



## 2019 Street Stock Rules

### Approved Models

General Motors: 1973 & up Nova/Venture/Monte Carlo/Chevelle/Lemans/Malibu/Impala/Parisienne or similarly designed cars.

Ford: 1973 & up Torino/Thunderbird/Granada/Crown Victoria or similarly designed cars. Up to 1991 Crown Victoria. 1992-1995 Ford Crown Victoria allowed (must use drum brake housing from 1991 and prior)

Chrysler: 1973 & up Dart/Satellite/Charger; 1978 & up Volare/Diplomat or similarly designed cars.

**No Mustang, Camaro, Cuda or similarly designed cars**

**For 2019 must run same motor and transmission for type of frame. For 2020 this may change.**

Any other models are subject to approval by track management.

Minimum wheelbase of 108" (factory specifications) with not more than one inch difference (+/-) side to side.

### Body/Bumpers

Spoiler must be no higher than 5" and no wider than 60". Bracing from the rear only.

Roof and hood can be fiberglass.

All steel bodies approved.

All fiberglass body panels similar to Duraflex are approved.

A tow chain around the front and rear bumper is mandatory.

No body part can be lower than 4".

Quarter panel windows may be replaced with Lexan.

Lexan or stock glass windshield is permitted. A minimum of two steel vertical braces on the inside of the windshield placed to the right of center are mandatory.

### Firewall, Foot Box and Floor

Non stock firewall must carry 50lbs on top of foot box

Foot box measurement from the center of the top bolt on the steering box closest to the top control arm to the front of the foot box, maximum 35".

Foot box must be built with 1/8" steel plate.

Brake pedals must be hanging and master cylinder must be bolted directly to foot box.

If not running stock hump in floor must run additional 50lbs. Example 3400lbs plus 50lbs.

### Interior

All interior flammable materials must be removed with the exception of the driver's seat.

A completely enclosed steel firewall front and rear is mandatory.

Floors may not have any holes. They may be repaired with steel but must retain their original appearance.

Metal interior panels MAY be removed.

All interiors must be a minimum of 22 gauge steel. No aluminum or fiberglass allowed.

## Electrical

Battery must be ahead of the firewall and securely fastened. If battery is not in the approved spot 40lbs must be added to the top of the right front firewall position.

Charging system and starting system must be operating.

Ignition system must be clearly marked "off" and "on" and be accessible from the outside of the car, as well as within the driver's reach (when safety harness is fastened).

## Weight

All cars must weigh a minimum of 3400 pounds with driver at all times.

Maximum left side weight 53% of total weight.

Maximum rear weight 45% of total weight.

## Brakes

Cars must have four-wheel brakes in working order, drums on rear.

No bias valves permitted.

Power booster must remain in stock location on firewall.

Standard master cylinder in stock location will take a 10lb penalty. This weight must be bolted on the top of the master cylinder to the firewall.

One brake duct hose is permitted per wheel. No electric fans allowed.

## Chassis and Suspension

Upper control arms can be homemade or tubular, Minimum left side control arm length 8.5", minimum right front control arm 8". If top control arms are homemade they must meet manufacturers spec ball joint location. Lower control arms, MacPherson strut towers, and all other suspension components must remain stock. No reinforcing.

The car must be a minimum of six (6) inches of the ground measured at any point under the frame Ground clearance will be the same on both sides. Inspection height gauges must pass under frame with no contact.

All vertical measurements will be taken with driver in car.

Front coil springs may be OEM or OEM replacement type. Conventional OEM type race springs allowed (i.e. AFCO, Hypercoil). No beehive or progressive rate springs allowed.

Front springs must have stock coil spacing. Springs must be a minimum of 5.0" O.D. (+/- 1/2 ") in diameter.

Front springs must sit in the original OEM spring seats. Solid shims may be used on the top of the spring and seated in the original spring seat. Solid wedges are permitted in the front springs. Adjustable front and rear spring seats allowed. **You are allowed to run one screw jack in the right rear or left rear but not both to match Oyster Bed Speedway cars.**

Stock arch must be maintained on rear leaf springs. No lowering blocks, jacking bolts, or adjustable spring spacers.

No cutting and/or welding pitman arm.

No air shocks or bags.

Stock sway bar only. Bar MUST be mounted in original brackets under frame rail.

Sway bar MUST be mounted in OEM position on top of control arm. OEM sway bar

not to exceed 1 5/16" O.D. Sway bar may be adjustable between control arm and sway bar only.

Chains are allowed.

Springs must be of original design and in stock location. No coil-over spring/shock combinations.

Rear coil springs may be OEM or OEM replacement type. Conventional OEM type race springs allowed (i.e. AFCO, Hypercoil). No beehive or progressive rate springs allowed.

