Hobby Stock

Hobby Stock Rules – 2017

Introduction

These are requirements that every car and driver must adhere to. These requirements are generally inclusive of driver, competitor, staff or spectator safety. Techs shall be inspecting and enforcing adherence to these rules. Rules are binding for a 3 year term. Track Decisions Decisions of officials are the final and binding without exception. In all cases, track safety rules will take precedence over oval rules – any discrepancy between track rules should be brought to the attention of track official.

1. FRAME:

1.1 Any American OEM full body rear wheel drive passenger car, 1964 or newer, full frame or unibody.

1.2 Unibodies must tie rear frame to front frame.

1.3 Frame must match body. Minimum 107.5" wheelbase, maximum 1" difference from side to side.

1.4 No Station Wagons or Mustangs.

1.5 Rear of frame behind rear tires, no further forward than 1" behind factory seam, may be replaced in OEM location with 2"x3" steel tubing with minimum 0.095" wall thickness, same length as material removed. Factory seam must remain visible

1.6 Frames may be "X" braced.

2. BODY:

2.1 All bodies must be unaltered OEM, or OEM replacement, in OEM location and match frame.

2.2 Sunroofs and T-tops must be enclosed.

2.3 No spoilers, hood scoops, ground effects or skirting, altering OEM appearance allowed.

2.4 OEM STEEL hood only, hood may be gutted. OEM STEEL trunk lid only, no gutting, may be cut to fit tail piece.

2.5 Hood must be separate from fenders.

2.6 Trunk floor directly over rear end housing must be removed.

2.7 Trunk floor may be replaced, frame rail to frame rail, with 0.049" thick steel, must be located on top of frame rail.

2.8 No reflective body panels.

2.9 All glass must be removed, all windows in body must remain open;

2.10 All doors must be securely fastened.

2.11 All hoods and trunks lids will have a pin type latch.

2.12 If trunk and hood hinges are removed, they must be secured with 4 pins, one in each corner.

2.13 Car number must be minimum 4" thick and 20" tall and clearly visible, on both sides and roof of car; 6" tall on rear and front if possible.

2.14 All flammable materials must be removed.

2.15 Hood and trunk must be securely fastened and back of hood must be sealed off from driver compartment with metal.

2.16 Front body mounts must be visible. Body spacers may be removed.

2.17 Maximum 7" metal sun visor allowed across top of windshield opening.

2.18 Aftermarket plastic nosepiece and tailpiece allowed, recommended to match body.

2.19 Front inner wheel wells may be removed.

2.20 Fenders and quarter panels may be trimmed for tire clearance, ONLY.

2.21 Overlapping of body panels permitted.

3. BUMPERS/RUB RAILS:

3.1 Maximum 1" x 2" steel or lexan rub rails allowed - bolted flush (tight) to body.

3.2 Front and rear tow hooks mandatory.

3.3 No sharp edges allowed on bumpers, rub rails or bolts.

3.4 No bars past outside edge of body other than rub rails.

3.5 One of two bumper options must be used and must be OEM height:

3.5.1 OEM: Bumpers not covered by plastic nose or tail piece must be complete, unaltered OEM, capped to fender with steel, welded or bolted.

3.5.2 Aftermarket: Fabricated tubular bumpers (front and rear) allowed, but must be covered by plastic nose or tail piece and bent to fit with rounded ends. Main bumper bar must be minimum 1.5" O.D. (maximum 2") with 0.083" (maximum 0.125") wall thickness.

3.6 All front bumpers must be mounted minimum 6" from front frame horns.

3.7 Steel bumper mounts only.

4. WEIGHT:

4.1 No titanium, magnesium or carbon fiber products.

4.2 No gun-drilled, tubular, hollow bolts or studs.

4.3 Steel fasteners only.

4.4 No ballast allowed.

4.5 Any item deemed as ballast will be required to be replaced - i.e. fuel cell straps, fuel cell cans, battery boxes, etc.

5. ROLL CAGE:

5.1 Main cage must consist of continuous hoops, minimum 1.75" O.D. tubing, with wall thickness of at least 0.095".
Recommended: low carbon or mild steel.

