

## **Full Throttle Motor Speedway @ Varney 2024 Street Stock Rule Book**

**DISCLAIMER:** The rules and/or specifications set forth herein are designed to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such events. By making an application for a competitor permit, it is deemed that the competitor agrees to become familiar with these regulations and abide by the directions set forth and prescribed by management. No express or implied warranty of safety shall result from publications of, or compliance with these rules and/or specifications. They are intended as a guide for conduct of the sport and are in no way a guarantee against injury or death to participants, spectators, or others. **The interpretation of these rules will be solely the judgement of the track officials and tech staff in charge and their decision will be final.**

Any part of the car not specifically mentioned or covered in these rules must remain stock. Stock parts are those found in the OEM parts book (original equipment manufacturer), not those found in high performance or off-road racing parts books. Any cars being checked will be allowed to have only one driver and two crew members in the tech area. Any harassment from any driver or crew member to the staff may result in an automatic disqualification, thus forfeiting all points and monies earned that night. **Disqualification decision for any reason will be deemed final.**

### **STREET STOCK CAR ELIGIBILITY**

Open to any make or model of North American built 2 or 4 door sedan, having a stock factory listed unaltered wheelbase of 108" or more, for the make, model and year being raced. No convertibles, four wheel or front wheel drive vehicles, trucks or station wagons. All cars must be complete and presentable in appearance at the beginning of each race night. Interpretation of these rules will be solely up to the judgment of the officials in charge of the tech area. The speedway reserves the right to impound non-complying components with no compensation to the owner. Non-compliance with the specifications outlined herein may subject violating teams to disqualification and loss of points and monies earned for that event. **IF IT DOESN'T SAY YOU CAN DO IT, ASK THE TECH DIRECTOR FIRST.**

**SAFETY:** All safety equipment must be inspected and approved by a speedway official prior to the vehicle going onto the racing surface. Safety specs and tech changes for street stock may differ to standards at other tracks because of the speedway sizes.

**BELTS:** A five-point racing harness is mandatory (max 5 years old) and be in satisfactory condition. All mounting hardware must be grade 8 and a minimum of  $\frac{3}{8}$ " diameter.

**FIRE CONTROL:** Cars must have a 2 1/2lb minimum fire extinguisher with a steel or aluminum head mounted in a steel mounting bracket and bolted down within driver's reach with seatbelts on and tightened. Fire extinguisher must be serviced and inspected each year and dated no earlier than Jan 1st of the current year.

**FIRE SUIT:** A complete driver fire retardant suit is mandatory and to be worn at all times in the car.

**GLOVES AND FOOTWEAR:** Fireproof gloves and fireproof footwear are mandatory.

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**IGNITION SWITCH:** Must have a kill switch to shut off fuel supply, which is easily accessible by the fire crew and/or safety staff.

**HEAD AND NECK RESTRAINT:** As of 2022, all racing divisions are required to have a head and neck restraint system to enter the speedway surface.

**HELMETS:** Full face Snell SA2015 or newer. No DOT or M rated helmets allowed.

**ROLL CAGE/BARS:** Cage must be constructed of 1 3/4" x .095" minimum round steel tubing (no square tubing or angle steel). 4-point cage mandatory and be directly welded to the frame and gusseted. Cage must be braced to rear kick ups. 4 left side door bars and 3 right side door bars (X allowed) mandatory with uprights and gussets for safety. Door bars must be no lower than door openings. Top of the cage must be within 2" of roof skin and "A" pillars. Left side door bars must be filled with 18 gage steel plate. All welding must be MIG or ELECTRIC welded and subject to track technical approval. All driver's areas must be padded and protected.

**SEAT:** Aluminum racing seats are mandatory. Must be in stock location between frame and driveshaft tunnel and bolted directly to cage. Headrest with energy absorbing material is mandatory on the right side and optional on the left. Full containment seat is recommended.

**WINDSHIELD AND WINDOW NET:** All windows must be removed except fill front windshield. Windshield may be safety glass, Lexan, or Marguard and a minimum of 1/8" thickness. 4 safety tabs are mandatory. Driver window net is mandatory and have a top release with 3/8" rods. Center windshield bar mandatory (1 3/4" roll bar). All other windows must be Lexan or Marguard.

### **MECHANICAL AND BUILD RULES**

**BODY APPEARANCE AND FRAME:** Must be stock and in stock position on frame (boxing of frame and X in center is allowed). Unibody frames and all rear clips can be fabricated and must use 2" x 3" x .095" tubing and follow all stock dimensions and points. All chrome, moldings, ornaments, door handles, glass or plastic components must be removed except for the grille and windshield. Scrub rails shall have a maximum of 1" x 2" welded or bolted to the body. Stock steel "greenhouse" roof, fender tops, 1/4" panel tops and trunk lids must be used (must be 22 gage steel side skins or .040 aluminum side skins allowed - add 20lbs to total). Roof height minimum is 51", measured 10" back of front windshield top. Rear spoiler max 5" is allowed. Plastic aftermarket/ stock appearing replacement street stock nose and tail covers allowed. The rear bumper bar (1 3/4" round tubing) must not have sharp outside ends. No fiberglass bodies allowed. Note: any mid or full-size car body can be used from 1950-present on existing street stock chassis without having to alter existing roll cage dimensions and maintain a 51" minimum roof height and 5" ground clearance. The replacement body style and components must be approved by track tech before installing on chassis. All "greenhouse" roof panels, trunk and hood must be steel and stock unaltered (gutting of panels allowed) all side body panels must be steel 22 gage (or .040 aluminum add 20lbs) and can be fabricated. Chassis rules must be followed to the rulebook. 79" overall width measurement including tire or body, outside to outside. (no tolerance).

