

## PURE STOCK RULES

\*\*\* Please refer to General Section for rules and regulations applicable to all divisions\*\*\*

**DRIVER ELIGIBILITY:** This is an entry level race division. You (The Driver) must be at an entry level. If you have finished in the top 10 in points in the last four (4) years in any other division at CNS or have ever won a main event race in another division at CNS, you are not eligible to compete in this division. If you have ever raced any upper division, you are not eligible to compete in this division. Figure-8 drivers and Super Stock drivers may compete in the Pure Stock division if they have not won a feature event or won a championship in those divisions.

Track officials reserve the right to determine the competition readiness and safety of any car or driver. If a driver has competed in any racing class at any race track please contact the track via email with a summary of your resume prior to each racing season for review and approval. If you have won 5 or more pure stock feature events at Colorado National Speedway please contact the track via email with a summary of your resume prior to each racing season for review and approval. If you have ever won the Pure Stock Championship, you are no longer eligible to compete in the pure Stock division.

**RULES:** The rules are made for an entry level racer in an inexpensive stock class. "If it doesn't say you can...then you can't." CNS General Rules apply to this division.

**CAR ELIGIBILITY:** Any full frame, rear wheel drive American made car will be allowed 1955 to 1996; and 1973 to 1987 full size trucks (2-wheel drive only – no 4-wheel drive trucks permitted). No Nova, Camaro, or leaf spring cars allowed. This is an event for the basic "stock car" only. Only minor modifications or alterations may be allowed per the rules for these divisions. No rack & pinion steering.

### 1. THE CAR AND BODY:

- 1.1 The body must be complete bumper to bumper. OEM steel frame must be retained.
- 1.2 *OEM* stock steel un-altered floor pan, firewalls, trunk, and trunk floor other than those modifications permitted by these Rules (such as hoop and cabling through same). Any rusted or damaged pans or panels can be replaced with no less than 22 gauge milled steel. No aluminum panels allowed.
- 1.3 Cars must be strictly stock. No holes in hood or roof. Hood must be kept in place at all times. Hood and trunk must be pinned closed. (No Bolting of Trunk or Hood) No aluminum pins. Hood hinges are optional.
- 1.4 Front firewall must be sealed with no holes.
- 1.5 No lightening of body components, hood, trunk, doors, inner panels, fenders, and roof, except clearance for roll bars on front doors. For existing race cars that have excessive gutting, please contact CNS for options.
- 1.6 Front wheel wells may be removed.
- 1.7 All doors must be welded shut.
- 1.8 Door hinges must remain in place, except for roll bar clearance drivers side only.
- 1.9 A complete rear fire wall must seal the trunk area from the driver's compartment with no more than 1" gap for any component passing through the wall.
- 1.10 Cars must have complete stock bumpers (any make or model OK), with no additional bracing allowed. Welding or bolting a piece of flat stock from the end of the bumper to the fender to keep from hooking other cars is permitted.
- 1.11 Only stock type rear view mirrors are allowed, or aftermarket wide view mirrors, shatterproof glass or plastic, and no wider than 14". Pure Stocks may use side view mirrors.
- 1.12 Doors, Fenders, Floor pans, and Quarter panels may be repaired with 22-gauge steel, body panels must maintain stock shape. Rivets or welds must be used for repairs and not sheet metal screws.
- 1.13 All flammable materials/insulation, carpet, etc. must be removed from interior and under hood areas.

- 1.14 Must have at a minimum one (1) 2.5 lb. fire extinguisher fully charged with an indicator gauge within reach of driver securely mounted with a metal quick release bracket.
- 1.15 Side skirts not to exceed 4" in height will be allowed. Skirt must not be lower than the factory floor pan.
- 1.16 No aftermarket front or rear bumper covers allowed.

