

# **FACTORY STOCK**

## **2025 TECHNICAL RULEBOOK**

Unless it came on a stock, mass produced vehicle, it is NOT LEGAL UNLESS SPECIFIED HERE. If it came on a stock, mass produced vehicle and it is prohibited here, it is NOT LEGAL. All dimensions references as the car is raced. Your tire pressures, spring settings, etc., may put your car out of limits. No variances are allowed when/if the cars are checked/weighed going onto the track. Following the race, decisions on variances for accident is at the discretion of the Penton Raceway Tech Inspector(s).

## RELATIONSHIP TO OTHER CLASSES

 These cars are primarily for NEWER drivers to V8 cars. There are a large number of stock parts. If you have won a feature in a late model style car in the last 10 years, you can NOT drive in this class.

# **ELIGIBLE MAKES/MODELS**

1. Any Chrysler, Ford, or GM model car that was/is mass-produced for the United States Market. Check with track before you build.

#### **MATERIALS**

1. No ceramic or carbon fiber parts allowed.

## **RADIATOR**

1. One, mounted in front of the engine for the purpose of cooling water and, optionally to cool an automatic transmission.

#### **ENGINE**

1. Location: Stock location for Make/Model/Year.

### **OPTION 1**

- 1. GM CAP SEALS or GEN-4 Green or GEN-5 Black Crate Racin' USA Seals ONLY.
- 2. If seals are altered, you will be disqualified.

- 3. Must run 500cfm Holley 2 barrel.
- 4. If you put a 602 Crate Motor in any other chassis besides GM, contact Penton Raceway Tech for engine location.

#### **OPTION 2**

- 1. Engine must pull 16" of Vacuum @ 1,000 RPMs, no more than 180 lbs compression. No vacuum pumps.
- 2. Block: Stock based, steel, small block not to exceed 362 ci. Must be stock bore (+60 okay) and stroke. No stroker/hybrids (No 383ci Chevys, no 347 FOrds, etc.) All engine casting numbers stamped on the engine must be unaltered.
- 3. Cam: Chain driven
- 4. Lifters: Solid or hydraulic. No rollers or mushrooms. No ceramic.
- 5. Pistons: Dished or Flat. No Domes.
- 6. Rods: OEM length. Example: SBC must be 5.7" I-Beam Rods. No 6" rods. No H-Beam rods.
- Heads: OEM iron heads. Vortec heads okay. Vortec copy okay. Not to exceed 173 intake runner volume. No Porting or Polishing. OEM style stamped steel rockers. No roller rockers. No roller tipped rockers. Screw in studs and guide plates okay. No porting/polishing.
- 8. Valves: Maximum of 2 valves per cylinder. Max intake is 2.02. Max exhaust is 1.600.
- 9. Carburetor: One carburetor 500 cfm two-barrel Holley with stock, unaltered, throttle arm and butterflies. Choke plate may be removed. No porting or polishing. Must pass go/no go gauge. The accelerator pump squirters may not extend into the are directly above the venturi (Tech Purposes). Recommend Epoxying the boosters for safety.
- 10. Carburetor Claim: Any car owner of a car in the feature race may claim the carburetor of any car finishing ahead of the claimers car, in the feature race, for \$300 and swap of claimers carburetor. Only 1 claim per year. (Penton Raceway Tech Inspector(s) will have final say so if carburetor is in shape to swap.)

## **INTAKE MANIFOLD**

- 1. No porting/polishing.
- 2. Okay to drill the intake, to mount on Vortec heads.
- 3. Any cast iron or aluminum intake.
- 4. Dual Plane Intake ONLY.

#### CARBURETOR ADAPTER/SPACER

1. NO more than 1 adapter and no more than 1 spacer, a combined total of 1" thick. May be aluminum, wooden, or plastic. Cannot extend into manifold.

## **AIR FILTER HOUSING**

- 1. No vacuum lines allowed between the air cleaner and the carburetor.
- 2. Only one, round, mass produced air cleaner may be used.
- 3. Maximum size of the element will be 14" in diameter by 4" tall.
- 4. Air cleaner top and bottom must be made of solid steel.

## **IGNITION**

- 1. Battery operated.
- 2. OEM electronic ignition system such as HEI required.
- 3. Distributor must be mounted in the stock location and maintain the stock firing order.
- 4. No crank/triggered ignition.
- 5. No ignition boxes.

#### ALTERNATOR

1. If used, ust be 12 volt and of OEM design.

#### HARMONIC BALANCER

1. After market to include fluid damper okay.

#### NUMBER ONE PLUG

- 1. Must be at stock location for make and model.
- 2. Engine has to be in stock location on frame.
- 3. Zero engine set backs.

#### STARTER

- 1. Full size or mini starter okay.
- 2. Must have starter.

#### WATER PUMP

1. Aftermarket okay.

## POWER STEERING PUMP

- 1. Stock location.
- 2. After-market power steering pumps and steering quickeners are okay.

# **ACCESSORIES**

1. Other items must be OEM style but may be after-market items.

#### **PROHIBITED**

1. Any titanium or other similar sophisticated lightweight parts. Mounting the engine so that the centerline of the crankshaft is more than 1" from the center point between the 2 top ball joints.

