



1188 James D. Hagood Hwy.  
P.O. Box 1066  
South Boston, VA 24592  
Office: 434-572-4947  
Fax: 434-575-8992  
Email: [info@southbostonspeedway.com](mailto:info@southbostonspeedway.com)  
[www.southbostonspeedway.com](http://www.southbostonspeedway.com)



# 2018 SEASON MOD 4 DIVISION

"See General Rules"

## Changes in RED

Updated 1.29.18

### Car Count/Lap Count:

- Minimum 4 cars are required to compete in an event. Four (4) to eight (8) cars track officials has option to reduce laps.

### COMPETING MODELS:

- Competition will be open to 1964 and later models of American and foreign four-cylinder passenger sedans sold in the United States.
- No Cosworth Vegas.
- No mid-engine or front wheel drives.

### BODY SPECIFICATIONS:

- Aftermarket muscle car type fiberglass bodies are permitted. Metal, Fiberglass or composite bodies can be used.
- A steel anti-intrusion plate must be installed on driver's side following NASCAR guidelines. This is mandatory.
- No lowering of body on frame.
- No offset in any way.
- Hood and deck lid must have positive, magnetic steel, type fasteners.
- Inner body panels and fenders may be removed but must be safe and neat appearing. No sheet metal may be added to the car interior (trim, vent, etc.) except to seal front and rear firewalls and over exhaust pipe if run through door.
- Any fabricated sheet metal (doors, etc.) must conform to original dimensions and be made of 22-gauge steel minimum.
- This rule will be strictly enforced.
- Headlight and taillight openings must be covered with aluminum.
- Roll cages must not be set back or offset when installed in car.
- Floor pan on right side may be raised eight (8) inches maximum for exhaust clearance. Fire wall must remain stock.
- May interchange bodies on frames. Front-wheel drive bodies on rear-wheel drive frames, but wheel base and tread width must remain same as for frame being used.

**ROOF HEIGHT:**

- Stock production bodies must remain as stock. No chopping or lowering of roof.
- Aftermarket body must maintain a minimum of 48 inches in height when measured 10 inches back from the center of the windshield.
- Rear of roof must maintain stock configuration.

**BODY HEIGHT:**

- Must be stock for car body being run.

**GROUND CLEARANCE:**

- Minimum five (5) inches. If frame rails have been added, measurement will be made at frame rails or uni-body seam(lip) where rocker panels and body are joined, whichever is lower.

**SPOILERS:**

- Maximum five (5) inches front and rear.
- Must have minimum five (5) inch ground clearance.
- Maximum width of rear spoiler will be 50" measured across the rear of the spoiler. Spoiler must be mounted within the center line of body.
- No rear supports or adjusters.
- Minimum spoiler thickness of 1/8"

**DASHBOARD:**

- All cars must be acceptable to track officials.

**FIREWALL:**

- Engine firewall must remain stock and no further back than four (4) inches from cylinder head.
- All race cars must have firewalls made of steel, welded and not riveted.
- All holes must be sealed with fire retarding material. No spray foam allowed.

**IDENTIFICATION AND MARKING:**

- Refer to General Rules.

**GENERAL ENGINE ELIGIBILITY/CHARACTERISTICS:**

- Different manufacturer's engines will be allowed in different manufacturer's cars. (For example, Nissan engines will be allowed in Ford cars, etc.) These engines must mount in the same location as the stock engine that came out.
- Must mount in stock location.
- Four (4) cylinder engines only.
- No cross-breeding of engine parts permitted except for cylinder heads. Heads do not have to match the engine but must be manufacturer stock production. No truck heads.
- Stock stroke must be retained. All short blocks must be stock.
- .060 overbore permitted on all engines.
- Blocks may not be decked over .020".
- GM 151 permitted in Monza, Vega, and Sunbird bodies only. Also, 1987-1989 2.0 Liter GM engine allowed. No high-performance GM 151 parts permitted.
- No truck engines or parts.
- No o-ringing of block allowed.
- 2500 cc maximum engine size allowed, except for the Dodge 2600 cc engine, which is permitted.

## **OVERALL CAR WEIGHT:**

- One pound per cc including driver. Maximum left side weight will be 55%. Engine cc must be painted on the hood.
- Minimum weight is 2300 lbs. for all Fords.
- Car weight may be adjusted to equal competition by speedway officials.
- Nissan and Toyota minimum weight 2,250 lbs. or one (1) pound per cc.
- GM minimum weight 2200 lbs.
- 3/4 lb. per lap allowance
- Added weight must be in block form of no less than five (5) pound blocks (no pellets) and painted white with the car number on it. Added car weight must be securely bolted in place.
- Weight may not be added to the outside of the frame rails or ahead of the front spindles or behind the rear axle or inside the driver's compartment.
- Dislodged weight will not be permitted to be returned to the car for weighing after race.
- Tungsten will not be allowed.
- Total claimed weight must be visible on right front of hood or on the bottom right side of windshield.

