

2020 Street Stock Rules

JUST BECAUSE IT DOES NOT SAY **NO** DOES NOT MEAN YOU CAN DO IT!

\$1000 fine for soaking tires.

\$100 fine for antifreeze.

COMPETING MODELS

1968 and later approved hardtop American manufactured rear wheel drive cars with a wheelbase of 101-108 inches. Wheelbase must be for make and model of car and remain unaltered. NO mustangs.

These changes below have been incorporated to allow Hickory Motor Speedway to become a Hickory Street Stock / MASS friendly race track and certain rules ie: engines / carburetors / weight etc. will be evaluated as necessary.

All MASS Rules and Hickory Rules apply for each car with engine / weight / shock claimer specifics below.

Cars competing under the present Hickory rules may use MASS rules for improvements at their discretion.

Rules are subject to change as necessary to insure all cars can be competitive.

CAR BODIES

1. Body must remain stock appearing.
2. NO reinforcements permitted with the exception of the hood, front fender wells and trunk lid. All must remain stock appearing.
3. Anything that bolts in may be removed.
4. Firewalls must remain stock appearing and in stock location.
5. Floor pans must remain stock for car make.
6. Hood may be fiberglass and must have 5 hood pins total; 3 across the front.
7. All hood and cowl air vents must be removed or covered.
8. Minimum 5" ground clearance on all body panels and bumper covers.
9. All glass and flammable materials must be removed.
10. Windshield required. 1/16 inch minimum Lexan required. Back glass optional.
11. Quarter panels and front fenders may be cut for tire clearance only.
12. Front inner fenders may be removed.
13. Aftermarket or fabricated steel bodies and replacement panels allowed but must remain stock appearing for make and model at the discretion of track officials. Roof must be OEM type for make and model.
14. Any fabricated sheet metal must be minimum 22 gauge steel.
15. Roof height minimum 49 inches.
16. Composite or fiberglass aftermarket bodies and/or body panels allowed. However they will be subject to a 30 lb weight penalty.
17. Body models may be interchanged within same manufacturer makes only.
18. 8" max length flat A-post vent/deflector allowed both left and right.

WEIGHT

1. All weights are MINIMUM with driver after qualifying and the race. When cars are weighed after the race, the only additional fluids that may be added to make weight will be enough water to top off the radiator, maximum of 2 quarts of motor oil in the engine and enough racing fuel to top off fuel cell at base of filler neck at bottom of vent hose. - as specified in HMS Race Procedures.
Hickory SS motor 3260 / 1467 (500 Holley)
MASS built motor 3260 / 1467 (350 Holley)
602 crate motor 3200 / 1440 (350 Holley)
602 crate motor 3260 / 1467 (500 Holley)
These are the only engine combinations approved for Hickory Motor Speedway in Street Stock
1. All cars must maintain a minimum of 45% right side weight at all times.
2. For competitor equality cars with front screw jacks will not be allowed to make jack bolt wedge adjustments during the actual race. * (1 lap penalty will be enforced)
3. All lead must be securely fastened and painted white with car number on it.
4. Claimed weight must be displayed on left rear corner of hood in minimum 1 1/2" tall lettering.

ENGINE COMBINATION #1, BUILT MOTOR

1. Only standard production engines allowed. Chevrolet 350 cubic inch maximum, Ford 351 cubic inch, Chrysler 360 cubic inch.
2. Engines may be interchanged in manufacturer lines only.

