When required, weight will be added first as additional roll cage bracing then as ballast weight bolted to the floor pan. Car weight and cc to be displayed on top left front fender.
 - ii) 4 valve/cylinder OHC engines, 1.23 lb/cubic centimeter of engine displacement. i.e. 2.0L, 4 valve engine x 1.23 = 2,460 lbs.
 - iii) 2 and 3 valve/cylinder OHC engines, 1.08 lb/cubic centimeter of engine displacement. e.g. 2.0L, 2 valve engine x 1.08 = 2,160 lbs.
 - iv) Camshaft-in-block engines, 0.98 pound/cubic centimeter of engine displacement.
- c) **Minimum Ride Height:** Three(3) inches at sub-frame of the car with driver excluding skid plates. **No** adjustable ride height mechanism(s) allowed. Sub-frame connector is not considered part of ride height.

2. Body

- a) **Styles Allowed:**
- i) Any mass produced front or rear wheel drive compact or sub-compact car, maximum wheelbase 106"
 - ii) **No** all-wheel drive, no convertibles.
 - iii) T-top cars, sunroofs **MUST** be replaced with permanently mounted steel panels.
 - iv) Removable hard-top roofs must be factory to car and permanently mounted.
- b) **Appearance:**
- i) Bodies and body panels **MUST** meet factory dimensions and appearance for year and model.
 - ii) 100% of body parts **MUST** be in place at start of each race day.
 - iii) Inner body panels **MUST** remain except as provided in rule b) xi) of this section.
 - iv) Fender edges **MUST** be rolled inward resulting in **no** sharp edges.
 - v) Burnables, chrome, hitches, white metal, glass, plastic, and mirrors **MUST** be removed, with the exception of dashboard and gauges.
 - vi) Stock plastic outer mirrors extending outside the width of the body **MUST** be replaced with metal frame mirror(s) (e.g. Round spot mirror) mounted so as the outer edge of mirror does not extend past width of body.
 - vii) Door handles may be removed and openings filled with either welded or riveted sheet metal. **NO** sheet metal screws allowed.
 - viii) Headlamps and tail lights **MUST** be removed. See General Safety Rules.

- ix) Rear and side glass **MUST** be removed or coated with window retainer film. Rear side windows may be replaced with Lexan or Polycarbonate.
- x) Windshield **MUST** be stock safety glass retained with minimum 1" x 6" x 1/8" steel straps riveted or bolted to body, two(2) top, two(2) bottom. All windshields must have a minimum of two(2) safety rods on the inside of the windshield, 1/2" diameter rods or 3/8" black pipe spaced minimum of 10" apart attached to roll cage. Cracked or damaged windshields that impair driver's vision will be required to be replaced.
- xi) Doors may be welded front and rear using three(3) two(2) inch welds, top center and bottom **OR** bolted, chained or pinned during competition. Driver's (left) door may be skinned to allow for required roll cage construction. Passenger (right) door may be skinned **ONLY** to accommodate optional bent tube roll cage construction (as per roll cage specs). Door skins may be replaced with 22ga sheet metal and **MUST** retain stock appearance. Driver's door opening may be enlarged for driver entry, **MUST NOT** be lower than the top horizontal cage door bar.
- xii) Hood and trunk lid, if hinged require two(2) hood pins each. If removable, require 4 hood pins each.
- xiii) Stock rear spoilers only, **NO** aftermarket parts allowed.

c) Bumpers, Tow Straps and Rub Rails:

- i) Bumpers **MUST** have stock appearance; metal guards of 20 ga sheet metal extending from bumper ends to body should be riveted in place to prevent gouging. Stock bumpers may be reinforced with a single length of .095 by 1-1/2 round tubing concealed by bumper cover.
- ii) Left side rub rail recommended and **MAY** be required at the discretion of the Technical Committee. Rub rail **MUST** be 1-3/4" diameter steel tube, mounted on left side, ends bent and cut to be flush with body between front and rear wheels. Space between door panel and rub rail is **NOT** to exceed 1-1/4".
- iii) Tow straps are mandatory on the front and rear of the car.

3. Frame

- a) **Frame MUST** be stock with sub-frame connectors recommended, one(1) per side, similar size and material to stock rails. Sub-frame connector is not considered part of ride height.
- b) Front and rear strut tower braces allowed.

