March 13, 2025

# ALBERTA EXTREME SPRINTS / ROCKY MOUNTAIN SPORTSMAN SPRINTS RULES

2025

We are bringing new rules in 2025 to build up the class. All rules are subject to change during the season.

- \* No titanium brake rotors, drive shaft, engine components.
- \* Carbon fiber hoods, panels, seats are allowed.
- \* Flat and curved top wing allowed.
- \* Right rear tire durameter reading of 40 minimum, Hoosier, American Racer, PWM allowed.
- \* GM crate engines 602 and 604 with carburetors as per GM specs.
- \* Skagit engines as per Skagit rules
- \* 360 Sprint cars are allowed as per engine rules listed
- \* Race Saver engine allowed
- \* Weight rule is 1600 lbs. minimum

1. **ROLL CAGE** – Roll cage must be constructed from 4130 condition N seamless steel tubing, top rails min. 1.5" outside diameter x .095" wall. Bottom rails 1.5" outside diameter x .083" wall or 1.375" outside diameter x .095" wall, upper rails and uprights 1.375" outside diameter x .083" wall. Side and Halo bars recommended. Required rear end protection bar under rear of seat.

2. **FRAMES & COMPONENTS** – No aluminum frames, 4130 construction only. Minimum wheelbase of 84 inches.

360 cars are allowed as per engine rules listed. No titanium rotors and drive shaft

STEERING WHEEL – Steering wheel must be quick disconnect (no pip pins).
KNEE GUARDS – Knee guards are mandatory.

5. **SEAT** – Must be a full containment high back seat, aluminum or carbon fiber. The Hans or equivalent device is mandatory. The technical staff will determine if the seat installation and structure are safe & sound for competition)

6. **BUMPERS** – Steel rear bumpers and nerf bars (rub rails) are mandatory. Front bumper may be aluminum or steel.

7. **SAFETY** – A five or six point SFI 16.1 competition shoulder harness with lap belt and sub-strap are mandatory. Working arm restraints are mandatory. Seat belts recommended being not more than one year old but must be dated within two years. Fire retardant gloves, shoes, socks, balaclava or (helmets with fire retardant liners)

are mandatory. A racing suit with minimum rating of SFI 3.2 A/5 is mandatory. Fire retardant underwear is highly recommended. Helmets are required and must be Snell full face SA2015 minimum. Head and Neck restraint systems are mandatory and must be SFI accredited systems only. (Hans, Z-Tech, NecksGen and the Hybrid Series are SFI compliant) Carbon fiber helmets are allowed. Helmets & driver's suit must be worn at all times when the car is on the track or during startup. Rock screens are mandatory. Drive shaft must be fully enclosed by torque tube. The torque tube must be drilled for inspection of the steel drive shaft. Safety hoop must be attached to the chassis below the forward edge of the seat around the torque tube. Drag link tether strap mandatory.

8. **ELECTRONICS** –Memory Tachometer, Race Transponder mandatory (You may own your transponder AMB X260 or rent one from the track), Raceiver radio is mandatory and video camera are the only electronic devices allowed on or within the car.

No traction control of any kind.

9. MIRRORS – No mirrors allowed.

10. FUEL SYSTEM – (A) A racing fuel cell with bladder is required. Check valve required. Fuel shut off valve recommended at fuel cell outlet. (B) Alcohol or ethanol fuels ONLY.

11. **MUFFLERS** – Mufflers are required at Rad Torque Raceway, maximum 100 DBA at 100 ft.

12. WEIGHT JACKS – No in-cockpit adjustable torsion bars or weight jackers allowed.

13A. **WEIGHT** –Weight Rule: Weight rule is 1600 lbs minimum, including the driver, at the conclusion of the race. Any bolt-on weight must be painted white and the car number must be on the weight. Loss of any bolt-on weight during competition will disqualify the individual from the event. Bolt-on weight can only be added in the areas designated in the accompanying diagram. The weight must be securely attached and must remain in place during a race. It must not be moved or removed during a red flag situation. We reserve the right to disqualify any individual whose weight mounting procedure does not meet our specifications. (see illustration)



### 13B. 2020 Chassis Support Bar Rule Optional (Recommended)

Support bar may be designed similar to what was known as a "safety bar". It must be attached to the top rail at a point 15" to 20" from the rear of the front upright. It must attach to the hip rail and have a gusset attached to the rear upright near a point opposite of the rear brace/shock mount bar. The curve must be between 4" and 7" measured from outside of the rear upright tube to the outside of the support bar. See Diagram (1)