3. Engine may be balanced.
4. Steel racing oil pan permitted.
5. No polishing or painting inside of block.
6. Overbore of .060 permitted.
7. No electric fuel pumps permitted.
8. Stock connecting rods only. No polishing or machine work will be permitted.
9. Flat top or dish pistons permitted. Stock replacement only. Pistons must have "four eyebrows" all the same size.
10. Stock type hydraulic cam and lifters with a maximum lift of .450 and stock rocker arm ratio. Lift may be measured at the retainer after replacing the hydraulic lifter with a solid lifter or by other means at the discretion of the HMS tech Official.
11. No roller rocker arms allowed.
12. Stock crank with stock stroke must be retained. Crank casting number must not be removed. Crank minimum weight 50 pounds.
13. Crank journals may be ground for undersize bearings. No other machine work will be permitted.
14. Piston must not extend above top of block. Except Chrysler.
15. Piston, pin and rod minimum weight 1200 grams.
16. Four bolt-main blocks permitted with stock caps only.
17. Aluminum and aftermarket pulleys allowed.
18. Crankshaft height 12" minimum.

CYLINDER HEADS

1. Cylinder heads must be stock for make of engine.
2. Stock production steel heads only.
3. No vortec heads, no angle plug heads
4. Maximum valve size intake 1.94, exhaust 1.50
5. No necked down valve stems.
6. Maximum valve spring wire size .192 inch on Chevrolet engines and .200 inch on Ford engines.
7. No cutting of head for larger valve spring.
8. Poly locks permitted on rocker arm studs.
9. Screwed in rocker arm studs permitted.
10. No angle cut heads permitted.
11. All casting numbers must remain unaltered.
12. NO modifications, no porting or polishing. No grinding of any kind. 3 angle valve job ok as per Late Model Stock rule.
13. 72cc minimum.

INTAKE and SPACER ENGINE #1

1. Only the following Edelbrock aluminum intakes are permitted. Chevrolet #2101, Ford with 4bbl heads #2665, Ford with 2bbl heads #2750, Ford Windsor #2181, Chrysler #2176.
2. No porting, polishing or gasket matching will be permitted.
3. Only a one-piece solid aluminum spacer, ¼ inch thickness may be installed between intake manifold and carburetor.
4. Spacer must be centered on intake manifold, No Phenolic or Plastic Spacers
5. Spacer must have 2 holes with 1 ½ inch openings that match the base of the carburetor. Holes must be centered and cut perpendicular with the base of the carburetor. No tapers or bevels.
6. Only 2 paper gaskets, 1 per side, maximum thickness .065 will be permitted.
7. No adjustable spacer will be permitted.
8. No other modifications will be permitted.

ENGINE COMBINATION #2, GM 88958602 CRATE MOTOR

1. This engine must be completely stock including but not limited to distributor, oil pan, intake manifold, valve covers, timing chain cover, vibration dampener, etc
2. Any non-approved modifications may result in confiscation of entire motor including but not limited to intake, starter, valve covers, rocker arms, springs, etc.
3. Crankshaft height 12" minimum.
4. Crate motor technical specifications will be based on the GM Performance Parts Circle Track Crate Engine Technical Manual part# 88958668 revised 2012.

INTAKE AND SPACER ENGINE #2

1. Intake manifold must be stock for 8602 crate motor.
2. Only a one-piece solid aluminum spacer, ¼ inch thickness may be installed between intake manifold and carburetor.
3. Spacer must be centered on intake manifold.
4. Spacer must have 2 holes with 1 ½ inch openings that match the base of the carburetor. Holes must be centered and cut perpendicular with the base of the carburetor. No tapers or bevels.
5. Only 2 paper gaskets, 1 per side, maximum thickness .065 will be permitted.
6. No adjustable spacers will be permitted.