## **2. WINDSHIELD AND GLASS:**

- 2.1 All glass, head & tail-lights and exterior moldings must be removed.
- 2.2 A minimum of four (4) 3/8 inch vertical steel braces made from solid steel rod, equally spaced within 4" of each brace, must be installed in front of the driver for protection. Full 1/8 inch thickness Lexan windshield is optional with rivets securing it every 10".
- 2.3 Side windows and vent windows are NOT allowed.

## **3. ENGINE SPECIFICATIONS:**

- 3.1 Engine must be mounted in OEM rubber mounts, in stock location.
- 3.2 Engine must be stock type for make and model. GM for GM, Ford for Ford, etc.
- 3.3 No racing or performance parts are allowed within or external to the motor if not approved in these Rules; stock or Crate motors only.
- 3.4 Pre 1984 small block 350 only. 400 will be allowed in cars with a wheel base of 114 or greater. Ford or Dodge engine contact CNS.
- 3.5 No external vacuum pumps or pan-vacuum systems allowed.
- 3.6 All stock accessory pulleys, power steering, water pump, fuel pump, etc.
- 3.7 602 Crate engine is allowed. Must run 500 CFM Holley 4412.
- 3.8 Mandatory Adapter Kit –Unaltered Moroso part #64966. Only one spacer will be allowed between the intake and carburetor. Carburetor spacer must be used as manufactured with no alterations.
- 3.9 Maximum 10:1 compression no tolerance.
- 3.10 Valve size may not exceed 1.94 Intake and 1.52 exhaust.

## **4. CYLINDER HEADS:**

- 4.1 Stock heads only with no modifications.

## **5. INTAKE MANIFOLD:**

- 5.1 Cast iron only. Manifolds must remain unaltered, box stock only. No grinding, match porting or polishing allowed.

## **6. CAMSHAFT:**

- 6.1 420 maximum lift (measured at the valve) hydraulic flat tappet camshaft.
- 6.2 After-market valve covers allowed.
- 6.3 No lifter bore truing allowed.

## **7. EXHAUST:**

- 7.1 Stock cast iron with no modifications, as provided on engine. No center dump styles allowed.
- 7.2 Mufflers are not required but, the 95 DBA rule will be strictly enforced.

## **8. CARBURETOR:**

- 8.1 Stock Holly #R4412 2-bl 500 cfm or stock complete Quadrajets 2 or 4bl are the only legal Carburetors and must meet all stock specifications.
- 8.2 No polishing, grinding, or drilling (i.e. Metering block) of holes allowed.
- 8.3 Choke, blade, and rod may be removed.
- 8.4 Size and shape of boosters must not be altered.
- 8.5 Booster height must remain stock.
- 8.6 Jets of any size may be used.
- 8.7 Venturi area must not be altered in any way.
- 8.8 Casting ring must remain completely visible and may not be removed.
- 8.9 Base plate must not be altered in size or shape.
- 8.10 No holes may be drilled in the base plate.
- 8.11 Stock butterflies must not be thinned or tapered.
- 8.12 Screw ends may be cut even with the shaft, but screw heads must remain stock.
- 8.13 Throttle shaft must remain standard and must not be thinned, cut or nicked in any matter.
- 8.14 Maximum gasket thickness shall be .065.
- 8.15 No electric fuel pumps allowed.
- 8.16 Only open type sandwich style paper type air cleaners are allowed with a maximum diameter of 14" by 3" tall. No treating or soaking. Offset air cleaners are approved for distributor clearance only. No cool air boxes allowed or forced air induction. No air deflecting or attachments of any kind are allowed to be attached to the air cleaner top, bottom or filter. Any modifications to the air cleaner assembly or filter must be approved prior to use in competition.

## **9. ELECTRICAL & BATTERY**

- 9.1 Stock distributor and stock coil in stock locations.
- 9.2 Battery must be securely mounted, with hold-down strap over top or metal tie downs to frame or box. Battery must be a dry cell or in a battery box with a lid. If mounted inside driver's compartment, must be secured in a battery box or properly covered with rubber or other fire resistant material. Terminals must be secured and covered to prevent contact with frame or tie downs.

