



*\*Rules Locked Through 2025 race season \**

The Hobby Stock division is designed to promote greater interest in stock car competition, to enable new and inexperienced drivers to compete in their own class. It enables individuals with moderate means to compete without spending a significant amount of money on racing equipment.

Decisions on interpretation of the rules by Technical Inspectors shall be final. No changes from stock production automobile or component parts except as listed in these rules.

*\* Any equipment that the officials consider exotic or not in the intent of the rules shall be considered illegal \**

### How the weight penalty/brake system works...

The goal of this system is to allow all cars that fit the various definitions of a Hobby Stock to compete legally and balance the competition using weight. The first time a new car arrives at the track the tech official will ask the driver a series of questions about the specs & technology used in the engine and throughout the chassis. The Tech official will fill out the weight slip according to what the driver has stated. All the elements covered on the weight slip are subject to tear-down at the end of the Main Event upon MVR official request to ensure proper compliance. If a driver adds modern technology, it is the responsibility of the driver to notify tech of the change and get an accurate weight slip. Any car found to be in violation of the weight guidelines will be subject to immediate disqualification and will receive last place points and money, any records achieved that night will be stricken from the records. A second offense will result in disqualification, No Point and No Pay. The weight slip shown below must be located on the upper left or upper right corner of the windshield or on the driver's side sail panel of the car.

It is encouraged that drivers who build cars specifically for this series consider Performance vs Reliability and racecar sophistication vs the benefits of being light weight.

**\*\* ALL WEIGHTS WILL BE CHECKED PRIOR COMPETITION WITH DRIVER IN THE CAR  
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Engine Displacement	Base Weight (Before Penalties)
Up To 345 cid	Total 3,000 lbs. - Max Left 55% - Max Rear 48%
346 – 365 cid	Total 3,200 lbs. - Max Left 55% - Max Rear 48%
366 or more	Total 3,400 lbs. - Max Left 55% - Max Rear 48%

**602 Crate Engine Weight is 3150lbs. Max Left 55% - Max Rear 48% (amended 6/18/2022)**

Engine Weight Penalties/Breaks		
	Technology	Weight Penalty/Break
E1	Roller rocker arms	+25 lbs.
E2	Headers	+25 lbs.
E3	Oversized exhaust pipe (Greater than 2 ¼" diameter)	+25 lbs.
E4	Camshaft lift over .500	+50 lbs.
E5	Compression over 11.1:1	+50 lbs.
Chassis Weight Penalties/Breaks		
	Technology	Weight Penalty/Break
C1	Chassis wheelbase under 108" (Not specified in C4)	-1% Left Side %, 54% Max
C2	Chassis wheelbase over 114"	+1% Left Side %, 56% Max
C3	Gen 3 Camaro & 2005 or Newer Mustang	-1% Left Side%, 54% Max
C4	Stock rear disc brakes	+25 lbs.

**1. COMPETING MODELS:**

Open to all American and Canadian made steel bodied passenger cars, 1960 and newer. No Jeeps or convertibles. No front wheel drive, rear or mid engines allowed.

**2. GENERAL SPECIFICATIONS:**

- A) Minimum ground clearance of all components is 5". All measurements will be made with the driver in the car.
- B) Body and frame must match, make to make, model to model, year to year.
- C) Control arms may be welded to strengthen.
- D) Over 108" Wheelbase permitted with no weight penalty. See chassis weight penalty/chassis above.

