



## 2022 STREET STOCK RULES

**THESE RULES WILL BE ENFORCED TO ENSURE THAT ALL WHO PARTICIPATE HAVE THE OPPORTUNITY TO BE COMPETITIVE. ANYTHING NOT COVERED BY THESE RULES MUST BE APPROVED BY NHSTRA OFFICIALS.** Upon inspection, NHSTRA Officials may penalize, fine, suspend, withhold money and/or points, confiscate parts, or disqualify any competitor for rules infractions. If a competitor is disqualified for using a illegal parts, the competitor may lose all points accumulated prior to and including date of disqualification under discretion of NHSTRA Officials. The use of carbon fiber or titanium parts are not allowed. Any questions regarding rules should be addressed with NHSTRA Officials, prior to assuming legality. It is the competitors' responsibility to read and understand all rules. It is the competitor's responsibility to declare what engine option they are competing under. The NHSTRA Street Stock Division is our NASCAR Division II Series and requires ALL competitors to hold a NASCAR license to compete.

The Street Stocks Division is intended to be a progressive Mid-Level class of race cars. All cars shall maintain stock appearance while utilizing OEM manufactured parts and minimal high-performance parts and equipment.

When used in the rules, the term "stock" or "OEM" components must conform to the original equipment manufacturer specifications. There are no changes to components or specifications unless outlined specifically in the rules.

### 1. Approved models:

**A.** American made rear wheel drive hardtops 1972 or newer. No convertibles, four (4) doors, or trucks. 3<sup>rd</sup> and 4<sup>th</sup> gen Camaros not permitted.

### 2. Bell Housing, Clutch/Pressure Plate, Flywheel:

**A.** Bell Housing: 360-degree magnetic steel housing mandatory. No cast steel. Bottom of bell housing (no more than 1/3) may be removed for inspection of flywheel and clutch.

**B.** Clutch: 10.5" OEM Stock Clutch/Pressure plate or OEM-type stock replacement only. Clutch cover and pressure plate must be completely steel. Hydraulic clutch controls permitted.

**C.** Flywheel: Steel (magnetic steel) flywheel only. Crate engines must use GM# 14088646 or 14088650 no modifications.

**D.** Minimum total weight of Clutch disc, pressure plate, and flywheels is 32.0 lbs.

### 3. Body:

**A.** Body- Stock or Stock appearing aftermarket body, may be Aluminum, Fiberglass, Plastic, or Steel. All bodies must appear stock retaining body lines for year, make, and model. Full unaltered front and rear bumper covers required and must match the year, make, and model of body. Rear tail area must be closed. No ABC, Downforce, or Dirt bodies allowed. Five Star Street Stock body and AR Sportsman Muscle car body allowed, but must be used complete, no mixing and matching.

**B.** Roof Height- Minimum roof height is 49" inches.

**C. Glass-** All glass must be removed. The windshield shall be replaced with clear Lexan 1/8<sup>th</sup> minimum. A minimum of two (2) 1" inch x 1/8<sup>th</sup> must be installed to center of windshield for support. Vent windows allowed 6" maximum, measured at door. Rear quarter windows allowed. Rear window allowed and must be braced from collapsing. All lexan must be clear, No stickers blocking drivers view permitted (NHSTRA Officials approval).

### **3. Body Cont.:**

**D. Bumpers-** After-market fully enclosed nose and tail covers may be used. Front and rear must be same year, make, and model of body. Bumpers may be reinforced but all reinforcements must remain behind the bumper cover. Front and rear bumper heights must be 16" inches to center. Front bumper cover must meet the 5" inch chassis height rule.

**E. Hood-** No holes in Hoods. Air cleaners must remain under the hood. Hood must be tight to windshield.

**F. Rub rails** are allowed between the tires only. Bars must be mounted flush to the body and doors. Rub rails must be made of no more than 1" inch x 1" inch square tubing with ends cut and welded closed (ends must be sealed) at a 45-degree angle sloping into the body. Steel rub rails must be secured to the cage in three (3) places. Plastic/carbonate rub rails allowed, must be riveted at least every twelve (12) inches. One rub rail per side only.

