

2021 Irwindale Speedway Spec Late Model Rules

The intent of this racing series/division and its rules are to create and maintain a safe, competitive, and affordable racecar. The basis of this racing series is that the race car, parts and all components remain unchanged. If you are interested in working on your race car to help the car's performance by making modifications to other than the minimal set up options you have, then this series is not meant for you. If this rule book does not specifically say that you can change/modify/add something, then you must consider that the change/modification/addition is illegal. All components must remain the same as delivered by Racecar Factory.

Air Cleaner

- A) Standard metal housing only.
- B) Air filter element must be 4" X 14".
- C) No air diverters, shields or coatings allowed.

Battery

- A) Only a lead cell or gel cell battery must be used.
- B) Minimum dimensions are 6" wide x 10" long x 7" tall.
- C) Car must run 12-volt electrical system.
- D) Battery must remain in its stock location and securely mounted.
- E) The original stock battery bracket may not be altered or moved.

Body

- A) The only approved body is the Five Star S2 Sportsman body.
- B) All panels must be run as produced by Five Star Race Car Bodies.
- C) Body must remain mounted to original body specifications and dimensions.
- D) Body must fit Fivestar/RCF template set.
- E) A-post windows must be 10" long maximum.
- F) No excessive trimming of body parts.
- G) Maximum front nose splitter width cannot exceed 75".
- H) Body mounts and bumpers must be run as supplied by RCF.

Brakes

- A) All brake parts must remain stock size, shape, weight and material.
- B) Front and rear brake calipers must be stock GM replacement only.
- C) Brakes must be operational on all four wheels.
- D) No proportioning valves allowed. One brake bias adjuster allowed.
- E) Only magnetic steel brake rotors allowed.
- F) Brake rotors must be minimum .900 x 11.75" front, minimum .800 x 11.75" rear.
- G) Brake rotor must be vented type.
- H) No drilled or scalloped brake rotors allowed.
- I) Master cylinders must be Wilwood 260-6765 and 260-6766.
- J) Brake cooling fans, brake ducts or holes in nose are not allowed

Carburetor

- A) Holley 3310C is the only approved carburetor.
- B) Primary jets and power valve may be replaced with OEM type.
- C) Choke flap and linkage mechanism must be removed
- D) No other modifications allowed.
- E) Secondary diaphragm spring must remain stock.
- F) External vacuum ports must be plugged.
- G) Carburetor is subject to exchange by tech officials.

Chassis

- A) Absolutely no modifications of the chassis will be permitted.
- B) Chassis must be raced as produced by RCF.
- C) No altering pick up points or mounts on chassis.

Clutch and Flywheel

- A) Flywheel must be 153 tooth OEM magnetic steel only (minimum 15#).
- B) Clutch disc must be magnetic steel (minimum 2.5#).
- C) Pressure plate must be magnetic steel (minimum 13#).
- D) 10.4" stock single disc diaphragm clutch only.
- E) Clutch master cylinder must be a Wilwood 260-1304.

Cooling

- A) One electric fan must be used.
- B) Radiator ducting must be flat panels, no wider than the radiator, and seal to nose.

Driver Seat

- A) Seat must be from a recognized manufacturer of seat and safety equipment.
- B) Seat construction must be solid aluminum, fully padded, with padded pelvis and left and right side shoulder supports.
- C) Seat must have a head restraint system, either integrated in the seat or a bolt-on system.
- D) Seat must attach to chassis at six points w/3/8" grade 8 hardware.

Driver Uniform

- A) Must be a multi-layer, full-coverage, Nomex-type fire protectant uniform meeting rated SFI-3 or better specifications.
- B) Nomex-type gloves, socks and racing shoes are mandatory.
- C) Nomex-type fire protectant underwear is recommended. Soiled, torn, worn, or poorly fitting uniforms will not be allowed.

Driveshaft

- A) Must be 2.75" x .060 magnetic steel only.
- B) Must have solid tube yokes.
- C) Must use magnetic steel u-joints.
- D) Driveshaft must be painted white.
- E) Minimum weight of driveshaft is 14#.

Engine

- A) GM 88958602 factory sealed break-away bolt engine only.
- B) All engine components must be stock GM only including valve springs, rocker arms and balancer.
- C) No heat shields allowed on valve covers.
- D) After an engine has won three main events in one season, that engine may be purchased by any registered RCF Spec Late Model race team that is in the top ten in the current point standings at the conclusion of an event. Price will be current retail price plus 10%.

Engine Mounts

- A) Engine must be centered in chassis.
- B) Minimum crankshaft height is 6 1/4" from top of cross member to center of crank.

Exhaust System

- A) Exhaust system, headers and tail pipe must remain stock.
- B) Exhaust components may not be altered in any way.
- C) Exhaust can't stick out past the body.
- D) No header wrap allowed on exhaust or headers.
- E) Exhaust system may be painted with high heat paint.
- F) Exhaust system cannot be ceramic coated.
- G) No grinding on headers or header flanges.

