

2015 Rules and Regulations

SUPER LATE MODEL DIVISION

Saskatoon Stock Car Racing Association
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Super Late Model Division

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.

The Super Late Model Division is a fairly 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.

Super Late Models are the fastest cars at Auto Clearing Motor 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 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.

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. Tires all tires MUST be scanned.
- 3. Wheel base dimensions.
- 4. Rear spoiler.
- **5.** Engine set back, and center line location
- **6.** Crate engine seals.

Inspected with driver in car and full of fuel:

- 1. Weights and percentages.
- 2. 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.

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. Check Tire Scans
- 8. Engine seals and rocker arms
- 9. 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.
- **3.** Super 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.

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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)

2. Body

- **a.** Open to Canadian and American built passenger car body styles including Chrysler, Ford, GM and Toyota, of the last 10 years.
- b. Wheelbase will be 101 inch minimum.
- **c.** The manufactured factory wheelbase of the make/model and the chassis may vary.
- **d.** Body's **MUST** closely resemble the intended make/model. (No wedge or downforce bodies.)
- **e.** In the interest of keeping the division marketable to sponsors, new looking or new body styles are highly recommended.
- **f.** All cars **MUS**T run 100% of original body parts at the beginning of each race day (hood, fenders, doors etc.).
- g. All body parts **MUST** be securely fastened to the chassis.
- **h.** Rear panel of the body **MUST** be completely sealed with a solid panel. (No screen or mesh).
- i. Minimum height of 42 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.
- **j.** Side panel of body **MUST** have 2" minimum ground clearance. Measured before race.
- **k.** Spoilers are allowed. Front **MUST** have 3 inches ground clearance at the front edge. Front edge considered to be equal to tread center width. Nose to be cut 90 degrees to the ground from fender line wheel opening down. Rear 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.
- I. Wheel wells may be enlarged to a maximum 5" from tire. Tire MUST be no further than 3" outside the body measured at the axle line square to the body (3:00 or 9:00).
- m. 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 on the driver's side only. Plexi-glass is unacceptable in race car construction

3. Tow Straps and Rub Rails

- **a.** Tow straps are mandatory on the front and 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.
- c. 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.
 - iii. 107.1 inch and longer stock clip only maximum 69 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 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. <appendix pg ?>
- **n.** All roll cages are to be approved by the Competition Committee.

o. Approved aluminum or carbon fiber 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 \$600.00 per shock.
- d. Steel non-adjustable shocks on all 4 CORNERS receive 50lb weight break.
- **e.** Single or double adjustable steel or aluminum shocks permitted with a 50lb weight penalty.
- f. 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 P/N 88958604, P/N 19318604
- **b.** The GM crate engine must be used in any Super 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.
 - iii. Ignition System: Stock type HEI and MSD distributors will be allowed. No magnetos. Rev limiter recommended.
 - iv. Harmonic Balancers: Any harmonic balancer may be used (e.g. 6 1/4" 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.
 - ii. 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.
 - iii. Vertical Location: The center of the crankshaft snout **MUST** be a minimum of 10" from the ground.
 - iv. Exception to the motor centre rule for older stock clip cars or perimeter style cars that are unable to maximize the 59% left rule. These cars will be allowed to move the engine left within reason. No ballast weights will

be allowed on the right side of a car if a car exercises this motor centre rule exception.

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.

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.
- **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** meet the limit by their next race date.

14. Cooling System

- **a.** Front mounted cooling system only.
- **b. MUST** include an over flow container with a minimum 1 liter capacity.
- **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:

MUST be located outside driver's compartment and securely fastened.
 AGM style is mandatory.

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 or automatic 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. An approved safety shield or blanket is mandatory when using an automatic transmission.

c. Ring gear:

i. Ring gear flex plate to be SFI approved.

d. Clutch:

- i. **MUST** be in working condition.
- ii. **MUST** be located in the bell housing (e.g.: no Bert or Brinn style transmissions).

17. Driveshaft

- **a.** Driveshaft Hoops: ½" 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 driveshaft hoop mounted as to protect the driver in case of driveshaft failure.
- **b.** Aluminum driveshaft allowed.
- **c.** All drive shafts must be painted white excluding aluminum.

18. Differential

- a. Full floating axle assembly mandatory.
- **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 heavy duty steel racing wheels mandatory.
 - i. 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. No tire softeners permitted.
- **c.** All tires **MUST** be scanned by Auto Clearing All Makes and Performance Parts registered to your car number and current year. *No used tires allowed, with the exception of practice.*
 - i. Four tires for the first race day plus one tire for each additional regular race date (*plus one extra tire annually*). i.e., for a race season with four (4) regular race dates, teams will be allowed 4 + 3 + 1= 8 tires.
- **d.** Out of town cars that are not members will be allowed 4 new tires for first race. See *c) i)* above for formula. For Dakota Dunes Series please see DDC WCSLMC Rules.
- **e.** Weight and balance rules for either the open or crate motor apply for all out of town cars.
- **f.** If a new tire is cut, it **MUST** be presented to tech immediately to be certified for a replacement, it **MUST** have 6/32 of an inch or more tread depth.
- g. Tire cheating penalty: Race Day points plus 15% of year end points total.
- **h.** Tire tread depth will be measured at a maximum pressure of 30psi for right side and 20psi for left side.

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.
- d. Minimum Weight: Weights and Balances Crate Motor
 - Total minimum weight for cars with steel non-adjustable shocks 2750 lbs. (2800 lb. weight in effect for Dakota Dunes WCSLMCS)
 - ii. Add 50 lbs. for cars with 1 or more steel or aluminum adjustable shocks 2800 lbs.
 - iii. Left side of the car shall be no more than 59% of the total weight of the car.
 - iv. All total weights and left side percentages will be calculated with a full tank of fuel and the driver in car. < formula for calculating fuel used to follow>

e. Weights and Balances - Open Motor (visiting cars only)

- i. Total weight, 2950 lbs. minimum.
- ii. Holley 500 cfm, 2 barrel Carburetor P/N 0-4412 or restrictor plate provided by SSCRA.
- iii. Left side of the car shall be no more than 58% of the total weight of the car.
- iv. All total weights and left side percentages will be calculated with a full tank of fuel and the driver in car. < formula for calculating fuel used to follow>

22. Safety

a. See General Safety Rules