**G. Spoilers-** Rear mounted spoilers allowed, maximum height is 5" inches x 60" wide (5"x 60" maximum). Ends of spoiler may not be boxed and no forward mounting brackets. Spoiler must be of a single blade only and must be clear lexan. Maximum height for all rear spoilers from ground is 41"

**H. Side Skirts-** Side skirts allowed, only between front and rear tires, and must meet 5" chassis height rule.

### **4. Brakes:**

**A.** Only standard type steel calipers and rotors permitted. Single piston brake calipers only. Drilling or lightening of Rotors, Drums, or Calipers are not permitted.

**B.** All cars must have four (4) wheel brakes working at all times.

**C.** Adjusting proportioning valves/brake bias permitted, front to rear only.

**D.** Rear wheel disc brakes allowed. Rear drum brakes may be converted.

**E.** Aftermarket brake pedals and master cylinders allowed.

**F.** No brake fans.

### **5. Carburetor Adapter/Restrictor:**

**A.** Build engine must use RPM p/n# 1480 restrictor plate at Claremont Motorsports Part and Lee USA Speedway. Build engine, if using a spacer, must use Canton p/n# 85-050 or 85-060 unaltered at Hudson Speedway and Monadnock Speedway.

**B.** Crate engines must use Canton p/n# 85-150 unaltered.

**C.** Only two (2) paper gaskets, one (1) per side, with a maximum thickness of 0.075" inches permitted

### **6. Carburetor Air Cleaner, Filter, and Housing:**

**A.** Only one (1) round paper air filter with maximum height of 3" inches, and diameter of 14" inches permitted.

**B.** Top and bottom of air cleaner must be completely steel or aluminum. Carb hats, ducts, baffles, dividers of any type are not permitted. No functional hood scoops or cowl induction allowed. No cold air boxes.

#### **6. Carburetor Air Cleaner, Filter, and Housing Cont.:**

**C.** Hood must be tight to windshield.

**D.** No holes in hood, air cleaner must remain under the hood.

#### **7. Carburetor:**

**A.** GM Crate# 88958602 – Holley 650cfm 4bbl part# 80541, 80541-1, or 80541-2 carburetor, no modifications allowed other than the removal of choke butterfly and shaft and automatic transmission linkage. Changing of main jets, power valves, accelerator cam, and discharge nozzles is permitted. Idle holes may be drilled in the butterfly's, screws must not be ground flush. Metering blocks must remain stock for the carburetor being used. Allowed metering blocks are p/n's 5925, 11978, and 34-68. All carburetors must pass NHSTRA tech no-go gauges.

**B.** GM 602 (Break-Away Bolt) Crate # 88958602/19258602 GMR 350/350– Holley 650cfm 4bbl part# 80541, 80541-1, or 80541-2 carburetor, no modifications allowed other than the removal of choke butterfly and shaft and automatic transmission linkage. Changing of main jets, power valves, accelerator cam, and discharge nozzles is permitted. Idle holes may be drilled in the butterfly's, screws must not be ground flush. Metering blocks must remain stock for the carburetor being used. Allowed metering blocks are p/n's 5925, 11978, and 34-68. All carburetors must pass NHSTRA tech no-go gauges

**C.** Build Engines: Holley 500cfm 2bbl part# 4412 unaltered. Must have choke horn. The only modifications allowed is the removal of the choke butterfly and shaft. Changing of the main jets, power valve, and accelerator cam, and discharge nozzles is permitted. Idle holes may be drilled in butterfly's, screws must not be ground flush. All carburetors must pass NHSTRA tech no-go gauges.

#### **8. Chassis:**

**A.** Roll Cage- All cars must have a four (4) point roll cage constructed of seamless mild or DOM 1 3/4" outside diameter x .095 wall magnetic steel round tubing. The cage shall consist of four (4) vertical bars connected at the top on all sides and shall be adequately cross braced. The base of upright members shall be welded to the frame of the car. Four (4) curved door bars on the left and three (3) curved or straight door bars on the right side are mandatory. Main bar may not have more than 10 degrees of lay back. The rear roll cage upright may not extend past the rear door seam more than two (2) inches. Offset cages are not allowed. Inside front and rear cage bars allowed, one per side. Rear bars from center cage to rear most part of chassis. Front bars from center cage to front part of chassis. Roll bars within drivers reach must be padded. All roll cages subject to NHSTRA Officials approval.

