# **2023** RULES AND REGULATIONS **PRO LATE MODEL DIVISION**

Saskatoon Stock Car Racing Association (S.S.C.R.A) P.O. Box 169 Saskatoon, Saskatchewan S7K 3K4 (306) 956-3212



**Effective January 2023** 

#### **MISSION STATEMENT:**

"To provide members a motor sports and entertainment facility to showcase their talents and abilities, while providing our fans, corporate partners, sponsors and media a valuable entertainment experience."

#### RULEBOOK DISCLAIMER

The rules and/or regulations set forth in this book are designed to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such events. These rules shall govern the condition of all events, and by participating in these events, all participants are deemed to have complied with these rules. NO EXPRESSED OR IMPLIED WARRANTY OR SAFETY SHALL RESULT FROM THE PUBLICATION OF, OR COMPLIANCE WITH THESE RULES AND/OR REGULATIONS. They 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, spectator or official.

The Competition Director together with Competition Committee, on behalf of S.S.C.R.A., shall be empowered to permit minor deviation from any of the specifications herein or impose any further restrictions that in their opinion do not alter the minimum acceptable requirements. NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM SUCH ALTERATIONS OF SPECIFICATIONS. Any interpretation of, or deviation(s) from these rules shall be left to the discretion of the officials. Their decision is final.

Saskatoon Stock Car Racing Association

(S.S.C.R.A.)

#### Lines highlighted in RED are rules that have been removed.

Lines highlighted in YELLOW are rules that have been added this year.

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## CODE OF ETHICS

## Purpose

To act in a professional manner so as to bring a positive image to the public and fellow members of the sport of stock car racing and to realize the need for a reasonable and responsible personal code of 'unwritten laws' since laws cannot cover all situations.

## Expectations

- 1. Respect **MUST** be had for all traffic laws and criminal codes, such as not drinking and driving.
- 2. No alcohol, drugs, or stimulants allowed in association with your car or team when in the public eye.
- 3. No verbal or physical abuse towards any person when connected with a stock car event, display or promotion.
- 4. When dealing with the public, courtesy and cooperation should be shown to promote the sport in a positive light at all times. For example, do not approach another person's sponsor(s).
- 5. All members should be clean and presentable when in any public situation.

## **Definition of Behavior**

Anyone who, by word or deed, impedes, jeopardizes, or in any manner hinders the smooth and orderly presentation of the racing program - or - anyone who commits, or causes to be committed, any detriments to stock car racing, the S.S.C.R.A. will consider that person(s) to have abused the privileges of membership, entry and/or admission granted by the S.S.C.R.A. and that they may be subject to the revoking of those privileges and/or disqualification as deemed proper by the Executive or designated official. Drivers are responsible for the sportsmanlike conduct of anyone in their crew and penalties incurred by a crewmember may affect the driver.

## 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.

#### 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. Tires all tires **MUST** be registered.
- 3. Wheel base dimensions.
- Roof height, skirt height, nose height and rear spoiler. A 5 minute shock extension recovery allowed for height checks if required.
- 5. Fuel cell to ground clearance.
- 6. Engine set back, and center line location
- 7. Crate engine seals.

#### Inspected with driver in car and full of fuel: meeting minimum weight

- 1. Weights and percentages.
- Roof height, skirt height, nose height. 5 minute shock extension recovery allowed for height checks if required.
- 3. Fuel cell to ground clearance.
- 4. Crankshaft center height.
- 5. Engine set back, center line location, crankshaft center height and track width

#### Post-Race inspection

- 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.
- Engine RPM
- 3. Carburetors
- 4. Shocks
- 5. Clutch
- 6. Transmission
- 7. Suspension
- 8. Check tire registration
- 9. Engine seals and rocker arms
- 10. Rear end

#### NOTE:

 Top 53 in a Club Event MUST go to tech line or disqualification will be automatic. Top 5 MUST go to tech at Special Events

- 2. Anyone waved to tech line after race, **MUST** go directly to the tech area, or disqualification will be automatic.
- 3. Pro Late Model special event race day results/points will be included in the local championship points system. Points will be awarded based on finishing order of local cars only, exclusive of non-local cars.

