

N.S.R.A.

North State Racing Association

2011 Street Stock Rules

A stock car class that is more technically proficient than the Bomber class, has no passenger, and that can be run competitively at a reasonable cost.

Ukiah Speedway
916 South Dora St.
Ukiah, CA 95482
(707) 462-7242

1 General

1.1 Glossary

1.1.1 OEM

Original Equipment Manufacturer: Manufactured by the original manufacturer.
The part may not be modified in any way that affects the performance specifications.

1.1.2 Stock

OEM, or after-market with performance specifications that are comparable to that of the OEM part.
The part may not be modified in any way that affects the performance specifications.

1.1.3 Technical Discretion

Inspection and assessment according to the spirit and intended purpose of the rules. The spirit, intended purpose, and safety concerns will always override the current wording of the rules.

1.1.4 Abbreviations

OD Outer Diameter Tube or hole cross-section diameter measured from the outer edges.

ID Outer Diameter Tube or hole cross-section diameter measured from the inner edges.

1.1.5 Measurement Units

A double-quote 2" inches

A single-quote 2' feet

cid cubic inch displacement

A super-script circle 90° angle in degrees

Sound level 90dBA A-weighted decibels

A measure of sound weighted by how it affects the human ear. 0 dBA is barely not hearable in a quiet room, and 140 dBA will cause pain.

1.2 Rule changes from the previous year are highlighted in gray (Spelling, wording, and format changes are not).

1.3 All rules are subject to Technical Discretion. A car that is found to be illegal will have a ticket written and must fix the problem in the time stated. If the problem affects performance, a penalty weight will be assigned in a specified position until the problem is fixed. If the problem is not fixed in the time allotted (tech discretion), additional penalties may be applied. These may include more weight or parts confiscation.

1.4 All parts must be OEM unless otherwise specified in these rules.

1.5 Cars that do not completely meet all rule specifications may be required to run a flat-type bomber-size restrictor plate; tech discretion.

1.6 Street Stocks are run with a driver and no passenger.

2 Model

2.1 **Year** 1960 to 2011, equipped with engines that comply to the current rules.

2.2 **Wheelbase** Minimum of 108". The length of the right and left side will be added then divided by two and the average length must equal no less than 108". Wheelbase must remain stock length for the chassis used.

2.3 **Includes** American made.

2.4 **Excludes** Pickups, 4-wheel drive, convertibles, American and foreign made sports cars, including Corvette & pickup parts.

2.5 Car must be constructed to start and move under its own power.

3 Weight

3.1 **Minimum Total** 3,250 lbs. car and driver up to 360 cubic inch engine size.

3.2 **Maximum Left Side** 56%.

3.3 Weights

3.3.1 Each 0 – 100 lbs. of weights must be secured to the car with either two (2) ½" bolts or four (4) ⅜" bolts.

3.3.2 Must be painted white and clearly marked with the car number.

4 Chassis

4.1 Frames must be OEM from bumper to bumper unless specified. GM to GM, Ford to Ford, Dodge to Dodge, etc.

4.2 Front and rear OEM sub-frames must be used on Unibody cars. Sub-frame connectors OK.

4.3 Rear clip may be tubing from axle housing to rear of the car.

5 Suspension

- 5.1 All suspension mounting brackets must be of original configuration, OEM components, and in OEM location for make and model unless specified. Front and rear spring shims OK.
- 5.2 Any spring, 5" diameter minimum, NO COILOVERS
- 5.3 If lowering blocks are used; they do not have to be equal thickness on both sides. Reversed shackles or multi-hole shackles OK. Sliders at rear of leaf-springs OK. Four-coil spring cars can use adjustable upper links or a single upper link with a panhard bar. Solid tubes only. No springs or rubber. Heim rod ends OK. The upper third-link arm can be mounted no farther forward than the lower trailing arm.
- 5.4 Any STEEL non adjustable shock mounted in stock position. NO air shocks. No bump stops anywhere.
- 5.5 After-market upper mounting bracket OK. Shock must stay inside the coil spring. No screw jacks.
- 5.6 Front sway bar must be stock-type bar; any mounting system; No heim rod ends.
- 5.7 OEM spindles, lower A-frames, and hubs ONLY.
- 5.8 Upper A-frames can be after-market, and the mounts can be after-market and moved.
- ~~5.9~~ Lower trailing arm mounts must be in stock location, but may be moved up or down. Lower trailing arm must remain OEM.
- 5.10 Rear bite bolts on four-coil spring cars only.
- 5.11 Ball joints optional; no uniballs. Tie rods and drag links must be steel. Adjustable drag links OK. After-market front end components OK; must resemble stock configuration; heim rod ends OK.

