



BOMBER
2024 TECHNICAL RULEBOOK

BODY

1. All bodies must be stock appearing bodies.
 - a. Aluminum sides allowed.
 - b. Fenders and quarter panels may be cut for wheel clearance only.
 - c. Five Star "Street Stock" steel replacement body panels allowed – must be the 101S body package or individual items stock replacement parts.
 - d. There will be a weight penalty for any unapproved bodies. (Penalty TBD on a case by case basis.)
 - e. Roof- no lips of any kind.
2. Doors must be fastened in a permanent manner. Aftermarket nose and rear bumper pieces permitted.
3. Quarter panels must remain in original position. Cars with raised quarter panels or deck lids will be required to remove rear spoiler (at the track's discretion). 45 inches high at top of spoiler, including bracing.
4. Stock bumpers only.
 - a. No heavy pipe reinforcements behind bumper – lightweight tube bracing ONLY.
 - b. No push bars allowed in front of bumper.
5. Stock floor pan and firewall does NOT have to be retained.
 - a. All holes in floorboard and firewall must be covered with sheet metal.
 - b. Firewall may be cut for distributor.
6. Dashboard may be replaced with sheet metal.
7. Complete bumper-to-bumper uni-body must be retained.
8. Must have stock bumpers.
9. No bump bars of any kind.
10. May have radiator protection bar, cannot extend past front bumper.
11. Protests of the body must be made before the race.

FRAME AND SUSPENSION:

PENTON SUSPENSION RULES IN GENERAL RULES ALSO APPLY

1. Minimum wheelbase 105”.
2. All frames must be stock from clip to rear clip. No altering, shortening, or interchanging of any kind.
3. May relocate top A-frame. May run tubular top a-frames. Lower a-frame must be stock and in stock location.
4. Unibody car frame may be connected. Stock shape of unibody may not be altered in any way.
5. No reese bars, J-bars, torque links, or any other traction-enhancing device allowed.
6. Steel shocks ONLY. No coil-over shocks. No adjustable shocks. Schrader valves ok.
7. Stock type suspension. Leaf spring cars must have leaf springs only. Coil spring cars must have springs mounted in stock location. Trailing arms must be stock length for make and model of car and mounted in stock location. Tubular rods permitted. MUST

BE STOCK LENGTH.

8. Stock type brake systems or dual master cylinders allowed.
9. Screw jacks allowed.
10. Six-point roll cage required – must be welded to frame rails and all connections must be fully welded.
 - a. Must be a minimum diameter of 1 1/2" and minimum .083 wall thickness.
 - b. A minimum of 3 horizontal bars is required in the driver's door and a minimum of 2 in the passenger door.
 - c. Roll bar installation and workmanship must be approved.

TRANSMISSION AND REAREND

1. Can run Brinn style transmission with 153 tooth flywheel and starter. Must mount to block, not bellhousing.
2. Stock factory production rear ends.
3. GM cars may run Ford 9" with floater.
4. Drum brakes or rear disc brakes. Rear disc brakes must have stock single piston calipers only. NO aftermarket calipers allowed. Rotor hats must be stock steel. No aluminum or aftermarket rotor hats.
5. Brake adjusters are permitted.

WHEELS AND TIRES

1. Hoosier H500 only. No E-Mod tires allowed.
2. No inner liners.
3. 1/2" wheel studs minimum and 1" lug nuts mandatory.
4. Steel wheels only. No aluminum wheels. 10" maximum width. No wide 5 wheels or adapters. 10" steel bead lock allowed on both sides.
5. Grooving, siping, and buffing tires permitted.
6. All numbers, codes, and manufacturer names must remain visible on the tire. No grinding off of numbers, codes or names. Any tire that has been altered will be illegal.
7. No tire softeners or conditioners permitted.
 - a. Tires may not be altered using any natural or unnatural, hazardous or nonhazardous, components or chemicals that affect the factory set baseline settings of a given tire.
 - b. ALL competitors are subject to tire inspections.
8. Tires are available on race night or call Clint Smith at 404-925-1888

SAFETY

PENTON SAFETY RULES IN GENERAL RULES ALSO APPLY

1. Approved helmet and full fire resistant driver's suit required.
2. All cars must have 3" lap belt and 2" shoulder harness and crotch strap MINIMUM and must be attached to roll cage.
3. All cars must have an approved fire extinguisher, securely mounted, within easy reach

of the driver. A 10 lb. halon system is recommended.

ENGINE

PENTON ENGINE RULES IN GENERAL RULES ALSO APPLY

* *GM602 crate engine allowed with seals in place*

1. No high performance equipment or machine work permitted unless otherwise noted here.
2. Only stock factory street production V-8 or V-6 engines permitted.
 - a. Must be mounted in stock location, center of chassis.
 - b. #1 spark plug must be in line with, or in front of, upper ball joint.
3. GM 350 c.i.d., Ford 351 c.i.d., Chrysler 340 or 360 c.i.d. Engines must be stock bore and stroke. 0.60ths over bore permitted.
4. No big blocks permitted.
5. Deck may be surfaced but pistons may not exceed the top of the block.
6. Racing oil pans permitted – must be made of steel. NO aluminum oil pans.
7. No engine interchanging – car and engine must be the same manufacturer.
8. Stock factory production steel or cast iron cranks permitted. Eagle or Scat crank acceptable.
 - a. This is the only aftermarket crankshaft allowed and must have factory numbers intact.
 - b. No knife edging or lightening of cranks.
 - c. Crankshafts must be stock stroke to size of engine.
 - d. No stroking or D-stroking.
 - e. Cranks must weigh 47 lbs. All cranks weighed with pilot bushing, cam gear, bolt and washer.
9. Engine balancing is permitted.