## Pro Late Model Rules

Pro Late Models are the fastest cars at Sutherland Automotive Speedway and use a modern or domestic late model aftermarket fibreglass body on a fully fabricated tubular racing chassis with complete driver safety systems. Suspension systems are designed and fabricated completely for racing with coil over shocks and rack and pinion steering etc. Tires are a 10 inch wide American Racer racing slick on all four corners mounted to a 10-inch wide racing wheel. These cars are allowed to be very light with a minimum weight as low as 2800 lbs with as much as 59% of that weight allowed on the left side.

The Pro Late Model Division is a very common racing division in North America. Different versions of SLM's can be found at many tracks and these cars are similar to the NASCAR regional series and Pro Cup Series cars seen on T.V.

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 next race meet. Further disciplinary actions are to be determined by the competition committee when warranted.

#### 1. Build Guidelines

- a. Any equipment that the Competition Committee consider exotic or not in the intent of the rules will be considered illegal. (e.g.: traction control devices)
- b. No Titanium allowed. No carbon-carbon or carbon fiber components allowed, except the air box. No hollow bolts.

#### 2. **Body**

- a. Open to ABC bodies installed to ABC rulebook and other approved bodies installed in accordance with their manufacturers dimensions including Chrysler, Ford, GM and Toyota, of the last 10 years.
- b. Wheelbase will be 101 inch minimum.
  - i. Maximum track width is 66" measured centre to centre of front and rear tires at spindle height with driver in car.
  - ii. The Five Star Referee will be the measuring device.
- c. In the interest of keeping the division marketable to sponsors, new looking or new body styles are highly recommended.
- d. All cars **MUS**T run 100% of original body parts at the beginning of each race day (hood, fenders, doors etc.).
- e. All body parts **MUST** be securely fastened to the chassis.
- f. Rear panel of the body **MUST** be completely sealed with a solid panel. (No screen or mesh).
- g. Minimum height of 43 inches from the bottom of side frame rail to roof plane, measured 12 inches back from the top of the windshield at the roof centerline.
- h. Side panel of body **MUST** have 2" minimum ground clearance. Measured before race.
- Front MUST have 3 inches ground clearance at the front edge. Front edge considered to be equal to tread center width. Rear spoiler with a maximum height from deck lid of 6½" inches and maximum width of 60 inches measured along the face of the spoiler. The rear spoiler MUST be made of clear Lexan. Rear spoiler must allow for the use of center line templates.

## . Tire **MUST** be no further than 3" outside the body measured at the axle line square to the body (3:00 or 9:00).

k. Lexan windshield material mandatory, with three vertical interior supports of a minimum ½" diameter attached to the role cage at each end. If an Earnhardt bar of 1.75" x .095" roll cage material is used, the interior windshield supports are not necessary. Vent style deflector is permitted to a vertical line meeting the top edge of the windshield. Plexi-glass is unacceptable in race car construction

#### 3. Tow Straps and Rub Rails

- a. Tow straps are mandatory on the two front and two on the rear of each car. (Under hood and under trunk.)
- b. Polycarbonate side rub rails between front and rear wheel wells allowed. Rub rails must be cut to angle on each end to remove sharp edges.

#### 4. Frame

- a. Car may be fully fabricated tube chassis or stock frame clips of either perimeter or offset design.
- b. Fabricated frame rails **MUST** be made of no less than 2.5" x 2.5" x .095" or 2" x 3" x .095" steel tubing on the left side and no less than 2.5" x 2.5" x .083" or 2" x 3" x .083" steel tubing on the right side.
- Maximum Tread Centerline:
  i. 101 inch to 104 inch wheelbase cars maximum 65 inch tread centerline.
  ii. 104.1 inch to 107 inch wheelbase cars maximum 67 inch tread centerline.

#### 5. Roll Cage

- a. Constructed from a minimum of 1.75" x .095" round steel tubing.
- b. Rear down bars and support bars **MUST** be constructed of a minimum 1.5"x .065" tubing.
- c. Joints in major locations (e.g.: door bars, dash bar and roof bars) **MUST** all be gusseted.
- d. Driver side door **MUST** have four horizontal bars with two vertical bars connecting all four horizontal bars to the frame structure evenly spaced. 1/8" steel door plate on driver's door area and foot box area is mandatory; may be one solid plate or sectioned into the spaces between the door bars to seal all openings.
- e. Foot box 1/8" plate to be a minimum 6" in height from the top of the frame rail and to extend forward to the end of the foot box.
- f. Right side door **MUST** have a minimum of three bar horizontal and two vertical or an X structure of 1.50" X 0.065" tubing with an outrigger rub rail against the inside of the body.
- g. Outrigger to be minimum 1.50" X .065" (1010) mild steel tubing braced with minimum 1" x .095" mild steel tubing to the main cage.
- h. 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.
- i. Cage **MUST** be connected at all four corners of the roof and window levels.
- j. Dash bar **MUST** run level from side to side, and connect to the top of the door bar area.
- k. Rear hoop **MUST** have two rearward diagonal bars from the top of the hoop to the frame.
- I. Bars to extend back past the centerline of the differential housing.
- m. See Diagrams A1, A2, A3 and A4.
- n. All roll cages are to be approved by the Competition Committee.

