

OUTLAW SPRINT CAR

2016 Outdoor Rules

(Last Updated 4/27/16)

*****Allen's R/C Raceway follows basic DODC rules for our Sprint Car Class*****
Track Specific rules are in GREEN

General: For turn marshal safety all cars must have a front bumper that is made of a shock absorbing material e.g. nylon, delrin, plastic, kydex etc. Front bumpers must be mounted in such a way that they will contact an object prior to any other portion of the car in a front impact. All cars must have 4-wheel independent suspension, single speed transmissions only. No Gyros of any kind are allowed. All power, radio equipment and weights must be in a secured and fixed position and not moveable during a race.

Tires: Tire choice will be determined by track surface and race organizers. General tire choices will be between either foam tires or rubber tires however a race director may implement a SPEC tire rule if desired. Track owners may restrict tire additives at their discretion. Any tire additives that are used must be wiped clean from the tires before any races or practice sessions. No silicone capped or impregnated tires or rubber capped foam tires allowed.

Rubber Tires:

Max wheel diameter: 2.2" front and rear
Max wheel width: 1.750" rear, 1.000" front
Max tire width: 1.850" rear, 1.250" front

Allen's Approved Tires

Front: AKA Rebar #13208 with Red Insert #33014

Rear: AKA Rebar #13108 with Red Insert #33012

Insets cannot be ground, cut, or altered in any way.

Cutting, narrowing, cutting the inside webbing or sidewall, or altering the carcass of the tire is not allowed.

POWER RULES:

Motors:

Modified: Any ROAR Approved Brushless 540 Modified motor.

Batteries:

Any ROAR approved 7.4 Volt 2 cell Lipo battery are legal. Batteries must use a quick release hobby grade connector for connection to the ESC ie: sermos, deans, traxxas etc.

All racers shall take every precaution to insure safe charging and discharging techniques with their batteries. This shall include but is not limited to, attentive monitoring of battery during charging and use of a proper charging container i.e., LiPo sack. To ensure safe charging methods are followed by all competitors, all batteries may be checked prior to each race to ensure battery voltage is a maximum of 8.44 volts or less. If the battery reads 8.45 or more you do not race. Battery temperature may also be checked with the following pre-race procedure. A control pack will be placed in the tech area for the purpose of monitoring the pack temperature. Checked batteries shall be no more than 10° F above the temp of the control pack.

Speed Controls:

The following options for Electronic speed control rules are available under the DODC electric classes. When choosing an electric class of competition the speed control used for that class must be defined by one of the following three options.

Open Speed Control/ Open Timing. Any production ESC with an average street price of no more than \$250.00 is legal in this class. There are no restrictions on timing profiles for these ESC's. Must be available thru normal hobby distribution channels.

CHASSIS/BODY RULES:

General - All entries must be 2wd and rear wheel drive only. No straight axle cars are allowed. No front brakes allowed.

Wheelbase: 9.5" min, 11.5" max
Maximum width: 10.250" (rubber tires)
Electric Minimum Weights
Rubber Tires: Sprint = 57.0oz

-Maximum Overall Length: 18.000". Maximum Chassis width: 4.025"

Cage – Sprint cars must have a scale appearing contemporary cage made out of rounded stock. The cage must be symmetrical left to right and mounted level to the chassis. Unrealistic shaped cages designed to exploit the rules below are not permitted. Maximum cage width at driver halo, down tubes, and top frame rail: 3.600". Maximum cage height 5.5" from top of chassis to top of cage at highest point. All cage and body components such as cage, bumpers, nerf bars, hoods, side panels, tanks, etc. must be mounted on the centerline of the cage. Chassis may not extend outside of the side panels by more than 1/4" on either side.

Bumpers – A flat, curved or tubular front bumper (or combination of) must be used and may not be designed to direct air or create downforce. Maximum height of front bumper is 1.75" from the bottom of the lowest point of the chassis. Scale appearing side nerf bars must be used on both sides of the car (left side of nitro sprint is optional due to clearance needed for nitro exhaust).. A scale appearing rear hoop style bumper must be used. Bumpers and nerf bars must be made of a shock absorbing material.

Tail tank – A traditional scale appearing rounded style three dimensional rear fuel cell must be used.

Headers - Three dimensional scale appearing exhaust headers must appear on both sides of car in "engine area" (left side of nitro sprint is optional due to clearance needed for nitro exhaust).

