



Hythe Motor Speedway Street Stocks 2022 Race Season



(Updated rules from 2022 are in red)

ATTEMPTS TO “BEND” THESE RULES OR FIND AND TAKE ADVANTAGE OF “LOOPHOLES” WILL NOT BE TOLERATED. IF YOUR CAR IS NOT INSIDE THESE RULES, YOUR CAR WILL NOT RACE.

HMS Board of Directors reserves the right to amend any rule at any time as it pertains to Safety, Environmental and/or Property Issues.

SAFETY EQUIPMENT: Rules apply always when car is on track. Snell-rated SA2010 or newer helmet required. Roll bar padding required in driver compartment. Fire retardant padding. SFI- approved full fire suit required. Fire retardant gloves, shoes and head and neck restraint required. Right and left seat head supports required. Recommended: Fire retardant head sock and underwear, collapsible steering shaft. Driver-side window net required, minimum 16 inch by 20- inch ribbon or mesh style, and must be mounted to roll cage so latch is at top front of window. Minimum three-inch (two-inch with head restraint system) wide SFI-approved five-point safety belt assembly required, must be mounted securely to main roll cage. Safety belts no more than 5 years old. Recommended: Safety belts no more than three years old. Kill switch required within easy reach of driver and must be clearly marked ‘OFF’ and ‘ON’. **Mass produced head and neck restraint systems STRONGLY recommended (SFI 38.1 devices like a Hans, Z-Tech, Simpson Hybrid, or similar).**

1. FRAME: Any American OEM full body rear wheel drive passenger car, 1964 or newer, full frame or unibody. **Minimum wheelbase 108 inches. Wheelbase must remain stock to the year and model with a maximum variation of one inch from the right side to the left side. The wheelbase must remain original to frame.** Minimum 107.5-inch wheelbase (measured from center of rear axle to center of front lower ball joint), maximum one-inch difference from side to side. Rear of frame behind rear tires, no further forward than one inch behind factory seam, may be replaced in OEM location with two-inch by three-inch steel tubing with 0.095-inch wall thickness. Factory seam must remain visible. Unibody must tie rear frame to front frame. Frame may be “X” braced. **67-81 Camaro and Firebird allowed with stock front clip, uni-body and rear suspension. 1982 and newer Camaros or Firebirds not permitted. No Mustangs, 4x4, independent suspension, convertibles, station wagons, and Corvette.** No part of frame or body can be lower than **6 inches** from the ground except front cross member, oil pan, sway bar, exhaust, lower rear control arms and shock mounts.

***** A 112” frame maybe shortened down to a 108” in the straight portion of the frame. If the car was originally a 112” frame, the car must follow the Thunder Mountain Speedway Street Stock rules in their entirety. - These are attached at the end of this document.**

2. ROLL CAGE: Main cage must consist of continuous hoops, minimum 1.75-inch O.D. tubing, with a minimum wall thickness of 0.095-inch, low carbon or mild steel recommended. Four-post roll cage required, front down bars and rear hoop must be welded to OEM frame. Driver’s head must not protrude outside cage with helmet on. Rear hoop must have “X” brace, consisting of one full horizontal and one full diagonal bar, minimum 1.25-inch O.D. with 0.083-inch wall thickness. Front down bars must be tied together, passenger side front down bars must be maximum 11 inches in from top of door. Must be minimum 40 inches between outside edge of front and rear down bars at top of door panel. **Top halo must be minimum 40 inches across**, and 29.5 inches’ front to rear, outside to outside. Rear hoop may be maximum 12 inches in from bottom of opera window. Minimum one cross bar in top halo. May have maximum two horizontal bars, (in addition to bar tying front frame horns together) for radiator protection; must be behind bumper, within confines of body, no wider than stock frame horns. Required rear kickers (down bars) and engine hoop must be minimum 1.25-inch OD tubing, with 0.083-inch wall thickness. **Fuel cells must be mounted between the frame rails and as far forward as possible and practical. Fuel cell must be in a metal case and have a minimum 8-inch ground clearance. If fuel cell hangs below frame, a Nerf bar must protect it.** All bars must be inside body. Foot protection bar required.