o. Approved aluminum oval track racing seat mounted to the roll cage, left of the centerline of the car and to the right of the left frame rail.( See diagrams in General Rules C1, C2, C3, C4, C5 and 5B.) Padded headrest is mandatory. Leg extensions and full containment seats are recommended.

#### 6. Interior

- a. Full metal floorboards from firewall to firewall.
- b. Minimum 1/8" steel under driver, the vertical section of driveshaft tunnel just right of the driver seat to be a minimum 1/8" x 8" high steel from back plate to transmission end.
- c. It is recommended a 1/8 inch thick steel back plate be installed vertically behind the seat to protect the driver from the rear lower trailing arm being driven through the rear firewall.
- d. Driver needs to be surrounded by 22-gauge metal including foot booth, driveshaft tunnel, and behind driver's seat. To the right of the driver maybe sloped from the top of the driveshaft tunnel to the passenger side window ledge (not straight across at shoulder level) and **MUST** allow access for safety personnel.
- e. Rear area of interior may be paneled straight across from the lower edge of the window openings.

#### 7. Suspension

- a. Heavy duty or racing hubs, spindles and stabilizer bars **MUST** be used. Weight jacks are allowed. Coil over suspension and tubular lower control arms are allowed. Weight jacks, sway bars and track bars are not allowed to be adjustable from the cockpit.
- b. Reinforcing of stock components is permitted.
- c. Shock Absorbers: Rated racing shock absorbers are allowed. Shocks with Schrader valves allowed. Tie down/high rebound type shocks allowed. No remote or piggy back reservoirs. Manufacturer's suggested retail price available to anyone of MAXIMUM of \$650.00 USD per shock.
- d. No independent rear suspension.

#### 8. Steering

- a. Type optional, with the Competition Committee approval.
- b. Steering column **MUST** be collapsible. Quick release wheel mandatory, with padded center.

#### 9. Fuel System

- a. 22 U.S. gallons maximum capacity (NASCAR-style recommended).
- b. Mandatory Construction: Fuel cell **MUST** have a bladder, filled with foam, with tip over valves and be contained in a 20-guage steel box.
- c. Minimum Fuel cell mounting requirements: **MUST** be mounted to the frame rails behind the rear axle housing, with two steel cross tubes of 1" x 1" x.095" minimum, having two steel straps 2"x 0.100" thickness, from cross tube to cross tube under the cell to saddle the container. Saddle straps to be spaced evenly side to side from the fuel cell center line (10" spacing minimum recommended). Steel fuel cell container to be mounted to the cross tubes with a minimum of 1/4" bolts at 6" spacing.

- d. Minimum 8" ground clearance.
- e. Rear fuel cell guard bar recommended, this bar drops down from the rear most cross member even with the lower surface of the fuel cell, running side to side, the width of the fuel cell to protect from impact damage.
- f. All fuel cells **MUST** be grounded and caps tethered.
- g. Metal cased fuel filters only. Fuel lines **MUST** be Metal or braided lines only.
- h. **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. Engine

- a. GM sealed Late Model Circle Track Engine only. P/N 88869604 P/N 88958604, P/N 19318604
- b. The GM crate engine must be used in any Pro Late Model body type.
- c. Any engine seal, which is altered or tampered with in any way from the original purchase, will be deemed illegal. The ONLY changes that will be permitted are as follows:
  - i. Valve springs must be stock to engine. Valve spring upgrade kit P/N 19300952.
  - ii. Oil Filter: Any single production type oil filter may be used. It may be remotely mounted but **MUST** be located in the engine compartment.
  - Ignition System: Stock type HEI and MSD distributors will be allowed. No magnetos. Rev limiter mandatory recommended. No dual ignitions.
  - iv. Harmonic Balancers: Any harmonic balancer may be used (eg. 6 ¼" fluid dampers / ATI permitted).
- d. All crate engines must be registered with SSCRA; please see General Rules for Crate Engine Registration form.
- e. Engine Location:
  - i. The engine **MUST** be located within 2" of the centerline of the car, measured from the center of the tires, measured at water pump shaft height on the block.