### 3. ENGINE SPECIFICATIONS:

- A) Stock production V-6 or V-8 engines only. No engine interchange between makes, (must be Ford to Ford, GM to GM). The engine must have been available to the general public to purchase. GM 602 crate motor permitted in all cars.
- B) Engine must be stock OEM. All internal parts must be OEM replacement part for make of engine except as noted.
- C) Engine may be set back so furthest forward spark plug is even with spindle centerline. The front motor mount may be after market with no rubber, rear mount must be OEM transmission location may be without rubber. D) Stock flat top OEM type replacement pistons only, may over bore of .060". Pistons may not exceed deck height. No racing pistons.
- E) Hyper-Eutectic, Molly-coated allowed on skirts only. No other coating. TRW, Seal power and Keith Black are the only forged pistons allowed. 5/64, 5/64, 3/16 rings only. Full skirts only.
- F) Factory OEM "as produced" Stock steel rods. May use aftermarket rod bolts. Must be "as produced" bore, stroke and rod length combination. Crankshaft may be steel or cast.
- G) Any flat tappet hydraulic camshaft. No solids, mushroom, or roller camshafts. .500" lift preferred, up to .530" lift approved with 50 lbs. penalty.
- H) No gear drives. **No aftermarket distributors.** OEM HEI ignition systems are approved. GM style HEI distributors approved in all makes.
- I) Cylinder head casting must match engine displacement as produced with these clarifications: 461 castings,  
1.94 intake Camel hump heads including 041, 462, 492 and 186 are acceptable on 350 and 400 Cid Chevrolet. Ford 289 head permitted on 351w. **The following aftermarket direct replacement stock cylinder heads are allowed with weight penalty: Chevy heads/part # 042660-1(assembled) #042660 (bare) Ford heads/part # 053030-1 (assembled) #053030 (bare)**
- J) Chevy Vortec, or X heads are not permitted. **NO AFTERMARKET HEADS.**
- K) Restricted to 2.02 valve size. 3 angle valve jobs permitted. Only rebuild standard allowed is 30, 45 and 60 degrees. Poly-locks are permitted.
- L) Screw-in or pinned studs, push rod guide plates are approved.
- M) No stud girdles.
- N) Chevrolet only allowed 1.5 rocker arms. Mopar and Ford adjustable rockers are allowed. Roller rockers are allowed with weight penalty. Must be factory rocker arm ratio.
- O) No porting, polishing or gasket matching of heads.
- P) **Exhaust manifolds must be stock cast iron OEM or stock replacement only, from a standard production car. Chassis or block headers are allowed with weight penalty. Maximum 2 1/4" exhaust from the headers/manifold back. Oversized 2 1/2" maximum exhaust approved with 25 lbs. weight penalty.**
- Q) Fuel pump must be stock OEM type and mount in stock location. No electric fuel pumps allowed.
- R) Stock steel or cast-iron flywheels only. No aluminum flywheels allowed. Stock OEM type pressure plate and OEM Single disc clutches only. S) Crate Engine Program:
1. GM 602 is the only legal crate engine.
  2. **Holley 500 cfm 4412 series carb only per rule #4.**
  3. **6000 chip; MSD #8727CT soft touch HEI rev limiter on right side of dash out of reach of driver.**
  4. **-50 lbs. weight break. 3,150 lbs. total base weight prior to additional weight penalties.**
  5. No modifications permitted.
  6. No rebuilding engines – factory seals must remain intact. Exception below.

7. MVSO officials reserve the right to inspect the internal components of crate engines only under paid protest from another driver. The engine will not be disassembled until new GM seal kit is present.

#### 4. CARBURETOR AND INTAKE MANIFOLD:

- A) Holley 500 CFM #4412 only. Only choke and related parts may be removed. Choke horn must remain intact.
- B) No tubes, funnels, or any other devices which may control the flow of air are permitted inside of the air cleaner or between the air cleaner and the carburetor.
- C) A one piece 1" maximum in thickness carburetor spacer acceptable to Tech Inspectors is allowed. **NO TAPERED CNC MILLED SPACERS.**
- D) Stock cast iron automotive 2 barrel or 4-barrel intake with adapter. No high rise or GM Z-28 replacement manifolds of any kind. **No Marine intakes permitted.**
- E) No porting, polishing, acid dipping, adding epoxy or similar substances allowed on intake. No gasket matching allowed.
- F) An air cleaner is always mandatory. No foam type air cleaners. The top and bottom of air filter housing must be solid and be same diameter, K&N filter element OK. It is permissible to attach a shield in front of the air filter housing up to half the air filter circumference. It cannot be higher than the air filter element. No air boxes.