4. Roll Cage

- a) Six-point roll cage of mild steel, gusseted, fully welded construction of the highest quality only. All welds must be 360 degrees.
 - i) Kit Cage CSC-RCK501-4 (*suggested*)
 - ii) <See *General Rules Diagram 1a*>
- b) Minimum roll cage construction is 1.75" x .095 round ERW 1010 mild steel tubing securely welded to frame or unit body. Bends **MUST** be smooth, **NOT** crimped or excessively ovalled.

- c) Bars mounting to body **MUST** weld to minimum four(4) inch square by 1/8 inch steel plates welded to floor. Floor plates should also be welded to sill or bulkhead reinforcement and may be bent to join higher up on sill.
- d) No bolted-in cages.
- e) Two(2) rear support brace tubes joining the main hoop no more than six(6) inches from top which may run straight back or form an X to trunk floor area.
- f) One(1) bar running from the main hoop to the windshield bar as roof support.
- g) Minimum three(3) door bars bent as close to the outer skin of the driver's door as practical, **NO** straight bars on driver's side. Two(2) vertical connector bars joining door bars from top bar down to sill (rocker panel).
- h) Steel plate panels of 1/8" thickness **MUST** be welded to the outer side of the door bars so as to completely cover the area beside the driver from the front door post to the main hoop and from top door bar to the sill plate (rocker panel). See also General Safety Rules.
- i) On passenger side, minimum two(2) straight door bars. Optional: minimum two(2) bent door bars on passenger side may be used bent to carry into the door cavity as close as practical to the outer door skin of the door, door may be skinned with this option.
- j) Cage **MUST** have a bar from the top of the door bar to the window A-pillar bar on both sides of cage. **<See diagram 2A in General Rules>**.
- k) Roll cage should be tabbed to body wherever possible. **ANY** cage bars which can come in contact with the driver **MUST** be covered with approved roll bar padding.
- l) As of January 2015, all NEW cars being built, the roll cage must include the Earnhardt bar (a vertical bar that extends from the horizontal dash bar to the halo). Or may be installed on front to back on top of the halo diagonally or straight across to prevent collapse from impact on rollover, but still must allow for extraction of the driver through the roof.. This bar must be constructed of 1.75" x 0.095. See diagram 2a under General Rules.

5. Interior

- a) **Floor:** Floor including trunk pan **MUST** be in stock location. Holes **MUST** be filled with minimum 22ga sheet metal or OEM panel welded or riveted. Rusted floor panels must be removed and replaced.
- b) **Firewall:** **MUST** be stock steel in the original stock location. Holes **MUST** be filled with minimum 22ga sheet metal welded or riveted.
- c) **Seating: Aluminum oval track racing bucket seat** with right-side head support, properly mounted to the roll cage is mandatory. Minimum distance of 36" from rear of seat to center of differential. Full containment head rest recommended. **<See Diagram 6B General Rules>**.
 - i) Seat belt mounts **MUST** be welded solidly to the roll cage.
 - ii) Shoulder belts **MUST** be mounted solidly to the roll cage at the correct height to align with belt openings in the seat back.
 - iii) A seat back brace tied in to the roll cage **MUST** be in place for all seats. Seat may be adjustable, including back brace.
 - iv) Right side seat-mounted head supports **mandatory**, left side recommended.

6. Suspension

- a) **MUST** be the same type as car was produced with – **NO** 4-link in place of leaf springs, etc.
- b) **ANY** stock type shock or strut allowed, **NO** adjustable shocks, **MUST** mount to stock location, **NO** coil-over suspension.
- c) **ANY** OEM style front anti roll bar is allowed, **MUST** mount to body at stock location, suspension end may be modified. A rear anti roll bar may be added, two(2) stock bars may be stacked.
- d) **ANY** OEM style spring allowed, **MUST** fit in OEM spring pocket. **NO** spring spacers are allowed. Rubber spring helpers are allowed. Springs may be cut to alter ride height.
- e) **Front and Rear Camber:** adjustment may be achieved with strut camber plates, eccentric adjusters, crash bolts, relocation of strut tower, lengthening of the lower control arm, or addition of adjustable heim joints on the lower control arm. All welding, fabrication, and parts used **MUST** be of highest quality, any pivot bolt changes should use a larger than stock diameter bolt if possible. Consult with Competition Committee for any unusual design.
- f) **Maximum Alignment Specs:**
 - i) Right Front - Negative 10 degrees camber.
 - ii) Right Rear - Negative 8 degrees camber.
 - iii) Left Front and Rear- Positive 8 degrees camber.
- g) **Left Side** tires **MUST NOT** extend past the body more than two(2) inches measured at the widest part of the body near the tire. Steel rub bar may be installed or required to meet specs. See Sec 2. (c).