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**PAINT AND LETTERING:** All cars must be neatly painted and lettered 24" high x 3" wide on doors, 24" x 4" wide on roof, 6" on nose and tail, white # on the right top windshield. Top of windshield should be reserved for class sponsor.

**BATTERY:** Must be secured in a metal frame and securely bolted and separated from the driver's compartment by a firewall. One 12V battery only.

**BRAKES:** Stock OEM parts only, four hydraulic brakes in working condition are compulsory. Pedal must be in its original position. Proportioning valve allowed and out of driver's reach inside car. Disc front and drum rear, or disc front and rear allowed (as long as the calipers are the same size front and rear).

**CARBURETOR:** Holley 4412 (no hp series) unaltered from stock and measure to all stock measurements or OEM carburetor with no alterations and no larger than 500 CFM. 1" adapter max if using a 4412 carb. Must have 2 return springs. Must fit all track tech tools.

**CHASSIS, SUSPENSION AND STEERING:** OEM stock and unaltered frames only. No changing or modifying of any bolt on suspension points or parts. Adjustable sway bar hardware link is allowed. 5" ground clearance minimum. Tubular steel upper control arms can be used. Screw in ball joints are allowed upper and lower. No altered or offset ball joints allowed upper or lower. (all star part or equivalent) Min pin length: to be determined Max pin length: to be determined Stock factory spindles and hubs only (no racing or aftermarket allowed). Rear suspension can be reinforced but not altered. Full size spindles allowed (no racing spindles i.e., Howes or 2-piece spindles allowed). All steering parts from steering box forward must be OEM specification and mounting as produced. 5" minimum diameter springs. No Monoball or Heim suspension parts allowed. Lower control arms must be the same and unaltered from stock for the frame being used.

**SHOCKS:** Steel, non-rebuildable, non-adjustable 50/50 valve shocks only.

**DRIVELINE:** Must have a 360-degree hoop around driveshaft 2" from u-joints front and rear and be made of 1/4" x 2" steel. No aluminum drive shafts. Must be painted white and steel only.

**CRATE ENGINE – 6400 RPM CHIP MANDATORY**

**BUILT ENGINE – 6500 RPM CHIP MANDATORY**

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## **ENGINE:**

**ENGINE HEIGHT:** 12" from the center of the crank to the ground (5" ground clearance)

**ENGINE SETBACK:** maximum engine setback: must line up with #1 spark plug or ahead. There will be a 20lb weight penalty for any engine setback. (10 lbs on each side of the car, mounted in front of the front crossmember. The weight penalty will be included in total minimum weight.

**ENGINE SIZES:** GM engines 350 CI plus .040 max overbore (no 400 block). Ford engines 351 CI plus .040 max overbore. Dodge engines 360 CI plus .040 max overbore. No stroker motors, stock stroke only.

## **ENGINE PACKAGES:**

### **BUILT:**

Hydraulic cam mandatory (.510 lift max) Stock valve spring diameter only. Stock valve size to head used (1.94 intake max, 1.50 exhaust max) Stock stamped rockers only. 74cc minimum heads 0.040 over bore max. 2 or 4 eyebrow pistons (hypereutectic only) Maximum compression ratio - 9.0-1. Whistler results are FINAL. 2101 intake allowed with no alterations. "Stock" unaltered rotating assembly weights and sizes only. Screw in studs and guide plates allowed, stock measurement push rods only. Aftermarket oil pans allowed with 1" inspection hole. No aftermarket or altered harmonic balancers.

### **602 CRATES:**

\*No changes or opening from gm stock crate specifications in motors\* \*\*any engine components deemed illegal are subject to a permanent suspension or fine from the track\*\*

### **2020 SPEC GM 5.7 (75 LBS ADDED TO BASE WEIGHT)**

2020 spec engine package with a Holley 4412 2-BBL carb in street stock (1996 - 2002 V8 production GM Vortec 5700 L31 engine which came in pick-ups and vans). \*\*absolutely no machining, balancing or alterations from production specification or changes other than parts below. \*\* DISH PISTONS ONLY.

The only changes to the "spec" engine allowed by part # listed and approved:

1. Hydraulic roller camshaft .431/ .451 lift (GM part # 14097395)
2. Aluminum intake manifold (Edelbrock part #2116 or GM602 crate manifold)
3. Racing oil pan/pick up/ pump (champ part # CP 100RB or GM602 crate pan/pump)
4. Racing harmonic balancer (Powerbond part # PB2221-SS or equivalent)
5. Double roller timing chain (JP performance part # JP5981T or equivalent)
6. Replacement racing valve springs (part #19154761 only). No shimming allowed.
7. Engine rebuild kit (federal Mogal part # MK6504-000)
8. Electric fuel pump with oil pressure shut off MANDATORY.