**B.** Frames must remain as manufactured. No cutting, altering, or widening of stock frames permitted. All frame suspension mounting points must remain in stock location. Sections may be replaced with tubing that maintain stock location and be approved by NHSTRA Officials. No altering of any mounting bracket permitted. Unibody cars must have subframe connectors. Stock front snouts may not be interchanged. Hamm/Johnson chassis and snouts are allowed.

**C.** Firewalls may remain stock or be reconstructed to near original location. All holes in firewall must be covered. Rear Firewall may extend forward but not passed main hoop bar behind driver. Firewalls must be magnetic steel, minimum of 22 gauge (.031"). Interior must be sealed from engine and fuel cell compartments. Crush panels may be made of aluminum, no more than 6" inches from driver.

**D.** Floorboards steel (magnetic steel) minimum .031" must remain in stock location with the right-side maintaining transmission tunnel height across to passenger door. Floors must extend full length of driver's compartment from front to back firewall.

## **9. Cooling:**

**A.** Radiator must remain in stock/standard location. Any radiator may be used. Electric fans allowed. All cars must be equipped with a overflow tank located at the right rear of car. Aluminum water pumps allowed. No water pump/alternator racemates allowed.

## **B. NO ANTIFREEZE ALLOWED**

## **10. Driveshaft:**

**A.** Only steel (magnetic steel) driveshafts allowed. Driveshafts must be painted white. It is mandatory to use two (2) circular 360 degree steel brackets/loop, minimum 2" x 1/8" positioned near each u-joint.

**11. Engines:** (GM 350/350 PN#88958602/19258602 is the NHSTRA engine of choice, but NOT mandatory):

**A.** 602 (Factory Sealed) Crate Engine PN# 88958602/19258602 GMR 350/350 Circle Track Engine – All engine (bottle-cap) seals must remain intact and un-tampered with at ALL-TIMES. If the engine sustains damage or wear that requires the removal of GM factory installed seal, the engine has then served its life and must be replaced.

**B.** 602 (Break-Away Bolt) Crate Engine PN# 88958602/19258602 GMR 350/350 Circle Track Engine- utilized in factory form with out modifications or rebuilt per GM manual #88958668, maintaining a compressing ratio of no more than 9.1200 to 1 or less per cylinder. Engines will be tested with a "whistler" device.

## **C. Built Engines**

**1.** Block – Only V-8 standard production cast iron engine blocks permitted. Maximum displacement: GM & Ford – 358; Dodge – 368. Original bore and stroke "combination" must be maintained. Maximum overbore is .040 per cylinder. No internal painting or chemical coatings to engine parts permitted. Only normal engine balancing permitted.

**2.** Crankshaft – Only stock or direct replacements in nodular steel. Original stroke must be maintained. Absolutely no lightening of any part of the crankshaft permitted. No knife edging. Minimum weights GM – 50lbs, Fords 302- 38lbs, 351- 52lbs. Mopar- 54lbs.

**3.** Connecting Rods & Pistons – Stock or aftermarket cars or forge steel allowed. No billet, Stainless steel or aluminum rods. Must be stock configuration to sizes, locations, and appearance. Rod length must be stock for engine. No lightening, beam polishing, or exterior machine work allowed other than normal engine balancing. Any rod bolt permitted. Free floating steel wrist pins permitted. Cast or forged 3 ring pistons only with all rings in place. Flat top or dish pistons only.

**4.** Cylinder Heads – Any stock cast iron OEM production cylinder head, including vortec heads with 1.94" intake valves and 1.5" exhaust valves. No Dart, Bowtie, turbo, No EQs, Chrysler W2, or aftermarket cylinder heads allowed. Angle plug heads must have exhaust cross over port. No gasket matching, porting, polishing, acid dipping, or filling of any ports allowed. Valve springs shall not exceed 1.26" on outside diameter. S/R torques unaltered 043600 allowed. Guide plates allowed. No machining of heads.