3. DOOR BARS: All door bars and uprights must be minimum 1.75-inch O.D. with 0.095-inch wall thickness. Minimum three door bars, both sides, parallel to ground, and perpendicular to driver. Minimum four uprights tied from frame to top door bar on driver side, and minimum three uprights on passenger side. Steel doorplates, 18 gauge or 0.049-inch minimum thickness, must be securely welded to outside of door bars on driver's side. Plate must cover area from top door bar to frame and from rear down post to five inches in front of seat. Must be visible for inspection.

4. *Any OEM or Stock appearing aftermarket bodies of any material permitted. Late model nose and tailpieces permitted. Aftermarket bodies must be designed for perimeter chassis. No offset bodies permitted. OEM and OEM replacement bodies must still remain stock appearing. No wedge style front noses. A maximum 6.5" tall spoiler is allowed at HMS. Rocker skirt/flare allowed between tires only, cannot extend outside tires, minimum 6-inch ground clearance. Car number must be minimum four inches thick and 20 inches tall and clearly visible, on both sides, top and back of car, and front, if possible.

5. DRIVER COMPARTMENT: The interior of the car must be stripped of all flammable material. The interior sheet metal may only be removed for ease of roll cage installation. Floor pan may be replaced from front firewall to rear halo supports. Must remain flat/OEM appearing from frame rail to frame rail, can be no higher or lower than frame rail.- The firewall and passenger floorboards may be altered or removed but must be replaced with minimum 20-gauge sheet metal. *Passenger side floorboards can be removed to allow for cockpit style interior. Driver compartment must be sealed off from underside of car. No transmission coolers, transmission lines or rubber fuel lines in the drivers' compartment. Holes in floor and firewall must be sealed with minimum 20-gauge steel. No aluminum. No driver-adjustable devices allowed while car is in competition except brake adjuster. One driver's side passing mirror allowed. No bigger than 5" in diameter and must stay within the wheelbase of the car. Drivers can also have a rear-view mirror in the car (Blocking will be addressed if it becomes an obvious problem).

6. FRONT SUSPENSION: All components and mounts must be steel, unaltered OEM or OEM replacement, in OEM location and from the same dealer family (GM to GM, Ford to Ford, Dodge to Dodge). Rubber, nylon or steel lower A-frame bushings only - no offset or bearing type. Unaltered OEM sway bar may be used but does not have to be OEM mounted. Exceptions are: weight jacks allowed - must be in original centerline of spring tower; OEM upper A-frame mount may be moved or replaced with aftermarket steel non-adjustable mount matching upper A-frame bolt on design; OEM or OEM replacement ball joints allowed. For 1978-1987 GM mid-sized metric frame, OEM upper A-frame may be replaced using aftermarket upper A-frame. Non-adjustable A-frame upper control arms allowed with OEM style bolt in ball joint. Shock location may be moved and may go through center of aftermarket upper A-frame, but frame cannot be altered in any way. Single hole shock mounts only. Tie rod adjusting sleeve may be replaced with swedge tube. No suspension stops of any kind allowed.

7. STEERING: No rack and pinion. All components must be steel, unaltered OEM or OEM replacement, in OEM location. Exceptions are: bolt on spindle savers allowed, OEM steering column may be replaced with steel knuckles and steel steering shafts (collapsible recommended). Quick release required - steering quickener and steering wheel may be aluminum.

8. SHOCKS: One steel nonadjustable unaltered shock per wheel. All shocks must completely collapse at any time. No external or internal bumpers or stops. No coil over, air, or remote reservoir shocks. No Schrader or bladder type valve allowed. No coil over eliminators.

9. SPRINGS: One steel spring per wheel only. Minimum 4.5 inches O.D., maximum 16-inch free height, non-progressive coil spring only. No spring rubbers allowed.

