2024 USRA FACTORY STOCK RULES

Published November 13, 2023



THE RULES AND/OR REGULATIONS SET FORTH HEREIN ARE DESIGNED TO PROVIDE FOR THE ORDERLY CONDUCT OF RACING EVENTS AND TO ESTABLISH MINIMUM ACCEPTABLE REQUIREMENTS FOR SUCH EVENTS. THESE RULES SHALL GOVERN THE CONDITION OF SPEEDWAY EVENTS AND, BY PARTICIPATING IN THESE EVENTS, ALL RACEWAY COMPETITORS ARE DEEMED TO HAVE COMPLIED WITH THESE RULES. NO EXPRESS OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATION OF, OR COMPLIANCE WITH THESE RULES AND REGULATIONS. THEY ARE INTENDED AS A GUIDE FOR THE CONDUCT OF THE SPORT AND IN NO WAY ARE A GUARANTEE AGAINST INJURY OR DEATH TO PARTICIPANTS, SPECTATORS OR OTHERS.

USRA rules shall apply at all events. All participants are subject to the rules of the USRA and are expected to know the rules. These rules are a guideline as to what is permitted and/or not allowed. If these rules do not explicitly say it is permitted, then you must contact the USRA to identify if the part in question is permitted for competition.

References are made throughout these regulations requiring and/or recommending that particular products meet certain specifications. These products are manufactured to meet or exceed certain criteria and are labeled as such upon satisfying those criteria. Any change to these products voids that certification. Under no circumstances may any certified product be altered from the "as manufactured" condition or such certification is voided.

Changes and additions to the <u>2023</u> USRA Factory Stock rules are <u>underlined and highlighted</u> in red. Changes made for grammatical purposes or to improve clarity are not highlighted. All participants and officials are expected and required to additionally be familiar with the definitions and details in the USRA General Rules, Regulations & Procedures.

The United States Racing Association shall hereafter be simply referred to as the USRA throughout the rules description. USRA official(s) shall include all personnel employed as an official by the participating racetrack.

TABLE OF CONTENTS

Article 1: Body

Article 2: Roll Cages

Article 3: Frame

Article 4: Cockpit, Steering & Seat

Article 5: Suspension

Article 6: Electrical System

Article 7: Fuel System

Article 8: Tires & Wheels

Article 9: Braking System

Article 10: Drive Shaft

Article 11: Transmission

Article 12: Rear End

Article 13: Engine

Article 14: Weight

Article 15: Safety

Article 16: Protest Procedures

Amendments

ARTICLE 1: BODY

- 1.1 Any American-made stock passenger car body on a stock unaltered full frame are permitted. Chrysler and Ford unibodies are permitted. Camaros, Mustangs and station wagons are not allowed.
- 1.2 Stock appearing aftermarket plastic nose piece may be drilled for air but may not be extended with any type of material. Tail pieces with no holes are permitted.

- 1.3 Rear of car must be sealed off so that fuel cell is not exposed.
- 1.4 Spoilers (even if factory equipped), wings, skirts, valiances, air scoops, hood scoops or anything that alters the stock appearance are not allowed.
- 1.5 Bodies may be gutted and moved from the original body mount rubber bushing—no more than +/- one (1) inch and may not be less than five and one-half (5.5) inches from the ground.
- 1.6 A seven (7) inch maximum front visor is permitted. Side and/or rear window visors are not allowed. Sunroofs and T-tops must be reinforced and enclosed. Minimum of three (3) windshield bars must be in place in front of driver.
- 1.7 Nerf bars are not allowed. A maximum of one (1) inch wide by two (2) inch tall steel or Lexan rub rail is permitted on each side but must be bolted flush to the body.
- 1.8 All glass, plastic, upholstery, lights, mirrors and trim must be removed.
- 1.9 Must be stock appearing. Cutting, channeling, shortening and/or modifying of the body is not allowed. Excessive trimming of fenders and/or hoods is not allowed, Holes may not be drilled in the hood for air supply. Must maintain stock O.E.M. appearance. Hood and trunk openings must be a minimum of forty-two (42) inches centered between frame rails.
- 1.10 All doors, fenders and window openings must remain stock appearing with OEM dimensions and be the same on both sides. Straight slab sides are not allowed. Enclosed interiors and/or decking is not allowed. Front edge of rear deck may not be more than eight (8) inches forward of center of rear-end and must have at least a two (2) inch continuous drop from front to rear.
- 1.11 Rear of dash can be no more than thirty-five (35) inches from the center of the distributor or twenty-eight (28) inches from back edge of the center of stock hood. Original OEM front and rear firewalls must remain in stock location. The front firewall must match the frame used and the OEM mount must be visible. Firewall must be full and complete. Front OEM firewall may be replaced using steel fabricated firewall, 18-guage or forty-nine thousandths (0.049) inch thickness. Front firewall may be no further back than the rear of oval frame hole, must be vertical and at or between twenty (24) and twenty-six (26) inches tall. Interior must be completely sealed off from engine, ground and trunk.
- 1.12 Must have a complete stock OEM steel roof mounted in OEM location with OEM rake and angle for that model. GM "G" body cars may utilize an OEM fiberglass replacement roof. All openings should be covered as to isolate the driver (subject to track approval). Body should be maintained in such a manner as to keep a presentable appearance.
- 1.13 Stock appearing aluminum or steel hood and trunk lids are permitted. Hood may not have more than five (5) inches of rake from back of hood to front of nose.