#### 5. TRANSMISSIONS:

- A) A stock OEM automatic transmission, with a stock working torque converter is permitted. Three and four speed manual transmissions with all gears working are permitted. B) Transmission must bolt to engine with no modifications.
  - C) All cars with manual transmissions must have an approved scatter-shield around clutch, or a constructed shield made of a minimum of 1/4" steel over the bellhousing section of the floorboard.
- CLUTCH:** Cast or Steel flywheel 0.870 thickness or greater. Pressure plate 10.5" min single disc clutch plate.

#### 6) DRIVE SHAFTS:

- A) Drive shaft and universal must be similar in design to standard production type. Only a one-piece steel driveshaft is permitted.
- B) It is mandatory that two 160-degree solid steel brackets, no less than 2" wide and 1/4" thick, or steel chain, be placed not more than 12" from each universal joint and fastened to the floorboard. C) All drive shafts must be painted white.

#### 7. BODIES:

- A) Bodies must be OEM steel and must remain stock.
- B) All glass must be removed except the front windshield. All chrome strips, door handles and other items must be removed. All upholstery, sound deadening, door panels, headliner material, carpeting, floor pads and seat must be removed. A Lexan rear window is optional.
- C) All body panels must remain stock and intact. Hood, roof, and rear deck lid may be lightened. Front door panels may be cut out only if door bars are inside of door. Rear inner fenders must remain enclosed or **must be approved by tech official.** Front inner fenders may be removed. The center of trunk may be removed for fuel cell installation only. Must have trunk floor & rear inner fender wells to protect fuel cell top from track surface, may be non-OEM but must be made of 22-gauge steel minimum.

- D) Bumpers must be strapped to the body. Bumpers may be reinforced within the confines of the original bumper. Front and rear aftermarket bumper covers allowed. Fabricated bumpers must be a minimum of 3" wide and resemble the stock installation.
- E) No sharp edges. All edges must be rolled under.
- F) Full floorboards and firewalls required. All holes must be covered with a minimum 22-gauge sheet metal.
- G) Doors must be welded or bolted shut.
- H) Hooks suitable for towing must be welded to the underside of all 4 corners of the car.
- I) A non-adjustable rear spoiler, not exceeding 6" in height and not wider than the rear deck lid (**unless stock per make and model**) may be attached to the rear deck lid. (It is recommended that the spoiler be made of 1/4" clear Lexan). No rudders or forward brackets are allowed.
- J) Rub rail permitted!

8. MIRROR: left side mirror only. 4" max diameter.

#### 9. RADIATOR:

- A) The radiator must be mounted in the engine compartment.
- B) Aftermarket and aluminum radiators are permitted.
- C) All cars will be equipped with an over-flow can. (**Removed 2 qt requirement**)
- D) Electric fans approved.

#### 10. SUSPENSION:

- A) All suspension components must be OEM for making (Ford to Ford, GM to GM) with no modifications except front may have longer bolts or elongated holes to obtain camber. B) Springs must be OEM type. Springs may be cut and/or bent.
- C) One shock per wheel. Shock mounts may be extended along the original axis to allow use of long body shock. All shocks must be stock OEM. Steel bodied sealed **nonadjustable or re-buildable shocks**. D) OEM front and/or rear sway bars are permitted. Must be mounted in stock holes.
- E) Front spindles may be interchanged within manufactures line to allow disc brakes on early chassis only. Metric cars may use older Nova spindles.
- F) **Two inch (2") right and one inch (1") left, max measured with square at top of wheel.**
- G) Lowering blocks and solid spring spacers are approved for use. No twist in spacers. Front spacers may be threaded but located around shock (coil only); rear coil spacers may be a solid type. May be interchangeable. Leaf spring cars may use either lowering plates under leaf springs or screw type as long as the u bolts have to be loosened and re-tightened in order to make height adjustment. No cam-actuated front to rear adjusters for rear alignment allowed. Adjustable shackles permitted on rear leaf spring eye only. Sliders permitted but must be bolted to mounting plate with shims adjustment.
- H) OEM rubber bushing only on rear, any bushing material on front.

