

## 2020 Bomber Rules

The rules listed below are now being enforced and are to be added into the rule book for all drivers of the Bomber class to abide by. For questions contact the racetrack or the technical director. All cars must pass & meet track officials' inspections.

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ANYTHING NOT SPECIFIED IN THE RULES MUST BE STOCK.

- All equipment must be in original position from original manufacturer.
- Total weight with driver 3350 lbs.
- Full Containment Seat and Hans 3300 lbs. Must Have Both To Get Weight Break.
- 602 – weight 3350 lbs. – Rebuilt 602 add 50 lbs. - Must run 1850 carburetor & manifolds must the class specifications listed below. Weight maybe adjusted as necessary for competition at track managers' discretion. Must meet GM/Crate USA engine specs
- No 400-small block
- No Big Blocks
- Stock appearing manifolds, OK.
- Headers OK. No try (y) or neck down headers allowed on collector. Must be Inside frame. Must Add 50lbs
- American made 2 or 4 door sedan or station wagon with a minimum wheelbase of 108 inches.
- May run Metric Monte Carlo, Cutlass Supreme or Grand Prix.

- Camaro OK – Must retain uni-body unless noted in rule book.

### **ENGINE RULES:**

- Engine must be strictly stock for that make and model. No high output engines.  
Engine allowed .060 for bore. GM in GM, Ford in Ford.
- Cast factory pistons only. Hypereutectic stock replacement allowed.
- No fly cutting pistons, no racing rings.
- Piston in hole minimum .020 (piston head to block deck).
- Stock rods or stock production eagle rods. OK
- Engine must sit in stock location. NO tolerance.
- Press wrist pins only. After-market bolts OK
- Crankshaft: Cast only 49 lbs. minimum, balancing OK. Eagle crank. OK
- Eagle # 103503480 cast 2 pc. Rear Seal - Scat # 9-10442 2 pc. seal. OK
- Eagle # 103523480 cast 1 pc. Rear Seal - Scat # 9-10526 1 pc. seal. OK
- Stock valve covers, or aftermarket covers with breathers.
- Stock oil pan or kick out, oval track pan limited to, simple windage pan. No scrappers/multiple tray pans.
- All mufflers and pipe must be removed.
- Stock type distributor. May add external rev. limiter. Cannot be mounted in reach of driver
- May remove alternator.
- May run after market pulleys to accommodate belt fit.

### **HEADS:**

- Open chamber only 70 cc Min. Production Only
- Stainless valves OK. Max. .010 Stem. Stock Diameter Stem. No hollow stem.

- Valve spring 100 lbs. maximum (stock diameter and design only)
- No aftermarket retainers. (stock steel replacement OK)
- May have 3 angle valve job.
- 1" bowl cutting maximum. No modification to combustion chamber.
- Stock type rocker arms only, long slot OK. 1.5 only. No rollers
- Polly locks OK. Guide plates OK. Screw in stud OK.
- Vally pan OK

#### **CAM AND LIFTERS:**

- Stock style timing chain and gears. Single roll or double roll timing chain ok.
- Camshaft OK to degree: lift: intake .390, exhaust .410 Hyd. – "0" Lash. No centerline rules
- Stock balancer / SFI approved stock type preferred.
- Stock replacement lifters only. Must have stock horseshoe wire ring clip. Valve adjustment must be preloaded.

#### **Camshaft specs for Ford:**

- Lift: Intake .416, Exhaust .416 Hyd. – "0" Lash

#### **CARBURETOR:**

- Stock make and model. Choke parts may be removed. 1850 OK – Completely Stock. May add Metering Plate.
- One -1-inch Carburetor spacer & 2 gaskets, Max. total 1.35"
- May use fuel regulator.
- Fuel injection OK if OEM from factory. Engine must meet all other rules.

- Stock manifolds only for make and model. No modifications. No high rise or Bowtie. No Aluminum,

### **TRANSMISSION:**

Must match transmission used for year and model. No POWERGLIDES or racing style transmission, both standard & automatic. Stock diameter full working torque converters. No light weight or direct drive (all gears must be operable).