2. Existing chassis with a left side support bar installed (formerly called safety bar) that do not meet the option one specification above, may add a gusset that attaches to the top rail 15" to 20" from the rear of the front upright and angle to the support bar. The existing support bar tubing must meet the minimum as described above (1.375 X .083 ASTM4130 normalized steel or equivalent material). See Diagram (2)

3. A support bar may be added to the top rail at a point 15" to 20" from the rear of the front upright and to the rear upright near a point of the rear brace / shock mount bar but no higher than 7" above the hip rail. This bar may have a slight curve near the rear upright to accommodate elbow room and ease of fitment. See diagram (3)



## 13C. 2020 Wheel Mud Cover Rule optional (Recommended)

All wheel covers must have a minimum of 6 attachment points if using dzus fasteners. Dzus fasteners must be made of steel only.

Wheel Covers having only 3 attachment points must be bolted-on all three points utilizing a minimum 5/16", flanged steel bolt and an approved fastening (nut assembly) system. Approved fastening (nut assembly) systems:

Keyser Manufacturing Part #100 7-101

Wehrs Manufacturing Part # (WM377A-312 Aluminum 5/16) (WM377S-312 Steel 5/16) Triple X Chassis Part # SC-WH-7810 (for a 1" spring) / SC-WH-7820 (for a 1 3/8" spring) Smith Precision Products Part # MC-516-18 Speedway Motors Part # 910-07119

K2W Part #DL15MCBKIT

6 Point Wheel Mud Cover



3 Point Wheel Mud Cover



14. **TIRES AND WHEELS** –RR tire durameter reading of 40 minimum. Hoosier medium 105.0/16.0-15. Race Saver Hoosier tire 38214RS, 104/16.0-15.American Racer, PWM.

All other tires may be of any brand (Goodyear, Hoosier, American Racer, PWM, etc). (C) Wheels – No plastic or carbon fiber wheels, bead locks are mandatory on RR outboard minimum.

15. **SUSPENSION** – No cockpit adjustable shock absorbers allowed. Left rear adjustable shocks are allowed. No adjustable shocks or remote canister allowed on the Front and RR of the car.

16. **BRAKES** – Minimum LF and rear inboard workable brakes. No carbon fiber brake components allowed. No titanium rotors.

17. **BODIES** – Must be of "sprint car" design. Full-length hood is recommended. No carbon fiber body panels allowed.

18. **DRIVELINE** – In - out box, slider driveline, shifter rear end or Bert Sprint transmission required or approved driveline.

### **19. WINGS**

Cockpit adjustable wing sliders allowed.

**A.** Top wing mandatory, maximum of 25 square feet. Maximum center foil width 60 inches. The deepest point allowed in the top surface of the wing will be  $2\frac{1}{2}$  inches. No Wicker Bills or Gurney Lips allowed on center foil. The 12 inch section located at the rear of the center foil must not have the belly/curl arc out of proportion with the rest of the center foil. Belly/curl arc must span the entire length of the center foil and appear to be a gradual arc with the deepest point no further back than 48 inches from the leading edge. The belly/curl arc must start at the center foil's leading edge and shall not exceed a depth of  $2\frac{1}{2}$  inches. Top surface of the wing measuring crosswise must be flat.



#### **B**. Flat Top Wing

A maximum 1" removable wicker bill may be mounted on the rear edge of the center foil. Wicker bill must be 90 degrees to the top of the center foil. Same size as the top wing in "19 A" section

**C.** The side panel maximum is 72" long by 30" wide. Side panels attached to the wing must be fabricated flat at 90 degrees, as to have no turnouts or flaps made of more than two inches of material on the front or rear panel and no more than  $1\frac{1}{4}$  inches on the top or bottom sideboard. All top and front wings must be fabricated of metal alloys only. No fiberglass, carbon fiber or other similar materials may be used in the basic framework (center foil and side panel) of the wing.

**D.** Center foil must be one piece. No split wings or bi-wings. Top wings must not extend beyond outside of rear tires.

E. Nose wing optional, if used maximum (6) square feet. The front wing may not be cockpit or driver adjustable.

F. Wing caps, plastic allowed. No carbon fiber.

G. No rudders anywhere on the wing

H. Center foil must be square to side boards. Side boards must be parallel

20. **ENGINE** – No turbo or superchargers allowed. General Motors, Ford, or Chrysler steel block push rod V-8 automotive engine.

