

# **2017**

# **Bomber Rules**

# 1 General

## 1.1 Glossary

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 Inner 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, Ci = volume in cubic inches Psi = pressure in pounds per square inch, Rpm = revolutions per minute, 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.

1.4 Bombers race with both a driver and a passenger sitting side-by-side and facing forward in the car.

1.5 The passenger must be at least 18 years of age. A photo ID is required of passengers.

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

1.7 No traction control (TC / ETC) devices are allowed in any part of the car.

## 2 Models

2.1 Year -1960 or newer, American made full size passenger cars

2.1.1 Includes: Station Wagons, El Caminos, Rancheros

2.1.2 Excludes: Pickups, Convertibles, 4-Wheel drives, Vans

2.2 Wheelbase 108" to 128", ±1/2" of the stock wheelbase

## 3 Weights

3.1 Minimum Total, Coil spring cars – 3,300 lbs., Leaf spring cars – 3400 lbs., 3 link rear suspension- 3500lbs, At all times.

3.2 Maximum Left Side 53% At all times

## 4 Chassis

4.1 All parts must be OEM and of the same manufacturer.

4.2 No modifications or cutting unless otherwise specified.

4.3 No modification to widen or narrow the cross-members fuel pump clearance, steering clearance and exhaust clearance okay must pass tech..

4.4 The chassis may not be stiffened or reinforced in any way except as specified.

4.5 May have a front hoop made from up to 1 1/2" OD .125" thick tubing, with no more than two (2) uprights. This is meant to be stiff enough to protect the radiator, but not so stiff that it becomes a car damaging battering ram.

**4.6** May have a rear hoop made from up to 12/3" OD .125" thick pipe or tubing, with no more than four (4) uprights. This is in addition to the required fuel cell guard (see §9.2.7).

**4.7** Must have exposed tow hooks or straps on the front and rear. Chain or cable must be strong enough for a quick tow around or off the race track.

## **5 Suspensions**

### **5.1 Springs**

**5.1.1** Front springs may be stock, or after-market with a minimum diameter of 5".

**5.1.2** Rear springs may be stock or after-market with a minimum diameter of 5". Aftermarket rear leaf springs are allowed but must be multiple leaf no mono leaf springs.

**5.1.3** Adjustable spring buckets are allowed on the front suspension only.

**5.1.4** Front Camber, Left side maximum 1 degrees and Right side maximum 5 degrees

**5.1.5** Shims are allowed.

**5.1.6** No weight jacks.

**5.1.7** No lengthened rear shackles.

### **5.2 Shocks**

**5.2.1** Must be stock.

**5.2.2** Must be mounted in the stock locations with OEM mounts and fasteners.

### **5.3 Sway Bar**

**5.3.1** Must be stock.

**5.3.2** All thread allowed.

**5.3.2** Bolts allowed.

## **6 Bodies**

**6.1** The make and model of the body and all parts must be the same as the chassis.

**6.2** Must be complete with all stock body parts, including the hood unless tech says otherwise.

**6.3** No modifications or cutting unless otherwise specified.

**6.4** Floor pan and firewall must remain stock.

**6.5** Must be stock height from the rocker panel to the roof.

**6.6** A minimum of 5" at center of cross member under the engine.

**6.7** All original flanges must be maintained.

**6.8** After-market rear tail pieces are allowed.

**6.9** Anything that may shatter or break off during the normal course of racing, such as lights and their socket assemblies, all chrome and trim or plastic grills must be removed.

**6.10** Interior must be stripped.

**6.11** The hood and deck lid interiors may be stripped for safety.

**6.12** Doors must be welded, bolted, chained, or riveted shut. Door skins may be .040" thick steel or aluminum sheet metal.

**6.13** Inner front fender may be removed.

**6.14** Wheel opening tire clearance must be within 6" of the tire.

### **6.15 Rear Spoiler**

**6.15.1** Optional, but must be a single blade, may not exceed 6" in height, may be no wider than the stock quarter panels, and must be attached directly to the body (no openings between the blade and the body).