1.14 Bumpers:

1.14.1 Stock-type rear bumper required. Fabricated front bumper may be used with the following conditions: (a) Bumper may extend past frame rails for support and reinforcement on cars with aftermarket nose pieces. Bumper must be behind nosepieces; (b) Bumper must be in stock location and capped to fenders on cars without aftermarket nosepieces—NO SHARP EDGES. Must have a minimum five sixteenth (5/16) inch diameter chain welded to front and rear of car and designed to allow tow truck to attach to them. Rear bumper must be covered by the tailpiece if the car has a tailpiece.

1.15 Appearance:

- 1.15.1 All racecars must be numbered with large legible numbers on both sides, on top and on the nose and real panels. Numbers on the sides of the racecar should be in contrasting color from the body and be at least four (4) inches thick and at least eighteen (18) inches high. Top numbers should be at least four (4) inches thick and twenty-four (24) inches high.
- 1.15.2 Officials reserve the right, in the public image of the sport and/or the USRA, to assign, approve or disapprove any advertising, sponsorship or similar agreement in connection with any event. All cars must be neat appearing and are subject to approval of officials to compete. By competing in an event, all drivers agree to comply with the decisions of officials in this regard.

ARTICLE 2: ROLL CAGES

- 2. 1 Must use a minimum ninety-five one-thousandths (0.095) inch wall thickness tubing with a minimum one and one-half (1.5) inch diameter for main cage and door bars. Offset cages are not allowed. Aluminum and/or other soft metals are not allowed. Roll bar connections must be properly welded. Front hoops are permitted. Adjustable bars and/or slip joints on the frame and/or roll cage are not allowed.
- 2.2 Roll bars within the driver's reach must be padded with an accepted material as determined by official(s). Fire-retardant material is highly recommended.

- 2.3 Installation and workmanship must be acceptable to official(s).
- 2.4 Full-perimeter four-post roll cage of continuous hoops, with an "X" brace in rear hoop is mandatory and front down bars must be tied together. Rear kickers must be used. Minimum tubing dimension for "X" brace and rear kickers are eighty-three one-thousandths (.083) inch wall thickness by one and one-quarter (1.25) inch diameter tubing.
- 2.5 Four point must be securely welded directly to frame. Must have a minimum of one (1) cross bar in top halo. A minimum of forty (40) inches between front and rear down bars at the top of the door panel is mandatory. Maximum of seventy-six (76) inches from back of engine to front edge of rear hoop is permitted and top halo must be no less than forty (40) inches across left to right and twenty-nine (29) inches front to back, from outside to outside.
- 2.6 With helmet on and driver securely strapped into the racing seat, top of driver's head must not protrude above the roll cage.
- 2.7 Three horizontal door bars on both sides are mandatory. Minimum of four uprights tied from frame to top door bar on driver's side, three on passenger side. Steel door plates made of eighteen (18) gauge or forty-nine one-thousandths (0.049) inch minimum thickness metal must be securely welded to outside of doors bars on driver's side.
- 2.8 Plate must cover the area from the top door bar to the rocker panel and from the rear down post to six (6) inches in front of the seat. Must be visible for inspection.
- 2.9 May have two bars for protection in front of radiator, behind bumper, within confines of body and no wider than stock frame horns. Absolutely no square tubing or galvanized pipe allowed in main cage.
- 2.10 Fuel cell protection bar is mandatory and must be mounted frame rail to frame rail and be no higher than the fuel cell and inside the trunk area. Maximum one and three-quarter (1.75) inches diameter by ninety-five one-thousandths (.095) inch wall thickness tubing required.
- 2.11 Frame "X" bracing and any added bars to the frame and cage may be a maximum of one and three-quarters (1.75) inch diameter by twelve one-hundredths (0.12) inch wall thickness round tubing only or one and one-quarter (1.25) inch by twelve one hundredths (0.12) inch wall thickness square tubing.

