

2023 Stafford Speedway Open Modified Rules

2023 Open Modified Rule Changes

Basic Car Rules

Body Requirements

Engine Rules

The rules herein shall refer to “Stafford Motor Speedway” as SMS. These rules shall refer to “participant” as any owner, driver, crew member, vendor or fan. Upon entry into SMS, all participants agree to be knowledgeable and bound by the contents found in these 2023 Divisional rules and the SMS 2023 General Rules. These rules supersede and replace any contrary rules as posted by any other sanctioning bodies.

Participants are required to register their car number and engine package/cylinder head manufacturer for the Open Modified feature events. Participants can contact the Stafford Motor Speedway Office (860-684-2783) or register online at www.staffordspeedway.com.

- A non-refundable registration fee must be submitted.
- The minimum age for competition is 16 years of age (15 years of age upon prior approval of SMS officials).
- A car may not compete in two different divisions during the same race event.
- The feature event will have a draw for qualifying heat starting position, and will use the USAC plus/minus system of handicapping from the qualifying results for the 26 car feature starting line-up (EIRI).
- Teams are required to use helmets for each of their five team members (maximum) that are allowed to go over the pit wall for any car service.
- There is no fueling or refueling permitted on Pit road / infield.
- Drivers must have a suitable HANS, NexGen, Hutchens, or Simpson Hybrid type head and neck restraint device.
- All drivers personal safety equipment and restraints must be SFI certified and in-date.
- The drivers seat must be a commercially manufactured aluminum containment-type seat. Carbon fiber, or any non-aluminum seat is not permitted.
- All SFI certifications must be clearly visible for inspection.
- All cars must have a fire suppression system installed.
- The interpretation and application of SMS Officials decisions concerning any rules or references to NWMT or MRS rules during and after each event is final and non-appealable.
- Please see the SMS 2023 General Rules for additional safety rules and procedures.

TRACK COMMUNICATION FROM RACE CONTROL:

- Each cars spotter must be in the designated spotter’s area and monitoring 464.5000 during their qualifying and feature event. Failure to follow the directives from Race Control may result in a penalty for the Driver and the Spotter.

SMS reserves the right to modify engine rules and weight requirements, as deemed necessary for competition. All components and their installation must be acceptable to SMS Officials.

ALL Tour-Type Modifieds must follow the 2023 Monaco Tri Track, ROC, MRS, NASCAR Whelen Modified Tour rule books - rules may NOT be combined between series - with the following exceptions/additions

Basic Car Rules

- The chassis, interior tin and body must be safe, neat appearing, and acceptable to SMS Officials.
- A maximum track width of 84" is permitted, when measured at outer wheel beads.
- The wheelbase must be between 104-110 inches.
- All cars must have a working transponder installed 12" rearward of the centerline of the rear axle housing.
- Front wheel / spindle tethers must be used, and be acceptable to SMS Officials.
- The windshield must be driver's side only, typical flat style, minimum 1/8" polycarbonate material
- The standard Modified type front bumper must be installed at spindle height, and may not extend beyond 31" from the upper ball joint.
- The standard Modified type rear bumper must be installed at spindle height, and can be no wider than 48".
- Standard Modified type side nerf bars must be installed in accordance with NWMT or VMRS rules.
- Belly pans are not permitted.
- All Cars must have mufflers
- Carbon fiber or titanium chassis, suspension, or body components are not permitted.
- **Chassis/frame must be mild steel only. Alloys – including chrome molly - of any type NOT permitted.**

Body Requirements

- Rear Spoiler 48.0" maximum width; 8.0" maximum blade height; maximum of 36.0" from ground to mounting point of spoiler - with driver in car.
- **The rear spoiler must be centered between the rear window B/C pillar mounting points. The B/C pillars must not extend (upward) above the line drawn from their roof mounting point to their aft mounting point. The left and right B/C pillars must match in size and style.**
- **Right side door and quarter must be a strait plane**
- **8" Maximum - 6" Minimum height measured from Bottom of quarter to ground with driver in car.**
- The roof must be a minimum of 40" measured from the ground to the center line of the roof, measured 6" behind the top windshield bed. The roof may have a maximum height of 43".
- **No Concave Panels allowed**

POST-RACE MINIMUM WEIGHT

- Cubic inch displacement must be labeled on the hood.
- All total and left side weights will be measured with the driver in the seat post qualifying and/or feature

18° Engine, 23° Engines, Steelhead Engines

- 350-364 ci must weigh a minimum of **2,515 pounds** / maximum 56% left post-race.
- 365-372 ci must weigh a minimum of **2,565 pounds** / maximum 56% left post-race.