## **DETAILED ENGINE REQUIREMENTS:**

### **PISTONS**

- May use stock or aftermarket cast or forged pistons.
- Must have same configuration as stock. Nissan 22 engine must run stock type dish pistons. Flat top pistons allowed only in engines that came that way.
- Toyota 22R Engines may run dome pistons
- No modifications. Bottoms of pistons cannot be milled or altered.
- Flat part of piston may not protrude out of block.
- Pistons must be installed same as stock.

### **RODS**

- Magnetic steel aftermarket rods permitted.
- No hollow rods.
- Maximum length 5.7 for Fords.
- Stock rods must be stock length and maintain all stock dimensions for motor being run. Balance pads cannot be ground off. No cross-breeding allowed.
- Toyota Engines may run H-Beam style rods

### **CRANKSHAFT**

- Only stock production cranks for motor being run allowed.
- No modifications other than balancing permitted.
- Balancing must be done by drilling, not grinding or polishing.
- No high performance or knife edged cranks.
- No grinding or polishing.
- Aftermarket balancers permitted.
- Strapping of main bearing caps is permitted.
- Studding of main bearing caps is permitted.

### **CAMSHAFT**

- Any single camshaft permitted.
- Any lifter solid or hydraulic permitted.

- Aftermarket or high-performance cam pulleys permitted.
- Stock ratio roller rocker arms permitted on GM engines only.

### **HEADS, VALVES, VALVE SPRINGS**

- Only manufacturer stock production heads for engine being run.
- No modifications of head (includes angle cutting, porting, etc.).
- Cam tower bracing will be permitted.
- No blending of valve job with rotor tool to head casting.
- Bowl cuts will be in accordance with LMSC guidelines.
- Stainless steel valves permitted. Neck down valves permitted
- Ford must use single valve springs only. Stock diameter dampers are allowed. Shims permitted.
- Toyota can run dual valve springs and steel retainers.
- Toyota may run 22R performance valves.
- Multi-angle valve job will be permitted.
- Toyota head bolts may be replaced with stud bolts.

### **CARBURETORS**

- All Fords will run Holley 2300 two-barrel (model #7448) carburetor. No modifications. Must be stock out of the box. The only alterations permitted are: the choke may be removed, the power valve size and jet size may be changed, and accelerator pump discharge nozzle may be changed.
- Nissan, Toyota, and Chevrolets will run Holley 2300 two barrel (model #7448)
- Holley 2300 two (2) barrel Carburetor Rework

### **GUIDELINES:**

#### **Carburetor Main Body:**

- Reshaping, polishing, grinding, or drilling of additional holes will not be permitted. The maximum size for the air bleed holes in the top of the carburetor body will be 0.080 inch for all four (4) holes. Screw in air bleed jets will not be permitted in the 2300 main body.
- The choke may be removed, but all screw holes must be permanently sealed.
- Choke Horn: horn must not be removed

#### **Carburetor Boosters:**

- The booster type must not be changed. The Holley booster part number 45R-107-1, with the casting number 45R107 and part number 45R-312R, with the casting number 45R-312 are the only boosters that will be permitted. The Holley casting numbers must remain legible on the top of all booster stems. Size or shape must not be altered. Height and location of the boosters must remain as manufactured.
- All boosters must maintain a minimum outside diameter of 0.616 inch. The addition of material will not be permitted to the boosters with the exception of a small amount of epoxy that may be used to assist in securing the booster stem to the main body of the carburetor.

#### **Carburetor Venturi:**

- The venturi area must not be altered or reshaped in any manner. The venturi must maintain a circular (round) cross section. The casting ring must not be removed. The location of the venturi must remain as produced by the manufacturer.
- Alterations that, in the judgment of Track Officials, were made to allow additional air to be picked up below the opening of the venturi such as altered gaskets, base plates, and drilling holes into the carburetor will not be permitted.

### **Carburetor Throttle Body (base plate):**

- The carburetor throttle body must be used as provided by the manufacturer. The positioning of the throttle bores in the carburetor throttle body must be the same as provided by the manufacturer. The throttle bores must be completely round. The throttle bores must be straight without taper from top to bottom. The throttle bores must remain perpendicular to the top and bottom of the carburetor throttle body. The throttle body (base plate) must not be altered in shape or size. All vacuum holes must be threaded and plugged.