#### 11. REAR ENDS:

- A) Differential may be locked by welding or shimming spiders. Mini spools & full spools allowed.
- B) Rear end must be in stock location and must use all stock parts for attachment. **NO LIMITED SLIP. NO DETROIT LOCKERS.**

- C) No cambered axle housings. No gun drilled axles. Aftermarket axles highly recommended. C-clip eliminator allowed.
- D) Ford 9" rear end allowed: must have drum brakes, no nodular, no aluminum, must have stock housing. Mini spools and full spools allowed. **Floater rear-ends approved. Floater with drum brakes add 25 lbs, floater with disc brake add 50 lbs. Must have steel OEM calipers.**

## 12. BRAKES:

- A) Four-wheel, stock, foot actuated brakes are mandatory. Adjustable proportioning valves may not be used. All brakes must work.
- B) Must be solid mount. No free float. **No drilled or slotted rotors.**
- C) Master cylinder must be OEM and mount in stock location.
- D) Stock pedal assembly must be used and may not be moved or extended.
- E) **Stock rear disc brakes approved with 25 lbs. penalty.**

## 13. ROLL BARS:

- A) Round steel tubing 1 3/4" x .090 inch or 1 5/8" x .120" minimum seamless roll-over bars are compulsory for the basic roll cage and must be approved by the Tech Inspectors. Aluminum and/or other soft metals are not permitted. Roll bar connectors must be welded.
- B) On unitized bodied cars, the cage must be attached to 6" square plates **or tech approved equal**, minimum 3/16" thick. The plate must be fish-plated to plates with the same specifications by four 3/8" bolts. Maximum 3/4 offset cage.
- C) A minimum of 3 door bars are required on the left side with 2 bars required on the right side. The left side door bars must curve to the outermost part of the door skin. It is required that a piece of 1/8" steel be welded to the driver's side door bars. The material should be placed between the door skin and cover the seat area. As an option, the material may be welded between the door bars.
- D) A dash bar connecting the front cage upright is required.
- E) A wing window bar is required on the driver's side and must be of approved roll bar material.
- F) **Only two bars (one on each side) may pass through the front firewall. The bars will attach to the front roll cage legs and attach to the radiator protector bar, with additional supports.** Two bars may attach to the rear roll cage legs and must extend past the fuel cell. No bars from inside 4 point to beginning of front kick-up forward.
- G) All roll bars within the driver's reach, along with the steering wheel hub, must be padded acceptable to the Tech Inspector.
- H) No bars, no x-ing or tying frames together under car. Cars with bolt-on sub-frames & unibody cars may use connectors. Connectors must only run parallel to wheelbase. No X-ing outside the 4 point.

## 14. RADIATOR PROTECTOR:

The radiator protector will consist of a maximum of 5 bars (1 1/2" ID, schedule 40 tubing maximum material), located in the following positions: Two bars upward from the frame horns, one bar across the front of the radiator, two bars mounted in front of A-frames and connected to upright bars.

## 15. FUEL CELL PROTECTOR BAR:

If the fuel cell is installed through the trunk floor, the car must have a bar installed at the rear of the fuel cell. The bar must be a minimum of 1 3/4" x .090 thickness and must attach to the frame rails and extend down and across the bottom of the fuel cell, with a center support bar that attaches to the rear cross member. (Protector bar is not required if fuel cell is installed above the floor of the trunk.)

#### 16. WINDOW SCREEN:

A nylon window screen must be installed in the left side glass opening. The minimum window screen size shall be 22" wide by 16" high. All window screen mounts must be welded to the roll cage. The window screen, when in the closed position, must fit tight and be secured with a quick release type lever.