5.2 Four-post roll cage required, front down bars and rear hoop must be welded to OEM frame.

5.3 Driver's head must not protrude outside cage with helmet on.

5.4 Rear hoop must have "X" brace, consisting of one full horizontal and one full diagonal bar, minimum 1.25" O.D. with 0.083" wall thickness.

5.5 Front down bars must be tied together.

5.6 Passenger side front down bars must be maximum 11" in from top of door.

5.7 Must be minimum 40" between outside edge of front and rear down bars at top of door panel.

5.8 Maximum 41" from top center of windshield to front edge of rear hoop; maximum 13" to front edge of top halo.

5.9 Top halo must be minimum 40" across, outside to outside.

5.10 Rear hoop may be maximum 12" in from bottom of opera window.

5.11 Minimum one cross bar in top halo.

5.12 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 OEM frame horns.

5.13 Rear kickers (down bars) required, and must be minimum 1.25" O.D. tubing with 0.083" wall thickness and engine hoop recommended.

5.14 Fuel cell protection required, must be mounted frame rail to frame rail, no higher than fuel cell, inside trunk area with maximum 1.75" O.D. tubing.

5.15 All bars must be inside body.

5.16 Roll bar padding required in driver compartment. Recommended: Fire retardant padding.

6. DOOR BARS:

6.1 All door bars and uprights must be minimum 1.75" O.D. with 0.095"wall thickness.

6.2 Minimum three door bars, both sides, parallel to ground, and perpendicular to driver.

6.3 Minimum four uprights tied from frame to top door bar on driver side, and minimum three uprights on passenger side.

Steel door plates, 18 gauge or 0.049" minimum thickness, must be securely welded to outside of door bars on driver's side.

6.4 Plate must cover area from top door bar to rocker panel and from rear down post to 5" in front of seat.

6.5 Must be visible for inspection.

7. DRIVER COMPARTMENT:

7.1 Minimum three windshield bars in front of driver.

7.2 Aluminum high-back seat only and must be bolted in using minimum 0.375" bolts.

7.3 Driver seat may be no further back than rear edge of B-pillar.

7.4 Minimum 3" (2" with head restraint system) wide SFI-approved five point safety belt assembly required, must be mounted securely to main roll cage.

7.5 Recommend Safety belts no more than two years old. Frayed, weathered or damaged belts must be replaced.

7.6 All holes in firewalls and floor must be covered with metal.

7.7 No mirrors of any kind.

7.8 Driver-side window net required, minimum 16" by 20" ribbon or mesh style, and must be mounted to roll cage so latch is at top front of window

7.9 Driver must be sealed off from track, driveline, engine and fuel cell.

7.10 Dash not to extend more than 24" back from center of lower windshield opening.

7.11 Dash must be flat, rear can be no higher than front, except for cowl in front of driver.

7.12 No other interior tin or covers. Inside rear quarter panels, below window level, may be cut out.

7.13 Doors may be gutted.

7.14 No cutting out of firewalls, roof, kick panels, rocker panels, except for roll cage clearance.

7.15 OEM floor may be replaced from OEM front firewall to OEM rear firewall using steel fabricated floor pan, 18 gauge or minimum 0.049" thickness, securely welded to frame. Must remain flat, OEM appearing from frame rail to frame rail, no higher or l ower than frame rail.

7.16 Exception is maximum 8" tall driveshaft tunnel similar to OEM tunnel in size.

7.17 Rear firewall and speaker deck must be metal and be of OEM design for that make and model.

8. GAUGES/ELECTRONICS/IGNITION:

8.1 No unapproved cameras, transmitting or listening devices (exception is one-way Race Receiver radio by officials), timing retard controls, or digital gauges (including tach).

8.2 No electronic monitoring computer devices capable of storing or transmitting information except memory recall analog tach.

8.3 12 volt ignition system and OEM HEI distributor only. Ford/Chrysler may use HEI distributor.

8.4 No ignition boxes.

8.5 No billet distributors or crank triggers. Ignition rotor, cap, coil and module must remain OEM-appearing.

8.6 602 Crate engine MUST use MSD #8728 rev-control and 6,200 rpm chip.