CARBURETOR (all motors)

Holley 2300 2bbl carburetor model #7448 or the Holley 2300 HP two (2) barrel carburetor, part number 80787-1, with a venturi size of 1 3/16 inch and maintaining throttle bore maximum size of 1 1/2 inch may be used. See below for rework guidelines:

1. No polishing, grinding or drilling holes will be permitted in the body of the carburetor.
 2. Choke may be removed and all holes must be permanently sealed.
 3. Choke horn may not be removed and/or altered.
 4. Boosters may not be altered in any manner including size, shape or height.
 5. Venturi area must not be altered in any manner. Casting ring must not be removed.
 6. Base plate must not be altered in shape or size.
 7. Stock butterflies must not be thinned or tapered. Idle holes may be drilled in butterflies. Screw ends may be cut even with shafts, but screw heads must remain standard.
 8. Throttle shafts must remain standard and must not be cut or thinned in any manner.
 9. Any attempt to pull outside air other than through the venturi is not permitted.
 10. Only Holley metering blocks can be used. Surfacing of the metering blocks for improved gasket seal will be permitted. The only metering blocks permitted for the Holley 2300 HP carburetor (80787-1) will be the Holley, part numbers 11938N, 11886 (390HP) and 12323 (screw in emulsion bleed jets) metering blocks. To order metering block part number 12323 (screw in emulsion bleed jets) the sales number is 134-276. For the Holley 2300 HP approved metering blocks, the amount of holes and passages and the location must remain as manufactured with screw in emulsion bleed jets in each jet passage, however, hole sizes may be altered in the jets. Blanks without holes may be used. Additional holes or passages will not be permitted in the Holley 2300 HP approved metering blocks. The Holley metering block, part number 12323 (screw in emulsion bleed jets) will not be permitted in the Holley 2300, list number 7448
- Holley 2300 HP two (2) barrel carburetor, part number 80787-1 when used must remain factory stock with no modifications. Only changes allowed are the power valve and/or jets, and float.

AIR CLEANER

1. Round air cleaner element minimum of 12 inches; maximum of 17 inches in diameter permitted.
2. Top and bottom of air cleaner must be the same size.
3. Element must be minimum of 1 1/2 inch and a maximum of 4 inches in height.
4. Air filter element same as LMSC 2020.
5. No tubes, funnels or anything which may control the flow of air are permitted inside the air cleaner or between the carburetor and air cleaner.
6. No shield around air cleaner will be permitted.
7. Base of air cleaner cannot extend higher than carburetor choke horn.

COOLING SYSTEM

1. Aluminum radiators permitted.
2. Antifreeze is not permitted.
3. Electric fans are permitted.
4. Radiators must be stock appearing and installed in front of the engine.
5. All air to the engine compartment must pass through the radiator. No ducting or directing of air to the carburetor.

EXHAUST

1. Single flange tube headers permitted. Maximum ID 1 5/8 inch.
2. No wrap around or 180 degree headers will be permitted.
3. OEM stock cast iron manifolds permitted.
4. Aftermarket exhaust manifolds permitted.
5. Exhaust collectors and exit pipes must not exceed 3 inch OD.
6. All exhaust must exit under the car and behind the driver.
7. No thermal wrap will be permitted on headers, collectors or exit pipes.

TRANSMISSION and FLYWHEEL ASSEMBLY

1. 3 or 4 speed manufacture stock production transmissions permitted. All forward and reverse gears must be in working order from driver's seat in car.
2. No aftermarket transmissions will be permitted.
3. All clutches and pressure plates must remain stock type. No drilling or lightening of clutch or pressure plate components from manufactures specifications. Clutch discs without springs are recommended.
4. All flywheels must weigh a minimum of 15 pounds.
5. Clutch minimum size 10 1/2 inch
6. No aluminum clutch or flywheel components allowed.
7. Steel bellhousing or scattershield must be installed on top, left, and right side of firewall constructed of 1/8 inch thick steel or 1/4 inch belting.
8. Hydraulic clutch slave system may be used to operate clutch.
9. Drive shaft must be at least 2 3/4 inch in diameter and be of magnetic steel only. Drive shaft must be painted white with two safety loops attached to the bottom of car.