10. REAR SUSPENSION: All components and mounts must be steel, unaltered OEM or OEM replacement, in OEM location, and match frame. No independent rear suspension. OEM rubber or nylon control arm bushings only, no offset or bearing type. Welded single-hole shock mounts only. Exceptions are: coil springs may be moved –front to back, but center line of axle tube can be no further forward than the front of spring, or no further back than rear of spring, but spring must remain vertical left to right; shocks may be moved but must remain behind housing; rear end lower control arm mounts maximum 7.5 inches long, may have maximum five holes for adjustment. Lower spring perch must be welded to axle tube. Upper control arm mounts on rear end must be level with each other. No suspension stops of any kind allowed. Lowering blocks allowed on rear leaf springs. Sliders allowed on leaf springs but must be rear-mounted only.

11. REAR END: Any steel approved OEM passenger car or truck non-cambered rear end (housing and carrier) allowed. Safety hubs (floaters) allowed. No sway/panhard bars. All components must be steel, exceptions are: lowering blocks, axle and U-joint caps, and drive flange may be aluminum. No adjustable lowering blocks. One-inch inspection hole in housing required. Full steel spool, steel mini spool or welded rear end only. Steel axles only. No quick-change devices. One-piece drive flange only. No torque-dividing differentials. No scalloped ring gears.

12. BUMPERS/RUB RAILS: Maximum one-inch-wide by two-inch-tall steel or Lexan rub rails allowed - bolted flush to body. Front and rear tow hooks mandatory. All front bumpers must be mounted minimum six inches from front frame horns. Steel bumper mounts only. No sharp edges allowed on bumpers, rub rails or bolts. One of two bumper options must be used and must be OEM height: OEM: Bumpers not covered by plastic nose or tailpiece must be complete, unaltered OEM, capped to fender with steel, welded or bolted. No bars past outside edge of body other than rub rails. Aftermarket fabricated tubular bumpers allowed, but must be covered by plastic nose or tailpiece and bent to fit with round ends. Front bumper bar must be minimum 1.5-inch O.D. (maximum two inch) with 0.083-inch (maximum 0.125-inch) wall thickness. Rear bumper must be minimum 1.75-inch O.D. with 0.120-inch wall thickness.

13. TIRES/WHEELS: **At HMS drivers must use unaltered Hoosier 970 or American Racer P265. No mixing of tire manufactures at any time. Competitors are allowed five tires per two-day event. The four tires a driver qualifies on, on day one and one more tire. The four tires you qualify on for day one will be marked after qualifying. At any other point when crossing the tech pad you can have one additional “unmarked tire,” this tire will then be marked giving a total of five marked tires for the two-day event. You must now run four of those five marked tires at all times during the two-day event.** If you have damaged a tire during an on-track incident and it's deemed not safe to race on, the tech official may allow you another tire but the damaged tire will come out of your allotted tires. b. Tires may be ground or siped within confines of tread (not past factory strait line). No chemical softening, conditioning or grooving of tires allowed. All wheels must be 15"x 8" maximum and display IMCA approved and manufacture decals. Spacers (composite, aluminum or steel allowed) used in conjunction with rim backspace must maintain a maximum of 76-inch track width front and rear. No bleeder valves allowed. Must use 5/8" wheel studs with steel lug nuts only. If a tire is damaged beyond safe use driver must get tech approval to replace it.

14. BRAKES: Steel, unaltered OEM, or unaltered OEM replacement, operative four-wheel, drum or disc allowed. Front components must be from the same dealer family as frame (GM to GM, Ford to Ford, Dodge to Dodge) OEM diameter caliper pistons only. Bolt pattern may be changed. Larger studs allowed. Vented solid surface rotors only, no scalloped or ceramic coated rotors. Rear rotors may be aftermarket 0.810 inch thick (new). No floating brakes. No brake shut-off or pressure sensitive devices. One front to rear proportioning device allowed. Brake lines must be visible. Aftermarket pedal assembly allowed.

15. EXHAUST: Round tube headers only. All primary header tubes must enter directly into one collector at same point at end of header. Cross-over style headers are allowed as long as all tubes enter into one collector on the same side. No 180-degree headers allowed. Muffler(s) are mandatory, must meet 98 dB rule. Exhaust must extend and exit near rear of driver compartment.