ARTICLE 3: FRAME

- Frame alterations are not allowed. Full and complete frame may not be widened, narrowed, shortened, lengthened, cut, bent and/or altered in any way to change suspension brackets.
- 3.2 Rear of frame behind upper shock mounts may be replaced with round, square or rectangular tubing.
- 3.3 Right rear frame may not be narrowed for tire clearance.
- 3.4 All bars which are forward of the roll cage must be lower than the hood.
- 3.5 Frame may not be cut for tie rod clearance or oil pan clearance.
- 3.6 Wheelbase must be a minimum one hundred seven and one half (107.5) inches. A maximum one (1) inch difference from side to side is permitted.

ARTICLE 4: COCKPIT, STEERING & SEAT

- 4.1 Loose objects and/or weights are not allowed.
- 4.2 Air bags are not allowed.
- 4.3 Rear view mirrors are not allowed.
- 4.4 Other than the gas pedal and brake pedal, any knobs, handles or levers used for adjustment of carburetor, ignition timing and/or brakes is not allowed.
- 4.5 Window nets and firesuits are required for both driver and passenger (if passenger is in car).

4.6 Floor Pan:

- 4.6.1 OEM floor pan may be cut in a straight line across to the other side and be replaced using steel fabricated floor pans made of eighteen (18) gauge metal or a minimum of forty-nine one thousandths (0.049) inch thick steel securely welded to the frame.
- 4.6.2 Must remain flat, OEM appearing from frame rail to frame rail and no higher or lower than frame rail except for a maximum eight (8) inch tall drive shaft tunnel (like OEM tunnel size).
- 4.6.3 Interior must be completely sealed off from engine, ground and trunk.

4.7 Steering:

4.7.1 Steering boxes must remain in stock location. All components must be made of steel, unaltered OEM and OEM location, and match frame. Tie rod end adjusting sleeve may be replaced with a five (5) inch steel

- tube replacement spindle with Speedway Motors raised cast part #91034501. Bolt-on OEM spindle savers are permitted.
- 4.7.2 Must remain on left side of cockpit (center steering not allowed). Rack and pinion is not allowed.
- 4.7.3 Aftermarket steering wheel and quick release steering coupling are recommended.
- 4.7.4 Quick steer boxes are permitted.

4.8 Seat:

- 4.8.1 Factory-manufactured racing seats are required and must be acceptable to official(s). Full-containment racing seats are strongly recommended. Homemade aluminum, plastic or fiberglass seats are not allowed.
- 4.8.2 Must be installed with minimum three-eighth (3/8)-inch fasteners and washers.
- 4.8.3 Area of seat where drivers shoulders make contact (where the shoulder harness passes through) may be no further back than twenty-five (25) inches forward of center line of rear-end housing.
- 4.8.4 Four-point quick release seat belt and harness required for both driver and passenger (if passenger is in car).

ARTICLE 5: SUSPENSION

- 5.1 Front and rear suspension must be stock unaltered OEM for that make and model of frame, ball joints, spindles and all components. Alterations to any part of the suspension and/or frame is not allowed. Aftermarket ball joints are permitted but must be stock OEM dimensions. Rebuildable ball joints are permitted. Upper ball joints may be any height but must be in the stock location.
- 5.2 Lower control arm bushings must be OEM design and may not be steel, aluminum or greaseable type or greaseable bolts. Forward or backward movement is not allowed.
- 5.3 Lower A-frame mount may not be notched for clearance. Factory spec upper control arms with lengths of eight (8) inches or eight and one-half (8.5) inches are permitted. Upper A frames must be within one inch of OEM offset.
- 5.4 Sway bars must be stock for make and model mounted in OEM mounts.
- 5.5 Suspension stops of any kind are not allowed.
- 5.6 Spring and/or suspension covers are not allowed.

5.7 Shocks:

- 5.7.1 Must have stock-type rubber ends and must be mounted in stock location on frame and rear-end. Shocks may not be spaced up or down.
- 5.7.2 Bulb-type, threaded body, coil-over and/or remote reservoir shocks are not allowed. Air shocks are not allowed.
- 5.7.3 External and/or internal bumpers and/or stops are not allowed. Schrader valves are not allowed. All shocks must collapse at any time and body must be made of steel.

5.8 Springs:

- 5.8.1 Maximum length of rear springs is fourteen (14) inches tall free height. Both rear springs may be different heights but must be in stock location. Minimum length of front springs is eleven (11) inches tall free height.
- 5.8.2 Springs must be a minimum of five (5) inches diameter.
- 5.8.3 Spring rubbers are not allowed. Progressive springs are not allowed.
- 5.8.4 Adjustable weight jacks of any kind are not allowed.
- 5.8.5 Must sit in unaltered top and bottom stock mounts.