8.6.1 Built engine MAY use MSD #8728 rev-control with any rpm chip.

8.6.2 Rev-control must be mounted under hood on engine firewall and accessible for inspection with rev limiter facing upward.

8.7 No electronic traction control devices

8.8 All wiring must be visible for inspection. OEM type alternator with internal regulator allowed.

9. ENGINE COMPARTMENT:

9.1 Engine must be in OEM location.

9.2 On GM metric frame, center of fuel pump must be located minimum 1.75″ in front of cross member (measured at frame).

9.3 Ford metric frames must have back of fuel pump in front of cross member.

9.4 Frame and cross member may not be altered for engine placement.

9.5 Engine mount holes cannot be removed or altered on block.

9.6 Aftermarket steel engine mounts allowed.

9.7 No mid-plate allowed.

9.8 Engine must be OEM appearing, must be able to be used in conventional passenger car without alteration. GM with GM, Ford with Ford, Chrysler with Chrysler.

9.9 Steel or aluminum V-belt pulleys only.

10. STEERING:

10.1 All components must be steel unaltered OEM, in OEM location and match frame.

10.2 OEM steering column may be replaced with steel steering shafts (Recommended: collapsible steering shaft).

10.3 Steel knuckles only.

10.4 No steering quickeners (minimum 2.5 turns lock to lock), or remote power steering reservoirs.

10.5 Steering wheel and quick release (recommend) may be aluminum.

11. Radiator:

11.1 Minimum two-core radiator, must be mounted in front of engine.

11.2 No electric fans.

11.3 Overflow tubes must be directed to ground.

11.4 OEM type steel or aluminum water pumps only.

12. ENGINE OPTIONS AND SPECIFICATIONS:

12.1 602 CRATE ENGINE:

12.1.1 All cars utilizing a GM602 crate engine must clearly display on both front roof posts the word CRATE.

12.1.2 Must be contrasting in color from body, minimum 2″ tall. Markers not acceptable.

12.1.3 Must use unaltered sealed GM #88958602 or #19258602 crate engine.

12.1.4 Upon inspection, any different, altered or missing GM seal bolts will result in disqualification, loss of all points for the season, and 30-day suspension from all events.

12.2 BUILT ENGINE:

12.2.1 Any American make engine allowed. Maximum 361 cubic inches (GM); 363 (Ford); 370 (Chrysler). Violation of cubic inch limit must be verified by removal of head and will result in disqualification, loss of all points for the season and a 30-day suspension.

12.2.2 BLOCK:

12.2.2.1 OEM steel passenger vehicle production block only.

12.2.2.2 No GM Bowtie, Ford SVO, or Chrysler W components allowed.

12.2.2.3 GM approved block numbers are: 10105123, 10066034, 3892657, 3914660, 3914678, 3932388, 3932386, 3956618,

3970000, 3970006, 3970010, 3970014, 10066033, 10066036, 10243880, 14010207, 14010209, 14010287, 14016376, 14016379, 10054727, 14088528, 14088548, 14088552, 14093638, 14101148.

12.2.2.4 Stroke must match block.

12.2.2.5 No 400 or larger cubic inch parts allowed.

12.2.2.6 Maximum compression ratio is nine to one (9:1), no tolerance. Compression ratio checked using Whistler and cubic inches checked using pump, OR by visual inspection of part and/or casting numbers, pistons, etc (track option which method is used).

12.2.2.7 Flat top or dish pistons only, no gas ported pistons.

12.2.2.8 OEM or OEM appearing replacement steel crankshaft only – cannot be lightened.

12.2.2.9 No aerowing, bullnose, knife edge, undercut or drilling of second or third rod throws.

12.2.2.10 OEM or OEM appearing replacement steel rods only – GM 5.7", 6" or GM Vortec rod part number 10108688 allowed.

12.2.2.11 Cap screw allowed.

12.2.2.12 No splayed main caps.

12.2.2.13 Conventional flat tappet cam and lifters only, cannot alter lifter bores.

12.2.2.14 OEM firing order cannot be changed (GM: 1-8-4-3-6-5-7-2).

12.2.2.15 May use oil restrictors. 'Wet' sump oiling system only.

12.2.2.16 Steel oil pans only. Racing oil pans allowed.

12.2.2.17 Mandatory 1" inspection hole in all pans - no obstructions to crank and rods. (On any new motors built after Sept 21 2014)