Rear springs must be a minimum of 5" O.D. (+/- 1/2 "). Rear springs must have original spacing. Rear spring seats may be modified to accept closed coil-ground spring.

Recommended 1" bucket type spring seat on differential housing. Solid shims may be used on the top of the spring. Solid wedges (either rubber or metal) may be used between the coil spring spacing.

One stock replacement shock absorber per wheel in stock position using stock mounting hardware is permitted. No racing shocks. Shocks may be stock replacement GAS shocks. All shock numbers MUST be readable. Shocks will be deemed illegal if numbers are unreadable.

Only stock OEM spindles and rotors for year, make and model may be used.

Original collapsible steering columns may be used. Quick release steering wheel may be installed which could mandate the changing of the steering column. This is permitted.

All steering components must meet the original specifications of the manufacturer for specific year, make and model.

An aftermarket rear control arm(s) has been approved for 2013 for metric chassis cars. It will be available from three suppliers which are Tucker Racing Products, Johnson Chassis and Lonnie Sommerville Racing.

They will be subject to a strict adherence policy and will be inspected by template as to correct dimensions.

Further information is found in APPENDIX "B" in this rule package.

For 2013 Front end Camber angle will be inspected. The camber specifications will be as follows:

LF wheel maximum camber will be 4.0 degrees positive or negative (+/- 0.5 degree)

RF wheel maximum camber will be 8.0 degrees positive or negative (+/- 0.5 degree)

### **Fuel System**

Original gas tank must be removed.

A smaller tank (max 12 gallon) must be installed in the trunk, between the frame rails, as close to the rear firewall as possible, securely strapped to the frame of the car.

Filler must be inside trunk.

The fuel cell height must be 12" from the ground to the bottom of the fuel cell.

Two pieces of tubing, pipe or angle iron may (Mandatory if trunk floor is removed or weak) be welded between the frame rails to install tank. These pieces may be parallel or in an "X".

Tank must be secured to frame with out movement.

All fuel lines must run under the floor and be metal. Steel braided fuel line may be used provided it is attached at or near OEM locations and is also OEM inside diameter.

A metal box completely enclosing a plastic tank is mandatory.

May use any size approved fuel cell positioned as above.

Any gas leak of any kind will park a car.

Fuel: Filling station gas only with no additives. No aviation fuel allowed.

Stock fuel pump only. (No electric fuel pumps)

Throttle must have two return springs on separate brackets

**AIR CLEANER AND AIR FILTER:** Only Track approved round air cleaner element minimum 12 inches and maximum 17 inches diameter will be permitted. A Track approved completely dry pleated paper element - minimum 1 ½ inches - maximum 4 inches high must be used in the air cleaner at all times. All air shall be filtered through element. The air filter element may not be sprayed or soaked with any type of chemicals or liquids. Only a round metal air cleaner housing is permitted. The top and bottom of the air cleaner must be solid and must be the same diameter. No lips or expanded edges are permitted. The air filter housing must be the same diameter as the air filter element. The air cleaner housing must be centered and sit level on the carburetor. The bottom of the air cleaner housing must be lower than the top of the carburetor choke horn. No tubes, funnels or any device, which may control the flow of air, is permitted inside of the air cleaner or between the air cleaner and the carburetor.

No K&N Air filters (or K&N style filters) will be allowed

### **CARBURETOR**

**Carburetor must be stock 2 barrel originally available on the vehicle.**

**Serial Numbers must be readable. (2G-Chev, Autolite-Ford Carter or Holley-Dodge).**

**No 500 CFM Holley carbs.**

**Choke blade may be removed.**

**Air horn must not be removed.**

**Casting ridge may not be removed.**

**Booster must be stock. May not be shortened, tapered or raised.**

**Booster O.D. not to exceed 18/32" (.567).**

**Booster I.D. not to exceed 4/32" (.124).**

**Booster height 9/32" (Measured from top of fuel bowl).**

**Carburetor may be drilled for Holley jets. Maximum size 74.**

**Throttle plates may be drilled for idle.**

**Throttle shaft may not be thinned. Screws must be as OEM.**

**Venturi bore not to exceed 1 3/8" (1.375).**

**Throttle body bore not to exceed 1 11/16" (1.680)**

**Carburetor gaskets must remain stock.**

**Only stock thickness throttle body gasket. No carb adapters.**

### **Rear ends/Drive shafts**

No lockers, limited slip or posi rear ends.

Welded rear ends allowed.

Gear ratio: Maximum 373

Front and rear drive shaft loops required.

### **Radiators**

Radiator (only one allowed) must be in stock location. Aluminum radiators will be allowed.

They must be OEM replacement type units. They are to fit within the stock radiator support.

Must have a cooling system overflow located in engine compartment only.

Water is the only acceptable coolant. No anti-freeze.

