



**LIMITED LATE MODEL
2024 TECHNICAL RULEBOOK**

***PENTON SUSPENSION RULES IN GENERAL RULES ALSO APPLY**

ENGINE

PENTON ENGINE RULES IN GENERAL RULES ALSO APPLY

Penton Raceway Limited Late Model division allows several engine packages.

Package	Engine	Weight	Spoiler
A	604 Crate Engine	2200 lbs.	8" Spoiler
B	Engine Rule	2300 lbs.	8" Spoiler
C	Engine Rule	2400 lbs.	8" Spoiler
D	GM/CT 525	2350 lbs.	8" Spoiler
E	NLMS	2300 lbs.	8" Spoiler
F	NLMS	2350 lbs.	8" Spoiler
G	358 SPUR Head Engine	2400 lbs.	8" Spoiler
H	Topless Outlaw	2450 lbs.	8" Spoiler

ENGINE PACKAGE A

1. GM P/N # 19318604-350 CID / 400 HP
2. GM Engines may be purchased at any GM dealer.
3. The sealed engines must remain intact and not be tampered with; any seals that have been removed or tampered with will make the engine illegal and not eligible for competition at Penton Raceway.
4. No changes are allowed to the engine (intake manifold, heads, valve covers, oil pan, harmonic balancer or any other part/or parts on/or in the engine. Crate Engines must not be altered, modified or changed from factory specs.
5. No vacuum pumps.
6. All crate engines must be sealed with factory GM seal bolts or Crate USA seals. We will allow other series seals if we can verify the seal system of the other series.

CRANKING COMPRESSION

1. All crate engines will have a maximum cranking pressure of 200 p.s.i. any engine that

has over 200 p.s.i. will be illegal to use at Penton Raceway.

ENGINE PACKAGE B

BLOCK

1. Cast iron V-8 block only.
2. Maximum cylinder bore size, Chevrolet 4.060, Ford 4.060, Chrysler 4.060.
3. After-market steel splayed main caps permitted.
4. Main cap studs and straps permitted.
5. Deburring block and plugging deck to strengthen block permitted.
6. Plug or vent and screen oil drain holes in lifter valley permitted.
7. May surface block.
8. Lifter bore must be OEM diameter for engine. Chevrolet .840, Ford .875, Chrysler .901.

CRANK

1. Any steel crank with the exception of (No Pendulum Undercut counterweights and titanium or other Exotic materials.)
2. Must be standard stroke for engine, Chevrolet 3.480, Chrysler 3.580, Ford 3.500
3. May balance engine.

RODS

1. Steel rods only.
2. No titanium or aluminum rods.

PISTONS

1. Any flat top pistons and pins.
2. No dome pistons.

CAM

1. Solid lift cam only.
2. No roller, mushroom or radius cams.

LIFTERS

1. Solid lifters only.
2. No roller, mushroom or radius lifters.
3. Lifter retaining tray permitted.
4. Lifter must be OEM diameter for engine. Chevrolet .840, Ford .875, Chrysler .901

HEADS

1. These are the only heads permitted.
 - a. OEMcast iron straight plug heads, Chevrolet Bowtie cast iron heads, Chevrolet Bowtie Vortec cast iron heads, Dart Iron Eagle cast iron heads, World Products Sportsman II cast iron heads, Ford SVO Sportsman cast iron heads, Chrysler cast iron W-2
2. Any 23 degree cast iron heads not listed above must be approved by Penton Raceway for this engine package. Heads may be subject to 50 lb. weight penalty.
3. All heads must remain AS-CAST.
4. No cc limit.
5. Valve angle and spacing must remain original production specs for heads being used.
6. Steel valves only. (No titanium valves)
7. Valve size maximum for (B) engine, Intake-2.020, Exhaust-1.600.
8. Valve stem diameter 11/32 minimum for all engines.
9. Under cut stems permitted, any type guides.
10. Any valve springs, retainers and keepers.
11. Guide plates, screw in studs and stud girdles permitted.
12. Roller rocker arms, stud or shaft mount permitted.
13. No porting or polishing, all heads must remain AS-CAST.
14. No port matching intake or exhaust runners.
15. Racing valve job permitted, Machine cuts only.
16. No blending valve job to casting. No deburring intake or exhaust runners.