16. FUEL SYSTEM: Racing fuel cell required, maximum 22 gallon (12 gallon recommended), must be in minimum 20-gauge steel container. Fuel cell vents, including cap vent, must have check valves. If fuel cell does not have aircraft style positive seal filler neck/cap system - a flapper, spring or ball type filler rollover valve is required. Fuel lines through driver compartment must run through metal pipe or metal conduit. Fuel filter cannot be in driver's compartment. No cool cans. Air cleaner top/stud cannot direct air into carburetor. No top flow air cleaner housings, cold air boxes or air cleaner ductwork. Mechanical OEM type push rod fuel pumps only. CARBURETOR (see engine options): Unlimited cubic inch engines must use unaltered 350 c.f.m. Holley - part no. 0-80787-1- with no modifications, or part no. 0-7448 which may be modified to meet the specs of part no. 0-80787-1. Holley carburetor components only. Any unlimited cubic inch motor caught with non-350 carb will

result in a complete loss of driver points for the day. Air bleeds cannot be removed, .076-inch maximum diameter. Limited cubic inch engine must use unaltered 500 c.f.m. Holley - part no. 0- 4412, may be modified to Holley HP Dorton part no. 0 80583-1 specs only. All float bowls must face forward. Carburetor adapter/spacer allowed, maximum 1.20 inches thick, including gaskets. Carburetor may be exchanged (same cfm for same cfm), following same procedure as engine claim.

17. FUEL: Gasoline only. Racing fuel allowed. No E85. No performance enhancing or scented additives. Fuel must pass both dielectric meter and chemical tests.

18. WEIGHT: Minimum weight limit of 3100lbs with 55% left side weight and 47% rear weight after the main event with zero tolerance. Driver must be belted in seat with all gear on as vehicle was raced in the main event when being scaled after main. Weights must be securely mounted to frame or roll cage using two .5-inch bolts. Weights must also be painted white with the vehicle number on each weight. No gun-drilled, tubular or hollow bolts or studs. Steel fasteners only.

19. BATTERY/STARTER: One 12-volt battery only, must be securely mounted between frame rails, and positive terminal must be covered. Battery must be in Marine type case if mounted in driver compartment. Starter must bolt in OEM location. Car must have capability of starting without being pushed or pulled. Car must leave initial staging area on demand, unaided, or go to rear of that race.

20. GAUGES/ELECTRONICS: No unapproved cameras, transmitting or listening devices (exception is one-way Race Receiver radio by officials), timing retard controls, or digital gauges (including tach). No electronic monitoring computer devices capable of storing or transmitting information except memory recall analog tach. One 12 volt, non-adjustable, ignition box allowed. Only change allowed to ignition box is one high-end rev-limiter or an internal setting inside box. This may be accomplished using an ignition box with one high-end rev-limiter setting or an internal setting inside box. Crane #6000-6474 pre-set ignition box, MSD #8728 rev-control or MSD #8738 additional rev control box allowed. No electronic advance curve ignitions allowed. No additional ignition accessories allowed. All components must be out of reach of driver, but accessible for inspection with rev limiter facing upward. No magnetos or crank triggers. OEM type alternator with internal regulator allowed. No electronic traction control devices.

21. TRANSMISSION/DRIVE SHAFT: Must have at least two forward gears and one reverse, plus neutral position. With motor running and car in still position, must be able to engage car in gear and move forward, then backward. Only OEM production type transmissions allowed - two speed, three speed, four speed and automatic. No five speed (or more) transmissions, "in and out" boxes, or quick-change devices allowed. Flywheel/flex plate must be bolted directly to end of crankshaft, and pressure plate must be bolted directly to flywheel/flex plate. One flywheel/flex plate only, and all driveline components within bell housing must rotate consistent with engine RPM while car is in any gear. Unaltered flex plate must be full OEM, or OEM replacement. Manual: Must be OEM or OEM replacement case and have a working 7.25-inch minimum diameter, steel and/or aluminum, single or multi-disc clutch inside explosion- proof steel bell housing – minimum 270 degrees around top of clutch/flywheel area. Automatic: Must remain in OEM or OEM replacement case, with a functioning OEM appearing pump. Aluminum OEM bell housing may be replaced with aftermarket explosion-proof aluminum bell housing. Original OEM bell housing must have approved scatter shield constructed of minimum 0.125 inch by three-inch steel, 270 degrees around flex plate. Manual bump starts allowed. Drive Shaft: Minimum two-inch diameter steel drive shaft, must be painted white. Steel slip-yokes only. 360-degree drive shaft loop required and must be constructed of at least 0.25-inch by 2-inch steel, or 1-inch tubing, mounted 6-inches back from front U-joint.