### **Crate Engines**

Crate Engine #12499529 will be allowed. Must be sealed through Petty International Raceway. Engine orders must go through Wayne or Craig. Dealer will be decided. Motor comes complete except for intake. Carburetor must be stock 2 barrel Rochester, no spacer plate.

### **Built Engines**

Must run stock engine; i.e. G.M. in G.M., Ford in Ford, MOPAR in MOPAR.

All engine parts must meet OEM specs for engine and brand.

Engine must have an engine mount restraint on the left side.

Solid mounts acceptable provided they conform to OEM specs

Engine must be located in stock position.

GM: may run 350, FORD may run 351 Windsor, MOPAR : 360 cu. in. only.

FACTORY PRODUCTION FIRING ORDER ONLY.

NO 327 CU. IN. ENGINES.

The following specs are for the GM 350, 351 Windsor, and the 360 MOPAR:

BORE/STROKE:

350 Chev - 4.000"/3.485"

351 Ford - 4.000"/3.500"

360 MOPAR - 4.000"/3.578"

.030 overbore permitted.

**CAM/LIFTERS: Hydraulic lifters (no mushroom type) and a hydraulic lifter camshaft with maximum specifications as follows (all measured at the valve):**

**G.M. lift - intake .390 exhaust .410**

**Ford lift - intake .419 exhaust .448**

**MOPAR lift - intake .410 exhaust .410**

**No solid Anti-pump or Rhoads lifters.**

**Camshafts must have a duration of: intake 195°, exhaust 204°.**

**The engine MUST be able to achieve an ABSOLUTE MINIMUM of 18" of vacuum @ 800 RPM at idle-in park with no throttle or mixture screw assistance. Any engine that does not meet this minimum spec as measured with the track gauge will be automatically disqualified. An easily accessible manifold vacuum port must be available to conduct this test. It is highly recommended that a competitor's gauge be checked against the track gauge to ensure compliance with this rule.**

PISTONS/RODS : stock cast (dished or flat top) pistons only (or equivalent replacement).

G.M. must have four relief valves from manufacturer. Stock rods (No 6" G.M. rods) and pressed wrist pins only. No floating pins.

Aftermarket rod bolts and nuts are allowed.

COMPRESSION RATIO: Maximum compression ratio of 8.5:1 is set. (8.7:1 on whistler will be deemed illegal). Compression will be determined by volume gauge and electronic sonic tester (whistler).

HEADS: All cylinder heads must be cast iron, OEM smog type, with specifications as follows:

G.M.: 333882, 3986336, 3998920, 3998993, 462624 castings only. Maximum intake diameter 1.94". Maximum exhaust diameter 1.5". Minimum Combustion Chamber volume 76cc.

Min combined deck clearance plus head gasket thickness .040".

Maximum intake runner volume 160cc.

Maximum exhaust runner volume 60cc.

FORD: D5AE, D5AEA, D5AECA D5TE, D5TEDA, D5TEEB, D70A, D80E castings only.

Maximum intake diameter 1.84". Maximum exhaust diameter 1.55". Minimum combustion chamber volume 69cc. (flat top piston)

Maximum intake runner volume of 125cc. (flat top piston)

Minimum combustion chamber volume of 60cc, and maximum intake runner volume of 140cc, a dished piston with .120" cup must be used.

Minimum combined deck clearance plus head gasket thickness .070" for all heads.

MOPAR: 3169974, 3671587, 3751357, 3751857, 3769596, 4027596 castings only.

Maximum intake diameter 1.88". Maximum exhaust diameter 1.5" (318); 1.6"(360).

Minimum combustion chamber volume 68cc.

Minimum combined deck clearance plus head gasket thickness with a flat top piston .110".

Maximum intake runner volume 162cc.

Maximum exhaust runner volume 72cc.

All cylinder heads must have stock intake and exhaust valves and stock valve spring dimensions (1.275" Chev, 1.437" Ford, 1.5"MOPAR). Stock replacement stainless valves are permitted. Valve stem length, diameter and keeper group location must be stock. Steel retainers must be used.

No undercut valves.

No angle milling, porting, port matching, polishing, sandblasting, coating and/or blueprinting will be allowed. Heads may be milled for straightness only.

Stock rocker arms (or equiv. replacement) with stock ratios (GM and MOPAR 1.5, Ford 1.6).

Jam nuts are allowed.

Poly locks, screw in studs and guide plates are allowed.

CRANKSHAFT: Only standard cast production design. Stroke may not be increased or decreased. Only standard factory OEM production steel or cast crankshafts with stock strokes permitted. Must have OEM readable numbers. No aftermarket crankshafts. Engine balancer must be OEM stock. It is to measure no less than 6" in diameter by 1" in thickness at outer edge.

