



# Eagle River Speedway

## 600 Micro Sprints Rules

IT WILL BE THE CAR OWNER AND/OR DRIVERS RESPONSIBILITY TO READ AND FOLLOW THE RULES IN THIS BOOKLET.

IF YOU DO NOT UNDERSTAND WHAT IS WRITTEN PLEASE CONTACT A TRACK OFFICIAL FOR AN EXPLANATION.

EAGLE RIVER SPEEDWAY HAS THE RIGHT TO INTERPRET AND EXECUTE THE FOLLOWING RULES AS THEY SEE FIT FOR THE GOOD OF THE ASSOCIATION AND RACING IN GENERAL.

NO EXPRESSED OR IMPLIED WARRENTY OF SAFETY SHALL RESULT FROM PUBLICATIONS OF OR COMPLIANCE WITH THESE RULES AND/OR REGULATIONS. ALL GENERAL TRACK RULES APPLY.

All drivers must be 12 years of age with minimum 2 year experience with sprints. All drivers new to the class must start at the rear of the field for their first three (3) race events. After three events the driver status will be reviewed by officials.

### **Safety**

- Helmet must be SA 2010 or newer. Must also be full face with eye protection.
- Flame retardant driving suit required.
- 5 point racing style harness no older than 5 years old required, no older than 2 years recommended.
- Racing style shoes required.
- Arm restraints required.
- Flame resistant gloves required.
- Neck brace or helmet restraints required.
- Cage net is strongly recommended.
- Headrest support on right side is strongly recommended.
- Must be in racing gear by middle of backstretch, before start. NO SHIFTING!

### **Car Size Limit**

- 1) The wheelbase must be at least 50 inches and not more than 70 inches.
- 2) Minimum weight is measured with the car and driver. The minimum weight for a 604cc motor or less is 775 lbs., and a motor that exceeds 604cc is 850 lbs. Weight must be displayed on the right top wing side pane facing the outside.

- 3) Any additional weight must be lead and must be bolted in a secure fashion to the chassis only. Any lead or steel weight must be painted white and have the car number clearly and legibly marked on each piece for ID purposes.
- 4) Add on weight must be securely fastened to the main chassis structure. Loss of any bolt-on weight during competition will disqualify the individual from that event. All bolt-on weight must be painted white and carry a car number.
- 5) Maximum track width will be 65 inches measured outside to outside of the rear tires
- 6) All cars are subject to motor cc check.
- 7) Top three feature cars are subject to motor cc check. NO EXCEPTIONS.

## **Car Construction**

- 1) 1 1/8" diameter minimum .065 wall or 1" x .090 wall min. steel tube (Sprint style cage). Minimum 4 uprights on cage per side. Driver must exit outside of car and top of cage must be 3" above the driver's helmet.
- 2) No elliptical (oval) tube, no aluminum or titanium frames. All bents must have 3" minimum radius, no mitered or pointed corners. All cages need to be able to withstand a rollover. All cages subject to inspection by track officials.
- 3) An effective firewall of metal at least .0625 thick must be installed between the engine and driver and be as leak proof as possible, motor mounts may not be carbon fiber or composite materials.
- 4) Car should be fitted with a suitable chain guard that should extend from the front of the roll cage upright to the back edge of the seat. Material should be .060 steel or .080 aluminum. Guard should be securely fastened to the main cage.
- 5) All bolts and fasteners other than for body parts must be Grad 5 or better. Grade 8 recommended on all steering components and seat mount.
- 6) Must have a full floor pan from front of seat to past the pedals. Must have a metal firewall (steel or aluminum) that is sealed as well as possible to protect the driver for fire or hot oil.
- 7) Bodies must be neat in appearance and can be constructed from aluminum, fiberglass, or carbon fiber. Plastic must NOT be used for any interior panels or body panels. All car must have front, rear, and nerf bars. Left side nerf bar should be constructed to protect engine as much as possible.
- 8) Battery must be securely fastened on the inside of the car and sealed off from the driver.
- 9) There shall be NO Chassis or Wing adjustments from inside the driver's compartments including shocks. The only adjustment allowed is for brake bias. Any adjusters must be disconnected and bolted or safety wired. Zip ties not sufficient.
- 10) Throttle toe straps are mandatory for the event of a throttle stick, 3 throttle springs mandatory.