12.2.2.18 Accumulator allowed, must be mounted under hood.

12.2.3 CYLINDER HEADS:

12.2.3.1 Steel only.

12.2.3.2 Must be unaltered approved OEM and minimum 76 cc combustion chamber (GM).

12.2.3.3 Only GM OEM approved head numbers are: 14079267, 3986336, 3986339, 3986339X, 3986388, 3932441, 376445, 3928454, 3932454, 3876487, 3973487, 3973487X, 3973493, 3951598, 468642, 330862, 333882, 3998920, 3998991, 3998993, 3998997, 3970126.

12.2.3.4 Maximum size valves on these heads are 2.02 inch intake and 1.60 inch exhaust.

12.2.3.5 May use Stock Replacement (SR) cylinder heads: Engine Quest (EQ) GM part number CH350I, (EQ) Chrysler part number CH318B, World Products Ford part number 53030 - 1.250 inch (± .015 tolerance) maximum O.D. valve springs.

12.2.3.6 All SR heads must remain as produced, seat angles and valve sizes cannot be changed: three angle valve job only (absolutely no casting removal in valve pocket of EQ or World Products head, for any reason); Ford - no SVO heads; Chrysler - no W-2 heads, 360 cubic inch heads only.

12.2.3.7 No porting, polishing or unapproved alterations allowed to any cylinder head or intake, disqualification and loss of all points for the season and a 30-day suspension.

12.2.3.8 Guide plates, screw-in shouldered studs (GM 0.375 inch max) and polylocks allowed. No stud girdles.

12.2.3.9 Steel roller tip rocker arms allowed. GM - 1.250 inch (± .015 tolerance) maximum O.D. valve spring, no beehive valve springs allowed.

12.2.4 INTAKE:

12.2.4.1 Unaltered, approved OEM cast iron, low-rise, two or four barrel intake. Only unaltered (no porting or polishing) aftermarket aluminum intakes allowed are: Weiand GM #7547, #7547-1; Ford #7515, #8023 or #7516; Chrysler #7545, #8022; Edelbrock GM #2701; Ford #7121, #7181, #7183; Chrysler #2915. (four barrel intake not IMCA compliant)

12.2.4.2 Intake manifold may use 4 to 2 barrel adapter, maximum 1.20" thick, including gaskets. (NOT IMCA Compliant)

13. CARBERATOR:

13.1 602 CRATE ENGINE:

13.1.1 Must use same Rochester 2G Series (2G, 2GC, 2GV) carburetor.and Speedway Motors carburetor adaptor, part #135-3502G

13.2 BUILT ENGINE:

13.2.1 Unmodified Holley 0-4412C, 0-4412CT, 0-4412S or 80583-1 2 barrel 500 cfm

13.2.2 Rochester 2G Series (2G, 2GC, 2GV) carburetor. Except: booster I.D. may be machined to 0.25 inch, venturi I.D. machined to 1.375 inch and throttle bore I.D machined to 1.6875 inch on Rochester carburetor. 0.625 inch minimum booster height on Rochester carburetor.

13.2.3 Air cleaner top/stud cannot direct air into carburetor.

13.2.4 No top flow air cleaner housings, cold air boxes or air cleaner duct work.

13.2.5 Must have air cleaner with an air filter element to act as a flame arrestor.

13.2.6 No ram air induction.

13.2.7 Choke plate may be removed.

13.2.8 One 0.25" (maximum) thickness gasket only on cast iron intake. Speedway Motors carburetor adaptor, part #135-3502G, allowed on GM aluminum intake.