**5.** Compression Ratio Maximum of 10.5000:1

**6.** Intake Manifold – Edelbrock Performer Series GM PN# 2101 or 2116, Ford PN# 2121 or 2181, Mopar PN# 2176. These intakes must remain as manufactured "Stock out of the Box".

**7.** Camshaft & Rockers – Flat tapped camshafts only, may be solid or hydraulic. No roller cams allowed. A maximum .460 cam lift when measured at the valve. Camshaft lobe measurement cannot exceed .300" with a 1.5" rocker arm ratio. (Example of cam rule: .306" cam lobe x 1.5 rocker arm = .460" maximum lift.

.306"x1.5"=.460"). Roller rockers and guide plates allowed. No shaft mounted rockers or stud girdles allowed. GM 1.5 rocker ratio/Ford 1.6 rocker ratio only.

**8. Oiling System** – No remote oil filters. No oil coolers. Aftermarket oil pan is permitted must keep to stock appearance.

## **12 - Engine location:**

**A.** Engine must be within +/- 1/2" of stock location for chassis being used. No engine offset or engine setback allowed. No engine plates.

**B.** minimum crankshaft height will be 13" inches when measured from the center of crankshaft to the ground.

## **13. Exhaust & Mufflers:**

**A.** Exhaust- Headers are allowed, only street-type under chassis headers are allowed. Step, Cross-over, Tri-Y, or custom-made headers are not permitted. No merge or pyramid collectors. Exhaust may not travel through drivers' compartment and must exit underneath car past the driver. Exhaust exit must turn down towards the ground. No coatings, or thermal wraps allowed.

**B.** Mufflers- Mufflers are mandatory. One or Two mufflers may be used, but MUST meet dB rule at all times. Mufflers are subject to NHSTRA Officials approval. Mufflers must be in good working condition and securely fastened.

**C.** All cars must meet mandated 96dB requirements at 50' feet. **STRICTLY ENFORCED.**

## **14. Fuel:**

**A.** Fuel Cells – Fuel cells are mandatory 22 gallon maximum and must be securely mounted behind the rear axle and between the frame rails. Fuel cell must be encased in a steel container of no less than 22-gauge steel. Minimum of three (3) steel braces must be used undergoing from front to back and two (2) braces on top for support. The fuel cell must have a minimum on eight (8)" inches clearance at its lowest point. Check ball required on return. Fuel cells must be protected by a rear skid bar. This bar must extend at least one (1)" inch below the lowest point of the fuel cell.

**B.** Fuel shut-off – A fuel shut off must be installed, and in good working order within drivers reach, or an in-line positive flow valve or fuel safe. If using a fuel shut-off it must be clearly mark Fuel and On/Off.

**C.** Fuel Petroleum based automotive gasoline is the only fuel allowed. No nitrous oxide, or any other fuel additives permitted.

**D.** Fuel pump- Mechanical engine mounted fuel pump only. No electric fuel pumps allowed.

**E.** Fuel line – From carburetor to fuel cell must travel in a safe manner under car and subject to NHSTRA Officials approval. Only steel fuel filters may be used.

## **15. Ignition & electrical:**

**A.** Ignition- Stock ignition for make and model of car. No magnetos or MSD ignitions allowed. Distributor will have a single (1) wire only for power. Tachs are allowed.

**B.** Battery- Battery must be securely mounted under hood or behind drivers' compartment and protected by a non-conductive cover. Only one (1) 12v battery allowed. A master battery cut-off switch must be located within drivers reach and clearly marked Battery Switch and On/Off.

**C.** Starter- Must be mounted in OEM location and in working order.

## **16. Lettering/Appearance:**

**A.** All cars must be numbered. All numbers must be confirmed with NHSTRA. Track reserves the rights to reassign numbers to avoid scoring duplications. Car registration for cars that raced the previous year (minimum of 3 races) will have first refusal of numbers until January 31<sup>st</sup>, then will be first come first served, if duplicate number requested will refer to the previous year's points.

