

# 2023 Bomber Rules

The bomber/cruiser Division is meant to be a fun, affordable & safe entry level racing class. These rules are designed to encourage a safe, competitive class while keeping a limit on spending. In no way will the rules be interpreted to allow a car that is technically superior to dominate the class or to be constructed in an unsafe fashion that poses a danger to the operator or other competitors. Any driver found outside the parameters or spirit of these rules will be sternly dealt with and faces fines, disqualifications and possible disbarment.

Interpretation of any or all of the rules is at the sole discretion of Alien Motor Speedway and its tech personnel. Let's keep it in the spirit of what these rules are designed for. Thank you in advance for your cooperation!

## The word "STOCK" means: unaltered and as originally produced; including aftermarket replacement parts.

#### **DRIVERS & SAFETY:**

- The minimum age for a driver is 15, unless approved by Track manager. All required documents, including minor waiver, must also be completed. Passengers, if applicable, must be minimum age of 15, with properly signed documents.
- RACEceiver is **MANDATORY** for driver.
- Solid bars running from top to bottom of windshield are **MANDATORY**. Bars must be solid, hollow tubing not allowed.
- Window nets are **MANDATORY** for driver and or passenger.
- Helmets must be SA2005 or better.
- Complete single- or double-layer fire suit is **MANDATORY**.
- Racing shoes, neck brace and gloves are **REQUIRED**, no tennis shoes or open toe shoes of any kind.
- 5 point harness belts are required must be in date, belts must be in good condition, no rips, tears or excessive sun fading. NO expired belts allowed.

#### VEHICLES:

- Domestic full-size two-wheel drive passenger cars only, to include station wagons, El Caminos and Rancheros. NO pickup trucks, vans, jeeps, sports utility or convertibles.
- Any American or foreign made compact car, with a maximum of four cylinders, is eligible. No turbo, superchargers, or rotary engines will be allowed to compete. The major mechanical components of the vehicle are to remain OEM.
- All glass, lights, chrome trim, mirrors, and plastic must be removed from the interior and exterior.
- All combustible interior to be removed.
- Stock Steel unaltered floor pan, firewalls, trunk, and rear wheel wells must be retained. Front wheel wells may be removed/on non-unibodied cars- The stock floor pan must remain intact for driver and front passenger compartment. The rear floor pan and firewall must be replaced with sheet metal if it is open or has been removed.
- Aluminum racing seat(s) **MANDATORY**, must be bolted to the floor pan and or cage.
- A/C, heaters and smog devices must be removed.
- No fuel lines allowed in driver's compartment.
- Factory stock fuel tanks in stock location or fuel cells, inspected and approved by tech only.

#### **BODY & CAGE:**

- All doors will be welded, bolted or chained shut.
- Front and rear bumpers are mandatory. Bumpers must be safety chained to the chassis.
- Stock appearing aftermarket plastic nose or tail piece is allowed.
- Spoilers not allowed
- A 7" maximum front visor is permitted
- A minimum of a six (6) point cage roll bar is **MANDATORY**.
- OEM body panels only Steel No aluminum panels of any kind hood, trunk etc. No reinforcement of any kind will be allowed.
- Driver's side door specs: 3 horizontal bars, from upright to rear upright of cage. Ladder bracing
  and gussets required on all door bars. 1/16" steel plating on driver's side <u>REQUIRED</u>. If a
  passenger seat is installed, passenger side door <u>REQUIRED</u> to have the same 3- bar
  configuration.
- Passenger must be provided with a "hang on" bar. This may be mounted from the dash, floorboard or door bars, and must be accessible to passenger while belted in. Location cannot impede entry or exit of passenger from the car, and cannot pose a risk to the passenger, in the event of an accident.
- All racecars MUST be numbered color contrasting to body with large, legible numbers on both sides, on top and on front and rear bumpers as follows:

Doors- 18" tall x 4" thick numbers

Top- 24" x 4" thick numbers

Front and Rear- 6" x 2" thick numbers

• No trimming of manufacturer's structural body metal allowed, except for roll cage fit.