TIMING CHAIN

1. Any chain and gears, no gear or belt drives.

WATER PUMP

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

OIL SYSTEM

1. Wet sump systems, internal or external pumps permitted.
2. Dry Sump Oil Systems permitted must add an additional 50 lbs.

FUEL PUMP

1. No electric pump.

DISTRIBUTOR

1. Any ignition with the exception of magnetos (No magnetos.)

CARBURETOR

1. One four-barrel carburetor only of any manufacturer.
2. No turbo-chargers, blowers or fuel injections.
3. All engines must be naturally aspirated.

INTAKE

1. Any single four-barrel intake permitted.
2. May port and polish.
3. Any size carburetor spacer permitted.

ENGINE PACKAGE C

BLOCK

1. Cast iron V-8 block only.
2. Maximum cylinder bore size, Chevrolet 4.060, Ford 4.060, Chrysler 4.060.
3. After-market steel splayed main caps permitted.
4. Main cap studs and straps permitted.
5. Deburring block and plugging deck to strengthen block permitted.
6. Plug or vent and screen oil drain holes in lifter valley permitted.
7. Lifter bore may be oversize.
8. 362.5 Cubic Inch Maximum Ford & Chevrolet.
9. 371.0 Cubic Inch Maximum Chrysler.

CRANK

1. Any steel crank with the exception of (titanium or other Exotic materials.)
2. 3.500 Maximum stroke for Ford & Chevrolet.
3. 3.580 Maximum stroke for Chrysler.
4. 362.5 Cubic Inch Maximum Ford & Chevrolet.
5. 371.0 Cubic Inch Maximum Chrysler.

RODS

1. Steel rods only.
2. No titanium or aluminum rods.

PISTONS

1. Any pistons and pins.

CAM

1. Any cam.

LIFTERS

1. Lifter retaining tray permitted.
2. Lifters may be oversized.

HEADS

1. These are the only heads permitted
 - a. Chevrolet: Any 23 degree cast iron heads- Bow Tie, Pro Action/Pro Top Line/ Racing Head Service (RHS) heads. Spark plug location must be the same as the Bow Tie and Dart heads.
 - b. Ford: SVO Sportsman cast iron heads M-6049-E351 and M-6049-N352, GT-40-P, World Products Windsor Sr, Pro Action/Pro Top Line/ Racing Head

Service (RHS) heads.

c. Chrysler: Cast iron W-2

2. All heads must remain AS-CAST.
3. No cc limit.
4. Valve angle and spacing must remain original production specs for heads being used.
5. Steel valves only (No titanium valves)
6. Valve size maximum for C engine: Intake- 2.055, Exhaust- 1.625
7. Valve stem diameter 11/32 minimum for all engines.
8. Under cut stems permitted, any type guides.
9. Any valve springs, retainers and keepers.
10. Guide plates, screw in studs and stud girdles permitted.
11. Roller rocker arms, stud or shaft mount permitted.
12. No porting or polishing all heads must remain AS-CAST
13. No shot Peen porting heads.
14. No port matching intake or exhaust runners.
15. Racing valve job permitted- machine cuts only.
16. No blending valve job to casting.
17. No deburring intake or exhaust runners.

INTAKE

1. Any single four-barrel intake permitted.
2. May port and polish.
3. Any size carburetor spacer permitted.

CARBURETOR

1. One four-barrel carburetor only of any manufacture.
2. No turbo-chargers, blowers or fuel injections.
3. All engines must be naturally aspirated.

OIL SYSTEM

1. Wet sump systems, internal or external pumps permitted.
2. Dry Sump Oil Systems permitted must add an additional 50 lbs.

WATER PUMP

1. No electric water pump.

FUEL PUMP

1. No electric fuel pump

DISTRIBUTOR

1. Any ignition with the exception of magnetos (No magnetos.)

ENGINE PACKAGE D

1. 50lbs of bolt on lead must be mounted in front of the rear motor plate. Lead and bolts will be only pieces allowed in making of the 50 lbs. Collars not included.
2. GM Part Number 19271821 (CT525)
3. These engines are sealed at Chevrolet Performance, all engines must have original Chevrolet Performance GM Seals. Engines must not be altered, modified, or changed from factory specifications.
4. The sealed engines must remain intact and not be tampered with. Any seals that have been removed or tampered with will make the engine illegal and not eligible for competition. The penalty for anyone tampering with seals, modifying any internal engine parts, changing the parts from stock as delivered and sealed from the factory will be subject to expulsion from racing at Penton Raceway.
5. CT525 must run MSD LSX ignition controller. MSD ignition controller must be mounted with easy access for tech inspectors. MSD ignition controller must be programmed with a limit of 7300 RPM maximum.
6. When checked after the race, if RPM limit is more than 7300 RPM, this will result in disqualification, no money or points for that race.
7. The GM/CT525 will be the only engine allowed to use a coil pack distributorless ignition system.

