

# 2023 THUNDER BOMBER RULES

- A. Car must be stock type passenger car or truck, station wagons, El Camino ranchero, or Nova are allowed. No commercial vehicles, convertible. (Camaro, Mustang) are allowed. 108" min. wheelbase are allowed.
- B. Cars must weight a minimum of 3,100 lbs., 3000 lbs. pre-1970 body, after the race with driver. Added weight must be bolted with at least 1 ½" bolt, if the weight is over 20 lbs. 2 ½" bolts required. Must be painted white with car number on them. No weight allowed in drivers compartment.

## Safety Requirements (Driver and Passenger):

- A. All cars must have 5-point racing seat belts bolted securely to the cage or frame and must be less than three years old.
- B. Racing seats required.
- C. Window nets are required for driver as well as passenger.
- D. Helmet must be full face SA approved. No motorcycle helmets.
- E. All drivers must wear driving suits made of fire-retardant material that covers the body with no tears or holes. Fire retardant gloves, shoes, and neck brace are mandatory.
- F. Passenger must follow same rules as driver.

### Body:

- A. Car must have OEM stock appearing roof and rear quarter tops.
- B. Stock bodies recommended but as per the cost of bodies, we are going to allow aftermarket bodies and must follow stock body dimensions (window openings, door heights, roof position, hood may not roll off at the nose and be flat with stock rake and the trunk as well and no flat sides) Must be made of sheet steal minimum 20 gauge.
- C. Windshield bars must be a minimum of  $\frac{1}{4}$ " diameter and securely mounted 4' on center for driver and passenger.
- D. Must have an open drivers' compartment. No decking of the interior allowed.
- E. Floor pans and front fire wall must be stock and in OEM location and sealed off from driver's compartment.
- F. Hood, trunk, and doors must be bolted or pinned shut. Hood must remain in place at all times.
- G. Rear fender wells must have at least the front half in place.
- H. Track reserves the right to request anybody panel to be replaced should it become a safety hazard.

### Suspension and Steering:

- A. Rear suspension parts must be strictly stock for make and model. Double pigtail springs only. Must have stock spring perch on rear-end in stock location.
- B. Racing springs allowed; conventional steel only no exotic materials.

- C. Leaf springs and racing leaf springs are allowed. Cars must use stock length springs and must have same amount of springs on both sides. Shackles must be stock length and same on both sides.
- D. Stock upper and lower A-frames only. No tube type allowed.
- E. Shocks must be stock for make and model only. No racing shocks allowed (ex: QA-1, AFCO, Pro, Bilstein not allowed.)
- F. Steering system must be completely stock for year, make, and model. No aftermarket gear boxes allowed.
- G. Steering shaft may be aftermarket and must have some kind of collapsible shaft between gear box and driver and may run quicksteer box with quick release steering wheel.
- H. Aftermarket power steering pump is allowed with or without remote reservoir.

## **Bumpers:**

- A. Front bumpers may be stock or fabricated out of 1 % x .095 tubing. May not be no wider than the frame horns and no sharp edges. May not be no more than 12'' overall height. May run full front bumper if running a nose piece only.
- B. Rear bumper may be stock or fabricated out of  $2 \times 4 \times 3/16$  rectangle tubing or  $1 \frac{3}{4} \times .095$  tubing. No more than 14" tall over all height. No wrap around bumpers allowed. Must have a minimum of a 4" steel strap from quarter panel to bumper and no sharp edges.
- C. Nerf bars allowed, must be bolted flush to body and no more than  $1 \times 2 \times 1/8$  rectangle allowed and cannot be connected to cage or door bars.

### Motor:

- A. Stock motor for make and model (GM-GM, Ford-Ford, Chrysler-Chrysler)
- B. 368 maximum cubic inch, no 400 or bigger blocks.
- C. Must remain stock bore and stroke combination
- D. No aftermarket cranks or rods, stock crank and rods only
- E. Pistons must be flat top w/ 4 equal valve relief of dish. No forged pistons.
- F. Stock cast iron or aluminum intake manifold or Edelbrock 2701 Weiand 7547 and/or 7547-1 will be allowed. No aftermarket, high rise intakes allowed. No porting, polishing, or port matching.
- G.No porting, polishing allowed headers are allowed any stock Manifolds are allowed
- H. Only hydraulic cam and lifters flat tappet allowed. No roller or solid lift allowed.
- I. Stock rocker arms only. No roller or roller tip rocker arms allowed. No stud girdles or poly-locks allowed.
- J. Must vacuum check at the intake manifold min. 15" at 1,00 RPM.
- K. Must compression check maximum of 175 lbs with 5 rotations.
- L. OEM/SR cylinder heads only. World Products 043600 or 043600-1 and Dart 10024360 are allowed. Screw in studs allowed without guide plates. No double humps or any closed chamber heads allowed including 040 and 041. No Vortech heads. No aluminum heads.
- M. No more than 1.94 intake and 1.50 exhaust valves. No angle milling, porting, polishing, or port matching allowed.