A. **BLOCK, CRANKSHAFT and RODS** – Engine must have a stock steel OEM block, Dart #31161111, World #084010, GM #10066034 or GM #12480047 no lightening anywhere on the block. General Motors and Ford limited to maximum displacement of 360 CID + or -1%. Chrysler limited to maximum of 364 CID. Maximum bore allowed is 0.060" over stock. Crankshaft and connecting rods must be steel. Stock type after-market crankshafts are allowed. No modifications to crankshaft counterweights allowed except for balancing purposes. (No knife edging).No pendulum cut counterweights (no scalloping) No stroker crankshaft (example: Cannot start with a 302 Ford to make a 351). Ford must be 351W or 351C. Crankshaft stroke: Chev 3.48 or 3.50. Ford 3.5. Dodge 3.58. Crankshaft weight for Chevy 47 lbs minimum. Highly recommended that all engine block frost plugs be pinned, screwed or tack welded. No titanium components allowed anywhere in the engine. No GM LS style engine.

B. **CYLINDER HEADS** – Cast iron cylinder heads only. No billet heads. No CNC porting. All cylinder heads and valve angles must remain within 1 degree of the original manufacturing (example: Chevy valve angle is 23 degrees, no other than 23 degree valve angle heads are allowed for Chevy motors). After-market heads allowed. Angle milling prohibited. Heads limited to two valve per cylinder in stock OEM location only, 11/32" valve stem minimum diameter. Steel valve spring retainers and locks only. Must retain stock spark plug location. Guide plates and screw-in studs permitted. Must use spec Comp Cams 994 or Bullet Racing Cams VS 90/24 dual valve springs, as is from Comp Cams or Bullet Racing Cams, no modification allowed. No other valve springs allowed. A maximum of .580 valve lift at zero valve lash. Roller rockers permitted but no shaft style rockers allowed, except one single shaft per head on Chrysler only. Hydraulic or mechanical flat tappet camshaft allowed. No roller cams and no rev kits allowed. Original manufacturers stock lifter diameter. No mushroom or Schubeck style lifters allowed.

C. **FUEL INJECTION** – Mechanical fuel injection systems must be configured of one individual stack per cylinder with a maximum of 8 injector nozzles up to  $3\frac{1}{2}$ " long. No nozzles permitted in the heads. Injector stack must have a maximum of 1 7/16" (1.437) I.D. square edge restrictor round and centered in the stack with a thickness of  $\frac{1}{4}$ ". Square edge (no blending) top and bottom, no taper bore. Restrictor (1 7/16) must be mounted 2" down from the top of the bell to the top of the restrictor. No air deflectors allowed. No straight sleeve or tapered sleeve. The stack inside diameter has to match the intake diameter at the butterfly. No downsizing of the stack, no thick wall stack. No plastic or rubber removable bell. The ONLY component allowed in the stack is the 1 7/16 restrictor. The restrictor

must be held in place by three pins, rivets or screws inserted into the restrictor. The restrictor must be sealed between the outer edge and the stack. No rotary injection system. Air filters with carbon fiber construction allowed.

D. **OILING SYSTEM** – Only wet sump-oiling systems allowed. A minimum oneinch pipe plug must be installed in the left side of the oil pan for crankshaft inspection (Not to be installed by the main caps). Accumulators are optional. No external oil pumps allowed. No vacuum pumps allowed. No pan-evac system. No dry sump-oiling systems allowed.

E. **IGNITION SYSTEM** – Only Vertex, Mallory, or comparable magnetos permitted. No MSD magnetos allowed. No MSD or electronic ignition allowed.

F. **FUEL** – Only methanol or ethanol fuel can be used. No fuel additives allowed.

**21.** The RaceSaver Sprint Series is allowed, some restrictions may apply. The Race Saver engine must be teched and sealed. If you're unsure of any rules, please contact the Rad Torque Raceway oval track management for more information.

Skagit engines are allowed as per Skagit rules GM crate engine 602 and 604 with carburetors are allowed as per GM specs

The RaceSaver Sprint Series engine rules are at <u>http://rules.racesaver.com/rules.cfm?rk=12</u>

Alberta Extreme Sprint / Rocky Mountain oval track director reserves the right to modify any rules at any time to ensure a fair competitive event for all participants.

It is at the discretion of the Alberta Extreme Sprints director of competiton and the head official to enforce and interpret the rules.

The decision made by the technical inspector is final.