6 Body

- 6.1 Bodies must look like the car they represent. (GM to GM, Ford to Ford, Dodge to Dodge, etc.) 108" wheel opening centers will be the minimum. Aftermarket nose and tails OK. Body Donuts may be removed. Interior measurements from inside roof to inside floor must be stock.
- 6.2 The entire firewall and floor pan must remain stock, except where specified:
 - 6.2.1 Firewall and floor pan must be stock for the chassis and in stock position. Chassis may not be altered in width.
- 6.3 Interior gutting allowed, from front to rear bumper, except where specified.
- 6.4 No visible exterior cutting except wheel opening which may be cut for tire clearance-maximum 6". May interchange body parts of the same body style. Body must appear complete including front and rear bumper or grill covers.
 - 6.4.1 Doors, hood and trunk lid must be securely fastened.
 - 6.4.2 Hood and truck must open for inspection.
- 6.5 Stock appearing door panels and front fenders may be fabricated out of sheet metal; must remain in stock vertical height dimensions.
- 6.6 Windshield opening must remain stock size. Doors and window openings must remain stock size.
- 6.7 Full hood mandatory. May be constructed of steel, aluminum or fiberglass. Hole for air cleaner OK. 18" max round hole.
- 6.8 Must have BOTH front and rear bumpers. No sharp edges. 2" maximum pipe or tubing bumper allowed. No battering ram.
- 6.9 All lights and their socket assemblies must be removed.
- 6.10 Grills that shatter must be removed.
- 6.11 Remove all chrome accent trim.
- 6.12 Front and rear spoilers OK. REAR spoiler maximum 6" blade and no wider than the body. NO WINGS. Deck lid must remain closed and in stock position. No side boards or forward bracing. Standard OEM spoilers OK.
- 6.13 Car numbers at least 18" high by 3". Must be on both sides of car and on top also. Numbers must be contrasting paint to body.
- 6.14 Aluminum dash OK.
- 6.15 **Windows** No glass other than windshield. If glass windshield is used, must be secured with 4 brackets of minimum 1/8" x 1/4" steel material. REAR WINDOWS OK; MUST BE LEXAN.
- 6.16 Any car that does not meet the above body rules must run the same restrictor plate at required on bombers.
 - 6.16.1 **Restrictor Plate**
 - 6.16.1.1 Must use an N.S.R.A. designated restrictor plate placed on the manifold or above an adapter plate, with a non-tapered spacer plate above.
 - 6.16.1.2 Nothing that enhances the venturi flow below the restrictor plate is allowed.

7 Roll Cage

- 7.1 Roll cage compulsory. Must be four posts with dash bar and one diagonal and two back braces. Four horizontal door bars driver's side and passenger's side. Doors must be plated with 1/8" thickness of plate. Outside of door bars must be a maximum of 2" from inside of the outside door skin. Top bar must be a maximum of 2" from top of door. Minimum 1 1/2" tubing of .090" thickness. Minimum 1 1/4" of .095" tubing mandatory in main cage. NO galvanized or black iron pipe.
- 7.2 Extra safety bracing OK.
- 7.3 In all unibody cars, roll cage must have minimum 1/4" plate by 6" square under roll bar posts and under floor bolted through the floor pan, or equivalent. Four bolts with washers per plate. Roll cage must be attached to frame rail on full frame cars.
- 7.4 Gussets mandatory on roll cage corners and door bar corners.
- 7.5 Door bar vertical struts mandatory – Two per bar.
- 7.6 No chopped or narrowed cages.
- 7.7 Right and left side of cage to be no narrower than front and rear sub-frames: must be equal on both sides.