## **10. COOLING SYSTEM:**

- 10.1 Radiator only in stock location. Aluminum radiators are allowed.
- 10.2 No electric fans.
- 10.3 No engine coolers.
- 10.4 A minimum of one quart overflow catch-can must be installed inside engine compartment.
- 10.5 The use of ethylene glycol (anti-freeze) or similar products is strictly prohibited. Water Wetter, Motormax or similar are allowed and anti-rust products are permitted.

## **11. TRANSMISSION**

- 11.1 Transmissions must have all working gears. Transmission must remain stock. Automatic turbo 350 only. For Ford or Dodge please contact CNS.

## **12. REAR END:**

- 12.1 Stock rear end only. It must be for the year, make and model. No racing components are allowed.

- 12.2 Must be rear-wheel drive.
- 12.3 342 rear end gear to produce 5:19 final drive with turbo 350 transmission.
- 12.4 No direct drive final. Welded gears only.
- 12.5 No aluminum or carbon fiber drive shafts, yolks, or slip yolks allowed. Must have a minimum of two 2 inch wide X ¼inch thick 360 degree brackets placed around the drive shaft and fastened to floor or cross member preventing the shaft from being dislodged and dropping onto the racing surface.

### **13. BRAKES:**

- 13.1 No deviation from stock allowed; performance racing pads are allowed.
- 13.2 Brake pedal must remain in stock location and mountings.
- 13.3 Cars must have functional brakes on all 4 wheels.

### **14. FRAMES:**

- 14.1 Body and frame components must be the same. Manufacturer to manufacturer.
- 14.2 Complete bumper to bumper stock frame must be retained.
- 14.3 Stub repair must maintain OEM measurements and components.
- 14.4 Trunk floor must remain intact.

### **15. ROLL BARS:**

- 15.1 All roll bar material must be mild steel, 1 ¾inch O.D. x .090 wall or thicker. No pipe-fittings, No gas welding. Welds must run the full 360 degrees around each joint.
- 15.2 Roll bar must be a 4 post design and must be located directly behind the driver and forward to the 'A' pillar. The roll bar must be back-braced from the top of the bars to the rear of the frame.
- 15.3 Roll bar members may attach to either the frame or the floor. Roll bars may not be installed so that they effectively connect the front and rear stubs. For floor installations, attach members to ¼inch x 8 inch x 8 inch or larger steel plates securely bolted or welded to the floor.
- 15.4 "Petty" bar may be installed and attached forward to the right 'A' post of the cage only.
- 15.5 Four horizontal door bars on each side must be used for driver protection, spaced equally apart. Driver's side deflector plates are required, located outside left door bars and foot protection bars, minimum 1/8 inch steel plate welded to roll bars. Plating must meet Track Official's approval.
- 15.6 Front and rear hoops are allowed but cannot be outside of car body or rear filler panel. Hoops may not extend more than 2 inches in front of radiator. Factory radiator supports / bracing may only be removed to allow for front hoop installation. Radiator support is recommended if it is removed, a maximum of 1 inch tubing will be allowed for a support. For those cars without a front hoop, factory radiator supports / mounts must remain in place. Front hoops must be installed with rear bracing at an angle down to the frame horns. Front and rear hoop are permitted but are not allowed to connect to or pass through front radiator support or rear body panel.

### **16. SUSPENSION:**

- 16.1 All chassis components must be unmodified original OEM type or direct service replacements for the vehicle year, make, and model claimed. This applies to all front and rear suspension components. There will be no altering of mounting points or made for racing components.
- 16.2 Urethane or rubber bushings in suspension components must be utilized. No metal or mono ball bushings allowed.
- 16.3 No modifying of the suspension allowed
- 16.4 All shocks must be stock type shocks in stock mounting location. No adjustable or aluminum shocks.