ARTICLE 6: ELECTRICAL SYSTEM

6.1 Battery:

- 6.1.1 Battery boxes must be securely fastened. Adjustable battery boxes are not allowed. One (1) battery box per car allowed.
- 6.1.2 Must be securely mounted inside frame rails in trunk area only.
- 6.1.3 One (1) 12-volt battery only (16-volt batteries are not allowed).
- 6.1.4 Voltage generator in series with ignition system is not allowed. Voltage at distributor may not be more than at battery (12 volts).
- 6.1.5 All battery posts must be securely covered.
- 6.1.6 Alternators are allowed with a maximum 14-volt output, and must be wired directly to the battery (not to an ON/OFF switch.

6.2 Ignition:

- 6.2.1 One (1) stock-type distributor, module and coil are permitted in stock location only. Open circuit board modules are not allowed.
- 6.2.2 All ignition parts must remain out of the reach of the driver.
- 6.2.3 Kill switch is required and must be within easy reach of the driver. The switch must be clearly marked "OFF" and "ON."
- 6.3 Digital gauges and/or tachometers are not allowed. Cameras pointing to any moving or suspension parts are not allowed. Except for memory recall tachometer, electronic monitoring computer devices capable of storing and/or transmitting information are not allowed.
- 6.4 Traction control devices of any kind are not allowed.

ARTICLE 7: FUEL SYSTEM

7.1 Fuel:

- 7.1.1 Automotive or racing gasoline is permitted. Oxygenated fuel and/or methanol is not allowed but an Ethanol blend up to 15% is permitted. Additives of any kind are not allowed. Penalty for illegal fuel is loss of points, cash and awards earned for that event.
- 7.1.2 Blending with ethers or other oxygenates, aniline or its derivatives, nitro compounds or other nitro containing compounds is not allowed. Fuel is tested using a Digitron dielectric meter. It is the responsibility of the driver and/or owner to have fuel tested.
- 7.2 Electric fuel pumps and/or fuel injection are not allowed (even if factory equipped). Fuel pump must be in stock location for make. Fuel pressure regulators and/or fuel bypass systems are not allowed.

7.3 Carburetor:

- 7.3.1 Only an unaltered cast or aluminum Holley 4412 two-barrel is permitted. Ultra XP or HP carburetors are not allowed. Screw-in air bleeds are permitted. Powder coating and/or any modifications are not allowed. Choke plate may be removed.
- 7.3.2 A limit of one (1) standard fuel filter is permitted between the fuel cell and the carburetor. Cool can devices are not allowed.
- 7.3.3 A one (1) inch adapter plate or spacer is permitted. Distance between bottom of carburetor and top of intake manifold may not exceed one and one-quarter (1.25) inches. Spacer thickness must remain the same front to back and side to side.

7.4 Fuel Cell:

- 7.4.1 Must be securely fastened inside trunk and no part of fuel cell may be forward of any part of rear-end. Must be in steel container and mounted by minimum two (2) one-eighth (0.125) inch solid steel straps that are two (2) inches wide around the fuel cell. Must have check valve. Fuel cell vent (including cap vent) must have check valves, flapper spring or ball-type filler valve. Fuel lines passing through the cockpit must be enclosed in metal pipe or metal conduit. Fuel filters are not allowed in cockpit.
- 7.4.2 Must be visible for inspection by an official from the top through a removable stock appearing trunk lid.

ARTICLE 8: TIRES & WHEELS

8.1 Wheels:

- 8.1.1 May be a maximum of eight (8) inches wide, fifteen (15) inches diameter and made of steel.
- 8.1.2 One (1) inch steel lug nuts are mandatory on all wheels.
- 8.1.3 Bead locks and/or screws are permitted on right rear only.
- 8.1.4 Mud plug and wheel cover permitted on right rear only. Wheel cover must be made of plastic and be bolted. Dzus fasteners are not allowed. The ring that holds the wheel cover must be welded to the wheel in at least three places.
- 8.1.5 Bleeder valves are not allowed.

8.2 Tires:

- 8.2.1 Approved, unaltered Hoosier Racing Tire asphalt F45 pull-off racing tires or the American Racer G60-15 KK704 (Short, Tall or X-Tall) are permitted, Mixing of tires is not allowed. Must run either the permitted Hoosier or permitted American Racer tire for the entire event. Switching form one tire brand to the other during an event will result in a disqualification for that event.
- 8.2.2 Must have a durometer scale reading of 60 or higher for the Hoosier F45, or 50 or higher for the American Racer KK704. Subject to inspection before and/or after race. Any tire not meeting this durometer reading is subject to having a tire sample sent in for chemical testing.

- 8.2.3 Grooving, siping and/or grinding is permitted for American Racer KK704 <u>and Hoosier F45</u> tires. <u>Plastic</u> <u>wrap on tires is permitted in your pit area but must be removed before leaving your pit stall.</u>
- 8.2.4 Sidewall markings must remain visible. Buffing and/or removing compound designations is not allowed.
- 8.2.5 Softening is not allowed. Solvents of any kind are not allowed. Altering tires with any components or chemicals which alter the manufacturer's baseline settings of the tire are not allowed.