8 Engine

- 8.1 All engines used in competition must be able to be used in conventional passenger car without alterations. Castings and fittings must not be changed. No machine work on outside of engine or on front or rear of camshaft.
- 8.2 "Wet" systems only. No dry sump systems allowed.
- 8.3 Oil breathers on valley or rocker cover and pan allowed if vented to center or left side. Stock type oiling system only. Pick up location optional. Skid plate recommended. Engine oil cooler not allowed in driver's compartment.
- 8.4 Any distributor. No magnetos.
- 8.5 Cubic Inch Restrictions;
 - 8.5.1 Up to 360 cu. in car weight: 3250 lbs, 56% left
 - 8.5.2 361 cu. in and above must run an NSRA designated 1-3/8" tapered restrictor plate.
- 8.6 Engine may remain in stock position or may be placed back no farther than center of #1 spark plug hole in direct line with upper ball joint center line. No offset to the left to the center of the frame.
- 8.7 Solid motor mounts mandatory.
- 8.8 Any engine to any body as long as it complies to the model and year requirements as shown in 2.1 & 2.4
- 8.9 No aluminum blocks.
- 8.10 Heads
 - 8.10.1 No aluminum heads.
 - 8.10.2 Any steel heads are OK
 - 8.10.3 Push rod type engine only; no overhead cams.
 - 8.10.4 Stock replacement type heads OK.
 - 8.10.5 Screw in studs OK. Roller rockers OK. Stud girdles OK. No porting or polishing of any kind.
 - 8.10.6 Any cam shaft and lifters are OK
- 8.11 Manifolds
 - 8.11.1 Intake
 - 8.11.1.1 Aluminum manifold OK.
 - 8.11.1.2 No modifications of intake manifold.
 - 8.11.1.3 Maximum spacer height between carburetor and manifold is 2".
 - 8.11.2 Exhaust
 - 8.11.2.1 Cast iron exhaust manifolds or Headers OK. No cross-over headers allowed.
- 8.12 Fuel Delivery
 - 8.12.1 Two barrel carburetor, Holly 4412 only. Subject to tech.
 - 8.12.2 No internal grinding or alteration of carburetor.
 - 8.12.3 Two carburetor return springs, mounted in separate locations required.

9 Fuel and Fuel System

- 9.1 Fuel cell mandatory. Must be in metal container 22 gauge or heavier. Bottom of fuel cell to be no lower than 8". Fuel cells will be securely fastened down with at least four (4) straps of 1" x 3/32" minimum strap material. Must be protected by a minimum of 1 1/2" rear hoop.
- 9.2 No snap open gas caps. No rubber hose from spout to cell. Fuel cell vent must have a check valve: PCV valve is OK.
- 9.3 Fuel line must be no lower than the bottom of frame rails. If fuel line passes through driver's compartment, it must be housed in a metal tube.
- 9.4 No electric fuel pumps.
- 9.5 Gasoline only for fuel. Racing gas OK.

10 Radiator / Cooling System

- 10.1 Cooling system may be modified.
- 10.2 No anti-freeze allowed.

11 Electrical System

- 1.1 Battery to be securely fastened to vehicle with a minimum of two (2) 3/8" bolts and a minimum of 1" x 1/8" steel straps across the tops. If in driver's compartment, must be completely enclosed and vented.
- 1.2 Battery disconnect mandatory, and accessible from either side of car.
- 1.3 Kill switch must be mounted in center so it's accessible from either side window.
- 1.4 No radios or communications allowed in cars.
- 1.5 No electronic traction control devices.
- 11.1 Transponders
 - 11.1.1 Must be located 13' (\pm 1") from the tip of the front nose of the car with a clear sight of the track surface (sheet metal will degrade the signal). The mount must be \pm 1" so that the transponder log matches what is seen by the scorekeepers and fans.
 - 11.1.2 To pass technical inspection, the transponder must be in place prior to inspection and must remain in working condition for the rest of the event. **Measure and adjust your transponder mount before every event.**
 - 11.1.3 If the bumper-to-transponder distance changes for any reason (like damage, repair, or modification), either the front nose or the transponder mount must be adjusted to re-establish that distance before every event.

12 Steering

- 12.1 No rack and pinion steering.