- 16.5 1 1/8"sway bar max diameter stock. One sway bar adjustment bolt will be allowed on the left front end link. No made for racing sway bars; they must be stock.
- 16.6 No spring jacks, no coil over, or overload springs allowed. No adjustable ball joints or adjustable suspensions.
- 16.7 12" springs, all 4 corners, all cars. Spring may not be cut or altered in any way. Spring must measure 12" when removed from car.

**17. SPINDLES:**

- 17.1 Stock spindles only.

**18. STEERING:**

- 18.1 Stock steering system only. Factory steering column may be removed and 3/4"steel shaft installed.

**19. WHEELS & TIRES:**

- 19.1 Steel wheels with backspacing of 3 inches is mandatory on all 4 corners of car. Wheel spacers are not allowed.
- 19.2 Oversize lug-nuts recommended on all wheels.
- 19.3 Maximum wheel width of 8 inches.
- 19.4 CNS mandatory tire is the Hoosier 8"Comanche.
- 19.5 Tires will be limited to 4 tires per event (2 rights and 2 lefts).
- 19.6 No tire treatments or softeners allowed.
- 19.7 The top 3 Main Event finishers must run the same tires in the next scheduled race (both qualifying and competition).
- 19.8 **No tire bleeders allowed.**

**20. WEIGHT (Note: Weight *MUST* be posted on Passenger A-Pillar!)**

- 20.1 1. Cars with a wheelbase over 110" minimum weight with driver before the race must be 3500 lbs. Maximum left side weight is 53%. 602 crate motor weight 3450 lbs with driver before race.  
2. Cars with a wheelbase 110" or less minimum weight with driver before the race must be ~~3550 lbs.~~ **3500lbs.** Maximum left side weight is 53%. 602 crate motor weight ~~3500 lbs.~~ **3450lbs.** with driver before race.
- 20.2 Any added weight must be bolted directly to the frame or suitably supported by body panels with backing steel plate, or encased in steel and welded to frame rails. Any added weight in the driver's compartment must be approved by CNS Officials.
- 20.3 Ballast must be painted white with car number clearly painted or stamped on it.

**21. FUEL:**

- 21.1 No fuel additives. No nitrous oxide, oxygen containing compounds, or any other additives will be allowed.
- 21.2 91 Octane Pump gas or CNS race fuel only.

**22. FUEL TANK:**

- 22.1 Fuel cells are required, and must be securely mounted in the trunk.
- 22.2 Fuel cell must fill from inside the trunk –No holes in trunk.
- 22.3 Vent tubes must exit outside of car.

22.4 No fuel lines in the drivers compartment.

**23. RADIOS:**

23.1 The use of two way radios are not allowed during any actual heat - or main event.

23.2 Raceceiver technology is required.

**24. MISCELLANEOUS:**

24.1 GoPro or similar cameras are permitted within vehicles: secured with safety cables and mounted within the vehicle body.

24.2 Data acquisition modules are permitted within vehicles if securely mounted and not usable for two-way communication.

24.3 SEATS AND SEAT BELTS: An Aluminum race seat securely mounted to the cage is required. All cars must be equipped with a 5 point racing type seat belt and shoulder harness, which must be connected to the frame or cage, in good condition. Seat belts must be a minimum of 3" wide. Shoulder and submarine strap shall be a minimum of 2" wide. Quick release metal-to-metal buckles are mandatory. Belts must be tagged 2014 or newer for the 2018 season. It is suggested that belts be changed every 3 years. Any belts with cuts or frays are unacceptable. Driver must be securely fastened into seat with belts adjusted.

24.4 WINDOW NETS: All cars will be required to run an approved window safety net. Window net must be large mesh 12" minimum length. Window nets will fall down and will snap with a seat belt snap on top front corner of window.

24.5 RUBRAIL: Rub rails with a maximum size of 2" x 1" may be installed at the widest point of the body, touching the body during its entire length, wheelwell to wheelwell. It must be painted the same color as the background it touches and be as inconspicuous as possible, with bolts or screws countersunk and all corners well rounded.

24.6 **Previous Pure Stock Champions are ineligible to race in the Pure Stock Division.**