**6.15.2** No forward bracing or side panels.

### **6.16 Bumpers**

**6.16.1** Must be OEM. After-market front noses allowed.

**6.16.2** Interchanging the same type is allowed.

**6.16.3** No cutting or lightening.

**6.16.4** After market stock appearing ok.

### **6.17 Rub Bars**

**6.17.1** Optional single horizontal 1” wide x 2” high bar for each side to protect the bodywork.

**6.17.2** Must be mounted flush to the body.

**6.17.3** End mount points must be within 6” from the end of the bar.

**6.17.4** Ends must be closed and angled or turned into the body.

**6.17.5** No sharp edges or protruding ends that might be hooked.

## **6.18** Windows

### **6.18.1** Windshield

**6.18.1.1** Must be safety glass, Lexan, or metal screen mesh.

**6.18.1.2** Must be braced by an inside vertical metal strap at least 1” wide x 1/8” thick mounted as close as possible to the center of the windshield.

**6.18.1.3** Safety glass must be additionally secured by 4 brackets a minimum of 1” wide x 4” high x 1/8” thick.

**6.18.2** Rear window openings must be either open or covered with lexan.

**6.18.3** Side windows must remain open.

## **6.19** Paint

**6.19.1** Any image or content visible on the car is subject to the approval of the track officials.

### **6.19.2** Car Numbers

**6.19.2.1** Must be a contrasting color and easily readable by the track officials. Do not use reflective or silver paint or tape (like duct tape) as it can not be seen at night. **6.19.2.2** Top (oriented to the right side) and side numbers must be at least 18” high with a line width of at least 4”, and must be preceded by a 6” top-aligned letter “A” for A-Bomber or “B” for B-Bomber. The preceding “A or B” is in addition to any letter used after the number to distinguish it from a car that already has that number.

**6.19.3** Front and rear numbers are required and must be at least 6” high with a line width of at least 1”.

## **7** Roll Cage

**7.1** The purpose of the roll cage is to protect the driver and passenger from injury during a crash.

### **7.2** Material

**7.2.1** Roll bar tubing from 1 1/2” to 1 3/4” OD .090” thick.

### **7.3** Design

**7.3.1** A full four-point cage over and around both the driver and the passenger.

**7.3.2** One (1) dash bar.

**7.3.3** Two (2) horizontal bars behind the seats.

**7.3.4** One (1) diagonal bar behind the seats from the top corner to the opposite bottom corner of the cage.

**7.3.5** Two (2) bars from the top rear of the car to the rear frame or trunk floor.

#### **7.3.6** Door Bars

**7.3.6.1** Four (4) horizontal and two (2) vertical bars on each door.

**7.3.6.2** The door inner panels may be removed to fit the door bars, but the bars must be flush with the inside of the exterior skin.

#### **7.3.7** Door Plates

**7.3.7.1** The driver and passenger sides must have door plates installed between the door bars and the door skin.

**7.3.7.2** Made from at least 1/8” (.125”) thick steel

**7.3.7.3** Must at least completely cover the door bar openings from the top to the bottom door bar, and from the rear to the front upright posts.

**7.3.7.4** If welded to the door bars, can be separate and must have 3” of weld for every foot.

**7.3.7.5** If bolted to the door bars, must be a single plate and mounted with at least 6 grade 5 3/8” bolts.

**7.3.7.6** Must be visible from the interior for inspection.

**7.3.7** Gussets for all tubing angles are strongly recommended, and may be required by technical discretion.

**7.3.8** Design, material, gussets, and welds are subject to technical discretion.

#### **7.4 Mounting**

**7.4.1** On a full frame chassis, each vertical cage and door post must be welded to a frame rail.

**7.4.2** On a partial frame or unibody chassis, each vertical cage and door post must be welded to a 6” square x 1/4” thick mounting plate. The mounting plates must be bolted through the floor pan to a matching plate underneath with at least four (4) 3/8” (grade 5) bolts with washers.