Fire Control

- A) Fully-charged 5# fire suppression system containing DuPont FE-36 or equivalent is mandatory.
- B) Fully charged 10# or 13# dry chemical, Halon, or equivalent fire extinguisher is recommended in each entrant's garage or pit area.

Front Suspension

- A) All front suspension parts must remain stock, size, and weight as delivered by RCF.
- B) No altering of suspension parts.
- C) Upper and lower ball joints must be stock.
- D) Low friction ball joints are not allowed.

- E) Lower and Upper A-arms must remain stock.
- F) Left front upper A-arm must be 9.5”.
- G) Right front upper A-arm must be 9”.
- H) No slotted or bearing cross shafts allowed.
- I) Spindles must be stock.
- J) Front hubs cannot be lightened or modified.
- K) Strut tubes may be aluminum hex or round.
- L) Tie rod tubes must be aluminum hex only.
- M) Steering box must be a GM Saginaw 12 to 1 ratio only.
- N) All rod ends must be magnetic steel.

Fuel and Fuel Cell

- A) Standard gas station Pump Gas only.
- B) No mixing of fuel or fuel additives allowed.
- C) Fuel cell must remain securely mounted in stock location.
- D) Fuel cell must be vented to rear bumper cover.
- E) Fuel cell must have a ground strap from fuel cell ring to the chassis.
- F) No cooling of fuel at any time.
- G) Fuel line must be steel braided or black braided hose.

Hardware

- A) All nuts and bolts must be solid magnetic steel only.

Heights

- A) All heights will be checked with driver in race car.
- B) Nose Height: minimum 5”.
- C) Side Skirt Height: minimum 4.25”.
- D) Frame Height: minimum 4.5”.
- E) Rear Quarter Panel at Tail and Deck lid: maximum 36”.

Ignition

- A) Stock GM HEI Distributor only.
- B) Ignition module must remain stock.
- C) No billet distributors allowed.
- D) Stock GM distributor cap, rotor and coil only.
- E) No heat shields allowed on distributor.

No Push Rule

- A) Cars must be driven to Tech and from Tech to staging area for Qualifying.

Number & Decals

- A) Must have readable numbers on door panels and roof. Numbers on door panels and roof must be minimum 20 inches in height. Roof numbers must be readable from the passenger side of the car. Numbers of minimum 5 inches in height must be applied to the right front bumper and left rear bumper areas of the car.
- B) Series sponsor decal must be displayed across front window.
- C) Front fenders reserved for series contingency sponsors. Contingency sponsor decals must be placed in line with and forward of the "A" pillar.

Radios

- A) Two way radios between driver and crew are required when car is on the track.
- B) Each team must monitor race control during practice, qualifying and race.
- C) Spotter must be in designated area at all times while car is on track.
- D) Team radio frequency must be registered with the track.

Rear End

- A) Full floater rear end with minimum .188 axle tubes only.
- B) Ford 9” mini spool only.
- C) Rear gear ratio must be 4.56.
- D) No lightening or back cutting of gears.

- E) No lightweight yokes allowed.
- F) Solid magnetic steel axles only. (Minimum diameter 1.200")
- G) No cambered rear end housing.

Rear Suspension

- A) All suspension mounts and pick up points must remain stock.
- B) All trailing arm tubes must be aluminum hex tubing.
- C) Track bar hex tube must be 25 3/4" minimum length and both rod ends must have jam nuts.
- D) All rod ends must be magnetic steel 3/4" diameter.
- E) No quick adjusters allowed on track bar or top link.
- F) Brackets on rear end housing may not be moved or slotted.

Rear Spoiler

- A) The rear spoiler must be mounted in original location.
- B) The rear spoiler must be mounted center on tail with 1/2" gap at center between blades.
- C) Spoiler size is ~~6" X 59" with notch in center.~~ 5" tall x 60" maximum width with 1/2" slot in center.
- D) Rear spoiler must be mounted with approved 70 degree mount.

Seat Belts, Shoulder Harness, Window Net

- A) Must be 5-point or 6-point SFI 16.1 or 16.5 rated, display a valid label, and dated within 3 years.
- B) Seat belt system (seat belt, shoulder harness, crotch belt) must connect at the lap belt with a quick release buckle for a one-handed, gloved release of all belts in all conditions. It must be either a latch link & lever or cam lock style.
- C) Lap belts must be 3" wide. Shoulder harness may be 2" wide over HANS device.
- D) Center crotch belt must be securely mounted to the lower seat frame at the bottom.
- E) Where the belts pass through the seat edges, it must have a grommet installed, be rolled, and/or padded to prevent cutting of the belt.
- F) Window net must be SFI 27.1 rated, display a valid label, and dated within 5 years.