REAR END

1. Stock rear ends, 10 and 12 bolt rear ends, Ford 8 1/2 inch and 9 inch allowed.
2. No quick changes rear ends allowed.
3. Differentials may be locked, Detroit locker or limited slip. NO Torsions (gleasons, Gold-Trac, etc).
4. Floating type rear ends Allowed and recommended.
5. Metric Cars may have adjustable coil spring spacers IN REAR ONLY.
6. Leaf Spring cars may have maximum 3" adjustable lowering blocks and adjustable spring shackles in rear.
7. No horizontal leaf spring "Sliders" allowed.
8. Front of leaf springs/trailing arms must maintain stock mounting location at frame/Unibody. Reinforcement of front mounting location(s) allowed at discretion of Track Officials but must remain in stock non-adjustable location.
9. Rear Trailing arms must be stock appearing for make and model and length must match left and right.
10. No adjustable trailing arms, heim joints, or devices that permit forward or rearward movement of the trailing arms or rearend housing.
11. Cars with factory panhard bar must be stock appearing and non-adjustable. Panhard bars only allowed on cars that were equipped from factory with panhard bars.
12. Bolt pattern: 5 inch X 4 1/2 inch, 5 inch X 4 3/4, 5 inch X 5 inch, and 5 inch X 5 1/2 inch.
13. No cambered or toed rear ends.

SPRINGS and SHOCKS

1. Heavy duty springs optional as long as they fit in original position. No coating permitted.
2. Front shocks may be moved outboard for easy control and inspection.
3. MASS approved shocks which would include the Hickory Spec shock..

No shock covers or painting of shocks allowed.

Only approved OEM type non-adjustable strut assemblies if applicable.

1. Strut cartridge claim rule: \$100 each for all Strut Cartridges.
2. Shock claimer as per MASS rules are in effect with exception of claim rule will be \$100 dollars per shock.
3. Only rubber type spacers are permitted in coil springs.
4. Spring type on front and rear must match chassis make and model.

FRAME/STEERING

1. Frames must be stock. No shortening or altering in any way. Any modifications must be approved by NASCAR Head Tech Official.
2. Frame rails and sub-frames must be stock for make and model.
3. No interchanging of frames from car make.
4. Lower A-arms must remain unaltered with exception of shock, sway bar mounting, and screw-in stock type ball joints only. NO slotting of frame mounting holes.
5. Tubular non-adjustable magnetic steel upper A-arms allowed. Must resemble stock upper A-arm configuration. No helm joints allowed. Upper A-arms must maintain stock appearing mounting location. Reinforcing or replacing of stock upper A-arm mounts approved. All Tubular A-arms and mounting location subject to approval of track officials. No adjustment slugs.
6. Full steel engine firewall may be notched or plated to allow engine setback, Engine may be moved back to #1 spark plug in line with the upper ball joint, engine must be centered in chassis. Excessive firewall cutting could result in a weight penalty. (Maximum rear weight percentage 49%)
7. Solid engine and transmission mounts are permitted.
8. Stock spindles, steering box, steering arms, idler arms and center links only. NO DROPPED SPINDLES as measured on spindle pin. No slotted holes or adjustment slugs allowed on any part of the steering or front suspension. Tie rod ends and ball joints must be stock appearing.
9. No heims or monoballs allowed on any front suspension/steering parts (except sway bar links).
10. "X" may be added between the inside of the frame rails for driver protection.
11. A 1 piece unaltered OEM sway bar when used must connect to lower A-frame in stock appearing location.
12. Aftermarket heavy duty sway bar to lower a-arm "links" including heim joints allowed, however, sway bar (including ends) must remain unaltered.
13. Maximum OEM sway bar 1 1/2 inches. Howe Style Under Arm "slapper Bars" allowed Max of 1.375 inches, No multi-piece sway bars allowed, No rear sway bars allowed. \$100.00 claim rule includes bar and bushings. Mounting and location subject to approval of track officials.
14. 5" minimum height rule for all cars including frame, ballast, ballast boxes, and body panels. Metric cars will be measured at outer-frame and leaf spring at rocker panels. Altering or modifications of rocker panels, underbody, and/or frames for height clearance purposes not allowed.