7. Steering

- a) **ALL** steering components **MUST** be stock to car, in stock location. **NO** welding of steering parts.
- b) Collapsible steering column and quick release steering wheel with minimum two(2) inch center padding is **mandatory**.

8. Engine

- a) **ONLY** naturally aspirated four(4) cylinder engines allowed.
- b) Maximum displacement:
 - i) 2.5 litres for 2 and 3 valve/ cylinder engines.
 - ii) 2.0 litres for 4 valve/ cylinder engines.
 - iii) **2.2 litre GM Ecotec**
- c) Engines may be rebuilt using stock replacement parts. Maximum overbore .040"; piston **MAY NOT** protrude above block deck at TDC (zero deck height); maximum cylinder head resurface 010".
- d) **NO** lightening, stroking, de-stroking, porting, gasket matching, de-burring of ports, acid etching, extrude honing, mismatching of components, or anything else you can think of. Stock **MEANS** stock.
- e) Engine **MUST** have originally been available in the chosen body. Engine swaps **MAY** be allowed at the discretion of the Competition Committee.

- f) Maximum factory redline of 7500 RPM, maximum factory horsepower rating of 150.
- g) Engine oil pan may have baffles added, **NO** capacity modification to stock pan. After market pans allowed.
- h) An engine spec sheet **MUST** be presented to the Competition Director before the first race meet.

9. Fuel System

- a) Fuel tank relocation is required for cars with the tank mounted within twelve(12) inches of the rear of the body, measured at the rear bumper body mount. Centrally mounted, under floor stock tanks allowed, skid plate **recommended**.
- b) **Fuel filler:** **ANY** fuel filler tube visible inside trunk or passenger areas **MUST** be fully enclosed with a tight fitting metal firewall riveted or welded in place.
- c) Replacement fuel cells are recommended and **MUST** be located as far ahead in the trunk area as practical with a full tight fitting firewall between trunk and passenger compartment.
- d) Maximum fuel tank size 60 litres.
- e) All fuel cells/tanks must be grounded and caps tethered.
- f) Fuel lines, filters and pumps **MUST** be mounted, routed and shielded in as safe a manner as possible. Steel line **MUST** be used, with a minimum length of high pressure rubber hose for connections.
- g) Electric fuel pumps **MUST** shut off with the key **ON**, engine **OFF** as per factory wiring.
- h) A securely mounted inertia shutoff switch required in power supply wire to pump located in easy reach of driver.
- i) ANY variations are subject to approval of the Competition Committee.
- j) **Fuel:** Only pump fuel available at local consumer outlets with a maximum octane rating of 94 is allowed. No additives, oxygenation, aviation fuel or race fuel.

10. Fuel Metering

- a) Stock fuel injection for engine used.
- b) **NO** re-flashed or re-chipped computers.
- c) Stock carburetor for engine used or **ANY** 2-barrel single carburetor or two(2) single barrel carburetors of **ANY** size. Fuel injected engines may backdate to carburetor(s) allowed.
- d) Maximum one(1) inch thick adapter plate allowed.
- e) **NO** grinding of stock manifold allowed.
- f) Two(2) throttle return springs required.

11. Air Intake

- a) Air cleaner **MUST** be mounted in the engine compartment
- b) Cold air induction allowed-

12. Ignition

- a) **MUST** be stock for engine used, **NO** MSD boxes.
- b) **ONLY** factory rev limiter is allowed, **NO** traction control.

- c) May backdate to mechanical and/or vacuum controlled distributor. Replacement of ignition points with electronic trigger allowed.

13. Exhaust

- a) Exhaust header allowed.
- b) Maximum exhaust system 2-1/2" OD pipe. **Mufflers mandatory** (maximum noise level of 98 decibels).
- c) Exhaust **MUST** exit behind and below the driver with the exhaust tip(s) pointed toward the ground and slightly toward the center of the car.
- d) Cars that fail to meet the maximum noise level will be required to install a spec muffler prior the next event. Part number to be determined.
- e) All cars will be required to run spec mufflers in 2019.