CARBURETOR

1. One four barrel carburetor only- of any manufacture.
2. Any size carburetor spacer permitted

ENGINE PACKAGE E

See National Late Model Series rules for specifications regarding engine.

ENGINE PACKAGE F

See National Late Model Series rules for specifications regarding engine with aluminum heads.

ENGINE PACKAGE G

SPUR Head 358

No porting

ENGINE PACKAGE H

Topless Oulaw Rules

ALL ENGINE PACKAGES

Track reserves the right to adjust weights in interest of competition should it be deemed necessary.

FRAME

1. All frames must be of steel construction.
2. Square or rectangular frame must have a minimum of 2" by 2" material, .083-wall thickness.
3. If round tube frame, tubing must have a minimum of 1-3/4 " outside diameter, .083 wall thickness.

WHEEL BASE

1. Minimum wheelbase will be 103", with 1" tolerance.

ROLL CAGE

1. All cars must have a suitable steel roll cage protecting the driver's compartment, including headrest.
2. Side roll bars are mandatory, and must extend into the door panels. A minimum of three (3) bars must be used on the left side.
3. Each bar must be at least 1-1/2" in diameter, with a minimum material thickness of .083".
4. Roll cages must be welded to frame.

BODY

PENTON BODY RULES APPLY (Figures 1,2,3,4)

*Limited Late Models can be topless. A piece of aluminum is allowed to be placed on the roof over the driver, if preferred.

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 inch seat belts with shoulder harness and must be attached to roll cage unless you run a head and neck restraint 2 inch shoulder harness is allowed.
3. All cars must have an approved fire extinguisher, securely mounted, within easy reach of the driver. A 5 lb. halon system is recommended.

BRAKES

1. Four-wheel disc brakes permitted.
2. No carbon fiber brake parts permitted.

FUEL CELL/FUEL

1. An approved fuel cell (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" by 1/ 8" steel straps.
2. All fuel cells must be completely visible from the rear of the car.
3. Fuel cell must not be mounted lower than bottom of quick-change rear end.
4. Pump gas or racing fuel only. (RACING FUEL AVAILABLE AT TRACK)
5. Pump gas may contain up to 10% ethanol as allowed by law.
6. Gas must pass acid test.
7. E85 Fuel is allowed.
8. Fuel must check within 1% at any time checked (MIN 84%ETHANOL-MAX 86%)
9. No alcohol, methanol, nitrous oxide, or chemical additives including, but not limited to, propylene oxide, nitromethane,nitro propane, or any nitrate additives.

TRANSMISSION

1. Must have at least one forward and one reverse gear in working order.
2. No straight drives or in and out boxes.

WHEELS

1. Any brand or type of wheel allowed must be mounted with lug nuts.
2. No knock-off or center lock wheels.
3. Maximum wheel width-14" inches.

TIRES

1. Hoosier 1350, 1600, 21 or 55 allowed.
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.
5. 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.
6. ALL competitors are subject to tire inspections.
7. Tires available on race night or call CSR 404-925-1888.

WEIGHT

See table under Engine section for specific weights.

1. All cars must have specified weight posted on top left side of roof.
2. Minimum weight will be measured with driver in car.

3. Attached weight must be securely bolted to frame with 1/2" or larger bolts, and painted white or silver with car number clearly painted on them.
4. No weight may be attached to rear bumper.
5. No lead pellets or liquid weight.
6. No driver operated weight adjustment devices.
7. One pound per lap weight allowance after race.
8. Track reserves the right to adjust weights in interest of competition should it deem necessary.

LIMITED LATE MODEL PROTEST FEES

Protest fees are as follows:

\$400.00 One Head (No valves will be pulled)

\$300.00 Oil Pan

\$100.00 Engine Setback (1" inch tolerance)

\$100.00 Gas

Any item not listed in the protest fees above is considered a visual protest item and must be protested before race – not after.