Fore/Aft position: The engine may be no further than 3" rearward in the vehicle. Measured from the center of the lower ball joints and the centerline of the furthest forward spark plug hole.

- ii. Vertical Location: The center of the crankshaft snout **MUST** be a minimum of 10" from the ground.
- iii. Measurements will be taken with driver in the car. The Five Star Referee will be the measuring tool. The vertical machined surface of the left cylinder head is the reference point to determine engine set back.
- f. Mandatory rev limiter 6500 RPM maximum.
- g. Penalty for deliberate violation of the sealed crate engine rules are as follows, Complete disqualification from the event, one year suspension of the Driver, car owner, and crew chief, and the seizure and possible confiscation of the engine in question.
- h. In the interest of maintaining a cost effective and fair sealed crate engine program, repairs may be made to the sealed engines and they may be resealed by the SSCRA.

All repairs will be made in accordance with the latest GMPP yellow book. The competition director will determine the suitability of all repairs prior to work on the engine. Cost effective repairs must be done under direct supervision of the SSCRA. Upon conclusion of the repair, the SSCRA representative will reseal and document all work performed. Contact Rob Howlett, SSCRA Competition Director 306-229-7346. A fee of \$125.00 will be assessed for all resealing.

#### 11. Carburetor

- a. Maximum one 650 cfm carburetor (e.g. Holley 4777 or Holley 4150 HP Series, P/N 0-80541-1).
- b. On the Holley 4777, the choke plate may be removed; choke tower may be milled off.
- c. Any modification to the airflow characteristics will disqualify carburetor.
- d. Throttle assembly **MUST** be equipped with two throttle return springs.
- e. Carburetor adapter/spacer plate maximum thickness of 1".
- f. Mechanical driven fuel pumps only.
- g. HP series carbs are checked with a BLP inspection tool kit #7864HP.
- h. All carbs must pass inspection. Carbs that fail will be seized and may be confiscated.

#### 12. Air Intake

- a. Stub stacks are allowed.
- b. Carburetor **MUST** be equipped with an air filter to act as a flame arrester.
- c. Carbon fiber air box allowed.

#### 13. Exhaust

- a. Mufflers are mandatory. Stainless headers are not allowed.
- b. Exhaust **MUST** exit under car behind the driver no more than 12" above the ground.
- c. Exhaust tips are to be pointed toward the ground and slightly toward the centre of the car or exit the body behind the driver's compartment and ahead of the rear wheel no more than 12" above the ground.
- d. Exhaust tips exiting door area **MUST** have a sliding protector riveted to the door with no jagged edges to prevent exhaust from cutting tires (e.g. Schoenfeld tail pipe saver).
- e. Any muffler may be used providing it reduces the exhaust noise below club standards.
- f. Every car will be tested according to club procedures and any car not meeting the maximum limit of 98 decibels **MUST** install a quieter muffler prior to the next event.

#### 14. Cooling System

- a. Front mounted cooling system only.
- b. **MUST** include an overflow container with a minimum 1 liter capacity or may discharge overflow upward vertically at the base of the windshield on the right side. This discharge may not interfere the safe operation of any race cars.
- c. Plastic fans are mandatory.
- d. No cooling or lubrication components allowed in driver's area.

- e. All oil lines **MUST** be steel reinforced.
- f. **NO Antifreeze!** Water wetter allowed.

#### 15. Electrical

- a. **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.
- b. Battery:
  - i. **MUST** be located outside driver's compartment and securely fastened. AGM style is mandatory. No lithium batteries.
- c. Starter:
  - i. **MUST** be in working condition at all times.
- d. Communications:
  - i. Radio communications between the driver and the spotter is mandatory.

#### 16. Transmission

- a. Transmission:
  - i. Any manual transmission with a minimum 2 forward gears and 1 reverse gear.
  - ii. Rear wheel drive only.
- b. Flywheel:
  - i. No "lightening" of the stock flywheel. Aluminum flywheels are allowed.
  - ii. Scatter shield: A 360° SEMA approved shield mandatory with clutch using nodular iron components (stock flywheel and pressure plate styles). Approved multi-disk units may use aluminum bell housing.
- c. Ring gear:
  - i. Ring gear flex plate to be SFI approved.
- d. Clutch:
  - i. **MUST** be in working condition.

