



HOBBY
2024 TECHNICAL RULEBOOK

NOTICE – PLEASE READ: All cars with replaced frame or frame rails must first be approved by Track Technical Inspector. Remember, this is not Late Model or Late Model Sportsman. No compacts, convertibles, sports cars or station wagons.

BODY

1. All bodies, stock or aftermarket, are subject to approval by the technical inspector. (Install it right the first time.)
2. Stock appearing aftermarket steel or aluminum bodies will be allowed.
 - a. All aftermarket bodies must have plastic nose pieces.
 - b. Body sides and roof must look like the nose of the car they are representing (ex: Camaro nose must have a Camaro-style roof; Monte Carlo must have a Monte Carlo-style roof).
 - c. Hood may be fiberglass, aluminum or steel.
 - d. If you use an aftermarket body, install it correctly.
 - e. All bodies must be mounted straight up. This means your roof is mounted exactly in the center of the chassis (left to right).
3. Aftermarket bodies must not exceed a maximum width of 76 inches behind the driver, 72 inches at spoiler. Body line front to back, one inch tolerance up and down. Quarter panels must not angle outside the door.
4. Any nose piece is allowed.
5. Deck height is 38 inches, with a 1 inch tolerance.
6. No front push bars will be allowed.
 - a. If you feel you need some protection for the radiator, you may build a guard using tubing, but all tubing must be kept completely behind the front bumper in the grill area.
 - b. If you have a body style with a plastic nosepiece, all guards must be behind the nosepiece.
7. Must have a rear fuel cell bar.
8. No glass or lexan windows; must be open.
9. Any plastic additions must conform to original body contour.
10. No homemade nosepieces.
11. Spoilers may have a maximum size of 8" high by 72" wide.
12. Gurney flaps or curls are allowed along the upper edge of the spoiler, but their length will be included in all measurements.
13. Three spoiler braces allowed. Braces must meet track spoiler pattern template. (See figure in body rules.
14. A metal firewall must be half the width of the car.
15. Floor pan must come behind the driver seat.
16. Boxed interiors permitted.

SUSPENSION-

PENTON SUSPENSION RULES IN GENERAL RULES ALSO APPLY

FRONT SUSPENSION AND STEERING

1. Any upper control arms and mounts permitted.
2. OEM lower control arms for make and model required.
3. Aftermarket bushings permitted.
4. OEM or safety spindles and hubs permitted.
5. 5" minimum O.D. on front coil springs.
6. Weight jacks permitted.
7. OEM steering type boxes.
8. Rack and pinion cars must add 100 pounds in front of engine plate (where block and bellhousing meet) on the left side of motor.
9. Inner and outer tie rod ends may be rod ends. Any tie rod sleeves permitted.
10. Racing shocks permitted; one shock per wheel. No canister shocks; non-adjustable, schrader valves are permitted.
11. Non-adjustable shocks only.
12. Bump stops permitted.

REAR SUSPENSION

1. No spring bars allowed on rear suspension of any kind, except the third link can be a biscuit bar.
2. Slide boxes on leaf spring cars permitted.
3. Upper link, rubber bushing torque link, or spring loaded type upper link permitted on leaf cars.
4. No fifth coil, lift bar, pull bar, or Reese bar, etc.
5. 90-10 shock allowed on top of rear end only.
6. Racing shocks permitted – one shock per wheel. No canister shocks – non-adjustable, schrader valves are permitted.
7. 3 bar suspension only. No 4 bar suspension is allowed.

COIL SPRING CAR – must remain coil spring car

1. May use a three point set up with a solid mount upper link bar, solid bar & rod ends. No 90-10's spring bar or rubber bushing torque links allowed.
2. Solid panhard bars with rod ends permitted.
3. Rear lower control arms may be aluminum or steel tubes with rod ends with a maximum length of 26" inches from center to center of the mounting holes.
4. Rod ends are allowed on solid panhard bar, solid upper link bar and rear lower control arms. *This is the only place rod ends will be allowed on rear suspension.*
5. No 90-10's spring bar or rubber bushing torque links. No 5th coil, lift bar, pull bar or Reese bar, etc.
6. Racing shocks permitted; one shock per wheel. No canister shocks. Non-adjustable.
7. Coil overs allowed on rear. One spring per wheel.