WHEELS AND TIRES

1. Maximum width 10 inch
2. Steel wheels only. Minimum weight 20 lbs.
3. Air bleeders will not be permitted.
4. Racing wheels with the same offset on all 4 wheels permitted.
5. All 4 wheels must be the same size.
6. At least 3 threads must be visible outside the lug nut on all wheel studs.
7. No welding allowed on any wheels.
8. Hoosier F-45 will be the only tire permitted. Purchased and impounded at the track.

FUEL and FUEL SYSTEM

1. Track fuel only
2. No mixtures or additives of any kind.
3. No nitrous oxide permitted.
4. Cooling of fuel not permitted.
5. Fuel cells are mandatory.
6. The maximum capacity allowed is 22 gallons
7. Fuel cells must have working check valve and foam.
8. Fuel cells must be mounted equal distance between frame rails and have 9 inch minimum ground clearance.
9. Fuel cell must be mounted in approved steel can.
10. Right side fuel fill not permitted.
11. Electric fuel pump not permitted.
12. A fuel cell protector bar must be installed at the rear of the frame.

ELECTRICAL SYSTEM

1. Starter must be in working order.
2. Battery may be relocated but must be bolted down securely and covered or placed in a battery box.
3. Only one 12-volt battery permitted.
4. HEI ignition permitted.
5. No dual point distributor permitted.
6. NO MSD or similar ignition boxes allowed.
7. No ignition boosters or crank trigger ignitions permitted.
8. Ignition firing order must remain stock for engine make.

BRAKES

1. Stock type brakes.
2. Disc brakes permitted on front only. Rear disc brakes ok.
Adjustable proportioning valves / Bias adjusters permitted out of the drivers reach.
All four (4) brakes must work.
1. Only single piston stock type steel calipers permitted.
2. Only stock type steel hub/rotor assemblies permitted on front. No floating or "hat type" rotors permitted on front.

ROLL CAGE

1. 4 point cage with curved door bars required.
2. Roll bars must be welded and made of at minimum .090 thickness 1 3/4" roll bar tubing.
3. Approved loop around radiator and behind grille is permitted.
4. Roll bars may be extended through engine compartment and rear deck.
5. Right side door must be "X" or 4 bars.
6. See Nascar Whelen All American Series rulebook for details.
7. Driver's door bars must be covered with steel plate minimum 1/8" thickness.

SPOILER

1. Homemade spoilers must not be over 5 inches high and must be no wider than 60 inches.
2. Spoiler must be mounted on the rear of deck lid.
3. Factory spoilers permitted on rear.
4. No front spoilers of any type
5. Spoiler side panels not permitted.

BUMPER

1. Bumpers must be stock appearing for make and model.
2. ABS tail and nose cover allowed. Support bars behind nose maximum size is 1 3/4 round or 2 inch square. 2 bars maximum

WHEELBASE

1. Wheelbase must be stock from factory plus or minus 1/2 inch tolerance.

TREADWIDTH

1. Spacers will be permitted to utilize the maximum allowable tread width. - One spacer per wheel, no welding, magnetized steel. Billet aluminum or magnetic Steel is approved. Spacers, if used, must be the same thickness left and right; however, the front and rear do not have to agree. Cars must not exceed the maximum allowable tread width of 67 inches, front and rear measured from the inside of one wheel to the outside of the other wheel, zero toe-in, at spindle height. A tolerance of $\frac{1}{2}$ inch will be permitted between the front tread width and rear tread width, but the widest tread width **must not exceed** 65 inches. No welding allowed on any wheels
2. One maximum $\frac{1}{4}$ " 'extra wheel spacer' will be permitted on the right rear axle housing for tire sidewall clearance. With this extra spacer allowed, the right rear spacer(s) total thickness may be $\frac{1}{4}$ " more than the left rear although the tread width still must not exceed 67 inches.