CYLINDER HEADS

1. Heads must be standard production factory steel or baby butt, 461, 462, or 041. Vortec 062 & 906 cylinder heads permitted with the following specs – 175 cc intake runner volume max, 64cc max exhaust runner volume. No bowtie, dart, or angle plug heads.
2. No angle milling, porting, polishing, squaring or epoxying of ports. Screw in studs or guide plates permitted. Rocker studs may be pinned. No roller or roller tip rocker arms. 3 angle valve jobs permitted.
3. Stainless steel valves allowed.
 - a. Chevrolet 350 - 1.94" maximum intake & 1.5" maximum exhaust.
 - b. Ford, Chrysler and other GM products must be stock sizes. Stock diameter valve stems.
4. Steel valve retainers and keepers only. No aluminum, titanium or other exotic material retainer. Any valve spring.
5. No mismatching of Cleveland or Windsor heads.
6. Screw in studs or guide plates permitted. Rocker studs may be pinned.

PISTONS

1. Have to be cast or forged flat top, with four valve relief pistons.
2. No dome pistons permitted.

RODS

1. Stock length forged steel I beam rods only – no H-beam rods.
2. 3/8 rod bolt maximum.
3. No billet or exotic material connecting rods.

CAMSHAFT

1. Hydraulic flat tappet camshafts permitted.
2. Hydraulic roller camshaft allowed with 50 pound weight added to total weight.
3. Maximum .450 lift at valves
4. No solid lift cams. No anti-pump up or Rhoads lifters permitted.
5. Lifters must be stock diameter to make of engine.
 - a. Chevrolet – .842"
 - b. Ford – .875"

INTAKE

1. Intakes must be cast iron or aluminum factory production low profile intakes.
2. May use aftermarket aluminum dual plane low profile intake manifold. Only intakes permitted are as follows:
 - a. Edelbrock 2101, 2701 or 7101;
 - b. Weiand 8120 or 8150;
 - c. Summit Racing 226008 or 226012.
3. No porting, polishing, squaring, or epoxying of intake ports, plenum, or runners. No milling or hogging out of plenum.
4. Ford Motorsports low profile aluminum intake permitted – must add 50lbs, and no spacer with this intake.
5. Vortec heads may run aluminum low profile intake – Edelbrock part# 7116 or 2116, or GM part # 12366573 (same as on 602 crate engine). Only intakes allowed with vortec heads.

CARBURETOR

1. Holley 650 cfm, vacuum secondary, dual or single line carburetor permitted.
2. Choke horn may not be removed.
3. 650 Spec carburetor allowed.
 - Holley HP80451 only
4. Must pass track's go/no-go gauge(s).
5. 1 inch carburetor spacer or adapter allowed.

FUEL SYSTEM

1. Fuel tank may be located inside the trunk. Tanks must be securely mounted. Fuel cell highly recommended.
2. Pump gas or racing fuel only. (RACING FUEL AVAILABLE AT TRACK)
 - a. Pump gas may contain up to 10% ethanol as allowed by law.
 - b. Gas must pass acid test.
3. E85 Fuel is allowed. Fuel must check within 1% at any time checked, (MINIMUM 84% ETHANOL - MAXIMUM 86%)
4. No alcohol, methanol, nitrous oxide, or chemical additives including, but not limited to, propylene oxide, nitromethane, nitro propane, or any nitrate additives.

IGNITION SYSTEM

1. Stock factory production electronic or breaker type ignition systems only. Ford allowed HEI type aftermarket distributor.
2. No MSD's or aftermarket ignition systems of any kind allowed. No spark enhancing devices of any type allowed.

WEIGHT

1. All cars – 2950 lbs.
2. Deduct 100 lbs for cars with 112" and longer wheelbase.
3. All cars must have specified weight posted on the top left side of the roof.
4. Minimum weight will be measured with the driver in the car.
5. Attached weight must be securely bolted to frame with at least 2 - ½" or larger bolts, and painted white or silver with car number clearly painted on them.
6. No weight may be attached to the rear bumper.
7. No lead pellets or liquid weight.
8. No driver operated weight adjustment devices.
9. One pound per lap weight allowance after race.
10. Track reserves the right to adjust weights in interest of competition should it be deemed necessary.

PROTEST

1. Top-end \$350 built motor – \$50 retained by track
2. Bottom end \$250 built motor – \$50 retained by track.
3. Must protest top end to protest bottom end.
4. Crate motors may be protested, but will refer to crate protest fees.