Side panels – Flat side panels may be made from molded or fabricated polycarbonate. Maximum height of side panels in front of the driver cockpit is 3.80" from the bottom of the chassis. Must have minimum of 3/4" high by 2.5" long openings on both sides of cage in driver compartment. Additional material may be used/added to either side of the side panel openings to replicate a scale appearing driver but may not exceed 1" x 1". (Note that the top wing mounts may cover these openings for winged classes.) Side panels may not extend beyond the rear of the cage by more than 0.25". Side panels may not extend above or in front of the front downtubes. Scale appearing driver arm guards and engine vents may be used but cannot extend more than 3/8" from the side panels. No other flares or turnouts designed to deflect, trap and/or form a pattern for air to travel in a directed manner are permitted except for those used to cool electronics.

Hood Area– A scale appearing hood must be used and is defined as beginning at the front axle and ending at the front of the driver cockpit. The hood must be symmetrical from left to right. The hood must be tall enough and wide enough to allow room for a scale engine intake and air cleaners (no unrealistically low or flat hoods). Minimum vertical gap from top of hood to bottom of front cage crossbar: .750". The hood may not drop below the nearest point of the side panels by more than 3/8" and may not have any channels more than 0.25" deep designed to trap or direct air.

Nose Area – A molded or fabricated nose piece may be used and is defined from the front axle forward to the front bumper. Front bumper may not extend more than 3" from front axles. Nose piece (any lexan) must be at least 3/8" back from the leading edge of the front bumper. Maximum width of nose piece/bumper is 3.75". Maximum width of any surface designed to add downforce is 3.125". Nose piece may not extend above the cage downtubes or an imaginary line connecting the downtubes if the cage is a split design. *****Note that the hood and nose piece can be one piece or multiple pieces for the purpose of easy access to electronics and suspension but are defined as above for purposes of aero rules.**

Front wing/mounts – For front wing dimensions see appropriate wing drawing pdf. The front wing center section may not extend in front of the front bumper. Front wing mounts may be made of lexan but may not exceed 1.75" in length and 1.75" in height and may not extend in front of or behind the center section of the wing.

Top wing/mounts – For top wing dimensions see appropriate wing drawing pdf. Top wing minimum height at leading edge: 5.00" from bottom of chassis. **Top wing maximum height at leading edge: 6.50" from bottom of chassis.** Center section and side panels must be made from at least 3 separate pieces of polycarbonate, carbon or aluminum material. All corners and edges must be rounded and free of sharp edges. Main and Front wings must be mounted so that they are centered on cage, no offset wings. Wing center sections must have all 4 corners set at 90 degree angles, no canted or angled panels. Wings must also be mounted level from side to side. Center section of wing may not extend beyond leading or trailing edge of side panels. Side panels must have braces that hold side panel rigid at 90deg. to center section during race conditions. Two braces are required from top of the center foil to the left sideboard and one brace is permitted below the center foil to the right side board. Braces can be a maximum of .750" wide and front edge of front brace must be no more than 1.5" back from side panel leading edge. Side Panels may have front, back, top and bottom turnouts of no more than .375" and are included in max dimension. Flat foil center sections will be allowed a .250" turndown at the leading edge. No **additional** lexan or any other material may be mounted to nerf bars, bumpers, cage, wing or any other part of the car that will trap, alter, or direct air flow for the purpose of gaining an aerodynamic advantage. The 6x6" wing will be the standard Sprint Car wing size. Race organizers and series directors may at their discretion allow the optional 7x7" wing rule for races and series using buggy or rubber tires.

Top wings are mandatory and front wings are optional for all sprint classes. Race organizers may also choose to run wingless sprint classes at their discretion where top and front wings are not allowed.

7x7" Buggy Tire Wing: See Drawing

Top wing mount can not exceed the dimensions of the following template: SEE DRAWING

SPRINT WINGS: BUGGY TIRE
 - ALL DIMENSIONS ARE MAXIMUM UNLESS NOTED.

MAIN WING DECK: - MAX 7" X 7" SQUARE
FRONT WING DECK: - 4.5" WIDE x 3" LONG
 - PLUS 1/2" MAX REAR SPOILER

SIDE PANELS:
 - SIDE PANELS MUST BE MOUNTED WITH A MINIMUM OF 1/2" ABOVE AND BELOW THE TOP OF WING CENTER SECTION ON EACH SIDE OF THE WING.
 - LEFT SIDE PANELS ARE 90 DEG AT ALL 4 CORNERS AND ON SAME PLANE.
 - RIGHT SIDE PANELS MUST BE 90 DEG AT THE TOP 2 CORNERS. ALL 4 CORNERS ON THE SAME PLANE.