ROLL CAGE

1. All cars must have a suitable steel roll cage protecting the driver's compartment.
2. Side roll bars are mandatory and must extend into door panels. A minimum of three bars must be used on left side and two on right side.
3. Bars must be at least 1-1/2" inch in diameter and a minimum of .083" inch wall thickness.
4. Roll cage must be welded to the frame.
5. Seat must be fastened to roll bars or rail.

FRAME AND RAILS

1. Minimum 103" wheelbase.
2. Tying frame rails together, reinforcing, or X bracing permitted.
3. Weight jack area may be altered. Buckets, plates, mounts, etc.
4. Frame or frame rails may be replaced from snout to rear of car. Must be .095 wall thickness.
5. Front snout, stock or the optional Howe Racing LLM direct replacement Camaro front clip Part#358-8-01 (2x4 rails and stock lower A arm mounts).
 - a. Howe clip must have the Howe inspection tags in place to be legal.
6. Technical inspector must approve all cars with replaced frame or frame rails.
7. Round or square tube frame rails from snout back.

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.

FUEL CELL

1. An approved fuel cell is mandatory (32 gallon maximum). Must be securely mounted in the trunk area of the car, inside a .20 gauge metal box supported by a minimum of two 2 inch by 1/8 inch steel straps.

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.

REAR END

1. Locked rear ends required-welded, spool or mini spool permitted.
2. 9 inch Ford floaters allowed. Housing and axle tubes must be steel.
3. No ratchets.
4. Quick change rear ends are allowed. Aluminum axle tubes ok.
5. No bird cages allowed. Must be solid mount to rear end, True-Trac or any other type locker unit allowed.

WHEELS

1. Any 12" wheel (steel or aluminum) permitted. Any 14" wheel (steel or aluminum) permitted, but must add 100 pounds.
2. Bead locks allowed.
3. Wide 5 wheels permitted.

TIRES

1. Hoosier D21, D55, 1350 and 1600.
2. Grooving, siping, and buffing tires permitted.
3. 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.
4. 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.
5. Tires available on race night or call Clint Smith at 404-925-1888.

BRAKES

1. Four-wheel disc brakes permitted.
2. Dual master cylinders permitted.
3. Brake adjusters permitted.
4. No titanium or exotic material permitted.

TRANSMISSION

1. OEM standard production 3 or 4 speed transmission permitted. Brinn, Falcon, or Bert transmission permitted.
2. Must have at least one forward and one reverse gear in working order.
3. Automatic transmission permitted.
4. Must have OEM-type torque converter (10" minimum) in working order.
5. No hollow converters allowed.

STARTER

1. All cars must have starter in working order.
2. No reverse mount starters, engine block starters only.

ENGINE SET BACK

1. Front most forward spark plug must be in line with or in front of top ball joint. NO TOLERANCE.
2. Must have original cross member in original position.
3. Drive train must be in centerline of car.

ENGINE

PENTON ENGINE RULES IN GENERAL RULES ALSO APPLY

1. All engines have a maximum bore size and must be standard stroke for the engine being used.
2. Small blocks only; no big blocks.
3. 602 Crate with the seals is acceptable.

BLOCK

1. OEM cast iron V-8 block only.
2. Maximum cylinder bore size:
 - Chevrolet – 4.060
 - Ford – 4.060
 - Chrysler – 4.060
- b. OEM main caps only.
 - No aftermarket main caps.
 - No splayed, studded or strapped main caps.
- c. Deburring block and plugging deck to strengthen block permitted.
- d. Plug or vent and screen oil drain holes in lifter valley permitted.
- e. May surface deck of block.
- f. Lifter bore must be OEM diameter for engine:
 - Chevrolet – .840
 - Ford – .875
 - Chrysler – .901

CRANK

1. Standard production OEM or stock replacement cast or steel crank.
2. Must be standard production stroke for engine.

- a. 350cid Chevy – 3.480
 - b. 302cid Ford – 3.000
 - c. 351cid Ford – 3.500
 - d. 360cid Chrysler – 3.580
3. No stroking or destroking.
 4. No lightening or knife-edging crank.
 5. No turning down counter weights.
 6. Cranks must weigh 47 lbs. All cranks will be weighed with pilot bushing, cam gear, bolt and washer.
 7. May balance engine

