PENTICTON SPEEDWAY STREET STOCK RULES
2023 v2

Non highlighted = pre-existing rules from 2022

Yellow Highlighted = Revised or new for 2023

Green Highlighted = Additions and or clarifications based on the feedback and questions emailed in from race teams.

The Street Stock Division is open to any North American-built Automobile having a factory-listed wheelbase of 108" or more. No front-wheel drive, 4-wheel drive, all-wheel drive, convertibles, or station wagon vehicles will be permitted. The word STOCK when used shall mean unaltered, as factory available and produced by OEM for the make, model, and year of the car being raced. Any PART of the car Not specifically covered in these rules must remain stock.

In this rule package, you will see 3 terms used to categorize cars in the Street Stock class. This is done in an attempt to clear up any misconceptions and theoretical combinations. Below is a brief overview of each name. The intent is to help eliminate any contradictions that may have been present in the past.

Any rule or combination that does NOT apply to all 3, will be clearly outlined specifically in the sections below.

Classic Stock: Any race car that maintains factory front and rear clips and conforms to the strict guidelines outlined in 4.7 that is permitted to run a minimum weight of 3000lbs.

- e.g. Metric car, Steel body, 3 link, 9” rear with drum brakes.

Street Stock: Any race car that does not qualify for Classic Stock as outlined in 4.8 but is not a Next Gen car.

- e.g. Metric car, Composite body, fabricated rear clip, 3 link, 9” and rear disc brakes.

Next Gen: Any constructed chassis as outlined in 4.9

- E.g. McColl chassis.

Next Gen cars running a sealed 602 crate will receive a 100lb weight allowance.

**Due to overwhelming concerns surrounding safely removing an additional 100lb from a Classic Chassis car. Several concessions have been made as described in 5.2.3.

1. Safety

1.1 See General Rules for Driver, Belts, Window net rules

1.2 Fire Control: All cars MUST have a minimum CSA-approved 2 1/2 lb fire extinguisher with either aluminum or steel head mounted in a steel mounting bracket and must be bolted down within drivers reach.

1.3 Window Net: Nylon Ribbon type window net MUST be installed in the driver's side window opening. The net size MUST be a minimum of 16" by 18". Net MUST be installed so it is tight.

Window net MUST be attached to the roll bar and not the body.

1.4 Steering Wheel: All cars MUST be equipped with a quick-release steering wheel. Collapsible highly recommended

1.5 Seat: An Aluminum racing seat must be used. A minimum of 6 seat bolts, .3/8" or larger must be used to anchor the seat.

2. Radios

2.1 2-way Radios Are Permitted, Receivers are MANDATORY.

3. Body

3.1 Body must be steel or Fiberglass stock in appearance, no cars will be allowed to start the race without a complete body unless approved by the tech director.

3.2 Approved Body Types

- 5 star S2 Bodies
- 5 star MD3 Street Stock
- Ultimate Custom Fiberglass
- CASCAR Bodies
- AR, XYG Metric Cars, or the Sportsman's body only.
- Sheet metal bodies MUST be stock appearing to the make, model, and year of the race car. Minimum of 040" or 22 gauge steel
- **Late model, Late Model Stock, ABC or 5 star Gen 6 bodies or pieces will NOT be permitted.**

3.3 Hood, Trunk: Minimum 5 hood pins and 2 truck pins must be used

3.4 Body Height / Ground Clearance: Minimum Height of 48" measured 10" behind the top of the windshield at the centerline of the roof and a 4" ground clearance at all times without the driver

3.5 Body front and rear: Bumpers must be in stock position, both front and rear, and securely fastened with No sharp edges exposed. The front fascia/grill panel and rear tail panel must be present. Plastic covers may be used but must be Stock appearing. No open front and or rear bodies are permitted.

3.6 Windshield: Glass windows must be removed. Minimum 1/8 Lexan or equivalent polycarbonate must be used, covering the full area, with sufficient bracing to prevent deflection. Minimum of 2 centre braces securely mounted.