8.3 Tire Testing Procedures:

- 8.3.1 Random GC (gas chromatography) scans may be performed to identify illegal substances. A GC scan should always be at its peak in 19-20 minutes. If there is no peak, the driver will be disqualified. Driver may protest the GC scan results and request a mass spec test at the cost to the driver (usually around \$300). The mass spec test will reveal exactly what substance was used. The main peak of the tire should never be in half.
- 8.3.2 Traces of chemicals and/or excessive quantities of chemicals found to be outside the baseline on any test is automatic disqualification. First offense shall result in loss of all points accumulated for the season, forfeiture of all prize money earned for the event, up to a \$5,000 fine and an indefinite suspension from USRA-sanctioned events. Driver will not be permitted to compete in any future USRA-sanctioned event until fine is paid in full.
- 8.3.3 It is strongly recommended that all drivers use only soap and water. Baking tires will not eliminate traces of illegal substances. The USRA will aggressively test for illegal substances and will levy severe punishment for infractions.

ARTICLE 9: BRAKING SYSTEM

- 9.1 May use any (1) one master cylinder and must have at least three (3) working brakes. May use dual aftermarket master cylinders. Bias adjustment is not allowed.
- 9.2 Aluminum and/or composite rotors or calipers are not allowed.
- 9.3 Rear disc brakes are permitted. Must use steel stock-type rotors on rear disc.
- 9.4 Right front may be blocked. Electric and/or manual cut-off switches or valves are not allowed. Lighting of components is not allowed. One (1) manual brake shut-off valve is permitted underneath hood to the right front only (optional).
- 9.6 Aftermarket brake pedal assemblies are permitted.

ARTICLE 10: DRIVE SHAFT

- 10.1 Must be painted white, made of steel and a minimum of two (2) inches in diameter.
- 10.2 A loop is required and must be constructed of at least one-quarter (0.25) inch by two (2) inch solid steel. Loop must be mounted no more than six (6) inches from the front of the drive shaft tube.

ARTICLE 11: TRANSMISSION

- 11.1 Any stock-type automatic or cast iron three-speed OEM manual transmission is permitted. Four-speed and five-speed manual transmissions are not allowed. Must have single disc ten and one-half (10.5) inch clutch. Flywheel and pressure plate must be made of steel. Steel bellhousing is recommended. Flywheel must weight a minimum of fifteen (15) pounds. Manual transmissions must have an explosion-proof, SFI-approved bell housing. A minimum two (2) inch inspection hole is required.
- Automatic transmissions are permitted but must have stock appearing and working torque converter which is a minimum of ten (10) inches may not be smaller with ring around it. Automatic transmissions must have approved scatter shield or blanket. Scatter shield may be constructed of one-eighth (0.125) inch by three (3) inch steel, two-hundred seventy (270) degrees around flex plate or flywheel. Aftermarket bellhousings are permitted.
- 11.3 Direct drives are not allowed.
- 11.4 Transmission coolers are permitted but must be mounted in engine compartment.
- 11.5 Mini clutches are not allowed. Lightened flex plates are not allowed.
- 11.6 Torque converter must be made of steel.

ARTICLE 12: REAR-END

Must be stock for make and model. From control arm mount out, housing end may be modified with three (3) inches tubing to accept a nine (9) inch Ford axle. Must remain minimum GM width or maximum three (3) inches wider if Ford axles are used in GM housing.

- 12.2 Brackets, control arms and shock mounts must be in stock location. Center of rear lower control arm bolt holes may be no lower than two and one half (2.5) inches from bottom of axle housing and the same on both left and right. Trailing arm bolts must remain tight.
- 12.3 Trailing arm bushings must be OEM or OEM replacement with OEM design—NO ALTERATIONS.
- 12.4 May be braced for strength. Upper and lower trailing arms may be braced for strength.
- 12.5 Gears may be locked but must use unaltered stock ring gear carrier and may weld or use bolt-in locking blocks.
- 12.6 Full spools are not allowed.
- 12.7 Detroit lockers and/or torque-sensing devices are not allowed.
- 12.8 Spring cups on rear-end housing are permitted (optional) but must be welded flat on the center of the rear-end and be in line with the OEM spring mounts left to right. Both sides must match.
- 12.9 OEM spring mounts may be removed from the housing.