#### **SUSPENSION & POWERTRAIN:**

- All 8-cylinder engines can be no more than 360 cubic inches.
- Muffler(s) must be 12" past driver's seat and soundly attached **MANDATORY**. No mufflers no racing!
- Intake manifolds must be cast iron OEM. No aluminum intakes will be allowed
- Must have stock exhaust manifold(s).
- No roller cams and or rockers of any type allowed.

- No center bolt valve cover heads allowed.
- All powertrain items to be factory stock for the particular model Ex: GM to GM, Ford to Ford etc
- Rear end gears are to be in between 208:1 to 411:1
- Vehicle must start under its own power and have both forward and reverse motion, as well as adequate four-wheel braking ability. OEM front disk brake upgrade is permitted.
- Normally aspirated engines using carburetor or factory fuel injection only. The following 2 carburetors may be used: Stock unaltered Holley number 4412 no 4412xp (illegal) or Rochester 2 barrel unaltered. Carburetor adaptor can be no thicker than one inch.
- Carburetor to oil pan, water pump to rear differential cover will remain stock in nature, Cam limit is set at 4.50 lift. No split duration.
- Compression cannot be more than 9-1. No dome pistons of any kind.
- Brakes and suspension will remain factory issued.
- No adjustable or racing suspension. Modifications are not allowed (ie. Spring spacer, axle tie down, weight jacks, etc.)
- All suspension must be stock or stock appearing (coil and leaf) Springs must be the same height side to side, no taller than 14" and a minimum of 5" diameter. No racing shocks of any kind. Stock only.
- All automatic transmissions must have a stock torque convertor. No stalls or 10" convertors.
- All standard transmission must use OEM standard clutch plate. No race clutches allowed.
- Absolutely no brake bias adjusters or shut offs are allowed, no ABS. All 4 brakes must work
- Nonadjustable aftermarket pedal assemblies are allowed.
- 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 frame or suspension is not allowed.
- No aluminum or titanium components allowed.
- All suspension bushings must remain OEM rubber type bushings with OEM inner steel sleeve attached to OEM rubber. No forward or backward movement allowed.
- Non adjustable tubular aftermarket upper A-arms are permitted but must match factory specs for frame being used.
- Shock mounts must be in factory location.
- Steering boxes must be OEM and in the OEM location.

### **ELECTRICAL & IGNITION:**

- Battery boxes must be securely fastened, with rubber or plastic covering the terminals
- Kill switch is required and must be in easy reach of the driver, clearly marked "OFF" and "ON"
- Must be OEM distributor and ignition. No aftermarket modules allowed of any kind.
  - GM external coils are not allowed on v8 and v6 cars but are allowed on 4 cylinder cars.
- Digital gauges are not allowed. Except a memory recall tach.

#### WHEELS & TIRES:

- Steel spoke wheels are allowed. <u>No aluminum wheels</u>. Wheel offsets are optional. The maximum rim width is 8 inches. One inch lug nuts are mandatory.
- Bead lock rims may be used on the Right side of car only (passenger side)
- DOT Street tires- no mud or snow tires no grooving with a maximum tread contact width of 7 inches. No mix matching of sizes, all 4 DOT tires must be the same size. Stock OEM 205,215,225/70 or 75 series 14" or 15" passenger tires are permitted.
- Racing Tires- American Racer G60-15 KK704 or Hoosier G60 racing tires are permitted.
- Mud, Ice/Snow, Exotic tread gumball tires are not allowed
- Grooving and or siping is permitted on race tires only.
- Softening is not allowed

#### BALLAST:

- The recommended ballast to be used is extra roll cage bars or other types of reinforcement.
- Any removable ballast mounting is subject to Tech approval. A ballast weight attached to the car must be painted white and the car number painted on it. A \$25 fine will be assessed to the driver if the ballast is lost on the racetrack

#### WEIGHT:

- All V-8 cars must weigh 2850 pounds after main event with the driver.
- All 4-cylinder cars must weigh 2350 pounds after main event with the driver.
- All cars will be weighed the first time on the track, and randomly during the season.