### **Throttle Plates (butterflies):**

- Stock throttle plates (butterflies) must not be thinned or tapered. Idle holes may be drilled in butterflies. Screw ends may be cut even with the shafts, but the screw heads must remain standard.

### **Throttle Shafts:**

- Shafts must remain stock and must not be thinned or cut in any manner.

### **Carburetor Metering Blocks:**

- Only Holley metering blocks can be used. Surfacing of the metering blocks for improved gasket seal will be permitted.
- The Holley metering block, part number 12323 (screw in emulsion bleed jets) will not be permitted in the Holley 2300, list number 7448.

### **Accelerator Pump:**

- The accelerator pump discharge nozzle may be changed.
- The retaining screw must not be drilled for a discharge passage.

### **Power Valves and Floats:**

- May be altered.

### **CARBURETOR SPACER AND GASKETS:**

- A one-piece aluminum carb spacer (adapter) a minimum of 0.7000 each, maximum 2 inches in thickness may be installed between intake manifold and carb. Holes must be cut perpendicular to base of carb. No taper or bevels. No modifications to plate.
- The spacer must be centered on the intake manifold and have two (2) holes with 1-1/2 inch openings located in the center that match the base of the carburetor. Holes must be cut perpendicular with the base of the carburetor. Taper, bevels, or any modifications will not be permitted.
- A one (1) piece two (2) hole paper gasket maximum 0.065-inch thickness that matches the exterior dimensions of the carburetor throttle base plate must be installed between the carburetor and spacer. A one (1) piece paper gasket maximum 0.065-inch thickness must be installed between the spacer and intake manifold. The gasket must be no larger than the top of the intake manifold.

### **INTAKES:**

- No heat shields.
- Aftermarket intakes allowed.
- Plenum may be modified to adapt to carburetor adapter plate only. No other grinding or modifications allowed.

### **AIR CLEANER:**

- Dry, round pleated paper or gauze type air cleaner max. 14 inches in diameter.

- No hats, ducts, or baffles.
- Must not protrude through hood.
- No openings in hood or cowl. Hood must seal to fenders and cowl.
- Bottom of air cleaner cannot be above choke horn.

#### **ENGINE/ELECTRICAL SYSTEMS:**

- Stock appearing for make and model.
- No magnetos
- Racing coils, MSD boxes, and REV limiters are permitted.
- A push to stop emergency engine shut off switch mounted on the steering wheel is recommended.

#### **BATTERY:**

- The battery must be installed in an enclosed metal box complete with a cover, located in front of the rear axle housing or behind the driver's seat. The battery box must be mounted inside the frame rails and cannot extend below the bottom of the frame rail. The battery mounting position must be acceptable to Track Officials. Any battery that would be installed during the race must be installed in a battery box.

#### **WATER PUMP:**

- Stock production magnetic steel water pumps only.

#### **ENGINE COOLING SYSTEMS:**

- Stock production radiators only or cheap aluminum racing radiator allowed.
- Minimum of one (1) quart overflow catch can required.
- All radiator overflow hoses must exit from the right side of the cowl area or right rear area.
- Toyota may reroute water line to intake.
- All air that enters the grille area must flow through the radiator core.

#### **FANS:**

- Stock type or electric fans may be used. Stock type must be at least four (4) blades and pitched. Stock type must have fan shroud over top of fan.
- Aftermarket belt pulley permitted.

#### **ENGINE LUBRICATION:**

- Must use stock lubrication system for car being used.
- Oiling system must be factory stock with no modifications
- Cheap aftermarket oil pans allowed. Windage trays are allowed on Toyota only. Sumps added to the bottom of the pan only. Maximum 7-quart oil pan only.

#### **ENGINE EXHAUST SYSTEM:**

- Header wrap is allowed only for driver protection.
- Any stock or aftermarket header permitted.

#### **DRIVE TRAIN:**

##### **CLUTCH ASSEMBLY:**

- Stock type clutch and pressure plate only.
- No high-performance parts.
- Minimum weight of clutch, pressure plate, and flywheel (minus bolts) is 28 pounds for all Fords only.

- As an option, a 19lb assembly may be used. Flywheel, clutch and pressure plate must weigh a combined weight of 19lbs. Flywheel must be at least 8 of the 19 lbs. If this option is used, you must add 25 lbs. to your total weight.

#### **FLYWHEEL:**

- Stock type flywheel only. ID number cannot be removed.
- Flywheel may be aluminum or steel.
- No high performance parts.