ARTICLE 13: ENGINE

13.1 OPTION #1 – Standard Engine:

- 13.1.1 Must be stock appearing. Any American make is permitted. May be a maximum of 364 cubic inches. Parts for 400 cubic inches or larger are not allowed. Absolutely no changes are allowed. Must use stock firing order for that make and model (GM to GM, Ford to Ford, etc.). Titanium is not allowed.
- 13.1.2 Only standard weight cast or forged (minimum 450 grams) four (4) equal valve relief flat top or dished pistons are permitted. Must use standard weight wrist pins (minimum 130 grams). Must use minimum 1.5mm, 1.5mm, 3mm piston rings.
- 13.1.3 OEM crankshaft or stock replacement only permitted and may not be lightened. Aero wing, bullnose, knife edge, undercut and/or drilling of second or third rod throws is not allowed. Lightweight, aluminum and/or fluid dampeners are not allowed. Only stock-type harmonic balancers are permitted.
- 13.1.4 OEM steel or stock replacement connecting rods only are permitted and must remain stock OEM length, pressed pins only, weight and shape. Lightening of any part(s) is not allowed. Cap screw rods are permitted.
- 13.1.5 Aftermarket water pump, mini starter, pulleys and oil pans are permitted.
- 13.1.6 Aftermarket power steering pumps are permitted but must be belt driven.
- 13.1.7 Stroking or de-stroking is not allowed.
- 13.1.8 Engine height and setback must be in stock location with a tolerance of +/- one (1) inch.
- 13.1.9 GM metric frame center of fuel pump must be located a minimum of one and three-quarters (1.75) inches in front of unaltered cross member.
- 13.1.10 Solid motor and transmission mounts are permitted. Full mid-plate is not allowed.
- 13.1.11 Maximum cranking compression of one hundred seventy-five (175) pounds with ignition off and engine turned over five (5) times.
- 13.1.12 Oil pans must have an inspection hole of at least one (1) inch diameter with nothing inside that may blocking inspection scope from seeing rotating assembly. If not utilizing a one (1) inch plug, oil pan must be removed at time of inspection.
- 13.1.13 Alterations to stock oiling system are not allowed.
- 13.1.14 Vacuum pumps are not allowed. Turbo and/or superchargers are not allowed (even if factory equipped).
- 13.1.15 Hydraulic cam and flat tappet lifters only. Maximum 0.450 lift at valve or 0.300 lobe lift at cam. Must maintain a minimum fourteen (14) inches of vacuum at 1,200 RPM. Maximum one and ninety-four hundredths (1.94) intake valve diameter, maximum one and one-half (1.5) exhaust valve diameter on Chevrolet engines.
- 13.1.16 Hollow valve stems are not allowed. Valve springs and retainers must be stock size and shape.
- 13.1.17 Push rods <u>may be any length but must be stock diameter</u>. Stamped steel 1.5 rockers on Chevy, 1.6 on Ford and Chrysler. Roller tips are not allowed.
- 13.1.18 Open chamber heads only are permitted and must be unaltered O.E.M. Porting, polishing and/or gasket matching is not allowed. GM cars must utilize 76cc heads. The only GM head numbers permitted are 14079267, 3986336, 3986339, 3986339X, 3986388, 3932441, 376445, 3928454, 3932454, 3876487, 3973487, 3973487X, 3973493, 3951598, 468642, 330862, 333882, 3998920, 3998991, 3998993, 3998997 and 3970126. Aftermarket head number allowed is Dart Part #10024360 or GM EQ Part #CH350I. Heads may be flat milled to minimum of 72cc. Screw-in studs and guide plates are permitted. 305 engines may use 305 heads (Vortec not allowed).

13.1.19 Only stock, unaltered low-rise cast iron or aluminum intake manifolds or approved aftermarket aluminum intakes are permitted. Approved aluminum intakes are GM – Edelbrock (#2101 or #2701) or Weiand (#7547 or #7547-1); Ford – Edelbrock (#2121 or #2181 or #2665) or Weiand (#7515 or #8023 or #7516); Chrysler – Edelbrock (#2176) or Weiand (#7545 or #8022). Porting, polishing, powder coating and/or port machining is not allowed. Bowtie, aftermarket, SVO and W2, marine, VORTEC or other special production intake manifolds are not allowed.