14. Cooling System

- a) Stock or aftermarket radiator allowed, may be re-mounted, but **MUST** remain in its stock location.
- b) Coolant overflow container mandatory.
- c) **NO** cooling rads of any kind allowed in driver's compartment.
- d) Mechanical or electric fans allowed, **MUST** be plastic.
- e) A rad support bar may be added between frame rails directly under the radiator.
- f) **NO ANTIFREEZE. Water wetter allowed.**

15. Electrical

- a) AGM batteries are **MANDATORY**.
- b) Battery may be relocated within the engine compartment **from front** for impact reasons or remain in stock location. Other battery locations subject to discretion of Competition Committee.
- c) The battery may be boxed into the engine side of the firewall, and completely sealed from driver's compartment.
- d) Battery **MUST** be securely fastened with minimum 1/8" by 1.0" steel strap and 3/8" rod hold-downs.
- e) **Battery MUST have master kill switch.** Switch **MUST** be **centrally** mounted for ease of access by driver and safety crew and must be clearly labelled ON/OFF. **MUST** kill motor and all power.
- f) Starter **MUST** be operational at **ALL** times.

16. Transmission

- a) Transmission **MUST** be stock manual or automatic and **MUST** bolt to engine without the use of an adapter plate. External clutch safety shielding recommended.

17. Differential

- a) Differential **MUST** be stock to vehicle, any gear ratio.
- b) **NO** locked or welded differentials allowed, limited slip allowed **ONLY** if equipped from factory.

18. Driveshaft

- a) Safety hoops required front and rear, on rear wheel drive cars. Minimum 1-1/2" by 1/8" steel bolted to floor pan with minimum Grade5-3/8" bolts, 4 per hoop.
- b) Driveshaft **MUST** be painted white.

19. Brakes

- a) Four(4) wheel hydraulic brakes, **MUST** be functional at all times.
- b) Brake pedal/bracket and mounting point **MUST** be in original factory location for the make and model of car.
- c) Brake rotors **MUST** be original diameter to car; OEM drilled or slotted rotors allowed.
- d) Brake calipers **MUST** be original family (eg. Datsun to Datsun) and **MUST** bolt to original mount, may be updated to newer OEM style.
- e) **NO** aftermarket calipers allowed, **NO** driver adjustable brake proportioning valve(s) allowed, **NO** antilock or ABS brake systems allowed.

20. Wheels

- a) Steel or Aluminum wheels are allowed, maximum wheel size 15" by 7.0". Multiple bolt pattern wheels allowed. Aftermarket racing wheels recommended.
- b) **NO** wheel spacers or uni-lug wheels allowed.
- c) Wheel nuts **MUST** engage the wheel mounting studs by **AT LEAST** the diameter of the stud.
- d) Wheels **MUST** be torqued to factory specifications, oversize nuts (1.0") are recommended.
- e) Wheels **MUST** be the same size and offset (backspace) front and rear on each side of the vehicle.
- f) Wheel balancing weights not allowed.

21. Tires

- a) **ANY** radial passenger car tire, 13", 14", or 15" diameter, **maximum** 205mm section width, **minimum** 60 series aspect ratio.
- b) **Minimum** DOT tread wear rating (UTQG) 280.
- c) Directional and/or asymmetrical tread patterns allowed.
- d) **NO** race tires, r-compound tires, ground grip, studded or re-cap tires allowed.
- e) **NO** altering of tires by softening agents, etc. Tires may be checked with a durometer.
- f) All four(4) tires on the car **MUST** be the same diameter and 60 series aspect ratio. One(1) increment difference allowed in section width from left to right side tires. i.e. Left side 195/60/14 and Right side 205/60/14.
- g) Allowing 195/55/15

22. Ballast

- a) All ballast **MUST** be securely fastened; minimum of two (2), 1/2" bolts for every twelve(12) inches of ballast.
- b) Ballast **MUST** be painted white with the car number on it.

- c) All ballast must be mounted no lower than bottom side of frame rails. No ballast behind the rear wheels lower than the fuel cell.

23. Safety

- a) See **General Safety Rules**