#### **BELL HOUSING:**

- Blow proof bell housing recommended.
- If stock bell housing is used, a scatter shield of belt material must be installed to floor pan.

#### **TRANSMISSIONS:**

- Must run standard OEM three (3), four (4) or five (5) speed manual transmission with all gears in working order.
- No automatics.

#### **DRIVE SHAFT:**

- Only stock drive shaft permitted.
- Must be painted white.
- Two (2) 360-degree drive shaft loops of 1/4 inch thick and two (2) inch wide solid steel required located six (6) inches to twelve (12) inches from each universal joint.
- No aluminum drive shafts.

#### **REAR AXLE:**

- Must be stock, standard production assembly.
- Posi-traction and locked units allowed.
- Quick change rear ends are allowed.
- Adjustable pan hard bars allowed. Must mount in stock location with stock brackets and bushings and must be mounted with the horizontal center line of the axle housing.
- 7 inch, Eight inch or nine inch Ford rear ends allowed. No offsets. MUST use stock mounts for car being run and rear end must be in the stock position.
- No independent rear axle assemblies allowed.
- No cambered rear ends. Zero (0) degree camber with the rear axles level.

#### **BRAKES:**

- Stock brake system for chassis being run. Steel braided brake lines permitted.

#### **WHEELS:**

- Eight (8) inch maximum width permitted.
- Must be 13-inch wheel with same offset on all four wheels.
- Car numbers must be painted on wheels.

#### **TIRES:**

- Hoosier (Sportsman) is the track tire and is the only tire permitted.

#### **FRAMES:**

- All stock frame sections must be retained. No crossbreeding of frame components or sections. May use box style tubing to repair front and rear clips. Suspension mounting points must remain in stock locations. Leaf spring cars must use stock front mount in stock location.

- Tube chassis allowed. No offset. Under slung rear chassis not allowed. Additional weight may be added to equal competition.
- Minimum body ground clearance is five (5) inches.
- No lightening of frames.
- Link up of rear frame is permitted.
- May interchange bodies on frames. Must use wheel base and tread width of frame being used. Bodies and roll cages cannot be set back on the frame.
- Re-enforcing behind bumpers is permitted.
- X bracing of frame is allowed. Maximum size of tubing will be two (2) inches by three (3) inches.
- Aftermarket K-members must add 20 lbs. To total weight.

#### **SUSPENSION:**

- Only one (1) steel shock or strut assembly per wheel.
- Upper strut mount may be adjustable.
- Coil-over kits and springs will be allowed.
- Only stock standard production sway bars. No rear sway bars allowed.
- Spindles and hub assemblies must be stock. Right front may be re-enforced or may use a safety hub.
- A-frames and ball joints must be stock with no modifications. Aftermarket replacement bushings are permitted.
- Racing springs and lowering blocks, spacers, and shims permitted.
- Screw jacks permitted.
- May move shock tower for camber adjustment only.
- Aftermarket suspension parts for tube frame chassis will be allowed at track officials discretion.

#### **WHEELBASE:**

- Wheelbase must be stock for frame being run. Left and right sides must be within 1/2 inch. Maximum wheelbase 101 inches.

#### **TREAD WIDTH:**

- Maximum tread width is 64 inches.

#### **STEERING COMPONENTS:**

- Must be stock for chassis being run. Can run heim joints on tie rod ends.
- Ford rack & pinion may be used on Toyota and Nissan to save on cost.
- Lower control arm bracing on Toyotas are permitted.

#### **ROLL BARS and CONSTRUCTION GUIDELINES:**

- Refer to 2018 NASCAR rule Book

#### **BRAKES:**

- Working four (4) wheel brakes mandatory.
- Must be stock, original equipment for frame being run only.
- No lightening of brake parts.
- Proportioning valves will be permitted but must be out of driver's reach.

#### **FUEL:**

- Track fuel or its equivalent. No additives.

**FUEL SYSTEM:**

- Minimum fuel cell capacity is eight (8) gallons. Excluding size and capacity, all fuel cells must meet the standard safety requirements.
- Electrical fuel pumps permitted only when used with a Mercury cutoff switch connected to the oil pressure switch.
- Fuel pump must be mounted in engine compartment.
- No electric fuel pumps allowed in trunk.

**SAFETY AND CONSTRUCTION GUIDELINES:**

- Refer to 2018 NASCAR rulebook.

**Additional Rules Coverage:**

- Anything not covered in this rule book must have prior approval from track official.
- Anything not covered must be factory stock for car being run.