13 Drive Train

- 13.1 Any STOCK passenger car transmission. Reverse gear must be workable. Tech approved scatter shield mandatory on manual transmissions. Clutch type transmissions, must be equipped with a minimum of 270° explosion proof bell housing. Must be equipped with a useable inspection hole.
- 13.2 Automatic transmissions must run stock torque converters. Protection between bell housing area over torque converter and floor pan or firewall must be provided with suitable material.
- 13.3 Steel drive shafts only.
- 13.4 Stock type clutch and pressure plate ONLY. No racing clutches such as multi disc, etc.

14 Rear End

- 14.1 Any Stock American factory production rear end. Trailing arms must be stock for frame being used.
- 14.2 Rear ends may be locked by welding or using a spool. Floating axles are OK. NO GOLD TRACKS, DETROIT LOCKERS, NO LIMITED SLIP UNITS OF ANY KIND.
- 14.3 Rear end must be centered axle flange to center line of frame.

15 Exhaust System

- 15.1 Exhaust must extend past driver's seat and be securely fastened.
- 15.2 Any mufflers that meet sound level of 90 dBA at 100'.
- 15.3 If muffler falls off, you will be penalized one position at finish of race. If car is too loud, you may be black-flagged.

16 Wheels

- 16.1 Steel racing wheels only. Maximum wheel width 8 7/8"
- 16.2 1" lug nuts and bolt size Optional; Tech discretion.
- 16.3 Brakes
 - 16.3.1 All cars must have four (4) wheel brakes in good working order.
 - 16.3.2 Type of brake system optional.
 - 16.3.3 Aftermarket pedal assemblies OK.
 - 16.3.4 Disc brake calipers must be cast iron and stock configuration; Piston size optional. Single piston only.
- 16.4 Tires
 - 16.4.1 Legal tires will be Goodyear 2363 27.0 x 8.0x15, A300 or Goodyear 2462 26.5 x 8.0 x 15, A300
 - 16.4.2 No tire softener or alteration of tires.

17 Safety

- 17.1 Five point racing harness, with minimum 3" lap belt, two 3" shoulder harness and crotch strap required. Must pass tech. Must be securely mounted to frame or roll cage. The two shoulder harnesses must be mounted with stress point at shoulder height.
- 17.2 Back of seat must be securely fastened to roll cage. Aluminum racing seat MANDATORY. Padded head rest MANDATORY; must be no more than 4" from driver's helmet.
- 17.3 Driver must be fully clothed with Nomex or equivalent fire suit designed for auto racing.
- 17.4 One (1) fire extinguisher of 2 3/4 pounds of commercial fire system with a readable gauge; must be mounted inside driver's compartment and operational from driver's seat.
- 17.5 No engine cooling systems, filter systems, or automatic transmission coolers allowed in driver's compartment.
- 17.6 Metal fire shield to completely separate driver from trunk, engine compartment and track.
- 17.7 Center of steering wheel must be padded with resilient material. Cage around seating area of driver must be padded.
- 17.8 Cable throttle not recommended. Toe strap or equivalent mandatory.
- 17.9 Driver must be able to reach shut off switch while belted in car.
- 17.10 SEMA approved racing safety net on driver's side mandatory. Fastening must be tech approved.
- 17.11 Drive line hoops 360°, 1/8" x 1" maximum of 12" behind from front u-joint. Drive line must be painted white.
- 17.12 Driver must wear 2000 or newer SNELL approved helmet. Full-face helmet with face shield mandatory.
- 17.13 Helmet, goggles, seat belts and window net must be in place when car enters the track.
- 17.14 Head and neck restraints are strongly recommended.
- 17.15 Exposed tow hooks front and rear.

18 Policy Statements

- 18.1 Any modifications not covered in these rules will not be allowed unless approved by Speedway Officials
- 18.2 Equipment will not be considered legal simply because it went through inspection unobserved or because a rule has not been written against it.
- 18.3 Cars are subject to inspection at any time.
- 18.4 Officials reserve the right to confiscate and hold any parts and/or equipment not conforming to the rules
- 18.5 Officials reserve the right to judge, decide, and establish what constitutes a legal part of car.
- 18.6 Weight and/or engine restrictor plate, which included amounts, sizes, placement and methods of use, may be added or adjusted at any time to benefit or equalize the racing program.
- 18.7 **OFFICIAL'S DECISIONS ARE FINAL**