#### 17. FUEL:

- A) Fuel shall be automotive gasoline only.
- B) Gasoline shall not be blended with alcohol, ethers, or other oxygenates and it shall not be blended with nitrine, or its derivatives, nitro compounds or other nitrogen containing compounds. C) Speedway reserves the right to require all cars to use the same fuel.

#### 18. FUEL CELL:

Tech Officials will reject any previously approved fuel cells, containers, or check valves which appear to be damaged, defective, or do not function properly. Fuel cell vent check valves are compulsory. No pressure systems allowed. Any concealed pressure type containers, fuel lines or actuating mechanism will not be permitted, even if inoperable. The use of a commercially manufactured fuel cell is mandatory.

- A) The maximum fuel capacity shall be 16 gallons and may not weigh more than 25 pounds empty, including mounting hardware.
- B) Must be mounted in center of trunk, a minimum of 12" ahead of rear bumper.
- C) Fuel lines must run under the car and be securely fastened to the frame. Grommets are required where passing through the trunk.

#### 19. FUEL CELL AND FUEL CELL CONTAINER INSTALLATION:

The use of an approved fuel cell and container is mandatory. The fuel cell and fuel cell container shall be installed in accordance with the following requirements.

- A) Fuel cell and fuel cell container must be fastened to the frame in a recessed support frame.
- B) Fuel cells and fuel cell containers must be installed as far forward as possible in trunk compartment.
- C) Fuel cell and fuel cell container, installed in trunk compartment, must be secured with steel tubing no less than 2 lengthwise and 2 crosswise evenly spaced across the top. Tubing must be made of 1"x1" x .065" thick square steel tube. The support frame must be constructed using 2 tubes that are welded to and extend from the left side to the right-side frame rails. Three tubes must be equally spaced across the fuel cell container. These tubes must be welded to the cross-support tubes and extend down the front sides, rear sides, and under the fuel cell container.
- D) A firewall free of holes must be located between the trunk and driver.
- E) The bottom of the fuel cell cannot be lower than 10" from the ground.

#### 20. WHEELS:

- A) 8" maximum width steel racing wheels only, white spoke or equivalent.
- B) Maximum offset is 6", measured from bead of tire to lug nut seat.
- C) Wheel studs will be a minimum of 1/2". Stud must pass completely through nut when wheel is tight.
- D) Maximum up to 1 inch wheel spacer allowed if 5 inch or less offset wheel is used.
- E) No bleeders.

#### 21. TIRE RULE:

- 1) Class Tire: American Racer 970 or Hoosier 970
- 2) You must start the Main Event on the tires used for Qualifying.

#### 22. HELMETS & NECK ROLLS

Head and neck restraints are highly recommended - e.g. HANs or Hutchens Devise It is recommended that all helmets meet the specifications set forth in the Federal Motor Vehicle Safety Standard regulations or the American Standards Institute, Inc. Snell 90 minimum. Neck rolls are required, unless using a head and neck restraint.

#### 23. SEATS:

- A) Aluminum racing type seat only. No fiberglass or stock bucket seats.
- B) It is recommended that all seats have padded rib protectors and seat leg extensions on both sides.
- C) A padded head rest approved by Tech Officials is required.
- D) Seat and seat belts must mount to the roll cage, not to the floor pan. Must use Grade 8 bolts and large flat washers.

#### 24. SEAT BELT AND SHOULDER HARNESS:

- A) A quick release lap belt no less than 3" wide is compulsory. Both ends of the lap belt must be fastened to the roll bar with high quality bolts, not less than 3/8" in diameter.
- B) Shoulder harness must be no less than 3" wide and must come from behind the driver's seat. Where the harness crosses the roll cage, it must pass through a steel guide welded to the roll cage, that will prevent the harness from sliding from side to side. Shoulder harness inertia reels cannot be used. C) A center (crotch) belt must be securely mounted to the lower seat frame at the bottom.
- D) Where the belt passes through the seat edges, it must have a grommet installed, be rolled, and/or padded to prevent cutting the belt.
- E) All seat belts and shoulder harnesses must connect to the lap belt with an approved quick release buckle.
- F) Seat belts must be dated by the manufacturer and must not be used beyond 5 years after the manufacture date.