13.2 OPTION #2 – Crate Engine:

- 13.2.1 GM Performance Parts (GPP) CT350 "602" Chevy small block crate engine only. This engine may be rebuilt and is not required to be sealed however this engine must remain unaltered and must utilize the unaltered listed part numbers and follow the listed guide lines CT350 four-bolt-main block only, hypereutectic pistons P/N 12514101/88894280, GM Connecting rod P/N 10108688, cast iron crankshaft P/N 10243070,14088526, GM Balancer P/N 19260269/19301706. GM iron Vortec cylinder heads P/N 12529093/12691728, high-rise dual-plane intake manifold P/N 12366573, 602 valve cover P/N 25534359. Unaltered GM Camshaft P/N 24502476 Only, GM lifter P/N 523270, GM push rod P/N 14095256, GM Rocker arm P/N 10089648. Rocker arm nut P/N 19210731. GM Valves P/N 10241743 intake/12550909 exhaust. GM Valve spring P/N 10212811. GM valve spring retainer P/N 10241744. GM Timing Gears P/N 340235/10128346 and chain P/N 14088783. GM Oil pump P/N 93442037. GM head gasket P/N 10105117 must be utilized. Any other brand gaskets may be used for the rest of the engine. The block may be decked to a minimum 9.020 inch deck height. The crankshaft line bore may be corrected. Maximum cylinder bore size is 4.008 inches. Minimum crankshaft journal size .010 inches under standard size. The maximum cylinder head resurfacing allowed is .005 inches. All valve and seat size and angles must remain stock. Standard three angle valve job allowed. No modifications are allowed below valve seat land. Grinding, polishing, painting or coating of internal engine parts is not allowed. Lifter bore valley vent tubes are not allowed. Lifter bores may not be altered. Any steel 8-quart single kick-out circle track oil pan is allowed. If motor is not sealed than a minimum one inch sight plug above the oil level in the side of the oil pan is required. If not utilizing a one (1) inch plug, oil pan may have to be removed for inspection. All other 602 Crate Engine Specifications must be followed.
- 13.2.2 Must utilize one (1) unaltered cast Holley 4412 two-barrel only (see rule 7.3.1). Carburetors shall be subject to <u>protest</u>.
- 13.2.3 Must utilize soft-touch rev control box with a 6,200 RPM chip. This must always be out of reach of the driver but easily accessible for inspection. Altering the chip and/or ignition system in any way to defeat the chip rule shall receive a 30-day suspension for the driver, loss of all track, regional and national points for the night and a \$1,000 fine for the first offense. Second offense shall be a one-year suspension, loss of all track, regional and national points for the season and a \$2,000 fine.
- 13.2.4 A factory sealed crate engine is not subject to protest, but must have a prominently displayed "Crate" decal affixed near the A pillar. Any unsealed crate engine is subject to protest. Any driver running a sealed Crate Engine is not allowed to protest engines in that season. Any driver that protests a Standard Engine and switches to a sealed Crate Engine is eligible for protest.

13.3 Exhaust System & Mufflers

13.3.1 Only stock unaltered cast iron exhaust manifolds are permitted. Porting and/or grinding is not allowed. Welding exhaust pipe to manifolds or modifying OEM exhaust flanges is not allowed. Chevy center dump, Corvette, marine, LT1 or tubular steel-type manifolds are not allowed. Adaptors between head and manifold are not allowed and must be able to use all OEM exhaust bolt holes in head. Two-into-one exhaust are not allowed and X-pipes must remain duals. Oil pan EVAC systems are not allowed.

13.4 Cooling System

- 13.4.1 One (1) radiator that fits in original location without body modifications is permitted. Water pump mounted fans only are permitted. Electric fans are not allowed.
- 13.4.2 Aluminum pulleys and radiators are permitted.
- 13.4.3 Overflow tubes must be directed to the ground and inside of the frame rails.

ARTICLE 14: WEIGHT

14.1 The overall weight of the racecar must be a minimum of two thousand nine hundred and fifty (2,950) pounds and shall be measured at the conclusion of the race with the driver in the cockpit, wearing complete racing apparel.

- 14.2 Lead and/or ballast may be added only in the trunk area and/or motor compartment. May not be mounted in cockpit, outside of body or hood area, or on any rotating or suspension parts. Weight must be mounted to the frame, roll cage only.
- 14.3 All lead and/or ballast must be securely fastened and painted white with car number. Must be mounted with two and one-half (2.5) inch bolts per fifty (50) pounds of ballast. May not have more than twenty-five (25) pounds mounted on a single half-inch bolt.
- 14.4 **Courtesy Rule:** Any car with "minor" rule infractions will be allowed to race (1) event but infraction must be determined before the race. Cars with infractions are subject to a weight penalty.

