

2018 ECO/Crate Winged Sprint

Note: These rules are to allow for a transition year as we form into a 602 Crate motor class in 2019. You will notice some minor differences between these and the 602 crate rules as posted by Marysville Raceway. Please keep these things in mind as we go through the 2018 season, and prepare for 2019.

Chassis

- a) Minimum weight after main event 1,600 lbs – scales will be at each race
- b) Open to any conventional sprint car chassis
- c) Wheelbase: minimum 82" Maximum 92"
- d) Main cage structure: shall be no less than 1 3/8" O.D. with .095" minimum wall thickness for chromoly tubing (1 1/2" x .095 wall is recommended) Case must extend 2" above drivers head.
- e) The cars body, motor, driver seat, and fuel tank assembly must be mounted to the chassis centerline
- f) Sprint car type bumpers and nerf bars are mandatory and must be securely bolted to the chassis.
- g) Bumpers and nerf bars must be constructed of steel tubing, minimum of 1" O.D. X .060" to 1" O.D. X .120" maximum. No solid
- h) bars and no lead bumpers.
- i) 1" raised rail frame ok

Drive Train

- a) All drive trains must have a driveline or rear-end coupler system (to disengage rear-end from motor) Torque arm drivelines
- b) may not be used. All drivelines must be enclosed and contain no more than one (1) U-joint and that must be at the front of the driveline.
- c) Buckley Yokes are acceptable
- d) A torque tube safety strap or driveline hoop is required
- e) Any sprint car quick-change with a maximum 2" axle offset is allowed.
- f) Rear end must be able to be engaged/disengaged from within the cock-pit.

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Suspension

- a) Any conventional 4 – torsion bar or bars on rear/coil on front is acceptable. No 4 coil over allowed.
- b) No independent rear suspensions shall be allowed, Straight axles only
- c) No devices that can adjust the suspension or shock absorbers by a driver in the car shall be allowed.
- d) No adjustable shocks – period.
- e) 1 shock per wheel

Wheels

- a) aluminum, 6-pin or splined wheel allowed
- b) No plastic or carbon fiber wheels allowed
- c) Bead-lock wheels are recommended. Mandatory on out-side right rear.

Tires

- a) Any tire allowed.

Brakes

- b) Minimum left front and left rear brake system required. Brakes must be in proper working order at ALL times. No brake shut off valves
- c) Steel, cast iron, or aluminum rotors only; steel recommended – TITANIUM or CARBON FIBER, rotors NOT allowed.

Body

- a) Sprint car bodies only. May be fiberglass or metal.
- b) Side panels are mandatory.
- c) No ground effect or wing-type bodywork shall be allowed
- d) Windshield screens are mandatory
- e) A floor-pan is required and must extend front the firewall to the front of the driver's seat.

Wings

- a) Top wing shall be no larger than 25 sq. ft. and no more than 60" wide.
- b) Side panels shall be a maximum of 30" H x 72" L.
- c) There shall be a 1" minimum wickerbill allowed on the top wing.
- d) Top wings shall be mandatory at all times. Top wings shall be surely mounted.
- e) Front wings shall be a maximum of 6 sq. ft. (2' x 3')

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- f) Wing sliders are optional (Hydraulic or Manual)

Engines

Note: we are a flat tappet cam class. No Roller cams

- a) Radiators shall be mounted in engine compartment ahead of motor.
- b) 100 DBA @ 100 feet Must meet track requirements for engine noise specifications.
- c) Throttle pedal shall have a toe strap and minimum of three (3) throttle return springs in the system with at least one (1) spring attached to the butterfly shaft.
- d) Starters are Optional. All racecars not self-starting, must supply own push vehicle!

Crate Motors

- A. CRATE MOTORS: ONLY Factory sealed must be in-tacked GM factory box stock crate engine 88958602 / 19258602. These are factory-sealed engines, tampering with a spec engine will be subject to \$3,500 fine, loss of all points, and technical probation for one (1) full year. (This means no breaking of seals, removing the harmonic balancer, etc.)
- B. All crate motors used in competition shall be delivered from GM or GM certified crate builders without alterations. Engine rebuilding is NOT allowed. Motor mounts cannot be removed or altered. Castings and fittings shall not be changed. No machine work on outside of engine. Casting or part numbers shall not be altered or modified and must be clearly legible.
- C. No "dry sump" systems allowed. "Wet" systems only, must use oil pan supplied with crate motor.
- D. No crankcase vacuum systems allowed.
- E. Stock-type water pump must be located in "stock" position.
- F. Must use a GM HEI distributor, a point-type (Accell or Mallory dual-point) distributor, or an MSD distributor, and a Rev Limiter that uses the MSD chip; limit to be set no higher than 6,200 RPM. NO MAGNETOS ALLOWED.
- G. Stock-size fly-wheel or flex plate required if using a starter and be SFI approved.