#### 17. Driveshaft

- a. Driveshaft Hoops: ¼" x 2" steel, mounted to the chassis within 6" of the front U-joint and no further than 3" away from the driveshaft circumference. Rear drive-shaft hoop mounted as to protect the driver in case of driveshaft failure.
- b. Aluminum driveshaft allowed. No carbon fiber.
- c. All steel drive shafts must be painted white.

#### 18. Differential

- a. Full floating axle assembly mandatory and solid spool assembly mandatory. No locker or traction type differentials allowed unless they are locked solid with a lock up plug.
- b. No cambering allowed.

#### 19. Brakes

- a. Brake Mechanisms on all four wheels **MUST** be in working condition and are subject to spot checks.
- b. Brake rotors **MUST** be cast iron or steel; drilled or slotted allowed.

#### 20. Wheels and Tires

- a. 10" maximum width, manufactured steel racing wheels mandatory.
  - i. Steel wheel nuts: Minimum 1" hex mandatory.
- b. **American Racer P/N EC84 (853 compound)** Tires are purchased through Auto Clearing All Makes and Performance Parts in Saskatoon.
  - i. Tire size 26.0 and 26.5 can only be used on left side of car. Tire size 27.0 can only be used on right side of car.
  - ii. No tire softening permitted.

#### c. Regular Race Events

- i. All tires on the race car must be registered. Bar code numbers must be presented to tech official before races begin. Unregistered tires are allowed for practice.
- ii. Four tires for the first race day plus one tire for each attended regular race day.
- iii. Plus two bonus tires annually. For each race day missed you forfeit one bonus tire
- iv. Plus **four** eight used registered tires from the first 2 special events race can be added to your tire allotment. **Example: 5 Races: 4 + 4 + 2 = 10 New + 4 8 Used**
- d. If a new tire is cut, it must be presented to tech immediately to be certified for replacement. It must have 6/32 of an inch or more tread depth.
- e. <u>Tire cheating penalty</u>: Race day points plus 15% year end points total.
- f. Tire tread depth will be measured at a maximum pressure of 30 psi for right side and 20 psi for left side.

#### g. Special Events

- i. Qualifying tire barcode must be registered. Tires will be marked and must stay on the race car all day (heat race, last chance, and feature.) Any car caught with unregistered tires on the car will be disqualified from entire race day. Unregistered tires are allowed for practice.
- ii. Punctured or flat tires must be presented to the tech official immediately after being removed from the car. If the tire that was removed from the car has a pressure greater than 10psi for left side tire or 15psi for right side tire, the car will be assessed a one lap penalty. Failure to present the tire to the tech official will result in an automatic disqualification. Tires replaced with cord showing will be assessed a one lap penalty regardless of pressure. If a team chooses to change two or more tires, a two lap penalty will be assessed.

#### 21. Weights and Balances

- a. All ballast **MUST** be securely fastened; minimum of two (2), ½" bolts for every 12 inches of ballast.
- b. Ballast **MUST** painted white with the car number on it.

c. All ballast must be mounted no lower than bottom side of frame rails and must be forward of the rear differential centerline.

#### d. Minimum Weight: Weights and Balances - Crate Motor

- i. Total minimum weight for al cars is 2800 lbs
- ii. Left side of the car shall be no more than 59% of the total weight of the car.
- iii. All total weights and left side percentages will be calculated with a full tank of fuel and the driver in car
- iv. All total weights and left side percentages will be calculated with driver in car with all their necessary safety gear prior to official tech or prior to time trials, heat races, qualifiers or features. You will not be allowed to top off on the scale. If illegal, you start at the back of the pack for the remainder of the race day. Second offense may be a loss of points and or fine or suspension

#### 22. Safety

#### a. See General Safety Rules

#### 23. Electronics

- a. No traction control.
- b. No electronic data logging that records any driver performance or chassis dynamics.
- c. No go pros or sport cameras may be used to record any driver performance or chassis dynamics.
- d. Any exotic or unapproved electronics must be submitted for approval 30 days prior to use.
- e. Cell phone use must be approved prior to use.