**B.** All cars must have numbers on both doors and roof. All numbers must be a minimum of 18" and must be registered and approved. Roof numbers must face the passenger's side. All numbers must be distinctly contrasting to the color of the car. No reflector or metallic numbers. All numbers to be subject to visual approval of NHSTRA Officials.

**C.** All cars must be presentable on race day and subject to NHSTRA Officials.

**D.** All cars must have their total weight and left side weight on the right front corner of the roof.

#### **17. Mirror:**

**A.** One (1) maximum 3" inch spot mirror allowed. Must be mounted on the left side of driver close to the door edge and not extend outside the body. **NO OTHER MIRRORS PERMITTED.**

#### **18. Rear End:**

**A.** Rear ends must be locked with steel (magnetic steel) spoons. No lockers or similar assemblies. Gear ratio open. Standard or full floater nine (9)" steel rear ends permitted. Center-section must be steel. Solid steel (magnetic steel) axles only. Yokes, hubs, and drive plates and bearing supports must be magnetic steel. No aluminum or light weight parts or polishing allowed, must use stock-type brackets, in stock location. No cambered rear-ends allowed.

#### **19. Ride Height:**

**A.** Minimum chassis to ground clearance is 5" with driver, including front bumper cover and side skirts.

#### **20. Safety:**

**A.** All seats must be constructed of aluminum. NHSTRA recommends seats be full containment type, designed to include comprehensive head surround, shoulder, and torso support, with energy impact foam. No holes permitted. Seat must be located inside main chassis rails no further back than trailing edge of door and securely fastened per manufacturer guidelines. Seat belts must be a minimum five (5) point harness, securely fastened to roll cage per manufacturer guidelines. Belts must be no less than three (3)" wide unless HANS device is used, then two (2)" wide. A quick release mechanism must be fastened to lap belt. Y-type shoulder harness is not permitted. Where the harness crosses the roll cage, it should pass thru a steel guide welded to roll cage that will prevent the harness from sliding side to side, and connect individually. Belt manufacturer date must be exceed five (5) years. Belts with no date will not be allowed.

**B.** All cars must have an approved SFI window net properly installed in the driver's window opening. No string nets allowed.

**C.** Neck restraints are HIGHLY RECOMMENDED.

#### **21. Steering:**

**A.** One piece steering shafts not permitted. It is mandatory to use two (2) u-joints on steering shaft, unless a collapsible shaft is used. Connection at the steering box must be changed to a solid u-joint (no rubber). A quick release coupling on the steering wheel is mandatory. Center of the steering wheel must be padded with two (2) inch fire resilient material.

**B.** Stock appearing non-adjustable center links allowed, stock-type steering boxes allowed, stock-type idler arm and pitman arm allowed. Front outer tie rods may be Heim ends with steel adjuster sleeves.

#### **22. Suspensions:**

**A.** Lower control arm must remain stock OEM for make and model. No relocating of lower control arm mounts. Ball joints may be changed with similar types but must have tapered shaft. Aftermarket bushings permitted.

**B.** Upper control arms mounts must be in stock OEM location. Upper control arms must be bolted to inside of mount as per stock OEM. Aftermarket upper control arms permitted, aftermarket cross shafts permitted, may have horizontal slots of no than 2", and must maintain a OEM likeness. Maximum cost of upper control arm not to exceed \$85.00 MSRP. Aftermarket upper control arms are allowed to be +/- 1/2" of manufactured OEM upper control arm for make and model being used. No turnbuckle upper control arms permitted. Any tapered shaft upper ball joint permitted.

**C.** Front jacking bolts are not permitted. Front adjustable cups permitted. Rear jacking bolts permitted

**D.** Sway Bar must be one (1) piece. Sway bar must mount in stock OEM location.

**E.** Rear leaf springs must be magnetic steel only. Springs must remain with 1/8" of stock OEM location. Bushings may be aftermarket. Lowering blocks permitted. Shackles may be adjustable above the spring. Slider mounts permitted.

**F.** Coil springs must remain in stock OEM location. Fabricated rear coil spring buckets may be used. Steel racing coil springs allowed with a minimum of five (5)" inches outside diameter and a minimum length of nine (9)" inches.