#### FUEL

- 1. Racing gasoline okay.
- 2. NO E-85.
- 3. No aftermarket additives.
- 4. NO cool cans.
- 5. See the safety rules on the required fuel cell.

#### **EXHAUST**

- 1. Must exit approximately parallel to the ground and not be aimed in the direction of the cockpit.
- 2. Headers okay with 1 1/8 inch primaries and 3" collectors.
- 3. No over the frame or crossover headers.

# FLYWHEEL/FLEXPLATE

1. OEM steel only. OEM dimensions.

## CLUTCH/TRANSMISSION

1. Single disc clutch only 10 ½" minimum.

- 2. No aluminum flywheel.
- 3. Stock type flywheel to weigh no less than 14 lbs., stock type pressure plate no less than 13 lbs., stock disc type clutch and flywheel required.
- 4. Stock torque converter 11" minimum required with automatic transmission.
- 5. Transmission may have shift kit installed, ¼" steel plate surrounding stock bell housing or blow proof bell housing required.
- 6. No racing clutches are light flywheels, or small torque converters, or racing torque converters are allowed.
- 7. Functioning torque converters must weigh 38 lbs minimum.

## DRIVESHAFT

- OEM steel.
- 2. Universal joints are to be similar in design to OEM units.

#### REAR END

- 1. Ford 9" okay in any make. When using 9" Ford, make sure brackets are in stock location. If any questions about stock location, call track BEFORE you weld brackets on.
- 2. OEM 5 or 6 lugs okay, consider installing C-Clip eliminators or other provisions such as that breaking a rear axle does not cause the axle to come out of the housing.

### **BRAKES**

- 1. Minimum of 2 rear and 1 front brake.
- 2. No floating brakes.

## **BATTERY**

- 1. May use 2 batteries.
- 2. If battery is located in drivers compartment it must be in an enclosed battery box and securely fastened. No bungee cords or ratchet straps. No exceptions.
- 3. Must power the starter and the ignition and any accessories.

#### **CHASSIS**

1. OEM for Make/Model/Year of the body.

#### WHEEL BASE

- 1. Must be as manufactured for the Make/Model/Year.
- 2. Minimum wheel base 108".
- 3. A one-inch tolerance may be allowed at the direction of the Penton Raceway Technical Inspector for accident damage the day of race.

## STEERING

- 1. OEM style for Make/Model.
- 2. No rack and pinions unless OEM equipped.

## SHOCKS

- 1. Any steel bodied shocks, must be mounted in stock location with stock OEM mounts.
- 2. No heim joints allowed on shocks.
- 3. Penton Raceway has the right to take your shock or shocks at any time of the season and have them dyno, to make sure they are legal. During this time of checking your shocks, Penton Raceway will provide you with a shock or shocks until the results come back. If for

- any reason your shock or shocks are deemed illegal, you will be disqualified, lose all points and winnings from that event. Winnings will be held until we get results back.
- 4. There will be a \$100 claim rule per shock. You can only claim once per season.

## FRONT SUSPENSION

- 1. Upper A-arm and all steering linkage may be reinforced as long as their identities remain clear
- 2. May use stock dimension tubular upper A-arms must be mounted in stock location on chassis.
- 3. OEM style and dimensions racing shocks allowed.
- 4. Shocks must use the OEM mounts and remain in their OEM location.
- 5. No screw jacks.
- 6. No bump stops or shock covers.
- 7. No spring rubbers.
- 8. No spring buckets.
- 9. No chains, no cables, or no tethers allowed anywhere on chassis or suspension.
- 10. Shocks must be mounted in stock location, no shock extensions.
- 11. OEM style and dimension racing springs allowed.
- 12. Springs must remain in their stock mounts and locations.
- 13. For coil spring cars you may use 5" springs.
- 14. Chrysler torsion bar suspension permitted if it was stock on the year and model designated for the car.
- 15. No driver adjustable suspension devices permitted.
- 16. Lower control arms must be stock to the chassis being used.
- 17. Upper control arms, spindles, and lower control arms must be in stock location for chassis being used.
- 18. Speedway 3-piece spindle or stock only.
- 19. Spindle must be for make of car (Example Camaro to Camaro, Metric to Metric).

#### REAR SUSPENSION

- 1. OEM
- 2. Shocks must use the OEM mounts and remain in their OEM location.
- 3. If using a 9" FOrd housing lower, shock mount must be 4 ½ inches below bottom of axle tube. ½ inch tolerance.
- 4. No shock extensions.
- 5. No spacers or washers.
- 6. No screw jacks.
- 7. No bump stop or shock covers.
- 8. OEM style and dimension racing springs allowed.
- 9. No spring rubbers.
- 10. No spring buckets.
- 11. No chains, No cables, No tethers allowed anywhere on chassis or suspension.
- 12. Springs must remain in their stock mounts and location.
- 13. For coil spring cars you may use 5" springs.
- 14. Chrysler torsion bar suspension is permitted if it was stock on the year and model designated for the car.
- 15. OEM design leaf spring setups in which the springs are securely fastened of the rear end are okav.
- 16. No driver adjustable suspension devices permitted.
- 17. No "Z" links, aftermarket pan hard bars, aftermarket J-bars, torque links, torque arms, damper shocks, fifth coils, etc.