13.3 Mr. Gasket carburetor adaptor, part #1933, allowed on Ford and Chrysler aluminum intake.

13.4 Maximum of two 0.100 inch thick carburetor gaskets on all aluminum intakes.

14. EXHAUST:

14.1 OEM cast iron exhaust manifolds only.

14.2 No center dump type manifolds.

14.3 Exhaust manifold can be ported and drilled to fit.

14.4 No adaptor allowed between manifold and head.

14.5 Exhaust must extend past firewall and turn toward ground. Must remain dual exhaust, no crossover or 'Y' pipes.

14.6 No pan evac systems, exhaust sensors or wrap.

14.7 Mufflers recommended.

14.8 602 Crate engine must use maximum 2" O.D. exhaust pipes.

14.9 Built engines may use maximum 2.5" O.D. exhaust pipes.

15. BATTERY/STARTER:

15.1 Each vehicle will be equipped with a master on/off switch. This switch must be within the driver's reach when belted in.
This switch must be clearly marked "OFF" and "ON". The switch must kill the engine while running at 3000 rpm.

15.2 One 12 volt passenger car battery only, must be securely mounted between and above frame rails, and positive terminal must be covered.

15.3 Battery must be in Marine type case if mounted in driver compartment.

15.4 Starter must bolt in OEM location.

15.5 Vehicle must have capability of starting without being pushed or pulled.

15.6 Vehicle must leave initial staging area on demand, unaided, or go to rear of that race.

16. TRANSMISSION/DRIVE SHAFT:

16.1 All forward and reverse gears must be operational.

16.2 Manual:

16.2.1 Must be unaltered OEM three or four speed, with minimum 10.5"steel/organic single disc-type clutch and steel pressure plate assembly inside an explosion-proof steel bellhousing - minimum 270 degrees around top of clutch and flywheel area.

16.2.2 Alternatively a ¼" steel plate shield / Blanket that follows the contour of the transmission hump. (Not IMCA Compliant)

16.2.3 No lightweight bellhousings. Hydraulic clutch release bearing allowed. Steel unaltered flywheel only - 16 pound minimum

16.3 Automatic:

16.3.1 Must be unaltered OEM, with unaltered OEM pump, original bellhousing and minimum 10" diameter torque converter containing a minimum of three quarts of fluid

16.3.2 Torque converter must have a minimum 0.125"plug. Must have approved scatter shield constructed of minimum 0.125" by 3" steel, 270 degrees around flexplate. Flexplate must be full, unaltered OEM, or OEM replacement.

16.4 No bump starts allowed

16.4 Drive shaft: Steel drive shaft (minimum 2.5" diameter) and slip-yokes only.

16.5 Drive shaft must be painted white.

16.6 360-degree driveshaft loop required and must be constructed of minimum 0.25"x 2" solid steel, or 1"tubing, mounted 6" back from front U-joint.

17. TIRES/WHEELS:

17.1 Unaltered OEM 205/75, or 205/70, 14" or 15" passenger car tires only.

17.2 Maximum 7" wide, 3"-4" offset, unaltered, D.O.T.-stamped steel wheels with standard bead bump - must weigh minimum 21 pounds

17.3 All four tires and wheels must be same size as displayed on sidewall of tire.

17.4 Tires must be inside body.

17.5 No snow, or all-terrain tires.

17.6 No softening, conditioning, sipeing / grinding or grooving

17.7 No wheel spacers.

17.8 1" O.D. steel lug nuts required.

17.9 No bleeder valves.

18. BRAKES:

18.1 Steel, unaltered OEM, or unaltered OEM replacement, operative four wheel, disc (front) and drum (rear) brakes, must match frame or rear end.

18.2 Hubs/rotors, axle flanges and drums may be changed to different bolt pattern and larger studs.

18.3 Full OEM backing plates, no aftermarket.

18.4 OEM or OEM appearing master cylinder must be in OEM location.

18.5 No antilock brake systems.

18.6 Steel brake lines only, must be visible.

18.7 No oil bath front hubs.

19. FRONT SUSPENSION:

19.1 All components and mounts must be steel, unaltered OEM, in OEM location and match frame.

19.2 OEM rubber A-frame bushings only. (UPPER)

19.3 Rubber, Nylon or Steel (Lower A frame bushings)

19.4 OEM or OEM replacement ball joints allowed.

19.5 No rebuildable ball joints.

19.6 No sway bars, spring spacers, chains or cables. Exceptions are: for 1978-1987 GM mid-sized metric frame, OEM upper A-frame may be replaced using aftermarket upper A-frame (steel or aluminum cross shaft allowed), must display approved" decal on top of rear tube of A-frame; bolt on spindle savers allowed.