MEP Sealed Equalizer, Dart Spec Engine, NWMT Spec engines

- Must weigh a minimum of **2,515 pounds** / maximum 56% left post-race.

Steelhead Engines compression ratio over 12:1 (maximum of 13:1)

- Must weigh a minimum of **2,565 pounds** / 56% left post-race.

Any other engine package must receive approval prior to competition.

You will be penalized one finishing position per pound that you are under on the total minimum post-race weight. The maximum left side weight percentage is detailed below. There is no tolerance on the maximum

left side total, you will be DQ'd for being over on the left side total.
SMS reserves the right to modify car weight requirements as deemed necessary for competition.

FUEL:

- Sunoco Standard Purple 110 or Sunoco Supreme Blue 112 leaded fuel must be used.
- SMS will sample your fuel as part of our technical inspection process.
- Blending or mixing of any fuel type or additives is not permitted.

FUEL CELL:

- A rubber bladder fuel cell must be used.
- The fuel cell must be a maximum of 24 gallon capacity.
- The fuel cell may be a maximum of 5 years old.
- The top plate must have a fully functioning roll-over check valve.
- A minimum ground clearance of 5" must be maintained.

SUSPENSION:

- Standard / Typical Modified type suspension components must be used.
- Bump stops, coil bind and/ or travel limiters of any kind are not permitted.
- Cockpit remote chassis adjusters are not permitted.

Front Suspension:

- The suspension and coil springs at all four (4) wheels must be active and permit suspension movement in compression and rebound.
- All downward chassis movement while the race vehicle is in competition must be limited only by the normal increasing stiffness of the springs or the bottoming of the chassis against the race track, whichever occurs first.
- Any device or procedure that in the judgment of SMS Officials attempts to detract from or compromise the above will not be permitted, including coil-bind or travel limiting.
- With your car on our 1" tall suspension inspection pads, your car must travel down and have the front nose panel touch the ground when the front suspension is compressed, without creating coil bind or travel limiting of any kind. Again: If it looks like you're compressing the spring completely, or achieving any type of travel limit, you can't run it.
- A maximum of ONE full (360 degree) non-adjustable spring rubber in the right front and each rear coil over spring is permitted.
- The spring rubber must be made of rubber, urethane or silicone, with no solid material inside it. A left front spring rubber is not permitted.

Coil Over Springs:

- Coil over springs must be manufactured from one solid piece of heavy-duty magnetic round steel and must be constructed with both coil ends closed and ground.
- One inactive coil on each end of the coil spring is permitted.
- Only one (1) spring per wheel will be permitted.
- All active coils of the spring must have the same coil spacing.
- Progressive or digressive rate springs will not be permitted.
- Front coil must be a minimum of 6" in free height and be a minimum of 250 lb. per inch in rate.

SHOCKS:

- Non Adjustable or Single Adjustable Shocks must be used.
- One shock per wheel permitted.
- Remote or External Reservoir Shocks are not permitted.
- Remote adjustable shocks are not permitted.
- Shock bump stops (internal or external) are not permitted.

- Shock/Coil over boots or bags are not permitted.

SPINDLES / HUBS:

- Spindles / Hubs and related components must be acceptable to SMS Officials.
Steel spindles only.
- Aluminum or magnesium hubs may be used.
- Hubs that require oil as lubricant are not permitted.
- Wheel bearings must be magnetic steel.

BRAKES:

- The brake pedal must operate all 4 wheels.
- Titanium, ceramic or carbon fiber components are not permitted.
- One brake bias control valve is permitted.
- Brake enhancing devices of any kind are not permitted.

REAR END ASSEMBLY

- The rear end, its associated components, and its installation must be acceptable to SMS Officials.
- An 8" or 10" diameter ring gear quick change rear must be used.
- A standard type spool must be used. Any type of ratchet, open, or slipping chuck is not permitted.
- A maximum of 4:86 gear ratio/final drive may be used.
- A "straight" or non-quick change rear is not permitted.

DRIVE TRAIN:

- All drivetrain components and their installation must be acceptable to SMS Officials.
- Any traction altering or enhancing device of any kind is not permitted.

DRIVESHAFT

- The 2" minimum diameter driveshaft, u-joints and yoke must be magnetic steel.

TRANSMISSION

- The transmission, its related components and its installation must be acceptable to SMS Officials.
The transmission must weigh a minimum of 50 lbs (dry weight).
- The gearing must be 1:1 on final drive, and nothing lower than a 1:15 on any other gear.
- The transmission must have two forward gears and a reverse gear.

CLUTCH

- A conventional 1, 2, or 3 disc clutch must be used.
- The flywheel and pressure plate must be bolted to the crank flange of the engine.
- A Ram coupler or direct drive type assemblies are not permitted.
- Components must be steel or aluminum (titanium, carbon fiber or composite are not permitted).