**G.** Shocks must remain in stock OEM location. All shocks must be \$110.00 or less at MSRP. All shocks must be of steel body configuration and maintain Factory OEM mounting. All shocks must be 100% sealed and non-Rebuildable. No external valves or Schrader valves. All shocks must be run the way you receive them from the manufacturer (out of the box). One shock per wheel. Shocks must collapse all the way down making contact with the body and lower jam nut at rod end. All shocks will be inspected and can be confiscated by NHSTRA Officials for further research.

**H.** No mechanical tie downs or other mechanical/suspension device that limits or binds travel. Suspension must have a minimum of two (2)" inches of travel in both directions when stationary, at ride height with driver in the car.

**I.** Front spindles must be OEM or OEM aftermarket type for make and model, except G-Metric cars are allowed to use Camaro spindles. No cutting or altering of spindles allowed.

**J.** Rear suspension upper control arm may be adjustable with tolerance of +/- 3/8" from stock length. Rear lower control arms may be strut style with heims with a tolerance of +/- 3/8" from stock length.

### **23. Tires:**

**A.** Only tire permitted are Hoosier 790's.

**B.** No tire softening/conditioners/treatment of any kind allowed. No liquid in tires allowed. Tires will be subject to NHSTRA testing.

### **24. Transmission:**

**A.** Must be stock manufactured OEM transmission with all forward and reverse gears working from drivers compartment allowed. Any OEM three (3) or four (4) speed manual. No racing transmissions, no internal modifications, no lighting or polishing of any kind permitted, must remain original as produced by OEM.

**B.** Aftermarket shifters permitted, multi-lever type shifters permitted.

### **25. Tread width:**

**A.** Maximum tread width allowed will be 72" inches measured from outside to outside of the wheel rim bead flanges.

## **26. Transponders/Scanners/Radios/Electronics/Cellular Phones:**

**A. Transponder-** All cars must be equipped with a transponder and must be operational at all times during practice, qualifying, and features. If at any time your transponder isn't working, you will be black flagged off the track. Transponder will be mounted on the right rear frame rail (inside or outside) exactly 12" to the rear of the centerline of the rear axles.

**B. Scanners-** Each competitor must have a one-way scanner programmed to 464.000, at all times during practice, qualifying, and feature event, so NHSTRA Race Control/NHSTRA Scoring can stay in contact.

**C.** Cars will not be allowed to carry "ANY" on board computers, micro-controllers, processors, recording devices, electronic memory chips, traction control devices, or digital readout gauges. Cellular phones are not allowed in cars at any time. Go-Pro type devices must be approved by NHSTRA Officials prior to use.

**D. No 2 Way Radios Allowed.**

## **27 - Wheels:**

**A.** Any Steel (magnetic steel) with a maximum width of 8" inch x 15" inch wheels only, as measured bead to bead.

**B.** Minimum weight 19lbs.

**C.** No mixing wheel width sizes allowed.

**D.** Pressure relief valves are not permitted.

**E.** Metric cars may use up to a maximum  $\frac{3}{4}$ " inch wheel spacer/spacers, as long as it doesn't exceed tread width rule.

**F.** Minimum 1" inch lug nuts required on all wheels.

**G.** Wheel studs minimum diameter is  $\frac{1}{2}$ " inch. Studs must even with or beyond lug nuts.

## **28 - Wheelbase:**

**A.** Wheelbase must be the same length, Drivers side/ Passenger side, as the came manufactured with (OEM). Minimum OEM wheelbase allowed will be 100.4" inches. Shortening, lengthening, or widening is not permitted.

## **29 - Weights:**

**A.** All weights are before race, if unable to scale before race a 1lb per lap tolerance will be allowed.

**B.** 602 – Factory sealed (Bottle-Cap Sealed) Crate Engine minimum weight 3050lbs, 55.0% left side weight, with the driver before the race.

**C.** Built Engine minimum weight and non-bottle cap sealed 602 crate engines 3200lbs, 55.0% left side weight, with the driver before the race