19.7 Upper A-frame mount must remain OEM and cannot be moved.

19.8 No suspension stops of any kind allowed.

19.9 No weight jacks allowed.

20. SHOCKS:
20.1 One unaltered steel, nonadjustable, OEM-mount shock, in OEM location, per wheel. Example; but not limited to Afco , Bilstiene
20.2 All shocks must completely collapse at any time.
20.3 No external or internal bumpers or stops.
20.4 No bulb-type, threaded body, coil-over, air, or remote reservoir shocks.
20.5 Maximum 2.125" O.D. shock body.
20.6 No gas port, Schrader or bladder type valve allowed.
20.7 No coil-over eliminators.
20.8 Rear OEM shock location is 4.5" from bottom of housing to center of bolt hole, and centered on control arm bracket.

21. SPRINGS:
21.1 One steel spring per wheel only in OEM location.
21.2 Minimum 4.5" OD. Maximum 5.5" OD, maximum 14" free height, non-progressive coil springs only. (Racing Springs allowed)
21.3 Coils must be securely fastened to prevent from falling out when suspension is fully extended. However the fastener cannot imped the suspension from fully extending, limit body roll or induce weight transfer.
21.4 No spring rubbers allowed.

22. REAR SUSPENSION:
22.1 All components and mounts must be steel, unaltered OEM or OEM replacement, in OEM location and match frame.
22.2 No independent rear suspension.
22.3 OEM rubber control arm bushings only.
22.4 Center of rear lower control arm bolt hole must be 2.25" to 2.5" from bottom of housing.
22.5 No sway bars, panhard bars, spring spacers, extensions, chains or cables. No suspension stops of any kind allowed

23. REAR DIFFERENTIAL:
23.1 Nine inch Ford rear end allowed, but must be mounted like OEM rear end (centered) for that make and model.
23.2 OEM, or OEM replacement (recommended) solid steel axles only.
23.3 No torque dividing mini spools or differentials.
23.4 No floater rear ends.
23.5 Ring gear, center section and yoke cannot be lightened.
23.6 Must be welded spider gears, or mini spool.

24. FUEL SYSTEM:
24.1 Mechanical OEM type push rod fuel pumps only.
24.2 Racing fuel cell required, maximum 22 gallon capacity (Recommended:12 gallon), must be in minimum 20 gauge steel container.
24.3 Must be securely fastened in trunk above level of OEM trunk floor, behind rear tires, no further forward than factory seam where rear frame rail can be replaced, with minimum two solid steel straps around entire cell, 2" wide and .125" thick.
24.4 No fuel cells allowed over rear end housing.
24.5 No adjustable fuel cell mounts.
24.6 Metal firewall must be between driver and fuel cell.

24.7 All cell mounts must be steel, securely welded to frame/cage.
24.8 Fuel cell vents, including cap vent, must have check valves.
24.9 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.
24.10 Fuel lines through driver compartment must run through metal pipe or metal conduit.
24.11 One fuel filter allowed, cannot be in driver's compartment.
24.12 No cool cans.
24.13 No fuel pressure regulators.

24. FUEL:
25.1 Gasoline only.
25.2 Racing fuel allowed, No E85.
25.3 No performance enhancing or scented additives.
25.4 Fuel must pass both dielectric meter and chemical tests.

25. SAFETY EQUIPMENT:
26.1 Rules apply at all times vehicle. is on track.
26.2 Snell-rated SA2005 or SA2010 or SA2015 helmet required.
26.3 SFI-approved full fire suit required.
26.4 Fire retardant gloves, shoes and neck brace (or head and neck restraint) required.
26.5 Recommended: Fire retardant head sock and underwear, collapsible steering shaft.
26.6 Right and left seat head supports required if using head and neck restraint system.
26.7 Each car will have a 10 lb. minimum ABC fire extinguisher in their pits.