Open carburetors run what you want carburetor space no more than 1" thick no fuel injection

- O. Stock oil pans or claimer pans allowed. Must have 1" inspection plug. If you do not have an inspection plug, you may be required to drop the pan for tech.
- P. No titanium or aluminum components allowed.
- Q. Any pulley combination allowed.
- R. Any breather combination allowed.
- S. No crank case EVAC systems

#### Transmission:

- A. No standards allowed even if factory equipped.
- B. No power glides allowed even if factory equipped.
- C. OEM transmission only. Must be stock with a full working torque converter (stock appearing 11" minimum). No direct drives, valve pumps or bleeder style valve bodies. All gears must work and must be able to idle in all gears with foot on break.
- D. Transmission coolers allowed but must remain under hood and not in drivers compartment.
- E. Drive shaft must be steel and painted white with a loop 360 deg. around shaft connected to the frame no further than 6" behind front U-Joint. No chains for loops.

### Rear-ends:

- A. No 9" Ford rear-ends unless factory equipped.
- B. Stock for make and model. Any gear ration allowed if no altering of the housing is required.
- C. Axles may be locked by welding or mini spool. No full spools allowed.
- D. No posi-trac, limited slip, Detroit locker allowed even if factory equipped.

### **Brakes:**

- A. All cars must have OEM brake components. (rotors and calipers) with a minimum of three working brakes. (4 wheels is recommended).
- B. May run aftermarket brake pedal but with only 1 master cylinder.
- C. No bias brakes or brake adjusters of any kind.
- D. Rear discs brakes allowed. Must use OEM style steel rotors (Like 96 Camaro rear rotors) and calipers with bolt on or welded brackets. No racing rotors allowed.
- E. Brake test may be held at any time.

### Roll Cage:

A. Steel roll cage is mandatory. Constructed of a minimum of 1 % x .095 wall. Tubing, minimum of three door bars on both sides. No exceptions. A door plate welded to the outside of the door bars. Must have 2 braces to the front and rear and may go through the fire walls. Hallow must be at least 2" above drivers head. Roll bar padding required around driver and passenger.

### Fuel Tank and Fuel:

- A. Fuel cell in a metal can is required and must be securely mounted in the trunk.
- B. Pump or racing fuels are allowed.

#### Radiator:

- A. Only one radiator must be centered in front of engine.
- B. Aluminum radiators allowed.

## Battery and Ignition:

- A. 1 12-volt max. battery allowed. Must be securely mounted behind rear upright or in trunk and covered with rubber.
- B. No battery larger than 12-volt.
- C. Stock replacement ignition only. No DUI, MSD, Mallory, Excel, or any type of traction control, or Rev limiter allowed.

Wheels and Tires: dot tires are allowed

- A. Steel wheels only 8" maximum width. 1" lug nuts are mandatory, oversized wheel studs recommended.
- B. Hoosier asphalt pull off are allowed May grove, no sipping or doping, no new ones.
- C. Wheel spacers are not allowed with stock size studs.
- D. No beadlocks or screwing of tires to wheels allowed.

### Protest and Claim:

- A. Only Driver can protest of claim and must have money in the infield after the checkered flag and must present the money to the tech man. If a claim or protest is made you have 1 hour to complete the deal after the checkered.
- B. Any car on the lead lap may protest any car that finishes in front of them if driver refuses lose of points and money for the night

C.

- a. Engine C.I.D = \$200.00 \$50.00 goes to the tech man
- b. Wheelbase= \$50.00
- c. Engine Location= \$50.00
- d. Suspension= \$50.00
- e. Drive Train= \$50.00 unless torque converter is removed then its 150.
- f. Carb/Intake= \$50.00
- g. Tire or wheel= \$35.00
- h. General Rule= \$35.00 (non-disqualifiable)

Claim = you must finish no further than 5 positions behind the car being claimed. In the case of multiple claims, the driver finishing furthererest away from the car being claimed gets it.

The claiming car must pass tech on the part being claimed as well. If not, the claim is null and void. If the claimed car refuses:

1st offence = Lose of money and points for the night.

2nd offence = Lose of money and points for the night and suspended for 2 weeks.

No one can claim more than once per calendar year. If claim does not go through it is not considered a claim and does not count against claimer.