### **8 Engines**

#### **8.1 Block**

**8.1.1** No aluminum blocks or heads.

**8.1.2** No dry sump oil systems.

**8.1.3** No blowers.

**8.1.4** Must be in the stock location.

**8.1.5** Solid motor mounts OK.

#### **8.2 Specifications**

**8.2.1** Small Block Motors Only

**8.2.2** No Vacuum Rule

#### **8.3 Manifolds**

**8.3.1** No modifying or porting is allowed.

**8.3.2** Intake

**8.3.2.1** May be OEM cast-iron,

**8.3.2.2** or Edelbrock aluminum Performer manifold: Chevrolet #2101, Ford #2121, Dodge #2176,

**8.3.2.3** or aluminum intake GM #12366573 on a sealed 88958602 crate motor.

**8.3.3** Exhaust

**8.3.3.1** Must be stock cast-iron.

**8.3.3.2** Must have a maximum of 2 1/2” OD pipes (**single or double**).

#### **8.4 Restrictor Plate Motors**

**8.4.1** Must use a “Lakeport/Ukiah Speedway” designated restrictor plate (two (2) holes – 1.25” maximum ID) placed on the manifold or above an adapter plate, with a non-tapered spacer plate above.

**8.4.2** Nothing that enhances the venturi flow below the restrictor plate is allowed.

**8.4.3** If caught altering a restrictor plate driver will be disqualified and have a one year suspension from the date that finding occurs.

#### **8.5 Non-Restrictor Plate Motors**

**8.5.1** Maximum compression ratio is 10.50 to 1

**8.5.2** Maximum of 360 cubic inches,

#### **8.6 Fuel Delivery**

**8.6.1** Holley 4412 2-barrel allowed.

**8.6.2** No performance carburetors.

**8.6.3** No center pivot Holley 4-barrels.

**8.6.4** No fuel injection.

**8.6.5** Electric fuel pumps okay but a low oil pressure cut off switch must be in place so when motor stops the pump will quit pumping. Must pass tech.

**8.6.6** Must have at least two throttle return springs anchored in two different locations in opposite directions.

## **9 Fuels and Fuel System**

### **9.1 Fuel**

**9.1.1** Gasoline, race fuel, or E85 only.

**9.1.2** No Nitrous (N<sub>2</sub>O), or any other fuel or combustion **additive**.

### **9.2 Fuel Cell**

**9.2.1** Must be completely enclosed in a metal container made of at least 22 gauge.

**9.2.2** Must be mounted to the car in a very secure manner. Examples include mounting all four (4) top edges, or with four (4) under-slung metal straps at least 1" wide x 3/32" thick or equivalent. The mounting is subject to technical inspection and should remain secure even when damaged.

**9.2.3** The mounting area may be reinforced with 2" x 2" box tubing.

**9.2.4** No plumbers tape, chain, or bungee cords as mounting materials.

**9.2.5** Must be no lower than 10" from the ground.

**9.2.6** Must have an electrical grounding wire from the fuel cap plate on the fuel cell to chassis ground.

**9.2.7** Must have a fuel cell guard made of at least 1 1/2" OD .095" thick tubing that is as wide and as low as the fuel cell. **9.2.8** No rubber hose from filler spout to tank.

**9.2.9** The gas tank vent must have a check valve.

**9.2.10** If fuel lines are run through the driver's compartment, they must be enclosed in a protected conduit, such as a steel or race-rated tube.

### **9.3 Gas Cap**

**9.3.1** Must be strapped or chained to the fuel cell.

**9.3.2** Must be clearly marked with the car number.

**9.3.3** No snap open types.

## **10 Radiators / Cooling System**

**10.1** An after-market aluminum radiator is allowed.

**10.2** Only water is allowed in the cooling system. No anti-freeze, coolant, or any other liquid that may slick up the track when spilled.