## **Nerfs/bumpers**

- 1) All cars must be equipped with front and rear bumpers, left and right nerfs securely fastened to the chassis. Minimum size 10-32 or 10-24 bolts. Front bumper must be single tube design.
- 2) Minimum  $\frac{3}{4}$ " outside diameter 1" maximum round steel or stainless steel.
- 3) Minimum wall thickness is .065 and maximum wall thickness of .120

## **Wings**

### **Top Wings**

- 1) Center air foil structure must be a minimum of 10 square feet and a maximum of 14 square feet of surface area. Surface area is defined by the width X length of the largest projection of the center foil.
- 2) The top wing must not extend beyond the outside of the rear tires, or behind the rear bumper.
- 3) Center foil must be of a square or rectangle shape with all four (4) corners set at a 90 degree angle.
- 4) Center foil must be of a single foil design. NO split or multiple stage wings will be permitted.
- 5) Maximum dimensions of each side panel is  $54 \frac{1}{4}$  X  $26 \frac{1}{4}$ . Only two side panels are allowed. NO kick-out allowed. Panels must be perpendicular to the air foil. Maximum depth of the side panels is 2 inches. This is the protrusion of the stiffening members not including the struts.
- 6) Maximum offset of the sail panels is 8". An offset is determined by the difference of the leading edge of the left sail panel to the leading edge of the right sail panel measured to the leading edge of the air foil.
- 7) Wing construction is of aluminum only (wood spars will be allowed). NO carbon fiber, Kevlar, plastic, or composite material will be allowed for wing construction. Leading edge protective covers will be allowed. One wicker bill is allowed and will be limited to a maximum of 1 inch.

### **Nose Wings**

- 1) The use of a nose wing is optional.
- 2) Center air foil cannot exceed 4 square feet of surface area.
- 3) Nose wing must not extend beyond the outside of the front tires, or beyond the front bumper.
- 4) Center foil must be of a single foil design. NO split or multiple stage wings will be allowed.
- 5) Maximum dimensions of each side panel is  $10 \frac{1}{4}$  X  $24 \frac{1}{2}$  X  $1 \frac{1}{2}$ . Only two side panels are allowed. Panels must be parallel. NO kick-out allowed.

## **Steering - Suspension**

- 1) Removable steering wheels incorporating a quick release mechanism conforming to SFI Foundation Specification 42.1 is mandatory. No plastic components can be used. Pin type mechanisms are not allowed.
- 2) A quick release type steering wheel is mandatory, and no plastic components can be used.
- 3) The use of carbon fiber, carbon/Kevlar, or other composite material as structural chassis component, suspension, or components in drive-line including the rear end, is not allowed.
- 4) Titanium front axles, rear axles, steering arms and torsion arms are not allowed.
- 5) Shock absorbers must have all valve mechanism housed in a single cylindrical unit. Shock absorbers may have two external adjustment and may be adjusted by manual methods only. NO cockpit adjusters are allowed.
- 6) Can be torsion bar or coil over any combination of the two.
- 7) Electric wing adjusters are prohibited. Can remain on the car but must be unplugged with one end taped and tied back.

## **Engine Size Limits**

### **Overall Engine**

- 1) Must be a Production Motorcycle Engine, 4 cylinder, 4 stroke
- 2) No current year engines
- 3) Titanium may only be used IF the part comes stock on the production bike.
- 4) Must have an engine, clutch, and transmission all in one unit.
- 5) Must be chain driven.

### **Bore and Stroke**

- 1) A maximum of 600cc for engine models that are 2007 and newer. All 2006 and older engines can have a maximum of 637cc. Engine model is defined by the manufacturer of the engine.
- 2) NO 2013 or newer Kawasaki 636 engines.
- 3) Standard stroke only (no strokers).
- 4) No "outlaw" style motors.

### **Head and Cams**

- 1) NO PORTING or blending of the bowls, or blending of the valve seats. (exhaust or intake).
- 2) Cam lift must NOT be greater than stock. (duration is open)
- 3) Cam timing may be adjustable.
- 4) Head may be resurfaced.
- 5) Any head gasket may be used.

### **Pistons**

- 1) Any piston may be used, but must be within cc limit specified under bore and stroke.
- 2) No machining of the pistons.

### **Bottom End**

- 1) No machining to remove weight from the crankshafts. (no after-market cranks)

### **Clutch-Transmission**

- 1) The clutch does not need to remain stock but must remain operable.
- 2) Transmission gears must be stock, no close-ratio gears or non-standard gear-ratios.
- 3) All gears must remain in transmission, no removing any gears.

### **Induction System**

- 1) No mechanically forced induction (turbo charging, or super charging)
- 2) Any carburetors may be used on any engine, regardless of year.
- 3) If the engine did not come from the factory with fuel injection, the fuel injection may not be used.
- 4) If the engine came with a factory fuel injection, the fuel injection may be used and may be converted to use with alcohol. Mechanical fuel injection may be used.

### **Charging System**

- 1) The original factory charging system may not be removed, and must remain in complete working order.

### **Self Starting**

- 1) The engine must self-start at the beginning of the event and have a functioning clutch. If it does not self-start, the car may be pushed off and must start at the rear of the event as the penalty.