### **CLUTCH / FLYWHEEL:**

- Flywheel 14 lbs. Min. Stock type clutch & pressure plate must weigh 16 lbs. spring clutch or solid disc ok. No Aluminum parts. Clutch and Flywheel must weigh a combined minimum of 30 lbs.

### **REAR END:**

- Stock rear end for make of car only. LOCKED REAR ENDS, POSI LOCKS, or LIMITED SLIP OK. 9-inch Ford Rear End OK. Floater OK. No lightweight gears or axles of any kind allowed. Disc brakes OK. No brake adjusters allowed. No brake cut offs allowed.

### **CHASSIS / SUSPENSION:**

- Stock suspension for make of car. Upper tubular A-Frame 1" max difference between left and right side. Stock type lower A Frame only (NO racing)
- NO "four wheel" independent suspensions.
- NO ADJUSTERS, SPACERS OR SHIMS ALLOWED BETWEEN SPRINGS AND FACTORY MOUNTS
- RACING SPRINGS OK (DOES NOT HAVE TO HAVE PIG TAIL)
- REAR TRAILING ARMS CAN BE AFTERMARKET OR STOCK BUT MUST BE NON-ADJUSTABLE AND HAVE STOCK TYPE RUBBER BUSHINGS.

- REAR TRAILING ARMS MUST BE STOCK LENGTH
- NO OFFSET BUSHINGS, MONOBALLS OR HEIMS
- UPPER TRAILING ARMS TO BE 3" FROM CENTER OF HOLE TO TOP OF REAREND HOUSING (+ / - ½)
- CENTER OF AXLE TUBE SEAM TO CENTER OF UPPER TRAILING ARM BOLT TO BE 7 ¾" (+ / - ½)
- LOWER TRAILING ARMS MUST BE 2 ¾" FROM BOTTOM OF AXLE TUBE TO CENTER OF TRAILING ARM BOLT (+ / - ½)
- BOTH UPPER TRAILING ARMS SHOULD BE MOUNTED IN SAME LOCATION AND BOTH LOWER TRAILING ARMS SHOULD BE MOUNTED IN THE SAME LOCATION (NO OFFSETTING OF TRAILING ARMS, IF THE RIGHT SIDE IS 3 ¼ FROM THE BOTTOM OF REAREND HOUSING THE CENTER OF THE TRAILING ARM BOLT, THEN THE LEFT SIDE SHOULD ALSO BE 3 ¼)
- **STEEL NON-ADJUSTABLE SHOCKS IN FACTORY LOCATION ONLY. NO BUMPSTOPS ANY REBUILDABLE STEEL SHOCKS OK (NO SCHRADER VALVES OR PIERCING VALVE).**
- BOTH ENDS OF REAR SHOCKS SHOULD BE MOUNTED AT FACTORY LOCATION. MOUNTING EARS OF SHOCK MUST BE MOUNTED FLAT AGAINST FACTORY SHOCK MOUNT. (NO SHIMMING DOWN FROM FACTORY LOCATION)
- NO BUMPSTOPS
- LOWER END OF REAR SHOCKS MUST BE MOUNTED AT SAME HEIGHT OF REAREND.
- LEAF SPRING CARS MAY RUN LOWERING BLOCKS BUT CANNOT BE ADJUSTABLE.
- IF LEAF SPRING CARS HAVE ADJUSTABLE SHACKLES, BOTH SIDES MUST BE MOUNTED IN SAME HOLE AT SAME MEASUREMENT.
- REARENDS ON LEAF SPRING CARS MUST BE MOUNTED AT THE SAME LOCATION ON SPRINGS, NO LEADING OR TRAILING
- NO OFFSET CAGES, PERIMETER STYLE CAGE OK. A WEIGHT PENALTY WILL BE ENFORCED FOR ANY CHASSIS WITH OFFSET CAGE.