**10.3** Must have a radiator overflow catch can of at least one (1) gallon capacity. No plastic jugs (anti-freeze type). **10.4** Valve cover and transmission breathers are recommended.

## **11 Electrical Systems**

### **11.1 Battery**

**11.1.1** Must be enclosed inside a covered and vented box that is mounted on the floor of the driver compartment.

**11.1.2** The battery box must be mounted with at least two (2) 3/8" or larger bolts attached to at least a 1 1/4" x 1/8" metal strap across the top.

### **11.2 Radio and communication**

**11.2.1** Race Receivers are required

**11.2.2** No other communication devices are allowed what so ever, including cell phones and Social media i.e.: Facebook live.

### **11.3 Transponders**

**11.3.1** Must be located 13' (± 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 ± 1" so that the transponder log matches what is seen by the scorekeepers and fans.

**11.3.2** 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.

**11.3.3** 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.

**11.4** H.E.I. will be allowed except model ITK127212 that has an adjustable timing control and fingered tipped related system in them. No other ignitions control system allowed.

## **12 Steering**

**12.1** The steering column must not have a locking device.

## **13 Drive Trains**

### **13.1 Transmission**

**13.1.1** Must have at least two (2) forward and one (1) reverse gearings in working order.

**13.1.2** Cars with an automatic transmission must use a stock-type torque converter.

### **13.2 Clutch**

**13.2.1** Must be a stock-type single-disk clutch with a stock-type pressure plate.

**13.2.2** Any bell housing around the clutch must be an approved explosion-proof type.

### **13.3 Driveline**

**13.3.1** Must have two (2) driveline hoops, near both the front and rear universal joints, that fully enclose the driveline (3 60°) and will keep a broken driveline from falling off. They must be at least as strong as 2" wide x 1/8" thick metal straps.

**13.3.2** The driveline must be painted white.

## **14 Rear Ends**

**14.1** Stock rear end mounts for make and model of car

**14.1.1** Ford 9" allowed, No floaters.

**14.2** All parts must use stock mountings.

**14.3** Differential - Differentials must be functionally open. No fully or partially locked or dynamically locking rear end systems of any kind are allowed.

### **14.4 Axle**

**14.4.1** No floaters

**14.4.2** No 3/4 ton

**14.4.3** Solid Axle (No gun drilling)

## **15 Brakes**

**15.1** Stock OEM steel brake calipers required in stock location. Aftermarket master cylinders allowed.

**15.2** Disc brakes permitted on all 4 wheels. Max 1 per brake per wheel

**15.2.1** One piece only, No Hats styles

**15.3** Aftermarket brake and clutch pedals allowed. Any type Brake adjusters cannot be in drivers reach.

**15.4** Brakes all four brakes must be in good working order for any race

## **16 Wheels**

**16.1** Any 15" diameter steel after-market made with 3/16" steel centers.

**16.2** Maximum width of 8".

**16.3** Left wheels may be stock but may not exceed the 8" width.

**16.4** Must have 1" lug nuts.

**16.5** No acorn lug nuts.

**16.6** 1/2" studs are recommended.

**16.7 Brakes** All four brakes must be in good working order for any race. After market pedals and masters ok.

**16.8 Tires**

**16.8.1** Goodyear Eagle 2863-300 and 2862-300 or American Racer MR970.

**16.8.2** Must have tread in safe condition.

**16.8.3** No slicks.

**16.8.4** No recaps.

**16.8.5** No altering, conditioning, or softening.

**17 Exhaust Systems**

**17.1** The exhaust pipe must run under the floor boards and extend past the driver compartment.

**17.2** Must have a muffler that dampens the sound volume to a maximum of 90dBA at 100' (Violators will be fined or penalized).