- 1. Motor Claim = \$500.00 and swap = \$50.00 goes to the track.
- 2. Shock Claim = \$25.00 each and swap
- 3. Spring Claim = \$25.00 each and swap
- 4. Distributer = \$50.00 and swap
- 5. Carburetor = \$150 and swap

Motor claim does not include any bolt on hardware.

If a driver wins a race he or she will start dead last the following race or next time said driver comes to race.

### 4 & 6 Cylinder Rules

- 1. Wheel well may be enlarged to clear tires.
- 2. Doors may be gutted to add door bars. Must have 4 driver side bars and 3 bars on passenger side.
- 3. FULL STOCK (stock appearing) floor pan back past the rear end. Patching or plugging may be steel, aluminum. NO TUBE CHASSIS ALLOWED!
- 4. FULL STOCK (stock appearing) Steel fire wall in stock location.
- 5. ALL body panels must be represented with stock appearance, may use steel or aluminum.
- 6. Rub rails "flush" against the door panels only ok.
- 7. NO changing of frames from 0" in front of the "A" frame to the back of the rear spring.
- 8. You must have a shield to completely separate the driver from the radiator, radiator must remain in the engine compartment.
- 9. CARBURETOR AND INTAKE: 4412 Holley 2 barrel or stock factory carbs, 2 barrel only. Bottom of carburetor can be no larger than 1 11/16" diameter. Must be stock Ventura 1 3/8". Gas tank must be in steel container in the trunk of the car. Fuel cell Mandatory. Pump gas or racing fuel only. No alcohol or Nitro or oxidizers of any kind. NO AFTERMARKET INTAKES. Stock intake only. The only alterations that must occur directly under the carburetor to allow for aftermarket carburetor. (I.E. 4412 Holley, etc.) STAY OUT OF THE RUNNERS. Two-inch spacers/adapter is allowed.
- 10. Battery MUST be in the rear of the car separated from the driver and COMPLETELY SECURED.
- 11. Door must be welded or bolted shut.
- 13. Motors: Stock block and stock heads, NO TURBOS, no stroked or de-stroked short blocks allowed. Stock crankshafts only (balancing allowed). NO lightened, knife edged, etc. cranks. Ford to Ford, Chevy to Chevy, and so on. Any length steel rod allowed. Any pulleys allowed. Engine must be in stock location, no moving it back. FLAT TOP or DISHED PISTONS ONLY! Head may be shaved any competition valve job is allowed. All angles must be concentric to the valve guide. Any diameter steel valve is allowed. Aftermarket roller lifters or cam followers allowed. Gasket matching or porting of any kind allowed in the heads and or intake other then what has been described. Must have 1" inspection plug in the oil pan for crankshaft inspection. Must be located with access for tech official.
- 14. TRANSMISSIONS: Factory stock automatic with stock factory torque converters. NO lockup converters allowed. Factory stock standard with all gears functioned including reverse. Any flywheel any safe clutch, pressure plate!! NO ram couplers.
- 15. Headers: Any header is allowed.
- 16. Wheelbase must be factory stock.

- 17. Wheels may not exceed 8" and must be steel! Grooving is allowed tire must punch 55 or higher. No more than 9" of tread width. BEADLOCK WHEELS ALLOWED ON THE RIGHT REAR ONLY. 1 INCH LUG NUTS MANDATORY.
- 18. NO four-wheel drives or engines in rear allowed.
- 19. SPRINGS: Springs may be after market. No wedge bolts or spring adjusters allowed. MAY USE SPRING SPACERS, Rear leaf spring cars are allowed lower/lift blocks and multi hole shackles. NO sliders or adjustable lowering blocks allowed.
- 20: CAMSHAFT: Any camshaft is legal.
- 21. SHOCKS: Must be stock. NO racing shocks. Must mount in stock position.
- 22. MUST HAVE RACING SEAT & SEAT BELTS. Seat & belts must be fastened to roll cage.
- 23. Rear body panel must be enclosed from deck lid to rear bumper.
- 24. WEIGHT:

6-cylinder 2800 lbs. and 4-cylinder 2300 lbs.

- 25. Drive shaft must be painted white. Must have drive shaft loop.
- 26. Stock front ends and stock swing arms must be factory stock only.
- 27. Brakes may have 3 or 4 working brakes NO adjustable proportioning valves allowed.
- 28. Fuel pumps may be stock or electric. If you have an electric pump, you must have an oil pressure shut off switch. 4 and 6 cylinders, only. No electric pumps allowed.
- 29: Rear-end must be stock OEM type rear-end. Locked rear-end are allowed 8 or 9 INCH is ok. Only applies for 4 and 6 cylinders.

NO TRACTION CONTROL OF ANY KIND.

30. May use a three quarters inch length shaft with quick release steering wheel.

After market ignition is ok for 4 and 6 cylinders.