ARTICLE 15: SAFETY

- 15.1 It is recommended that each racecar have built-in fire extinguishing equipment but cannot be of the dry powder type (must be Halon 1211 or equivalent).
- As part of their equipment in their pit area, drivers should have a fully charged dry chemical, Halon (or its equivalent) fire extinguisher. Ten (10) or thirteen (13) pound fire extinguishers are recommended.
- Driver must wear required helmet, fire suit and five-point safety harness whenever the racecar is on the racetrack. This includes during track packing, warmups, hot laps and races.
- 15.4 Helmets are mandatory and must be certified SA2015 or SA2020.
- 15.5 Helmet must accompany driver and racecar at time of inspection.
- 15.6 Complete one- or two-piece fire suits of a flame-retardant nature are mandatory.
- 15.7 Fire-resistant gloves and shoes are mandatory. Fire-resistant socks are recommended.
- 15.8 The use of a five- six- or seven-point driver restraint system (safety belts, sub-belt and shoulder harness) is required. Factory-type shoulder belts or straps are not allowed. The use of a seven-point driver restraint system is recommended.
- 15.9 Metal to metal buckles are required on shoulder and seat belts.
- 15.10 Shoulder harness must be mounted securely to the roll cage.
- 15.11 Where the belt passes through the seat edges, a grommet must be installed, rolled and/or padded to prevent cutting of the belt.
- 15.12 Driver restraint system must be less than three (3) years of age past the date of manufacture. It is recommended that the driver restraint system be no more than two (2) years past the date of manufacture.
- 15.13 Full-size window net mounted in the left side driver's window opening is required. Window net mounts must be welded to the roll cage. All bars around the driver must have approved roll bar padding. Approved racing arm restraints are recommended.
- 15.14 Fire-resistant safety neck collars are mandatory.
- 15.15 Absolutely no plastic except from edge of firewall to body skin and inner wheel tub to body skin.

ARTICLE 16: PROTEST PROCEDURES

- Any driver possessing a valid USRA license may have the opportunity to execute a protest on the cylinder heads and intake manifold, shocks or carburetor of another driver's racecar.
- 16.2 The first four (4) finishers in the main event must drive their racecars directly to the designated tech area at the conclusion of the main event and are subject to being protested by any other driver that finishes fifth or lower and finishes on the same lap as the winner. Any of the top four finishers that do not go to the tech area will be disqualified but are still subject to being protested.
- Protest must be made within five (5) minutes of the completion of the main event. Protested items must be removed at the racetrack and within one (1) hour after protested driver accepts the protest.
- 16.4 Driver making a protest must drive his/her race car immediately after finish of feature, under its own power, directly to the tech area.
- Protesting driver must present cash to official overseeing the tech area at the time that the driver declares his/her intention to protest. The cash price of a protest for cylinder heads and intake manifold shall be \$500. The cash price for a protest for carburetors shall be \$150. The cash price for a protest for shocks shall be \$100. Drivers protesting shocks may protest one or all of the shocks during a single protest. \$50 of the protest money shall go to the track officials and the remainder of the protest money shall go to the protested driver if found legal or returned to the protesting driver if items are found to be illegal. Any dispute on whether the protested part is legal or not legal will be settled by sending the part(s) to the USRA for a final decision. If the part is deemed illegal by the track officials then the driver

- being protested will have to pay for shipping the part to the USRA if they dispute that decision. If the part is deemed legal then the protesting driver will have to pay to have the part shipped to the USRA if they dispute the decision. Any part examined during the protesting procedure not related to the protest is still subject for inspection and may be deemed legal or illegal by the track officials.
- 16.6 Protesting driver shall select from the first four (4) finishers in the main event and must declare that choice to the official overseeing the tech area. If multiple drivers declare an intention to protest, the driver finishing farthest back in the main event will select first.
- 16.7 Driver is permitted one (1) protest per event, regardless of the outcome of that protest.
- Only drivers, car owners and officials are permitted in the designated tech area. Any other participants associated with that racecar that enter the tech area will be subject to disqualification, fine and/or suspension.
- 16.9 Only a driver may protest, and only the protested driver or car owner may agree to accept or refuse the protest. The first statement of acceptance or rejection of the protest by the protested driver or car owner is binding.
- 16.10 Any driver or car owner refusing to accept a protest will forfeit all cash and contingency winnings for that event.
- 16.11 Any driver or car owner refusing to accept a protest forfeits his/her right to make a protest in any USRA event for a period of one (1) year from the date of refusal.
- 16.12 Any driver or car owner refusing to accept a protest will forfeit all USRA points accumulated up to, and including, the event at which the protest was made.
- 16.13 First refusal to accept a protest will result in that driver and car owner being suspended from all USRA events for thirty (30) days and until a \$1,000 fine is paid and received by the USRA. Second refusal to accept a protest will result in that driver and car owner being suspended from all USRA events for one (1) year and until a \$5,000 fine is paid and received by the USRA.
- 16.14 In the event of a dispute between driver and car owner whether to accept or refuse a protest, the decision of the driver shall overrule that of the car owner.
- 16.15 Any driver found to be making a protest for another person will lose all USRA points accumulated to date for the entire season, all cash and contingency winnings for that event, and will be suspended from all USRA events for thirty (30) days and until a \$1,000 fine is paid and received by the USRA.
- 16.16 Driver may protest a maximum of three (3) times during the calendar year.
- 16.17 Driver must compete in a minimum of three (3) consecutive events prior to the event at which he/she makes a protest.
- 16.18 The USRA reserves the right to disallow any protest at their discretion.
- 16.19 Drivers utilizing a provisional starting position are not allowed to make a protest in that event.

AMENDMENTS

None.

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