**17.3** You will be black flagged if you lose a muffler.

**18 Safety**

**18.1** All safety equipment is subject to technical discretion.

**18.2 Interior**

**18.2.1** The interior compartment must be completely sealed from the track with no open holes in the floor.

**18.2.2** All padding must be resilient and effective.

**18.2.3** Roll cage bars around the driver or passenger must be padded.

**18.2.4** The steering wheel center must be padded.

**18.2.5** Driver and passenger windows must have SEMA approved window nets mounted securely and for quick and easy removal from either the inside or the outside.

**18.2.6** Must have a fire shield between the drivers compartment and the fuel cell compartment made from at least 24 gauge sheet steel.

**18.2.7** A motor kill switch must be installed between the driver and the passenger. It must be clearly marked, easily identifiable, and easily accessed by the driver, passenger, or anyone reaching through from the driver or passenger window.

**18.2.8** Must have at least one (1) fire extinguisher of at least 23/4 lb., or a commercial fire system, mounted in easy access of the driver and passenger, and with gauges or status indicators readable from either the driver or passenger window.

**18.3 Driver and Passenger Equipment**

**18.3.1** Must have high backed aluminum racing seats.

**18.3.2** Head and neck restraints are strongly recommended.

**18.3.3** Must have a five (5) point SEMA approved racing harness at least 3" wide for both the driver and the passenger.

**18.3.4** All belts must have the manufacturer's date tag, be no older than five (5) years, and in good and serviceable condition.

**18.3.5** Both driver and passenger must wear a 1995 or newer Snell approved racing helmet with goggles or a face shield.

**18.3.6** Both driver and passenger must wear a complete (top and bottom) SFI approved fire suit in serviceable condition. There can be no holes or rips.

**18.3.7** Fire proof gloves and shoes are strongly recommended.

**18.3.8** Race-Receiver Required.

**19 Policy Statements**

**19.1** Any modifications not covered in these rules will not be allowed unless approved by Speedway Officials.

**19.2** Equipment will not be considered legal simply because it went through inspection unobserved or because a rule has not been written against it.

**19.3** Cars are subject to inspection at any time.

**19.4** Officials reserve the right to confiscate and hold any parts and/or equipment not conforming to the rules.

**19.5** Officials reserve the right to judge, decide, and establish what constitutes a legal part of car.

**19.6** Weight may be added or adjusted at any time to benefit or equalize the racing program.

**19.7** Racing grows steadily and with growth, new situations arise, therefore, rules must be adapted or revised periodically

**All Tech Officials' decisions are final**

**Thank you for racing with  
Lakeport and Ukiah Speedway**

**“B” Bombers**

**All “A” Bombers rules apply except listed below**

**Brakes**

No aftermarket brake pedals

Stock brake pedals, in stock location,

**Rear Ends**

Stock rear end only

Rear ends must remain same as manufacturer-

No Ford rear ends unless, it's a Ford manufacture car

**Restrictor Plate**

Must use a “Lakeport/Ukiah Speedway” designated restrictor plate (two (2) holes – 1.25” maximum ID) placed on the manifold or above an adapter plate, with a non-tapered spacer plate above.

**Shocks**

Stock shocks only

Steel only

No rebuild-able or adjustable shocks

No racing type shocks i.e. AFCO, Brilstein, Carrera, Pro Shocks or Qa1

**Speed / Time limit**

At Ukiah Speedway, you cannot go faster then 15.500 sec in any lap

At Lakeport Speedway, you cannot go faster then 15.000 sec in any lap

Officials / Management reserve the right to adjust time limit

If a driver goes over the limit more than twice he /she will be moved to the “A” Bombers

**Suspensions**

Stock Ball Joints, in stock location

Stock A Frames, in stock location

Stock Trailing arms, in stock location

**Race procedures**

If there are less than seven “B” Bombers, the “B” Bombers will run in the “A” Bombers main event, lining up behind the “A” Bombers. If a “B” Bomber intentionally holds up or blocks an “A” Bomber, he/she will be black flagged and suspended for two events.

**All rules subject to change**