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- H. No traction control allowed. Ignition boxes with traction control capability will not be allowed.
- I. An infraction of this rule will result in \$1,500 fine and loss of all accumulated points.
- J. Rear drive pump mounting Optional from GM certified builder, (Pace Performance, Race 1)
- K. NOTE: COMPRESSION NOT TO EXCEED 160psi CRATE MOTORS. Compression release devices are not allowed. This may be changed by officials as needed

Built motors

- a) 360 cu. In. +2% (367.6 MAXIMUM – NO EXCEPTIONS)
- b) Cast iron block and cast iron heads shall be mandatory. No aluminum or other exotic metals shall be allowed. Raised runner
- c) heads shall not be allowed. 23 degrees Chevy. 20 degree Ford and 23 degree Chrysler
- d) Valve lift shall not exceed .565 – to be measured at valve. No titanium, exotic metals or materials allowed
- e) Flat tappet cams only. Lifters must be stock diameter. No offset lifter bores and no big block lifters. No roller cams. Roller rockers and girdles are OK.
- f) Gear drives ok
- g) Not titanium or aluminum rods shall be allowed.
- h) Stock-type, SFI approved harmonic balancer required.
- i) Stock-size fly-wheel or flex plate required – must be SFI approved.
- j) Engine Compression (Turn engine over 5 times with no start) not to exceed 240psi at spark plug hole chosen

- k) All built engines will be required to run a rev limiter at 6,200 RPM. 602 CRATES require 6200 RPM max.
- l) MSD boxes that accept a rev limiter chip will be allowed.
- m) Must be mounted OUT of drivers reach.
- n) No traction control allowed. Ignition boxes with traction control capability will not be allowed. – An infraction of this rule will result in a \$1,500 fine AND loss of all accumulated season points.

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Carburetors & Fuel System

- a) No Predator carbs, NO FUEL INJECTIONS
- b) Crate motors may use Holly 4bbl. / 750 CFM maximum for gas or alcohol
- c) Built motors must run a 4412, Holly 500 CFM 2bbl or Demon 500 CFM 2bbl – gas or alcohol
- d) Venturi may be opened .010 (ten thousandths) over catalog specifications
- e) Choke tower may be removed
- f) External jets allowed
- g) Bottom of carburetor shall be no more than 4" from the top of the manifold. This includes any adapters, spacers, etc.
- h) No RAM intakes shall be allowed.
- i) Cam drive fuel pumps allowed
- j) Alcohol or race gas allowed. E-85 pump fuel ok
- k) A securely mounted fuel tank (Sprint car or midget type) with bladder shall be required for all cars in competition.
- l) Approved fuel cell may be used for gas and must be securely mounted under fuel shell. Fuel Safe Endureo tanks allowed
- m) Fuel lines and fuel filters must be securely mounted to chassis.

Drivers compartment

- a) Aluminum or steel seats shall be mandatory. The seating system should provide lateral support on both right and left sides
- b) High back seats are recommended. High-impact headrests are mandatory. Headrest shall be of shock-absorbing material behind the driver's head and shall be a minimum of 1" thick. Full containment seats are recommended.
- c) Seats should be mounted in four (4) places to the chassis with a minimum 3/8" steel bolts and nuts. Each mounting hole shall have a minimum 2" diameter mounting plate with a .060" minimum thickness.
- d) Five (5) point type harnesses required with three (3) inch waist and shoulder straps. Belts may be no more than three (3) years old.
- e) Window nets, right and left side is highly recommended. If used, must be quick release type.

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Roll cage padding

- a) All chassis roll cage tubes and bars close to the driver's head shall be padded with high impact approved roll cage padding.

Steering

- b) Steering wheel shall be the quick-release type
- c) Steering drag link tether mandatory

Driver uniforms

- a) Driver's uniforms, gloves, and shoes shall be mandatory. Nomex underwear and socks highly recommended.
- b) Head socks and or helmet skirts are recommended
- c) Arm Restraints & Neck Brace mandatory. HANS-type device Recommended

Helmets

- a) SA 2005 or newer helmet required

General Rules

- b) A Battery is not required
- c) Battery shall be securely mounted. Must have a master switch to shut all battery power off, Must be reachable by tech or safety people.
- d) Bar stop safety rod fasteners mandatory - If using all thread, the all thread must be tethered to chassis.
- e) Master switch for battery, Must be accessible from left side of car.

***AGE RESTRICTIONS** - minimum age for Sprint Drivers is 15 (fifteen) years of age. 14 and Younger will need board's approval

Points Season

To be eligible for a points championship, you must be a member of either Rattlesnake Raceway in Fallon or Lovelock Speedway. Every scheduled night will be scored as a full event. For example, if only one car and driver appears on race day and pays their entry fee; the driver will be awarded First Place Points for the night. Fallon's point structure will be used.