#### 25. ELECTRICAL SWITCH LOCATION:

A clearly marked Master Battery shut-off switch within 6 inches of the center of the car must be installed. Emergency Responders must be able to reach the switch from both sides of the car. A brightly painted, solid square of at least 4 inches square must surround the switch. The shut-off switch must be operational at all times.

#### 26. STEERING:



- A) A steel quick release steering wheel is strongly recommended.
- B) The center of steering wheel hub must be padded acceptable to Tech Officials.
- C) Factory tilt steering wheel/column must be removed. Straight collapsible shaft permitted. **Universal Joints Required.**
- D) Factory Steering Box Only. Aftermarket steering quickener permitted. No Rack & Pinion Steering.

#### 27. ACCESSORIES:

Race cars will not be permitted to carry onboard computers, micro controlled processors, recording devices, electronic memory chips, digital readout gauges or traction control devices.

#### 28. MUFFLERS:

- A) All cars shall be equipped with exhaust systems, including mufflers with no leaks or holes.
- B) No cars shall exceed 92 D.B.A. at 100 feet.
- C) Maximum exhaust shall be 2 1/2" I.D. Exhaust pipes must extend past driver and exit between door and the rear tire. Any exhaust above 2 1/4" subject to 25 lbs. weight penalty.

#### 29. BATTERY:

A) Battery may remain in the engine compartment, be securely mounted in an enclosed box and accessible from under the hood or relocated inside of car. If inside of car, it must be securely mounted in a protective container. It can be no further back than the stock rear firewall and cannot protrude through the floor. The battery box will be six sided and not significantly larger than the battery.

#### 30. NUMBERS:

- A) A minimum 24" high, 3" wide number is required on the door area (and only on door area) of both sides of car. A minimum 30" high, 3 stroke number is required on the top of car facing the right side.
- B) A minimum 8" high white number is required on the upper right corner of the windshield.
- C) Numbers will be assigned by the Speedway office and must be renewed each year.

#### 31. FIRE CONTROL:

A) Race cars must have fire extinguishers securely mounted within reach of the driver. This extinguisher must be mounted on a metal mounting bracket (no extinguisher may be taped to roll bars). It is strongly recommended that each car have built-in fire extinguisher equipment, but it cannot be of the dry powder type. **ALL ENTRANTS SHOULD HAVE IN THEIR PITS AT ALL TIMES A FULLY CHARGED 15 POUND CAPACITY DRY POWDER FIRE EXTINGUISHER OR ITS EQUIVALENT, SHOWING CURRENT INSPECTION CERTIFICATE.**

B) It is mandatory that, **AT ALL TIMES**, suits of fire-retardant material that effectively cover the body from neck to ankles and wrists, along with fire retardant or leather shoes and gloves, to be worn on the racing surface. It is strongly recommended that at all times drivers wear at least a 4-layer driving suit made of fire-retardant material that effectively covers the entire body. It is also strongly recommended that drivers wear long underwear, headgear, gloves, and socks made of fire-retardant material.

C) It is strongly recommended that at all times while the car is being refueled or while fuel is being transported from the pit area, all crewmen involved should wear at least a 4-layer suit made of fire-resistant material that effectively covers the body. It is also strongly recommended that the crew members wear long underwear, headgear, socks, gloves, and shoes made of fire-resistant material, plus protective eye wear. D) NO ANTIFREEZE; NO SYNTHETIC OILS OR ADDITIVES IN THE OILS  
E) ALL SAFETY REQUIREMENTS ARE MANDATORY.