Shocks

A) Shock numbers must remain stamped on shock, Must use the following approved shocks:

1. 310-42173/5 LR
2. 310-42174 RR
3. 310-42175 RF
4. 310-42174/6 LF

Springs

- A) Coil over springs must be 2.5" ID x 14" tall. Only the right rear spring may be 12" tall.
- B) No barrel springs.
- C) Minimum front spring rate 200#.
- D) Maximum rear spring rate 500#.
- E) Only 1 spring per shock allowed.
- F) Only 1 spring rubber per spring allowed.
- G) Bump stops are not allowed.

Sway Bar

- A) One piece 1.25" sway bar only.
- B) Sway bar mounts must remain stock as produced by RCF.
- C) No quick adjusters allowed.
- D) Sway bar must attach to right side lower shock mount only.
- E) Left side sway bar must run on slapper plate.
- F) All sway bar components must be magnetic steel.

Technical Inspection

- A) All cars and drivers must go through and pass inspection prior to qualifying.
- B) After each Main Event, the top three finishing cars must report directly to tech area.

Tires

- A) Hoosier 970 Tire only.

- B) Each car will be allowed 5 branded tires at their first race.
- C) At each race event they will be allotted 1 branded tire per race.
- D) No other tires will be allowed for competition.
- E) You may practice on any 970 tire.
- F) No chemically altered tires.
- G) Tires must remain as manufactured. No shaving, grinding, or grooving of tires permitted.
- H) Tires serial number will be recorded by Irwindale Official for verification.

Track Width

- A) Front must be 63" maximum from center of tire to center of tire at spindle height.
- B) Rear must be 62.5" from center of tire to center of tire.
- C) No wheel spacers allowed.

Transmission

- A) Must be magnetic steel.
- B) Must be 3 speed Saginaw.
- C) Stock OEM transmission with three forward and one reverse gear.
- D) Transmission cannot be lightened or altered.
- E) Transmission must weigh 75 pounds without shifter. No polishing or coating internal parts.
- F) Transmission mount must be rubber or urethane only.

Transponder

- A) All cars must have an operating transponder for the entire Event.
- B) Must be mounted vertically 24" behind the centerline of the rear axle housing on the right side frame rail.
- C) Teams who own transponders may use them and must register them with the track officials. Teams may elect to rent transponders from the track.

Weights

- A) Minimum weight 2,800 lbs with driver prior to main event.
- B) All weight includes car and driver, race ready with all fluids and safety equipment on board.
- C) All weight must be in left side rail (3" x 4" tube) or inside the center section frame rails on right or left sides (2" x 3").
- D) Weight must be stationary and secured by 3/8" grade 8 bolts at each end of the frame rail.
- E) All weight must be non-magnetic lead; no tungsten or other material.
- F) All weight must be painted white with car number.
- G) No weight may be added to or clamped to the chassis anywhere else but the described positions.
- H) Maximum left side weight before event with driver is 55%.

Wheelbase

- A) Wheelbase must be 108" +/- half inch.
- B) Wheelbase must be within 1/2" from side to side

Wheels

- A) Circle Racing Wheel 15" x 8" steel wheel only.
- B) Wheel must be 4" backspace only.
- C) Minimum weight of wheel is 19#.
- D) Lug nuts must be 5/8"-11 threads with a 1" hex outer dimension.
- E) No gun drilled wheel studs.

Helmets

- A) Drivers must wear a full-face helmet with one of the following certification labels: Snell SA 2005, Snell SA 2010, FIA 8860-2004, FIA 8860-2010, or SFI31.1/2005. SFI or Snell certification label must be visible for inspection. Any helmet with the labels defaced, obliterated or removed will not be approved
- B) "M" rated helmets not allowed.
- C) Eye protection is mandatory at all times.
- D) Helmets showing wear or abuse, such as chipping or cracking, will not be approved.
- E) Head and Neck Restraint Devices/Systems mandatory.

- F) Drivers must connect their helmet to a head and neck restraint device/system at all times during an Event (practice, qualifying and competition).
- G) Must meet SFI 38.1 specification and must display a valid SFI 38.1 label.
- H) Device/system must conform to the manufacturer's mounting instructions, and must be configured, maintained and used in accordance with the manufacturer's instructions.

ALL EQUIPMENT IS SUBJECT TO THE APPROVAL OF IRWINDALE SPEEDWAY TECH OFFICIALS. NO EQUIPMENT WILL BE CONSIDERED AS HAVING BEEN APPROVED BY REASON OF HAVING PASSED THROUGH INSPECTION. ALL NASCAR MEMBERS ARE REQUIRED TO BE FAMILIAR WITH THE TRACK RULES AND NASCAR RACING SERIES RULES PERTAINING TO OUR DIVISION.

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