## **Exhaust**

- 1) Exhaust system must be designed to create a minimum of fire hazard and a minimum hazard to other competitors.
- 2) Exhaust pipes passing close to the driver must have raised metal guards.
- 3) All cars must have each exhaust pipe equipped in such a manner to reduce the noise level to acceptable levels.

## **Ignition-Electronic**

All cars must have an ignition switch or emergency shut off switch within easy reach of the driver and labeled "on" and "off".

1) No aftermarket ignition systems. Must use factory stock for factory racing ECU. No hot ECU boxes, no physically modified ECU boxes. Factory race boxes are ok, but must have the rev limit set to the street bike rev limit. Stock rev limiter must remain intact at all times. (EX: no switch or gear specific limiters) If a computer is hooked up to the check the ECU it must be set to factory stock specifications no tolerance. See specifications list for RPM limits. All cars must have the U6SA standard connector for the track to check engine rpm rev limit. These are available from chassis manufactures and engine builder, and at the track. All cars must leave intact the rpm wire coming from the ECU. May use different year ignitions from the same manufacturer as long as stock rev limit or engine not ignition is retained. No aftermarket coils. NO gear position sensor may be used. The sensor may be in place on the engine but can not have any wired connected to it. Gear position wire from ECU may not be switchable. No more than one ECU box present in or on car. A 50 rpm over rev tolerance for the purpose of tech inspection is acceptable. NOTE: this does not mean you can turn up the rpms in any ECU by any amount.

2) Traction control of any kind is strictly forbidden. Any device that extends the factory preset rev limit for whatever make or model engine being used is strictly forbidden. All electronics must be fully accessible for technical inspector. No hidden items.

3) Engines that came with stock fuel injection may use an after-market add on (ex: Power Commander, Dim Sport) to adjust the fuel curve and/or timing (essentially the same as adjusting jetting and using an ignition advancer).

4) Auto tune is allowed.

## **Brakes**

1) The car must be equipped with a functional braking system.

2) Steel or aluminum brake rotors only. Carbon, carbon composite or titanium brake components are PROHIBITED.

3) Brake pad material is open.

## **Wheels**

1) Rim diameter must be 10 inches.

2) Right rear wheel width will be a maximum of 14 inches.

3) Left rear wheel width will be a maximum of 10 inches.

4) Wheels must be of an approved manufacturer.

## **Tires**

- 1) Can be any brand or compound on front and left and right rear.
- 2) May 1st 2019 the right rear tire must be a minimum of a 43 durometer reading at the conclusion of the race.
- 3) Absolutely NO tire softening agents of any kind allowed.
- 4) Can groove or sipe tires.

## **Fuel System**

- 1) All fuel cells, bladders or plastic tanks must be mounted securely to the frame. No wet tanks. All cars must be equipped with a fuel cell and tail tank meeting the requirements of UPIRA and SFI foundation specification 28.2.
- 2) Fuel tanks used for qualifying or heats must be used for the entire event.
- 3) Fuel systems must be equipped with a shut off device located within easy reach of the driver and the safety crew. The ignition switch and fuel valve must be clearly marked with on/off.
- 4) Fuel cells may not be made from carbon fiber or carbon/Kevlar materials.
- 5) Bladders are highly recommended.
- 6) Vent valve must be rollover type with valve.

## **Fuel**

- 1) The addition of any material(s) to the fuel is strictly prohibited.
- 2) The addition of any material(s) to the intake or the addition of any mechanical device(s) essential to the application of this material(s) is strictly prohibited.
- 3) Any device, which artificially reduces the temperature of the fuel, is strictly prohibited.
- 4) Can use Methanol or Gasoline only (high octane gasoline is permitted).
- 5) A driver may not be seated in the race car during fueling at any time, including the designated pit area. The penalty for violation will be to start at the rear of the field.
- 6) Top end lube is allowed.

## **Car Numbers**

- 1) Car numbers must be a minimum of 10" high and on both sides of top wing.
- 2) Number must also be on the tail section of the front wing.
- 3) Cars with numbers that are not readable by tower personnel will be required to fix. If correction (ex: contrasting colors, larger, smaller) is not made by following week car will not be scored.

## **Transponders**

Eagle River Speedway will require AMB MyLaps Transponders in 2020, there will be a limited number of transponders available for rent. We highly suggest purchasing a transponder before the event. For questions contact Eagle River Speedway. There will be a separate sheet pertaining to the required placement of transponders, this is a tech item and can result in the DQ of a driver not following the placement guideline. **Mirrors are prohibited.**

## **Two Way Radios**

- 1) All in-car communication devices are prohibited. A SW1600 model Raceceiver, tuned to channel 0000 (454.000) is mandatory.
- 2) All cars are subject to a minimum specification inspection at any time.
- 3) It is the responsibility of the driver to prepare their car FREE of defects and in safe racing condition.

**RULES ARE SUBJECT TO CHANGE.  
ALL DECISIONS BY OFFICIALS ARE FINAL.**