**ABSOLUTELY NO OTHER COMPONENTS OR ALTERATIONS TO "SPEC" ENGINE ALLOWED.**

All "spec" engines must be sealed prior to competition (cost for travel/time) by a tech official before any reassembly, no matter what stage or parts removed. All parts, components and measurements will be documented before you can re-assemble or use for competition any "spec" motor. \*\*any tampering or changing of any parts or components after tech officials' inspection and approval will result in permanent suspension from the speedway. To book an authorized FTMS inspector call Tim (519) 240-1537

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**EXHAUST:** Must exit behind driver and in front of rear wheels and outside of the body. 1 5/8" maximum diameter headers allowed. No step style. Maximum 3" flanges and 3" exhaust pipe with two 98 decibel mufflers mandatory. No "H, X, Y" pipes. Approved mufflers are available through the speedway. 3" exhaust system must be dual. No exhaust scavenging allowed.

**FIREWALLS:** All firewalls must be made of 22 gage steel and welded or riveted. Front firewall must be stock to frame being used from the driver door bar upright to the right side of the transmission tunnel. Interior holes must be sealed from engine and fuel compartments. Fabricated steel firewalls allowed with a weight penalty of 40 lbs.

**FLOOR:** Must be in the original location and a minimum of 22 gage steel if other than stock. Right side of the transmission tunnel may be raised to 10" or higher extending to the right door.

**FUEL PUMP AND FUEL CELL:** Stock mechanical pump in stock location only. Electric pumps on the spec motor allowed. Fuel cells are mandatory. Must be in a steel box made of 22 gage steel. Must be mounted between the rear frame rails and no lower than the rear axle housing. Cells must be protected with 1" x 1" tubing on all sides. Must have a 1-way check valve in the venting system. Fuel cap must be tethered and the cell must be grounded to the frame. Petroleum based unleaded fuels only. Max 94 octane. No alterations or additives. 100 low lead AV fuel unaltered allowed.

**IGNITION:** 12-volt stock ignition system only. No aftermarket components. Stock starting system must be functional. MSD rev limiter is mandatory.

**RADIATOR:** Must resemble OEM and be in stock location and have a remote overflow can mounted in the engine compartment. Aluminum radiator and water pump is allowed. Any fan is optional. High pressure cap is recommended. No antifreeze is allowed in the rad at any time.

**REAR ENDS:** Only stock passenger rear ends allowed. Locking or welding of gears is mandatory. No rear sway bars. No aluminum spools allowed. Aftermarket axle mandatory on right rear. Floater axle rears allowed, and final gear ratio allowed. No cambering of rear ends. May use the rear end out of any vehicle, as long as it has the same pickup points as the stock frame being used. No light weight gears. No aluminum spools.

**TIRES AND WHEELS:** All cars must use a minimum of 5/8" wheel studs. A maximum of 8" rim is allowed. No aluminum or non-approved wheels allowed. Racing wheels are mandatory on the right side of the car. Minimum 2" backspace allowed. Track width maximum of 79" (absolute outside to outside at widest point) All cars will be using American Racer 870 8" four groove tires purchased only from the Speedway.

**TRANSMISSION:** Automatic transmission or stock OEM 3 speed with no modifications. Stock unaltered torque converters only, 12" converter and weigh no less than 40lbs wet. All gears must be operational. No high stall torque converters. Transmission cooler allowed and securely mounted. All lines must use double gear clamps. 3 speed automatic receives a 50lb weight break.

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**MIRRORS:** Due to the now mandatory neck restraints, mirrors will be permitted. A convex 3" max diameter allowed on the driver's and passenger side a-pillars; a rear-view mirror is permitted as well. Please note that the purpose of these mirrors is to prevent damaging your car and others. Anyone using mirrors to block or damage other cars will be subject to penalties levied by race officials.

### **WEIGHTS:**

3100 LBS BASE WEIGHT (car will be weighed with the driver in it, after feature race completion)  
55% left side weight (driver in)  
48% rear weight max (driver in)

### **WEIGHT PENALTIES:** (added to total weight of the car)

FTMS spec motor - add 25lbs  
Fabricated firewall - add 40lbs  
Fiberglass hood - add 10lbs  
Aluminum panels - add 20lbs  
Stock 2 speed automatic - 25lbs weight break  
Stock 3 speed automatic - 50 lb weight break

**Speedway management have the right to alter weights and rules in an effort to keep the racing equal and competitive.**

### **RADIOS:**

Receivers **MANDATORY**

### **TRANSPONDER LOCATION:**

168" from the front of the car. Must be mounted facing downward.

**All decisions by pit stewards, tech, or the speedway will be final. all rules are subject to the interpretation of the speedway officials. rule books will be issued to all members. all equipment not governed by the aforementioned rules are to be submitted to the speedway no less than 30 days prior to the date of intended use. no equipment will be considered approved by reason of having passed through tech unobserved. rules apply to all race events.**