22. ENGINE COMPARTMENT: Engine must be OEM appearing, must be able to be used in conventional passenger car without alteration. For 1978-1987 GM frame and engine combination, center of GM fuel pump must be located minimum 1.75 inches in front of cross member. From back of block to front of cross member (measured at frame) - 22.625 inches (Ford), 21.75 inches (Chrysler). Ford metric frames must have back of fuel pump in front of cross member. GM frame and cross member may not be altered for GM engine placement. Engine mount holes cannot be removed or altered on block. Aftermarket engine mounts allowed, including mid-plate. Radiator must be mounted in front of engine. Cooling system may be modified. Minimum 11-inch engine height measured from the ground to the center of crankshaft. Overflow tubes must go to a minimum 1-liter catch can.

- A. ENGINE OPTIONS AND SPECIFICATIONS: All cars must clearly display on both front roof posts which carburetor/engine option they are competing with, 350 or 500. Must be contrasting in color from body, minimum 2-inches tall and display 350 or 500. Markers not acceptable. Any American make engine allowed. Steel heads, block and oil pan only. OEM passenger vehicle production block only. No GM Bowtie, Ford SVO or Chrysler W blocks. Castings and fittings cannot be changed, no machine work on outside of engine. OEM firing order cannot be changed (GM: 1-8-4-3-6-5-7-2). Steel or aluminum water pumps allowed. No electric water pumps allowed. 'Wet' sump oiling system only. Accumulator allowed – cannot be located between seat and door bars. INTAKE: Unaltered, approved OEM cast iron low rise, two- or four-barrel. Only aftermarket aluminum intakes allowed are: Weiland GM #7547, #7547-1; Ford #7515, #8023 or #7516; Chrysler #7545, #8022; Edelbrock GM #2701, #2716; Ford #7121, #7181, #7183; Chrysler #2915. No porting, polishing or milling allowed on any intake. Exception is OEM cast iron plenum webbing may be removed, maximum one inch down. Cooling lines allowed on aluminum intakes. Any unapproved intake alterations will result in a complete loss of points for the day. 350 cfm CARBURETOR ENGINE: No cubic inch or compression limit. Flat tappet cam/lifters and stud-mounted rocker arms only. No shaft, offset or pedestal rocker arms. No titanium engine components. No stud girdles. No mushroom lifters, lifter diameter and configuration must match OEM passenger block. Full roller rocker arms allowed.
- B. Crate Engine: Must use unaltered sealed GM #88958602 or #19258602 crate engine. Effective Jan 1, 2016 all GM 602 crate engines must have IMCA Cable-loc seals. Upon inspection, any different, altered or missing GM seal bolts will result in a loss of points for the day. GM seal bolt exception is IMCA approved and issued Cable-Loc repair system, and oil pan may be replaced by GM certified repair center with Champ pan #CP57LTRB and Champ pick-up #1012SB, or Kevko pan #1090NRHW/ISP and Kevko pick-up#1003-3/4. Any engine with altered or unapproved parts will result in a loss of points for the day. Any driver using crate engine cannot claim engine or have engine claimed. In the same season, no driver is allowed to claim an engine after competing with a crate (if a driver switches to a crate after claiming an engine the crate engine is then claimable). All vehicles using the 602-crate engine must clearly display "500 crate" on both front roof pillars. The GM crate engine can use unaltered 500 CFM Holley carburetor p/n 0-4412. GM 602 crate engines must use MSD #8728 rev-control with 6200 chip in it

23. Transponder Location:

- A. The transponder must be at least 160" from the nose of the car to the transponder. Further back is ok, but it cannot be any closer or you will receive a penalty that will range from a loss of one position to last place points in the main depending on circumstances.