#### TRACTION CONTROL

1. Other than listed under rear suspension, no other traction devices are permitted.

#### BODY

- 1. OEM production body or sheet metal body okay must look stock appearing (we will not let this get out of hand).
- 2. Complete stock body, unaltered except as stated here.
- 3. Hoods may be gutted.

# DRIVER COMPARTMENT

- 1. You can run stock floor pan and firewalls in stock location, or minimum of 3 windshield bard in front of driver.
- 2. Aluminum high-back seat only, must be bolted in using minimum 0.375 inch bolts.
- 3. Seat must remain inside all confines of roll cage.
- 4. Maximum 70 inches from the back of the engine block to the front side of seat, measured at the shoulder harness.
- 5. Driver must be sealed off from track, driveline, engine, and fuel cell.
- 6. Kick and rocker panels may be removed.
- 7. Front OEM firewall may be replaced using steel fabricated full firewall, 18 gauge or minimum 0.049-inch thickness.
- 8. Entire firewall can be no further back than 12 inches from the back of engine block, measured horizontally.
- 9. Dash must not extend more than 24 inches back from top of firewall.
- 10. Dash must be flat, extend from door to door, rear can be no higher than front, except for cowl in front of driver.
- 11. OEM floor pan may be replaced using steel fabricated floor pan, 18 gauge or minimum 0.049-inch thickness, securely welded to frame.
- 12. Floor pan may be replaced from front firewall to rear halo supports.
- 13. Must remain flat/OEM appearing from frame rail to frame rail, can be no higher or lower than frame rail.
  - a. Exception is maximum eight inch tall driveshaft tunner.
  - b. Tunnel must remain similar to OEM tunnel in size.
- 14. No cockpits, interior must remain open.
- 15. Inner panel on outside of passenger door bars allowed, may connect to top of door.
- 16. Full rear firewall may be aluminum or steel and may be located no further forward than rear halo supports and no higher than bottom of rear opera windows.
- 17. All holes in firewalls must be covered with metal.
- 18. No driver adjustable devices allowed while car is in competition except brake adjuster.
- 19. No mirrors.
- 20. No decking allowed, must have open cockpit from firewall to rear firewall.
- 21. All doors must be welded and/or bolted shut.
- 22. Doors may be gutted.
- 23. Install 3 driver's sidebars, with 1/8" steel plate covering the door bars from front to back and top to bottom welded in place on outside of bars (strongly recommended).
- 24. Install a minimum of 2 right side bars.
- 25. Front inner panels optional on shock cars, required on strut cars.
- 26. Trunk lid may be gutted.
- 27. All glass must be removed.
- 28. Grill may be replaced with wire mesh.
- 29. Must have stock bodylines.

- 30. Must have a metal firewall between driver and fuel cell.
- 31. No fuel line in driver's compartment unless contained in conduit/pipe.
- 32. Fenders may be cut for tire clearance.
- 33. Front fender well may be removed
- 34. The rear of the car must be closed in.
- 35. Rear of car must have downward slope from back of rear glass to back of trunk lid or tail piece. A minimum of 2 inches.

#### NOSE/GRILL

- 1. Aftermarket plastic nose for make/model okay.
- 2. Front grill may be removed if such nose is installed.
- 3. Must match body/year model.

#### HOOD

- 1. May have an opening for the air cleaner.
- 2. The claimed engine size must be displayed on each side of the hood reading from the closest side of the car.
- 3. Use letters at least 3" tall with the length proportional to the height.

### ROOF

- 1. Stock appearing.
- 2. No spoilers or wings.
- 3. The left and right edges of the roof are to be approximately the same height from the top of the doors and quarter panels.
- 4. No more than 1" tolerance.
- 5. The left and right side support panels for the roof must be the same design and front to back length.

#### INTERIOR

- 1. See the section on safety.
- 2. No part of the seat may extend rearward past the plane generated by connecting the rear edges of the doors.
- 3. Aftermarket gas pedal okay (may be relocated).
- 4. Must retain OEM window openings.

#### TRUNK LID

- 1. Required.
- 2. May be gutted.
- 3. Must be able to be opened.

## **REAR BUMPERA**

- 1. Any make/model OEM ok. Fabricated ok if approved by Penton Raceway tech.
- 2. Ends must be smooth.
- 3. Must be attached to the frame or roll cage in at least 4 places, 2 on each side of centerline.

#### SPOILERS

- 1. Not allowed. Period.
- 2. If your car came with one, take it off.

# **WHEELS**

- 1. 15x8 steel wheels only.
- 2. No wide fives.
- 3. Must mount with at least 5 lug nut design.
- 4. Mud caps okay.
- 5. Bead locks okay right side only.

# **TIRES**

- 1. Hoosier H500.
- 2. No mud grips.
- 3. Grooving and siping ok.
- 4. No chemical alteration on tires.

# **WEIGHT**

1. All cars must weigh 3200 pounds with driver on board.