- No modifications of any kind (heating, cutting, spacers, jacks etc.)
- Control arm bushings and sway bar bushings, may be aftermarket polyurethane
- Sway bar optional

## **BODY:**

- All doors must be welded shut.
- All materials that would burn must be removed.
- All glass must be removed. \* INCLUDING REAR VIEW MIRRORS. \*
- Stock seat and head rest OK. Racing seat recommended.
- Seat must be bolted with a minimum of 6- 3/8 in. bolts to bars that are welded to roll cage.
- Must have 3-point quick release type racing seat belt and shoulder harnesses 3 inches wide, or belts recommended for Hans style devices, must be bolted to roll cage with minimum 3/8-inch bolts.
- 6-point roll cage required and must be welded to frame rails and all connections must be fully welded.
- All cages must be a minimum diameter of 1 ½ inches and minimum .090 wall thickness.
- A minimum of 3 horizontal bars is required in the driver door and a minimum of 2 in passenger door.
- Roll bar installation and workmanship must be approved.

- Additional bars may be added for driver protection only, must not alter stock flexibility of frame.
- Stock unaltered floor pan and firewalls must be retained.
- Trunk may be open / Rear of car may be OPEN
- Dashboard may be replaced with sheet metal. Dash may be altered with minimum modifications. May not extend dash.
- All holes in floorboard and firewalls must be covered with sheet metal.
- Complete bumper to bumper unibody must be retained.
- Stock bumpers or approved fabricated, bumper covers, and grill may be aftermarket, should be stock appearing. NO sharp edges or tire cutters.
- Bump bars OK must not extend past front & rear bumper
- May have radiator protection bar, cannot extend past front bumper.
- Must have wrecker pick up points front and rear.
- May run fuel tank safety bar at rear, cannot extend past bumper.
- Body parts may be fabricated from aluminum or steel but must retain as close as possible stock appearance.
- Interior may be boxed. Must have 1 ft. x 2 ft. access panel beside driver.
- 4" spoiler & Side boards OK

#### **TIRES:**

- Tires: ONLY TIRE ALLOWED Hoosier H500 (8.0/26.5-15 & 8.0/27.0-15 or 8.0/27.5.15)
- Steel wheels only, maximum 8-inch-wide, maybe aftermarket steel.

- Any offset wheel at any location. Oversized studs & nuts recommended.
- May run bead lock or new safety bead wheel.
- NO TIRE TREATMENT ALLOWED – Track reserves the right to cut tire sample at track discretion.
- Also, look at Protest section about Tire Protest

#### **SAFETY:**

- Fuel tank must be moved inside of trunk.
- Fuel cell highly recommended. Must be in metal can.
- Tanks must be securely mounted.
- Fuel line run through car must be in conduit or protective cover. Braded line OK.
- Approved fire extinguisher, 2 lb. WITH GAUGE required and must be securely installed in reach of driver. Must not be taped to bars.
- Battery should be located under hood or in trunk.
- Batteries must be in a containment box, securely attached to frame or roll cage allowed in driver compartment.
- Approved racing helmets and complete fire suit must be worn any time car is on track.
- Racing steering wheel with quick release permitted.
- Clutch type fans must be removed and replaced with straight blade fan for safety.
- Seats belts must have date code and be no older than 5 years.
- Window net required and must be in use any time car is on track.
- All race cars must by state law have a 10-lb. fire extinguisher with each car.
- All weights must be painted WHITE and have car number on them.
- All drive shafts must be steel and be painted White with car number on them.

**DRIVER:**

- BOMBER CLASS open to any driver of legal age.

THE ABSENCE OF A SPECIFIC RULE DOES NOT IMPLY APPROVAL, CONSENT OR PERMISSION REGARDING THAT SUBJECT. ANY QUESTIONS OR DOUBTS REGARDING SUCH MATTERS SHOULD BE DIRECTED TO RACETRACK OFFICIALS FOR A CLARIFICATION. TRACK RESERVES THE RIGHT TO ADD WEIGHT FOR ANY INFRACTION. TRACK MAY CHANGE RULES AT ANY TIME.