WHEELS

- Wheels must be magnetic steel.
- Wheels may be a maximum of 15" wide.
- Lugs and lug nuts must be magnetic steel.

CARBURETOR:

- All carburetors must have the booster's safety wired.
- All carburetors must pass applicable gauges and inspection.
Aluminum 18-degree head
- Must use the Holley 390 CFM carburetor with .500 length bridged boosters.
Aluminum 23-degree head

- Must use the Holley 390 CFM carburetor with bridges removed that meet MRS rules.
The Dart aluminum Spec head
- Must use a Holley Model 4150 HP series type carburetor.
MEP Equalizer
- Must use The Holley 750cfm 4150 series HP 4 barrel carb as supplied.
The NWMT Spec
- Must run the NWMT legal encrypted carburetor.
Stock Steel head
- May run any Holley 4 barrel carb.
Ported Steel head
- Must use a gauge legal Holley Model 4777 – 650 CFM carburetor with stock Holley OEM components.

Engine Rules

- LS Tour Type Engines must have a current year tour seal in place. *LS Tour-Type Spec-type engine must be Whelen tool legal including Spec 830 carburetor and spacer.*
- *Spec engine cylinder head throat under intake valve max diameter 1.790”, exhaust valve max diameter 1.340”. Go/No-Go gauge will be utilized to measure, assuring compliance.*
- All Aluminum, 18-Degree head built engines will use only 390 CFM carburetors with .500 length bridged boosters.
- All aluminum 23-degree head built engines can use the same carburetor with bridges removed that meet MRS rules.
- The only exception is the DART aluminum budget/ spec head package which can use any size Holley model 4150 HP series type carburetor.
- All aluminum head engines are allowed one single maximum 2” carburetor spacer.
- 650 CFM carburetors must pass go/no-go gauges.
- Maximum cubic inch limit 372cu in for all built engines.
- All ported steel head engines must use Holley 4777-650 CFM carburetor with stock Holley OEM components for this model carburetor.
- Standard straight, stepped or Tri-Y headers are permitted. NWMT, Kooks, Flowrite Beyea, or similar unaltered mufflers must be used.
- Engine compression and displacement equipment will be present at Stafford Speedway.

IGNITION:

- One MSD 6ALN ignition box is permitted, mounted on right side of driver’s compartment. A 6 pin male/female connector is mandatory.
- Crank trigger ignition is permitted, without an ignition module installed in the distributor.

TIRES

Note- Teams that have pre-registered may call Hoosier and pre-order their race tires.

- The tire rule will be a Hoosier 1320 compound for left side tires and a Hoosier 1330 compound for right side tires with a quantity of six (6) registered to each team.
- These six tires must be purchased at SMS on race night, and will be scanned into our tire inventory system.
- You must complete a Tire registration sheet and submit it to the Tech Center after practice has concluded (prior to the start of qualifying, or a penalty may be applied).
- You must have four of those six registered tires on your car at all times during all qualifying and feature events.
- Competition tire changes are permitted, but you must use only your six registered / inventoried tires.
- You are required to notify SMS Officials of your “change tires” positions on the car (right sides, rears, etc...) on your tire registration sheet.
- Flat tires/damaged rims must be approved for changing by your SMS pit road official. Flat

tires must be replaced with inventory change tires when those tire positions are flat. Flat tires must be replaced with “scuffs” when a non-change position tire is flat.

- Flat tires may not be replaced with a ‘sticker” tire at any time.

You may not compete without the roof, windshield, hood, air filter or mufflers in place. Additionally, the bumpers and all nerf bars must be adequately secured to the chassis at all times. SMS Officials will pass judgment on any body / bumper / nerf bar damage prior to continuing an event. Their decisions are final and non-appealable.

Rules Disclaimer:

The rules and/or regulations set forth herein are designed to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such events.

These rules shall govern the condition of all events, and, by participating in these events, all participants are deemed to have complied with these rules.

No expressed or implied warranty of safety shall result from the publication of or compliance with these rules and/or regulations.

They are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to a participant, spectator, or official.

Stafford Motor Speedway Management / officials shall be empowered to permit reasonable and appropriate deviation from any of the specifications herein or impose any further restrictions that in their opinion do not alter the minimum acceptable requirements.

No expressed or implied warranty of safety shall result from such alterations of specifications.

On occasions when situations arise that are not covered by written rules, Stafford Motor Speedway Officials may put special rulings into effect.

Once such rulings are acted upon, they may become an act of policy and may be added to the existing rules and procedures.

Any interpretation or deviation of these rules is left to the discretion of Stafford Motor Speedway officials. Their decision is final and unappealable.