RODS

1. Stock appearing I-beam steel rods.
2. 5.7 inch rods only. No 6 inch rods.
3. No H-beam sportsman type rods.
4. No polishing rods.
5. Press or floating pins permitted

PISTONS

1. Flat top pistons only.
2. No dome pistons.

CAM

1. Any hydraulic cam permitted.
2. Any lift and duration permitted.
3. No mushroom or radius cams.

LIFTERS

1. Hydraulic lifters only.
2. No cheater hydraulic or modified lifters.
3. Anti pump-up lifters permitted.
4. No mushroom or radius lifters.
5. Lifter retaining tray permitted.
6. Lifter must be OEM diameter for engine:
 - a. Chevrolet .840,
 - b. Ford .875
 - c. Chrysler .901.

TIMING CHAIN

1. Any chain and gears.
2. No gear or belt drives.

HEADS

1. OEM standard production cast iron heads only. All heads must have casting numbers and numbers must be readable at the time of a cyl. head check.

2. Chevrolet straight plug heads only.
3. Chevrolet Vortec heads.
4. No Chevrolet Vortec Bowtie heads.
5. World Products S/R (stock replacement) heads casting #I-052 permitted.
6. Ford and Chrysler angle plug standard production cast iron heads permitted.
7. IMCA heads allowed.
8. No Bow Tie, W2 or Ford SVO heads.
9. May surface heads (no cc limit).
10. Steel valves only. No titanium.
11. Maximum size for Chevrolet, Int. 1.940, Exh. 1.500
12. Maximum size for Ford and Chrysler, (Consult Tech Inspector)
13. Valve stem diameter 11/32 minimum for all engines.
14. Under cut stems permitted, any type guides.
15. Any valve springs and keepers permitted.
16. Steel retainers required.
17. Guide plates and screw in studs permitted.
18. Roller rocker arms permitted any ratio.
19. No after-market shaft or pedestal mount rockers will be allowed.
20. If standard production head came with shaft or pedestal mount rockers, they will be allowed.
21. Stud girdles allowed.
22. Racing valve job permitted- Machine cuts only.
23. No porting or polishing, all heads must remain AS-CAST.
24. No blending valve job to casting.
25. No port matching or deburring intake or exhaust runners.

HARMONIC BALANCER

1. Fluid damper permitted.

OIL SYSTEM

1. Wet sump oil pump in pan system only.
2. No dry sump system.
3. Racing oil pan and/or windage tray permitted.
4. Remote oil filter and oil cooler permitted.

WATER PUMP

1. Cast or aluminum permitted.
2. No electric water pump.

FUEL PUMP

1. Block mounted mechanical pump only.
2. No electric pump.

FLYWHEEL

1. Any Ford or Chrysler steel flywheel only.
2. 14 lb minimum on flywheel.

CLUTCH

1. Standard stock type discs and triple disc ok.
2. 153 tooth flywheel with triple disc clutch package.
3. No reverse mount bellhousing.

DISTRIBUTOR

1. OEM factory HEI or OEM factory single point distributor or MSD system allowed.
2. Aftermarket coil and module will be allowed as long as they are stock appearing and mounted in stock location with no modifications.
3. Advance kits permitted.
4. Alternator, if used, must be wired to battery- no loop system wiring to distributor.

INTAKE

1. Any single four-barrel intake permitted.
2. No porting or polishing.
3. 1" spacer only.

CARBURETOR

1. Holley 650 cfm, vacuum secondary, dual or single line carburetor permitted.
2. 602 Crate Engine can use one dual line Holley 650 CFM (Holley HP 80541 ONLY).
3. No down leg boosters.
4. No cutting of choke housing.
5. No porting or polishing.
6. Choke linkage and butterfly must be removed.
7. K & N flow control air cleaner permitted.

WEIGHT

1. Chevrolet – 2700 lbs.
2. Ford and Chrysler with intake valve over 1.94 must weigh 2800 lbs.
3. All cars must have specified weight posted on top left side of roof.
4. Minimum weight will be measured with driver in car.
5. Attached weight must be securely bolted to frame with 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 as necessary.