MANIFOLDS: Stock cast iron intake (2 barrel with no adapter plates) and exhaust manifolds only. INTAKE:

Must run stock cast iron intake manifold. No angle milling, porting, port matching, polishing, sandblasting, coating and/or blueprinting will be allowed. OEM numbers must be readable. EXHAUST: No ram horn manifolds. No inverted exhaust. No porting

and/or polishing. Exhaust must exit behind the driver. Exhaust pipe must be 2" O.D. maximum from exhaust manifold to pipe exit. A single exhaust must use an OEM crossover pipe. If dual exhaust is used, pipes may not be joined (no balance pipe). Pipes must be tight at all joints and securely fastened.

OIL PAN: Oil pans can have a kick out.

WATER PUMP: Stock water pump only. No aluminum.

FUEL PUMP: Mechanical fuel pump only in stock location. No belt driven fuel pumps.

OILING : OEM oil pump only. No dry sumps.

TIMING: Stock timing chain (or equivalent replacement). No belts.

STARTER: Small OEM starters allowed. 12v starters only.

DISTRIBUTOR: Only stock distributor and stock type coil allowed. No dual points. No external amplifiers.

Distributor must be wired to match the FACTORY PRODUCTION FIRING ORDER ONLY.

- GM firing order is 1-8-4-3-6-5-7-2

- CHRYSLER firing order is 1-8-4-3-6-5-7-2

- FORD firing order is 1-3-7-2-6-5-4-8.

**WIRES** - OEM stock replacement plug wires or performance wires will be allowed. Wires

MUST not be larger than 8mm and size must be clearly marked on wire insulation.

**ENGINES For 305ci and Trucks** - Block casting numbers must be readable (indicating block is a 305)

Block may be bored .030 to clean and square. Tech officials must be informed.

Heads must be stock 305 cast iron numbers readable, ie. 14014416, 367450 no vortec heads.

No decking block or planing heads other than to true up. Valves must be stock steel,

Stock replacement stainless valves permitted. No swirl polished valves. Max size intake

1.85 exhaust 1.5.

Stock size hydraulic lifters (no mushroom type) and a hydraulic lifter camshaft with

maximum valve lift as follows: intake .390 exhausts .410.

Compression ratio of 8.6:1 (checked by whistler)

Aftermarket extra capacity oil pans are allowed. No cutting of cross member is permitted.

### **Tires and Wheels**

Tires allowed will be 890 Hoosiers.

Wheels are 8x15 maximum.

Maximum wheel offset will be 2 inches. All wheels must be the same backspace on all four corners.

**For 2019 you are allowed to run a 1" offset spacer on metric chassis only and must run on ALL four wheels.**

### **Tires**

**Petty Raceway has decided not to have a tire rule for 2019 to encourage more teams to compete. The only stipulation is the Durometer rule as below.**

**All tires (new and used) must not be less than a Durometer reading of 52.**

### **Transmissions**

Three speed OEM automatic transmission only. These are limited to GM THM 350,

Chrysler 904, and Ford C4 models only.

Transmission must have three gears forward and one gear reverse, plus a neutral and a park position. Must have stock shift pattern. No reverse valve bodies.

It must be able to be shifted by the driver in position. No "slap stick" shifters.

Must have a stock torque converter.

Transmission cooler legal. Must be located in engine compartment. Recommend cooler be fitted with high pressure hoses and fittings.

Cars must start in neutral or park only.

Must have stock shift points. The transmission must be able to be automatically upshifted to high gear at 1500 RPM with vehicle rear wheels raised.

The OEM transmission must have an operating vacuum modulator. This unit is used on all of the OEM transmissions for this class.

### **Driver Safety**

Four point harness is mandatory. A Five point harness is recommended.

Harness must be worn whenever car is on racetrack. **Harness build date must 2010 or newer.**

Neck Collar is strongly recommended.

No tying, riveting, bolting, or any method other than a proper attachment will be acceptable.

Snell approved helmets no older than 2010 are mandatory. No DOT or M style allowed.

A securely mounted, easily removed fire extinguisher is required, within easy reach of the driver. It must have a recharge slip dated no earlier than January 1st of the current year.

**Fire extinguisher must be minimum of 2.5lbs.**

Flame resistant driver suits must be worn whenever car is on racetrack.

**Flame resistant gloves and shoes are recommended.**

Window net with quick release attachments is mandatory.

Drivers are responsible to ensure all safety equipment is in good condition and securely installed.

### **Listening Devices**

SCANNERS: Mandatory. They are to be mounted in a secure and driver accessible location. May require an external antenna. ONLY the track frequency is to be programmed. Scanners will be subject to inspection for other frequencies.

### **Miscellaneous**

**Petty Raceway reserves the right to confiscate and retain any parts or components that are deemed to be non-conforming to the rules set forth in these pages. The decision of track management will be final.**

**Any questions regarding these rules please contact Wayne Smith at [wayne@pettyraceway.com](mailto:wayne@pettyraceway.com)**