3.7 Rear windows are allowed. Must be clear. No tinting.

3.8 Side windows are allowed but must be a maximum of 12” long, measured from the intersection of the A-post and door.

3.9 1” x 2” Rub Rails are allowed. Each end must be tapered and have a welded cap.

3.10 Rear Spoiler: Rear spoiler is allowed. The rear Spoiler MUST follow the contour of the rear deck lid. Maximum 6" high and 60" wide. Must be centered on the deck lid and cannot be adjustable.

3.11 Paint and Lettering: MUST have numbers on both doors (Minimum 18”) and on roof (Minimum

24”) Numbers must contrast the colour of the car.

4. Chassis, Roll Cage

4.1 Cars may utilize a North American Stock Production frame/chassis (1965 or newer)

- 108” Minimum wheelbase.
- Chassis must use the corresponding OEM front and rear suspension styles type for the chosen chassis.
- All frame Components MUST be Stock if Not stated with No lightening.
- Suspension mounting locations must remain in OEM stock locations ONLY.
- The wheelbase must remain Stock unaltered for the frame being used.

4.2.1 NON-Uni-Body:

- A rotted chassis rail can be reinforced by utilizing 2” x 3” .095 thick tubing inside the rail to safely support the roll cage mounting.

4.2.2 Uni-body cars:

- Uni-body cars may install subframe connectors. Minimum 2” x 3” .095” wall tubing.

4.3 All Chassis MUST be symmetrical, NO OFFSETS OR STRAIGHT RAIL CARS

4.4 Frame Height: Minimum 6” Frame Height for ALL CARS. Driver out of the car.

4.5 Stock C-channel frame extending from front to rear clips on full frame cars may be boxed or connected from side to side with an “X”.

4.6 Roll Cage: A Full roll cage constructed out of 1 3/4 .095 minimum round steel tubing is mandatory. Roll Cage Must be symmetrical in all directions. Leg Protection Bar MUST be installed. A MINIMUM of 4 horizontal door bars on the driver's side with a minimum of 2 vertical bars between each horizontal bar and anti-intrusion plates must be welded on the outside of bars (min. 16 gauge). Three-door bars or " X" type bars with a top cross bar mandatory on the passenger side.

4.7 Classic Chassis

Classic Chassis Street Stocks must use corresponding OEM front and rear suspension clips, and spring type for the chosen chassis. Unless specifically noted below. No rule found in any other section overrules items listed in 4.7 unless said specifically noted.

- Stock Frame. No fabricated front or rear clips.
- Steel Body with intact factory A-pillars and windshield frame
- Stock front suspension (Tubular upper arms are permitted)
- Must use a stock transmission cross member in the stock location. Notching for exhaust pipe clearance is allowed.
- Front brakes Steel, unaltered OEM, or unaltered OEM replacement brake components only
- OEM diameter caliper pistons only. Vented solid surface rotors only, no scalloped or ceramic coated rotors
- The bolt pattern may be changed.
- Rear drum brakes.
- Front-load bolts are permitted on all front clip designs.
- Rear-load bolts are permitted on factory rear coil sprung chassis.

- Factory rear coil sprung chassis are permitted to run 3-link rear suspension.
- 9” rear differential conversions are permitted.
- Leaf spring sliders permitted on rear spring mount only.

NOTE: in the matter of best on-track competition, this could be adjusted over the season. Any car that the Tech committee deems outside the spirit of the Classic Chassis designation will be classed a Street Stock.

4.8 Street Stock Chassis must use corresponding OEM front and rear suspension clips, and spring type for the chosen chassis. Unless otherwise noted below.

- Stock Frame. No fabricated front clip.
- Any approved body as outlined in section 3. Body
- Stock front suspension (Tubular upper arms are permitted)
- Front-load bolts are permitted on all chassis.
- Rear-load bolts are permitted on factory rear coil sprung chassis.
- Factory rear coil sprung chassis are permitted to run 3-link rear suspension.
- 9” conversions are permitted.
- Rear disc brakes.
- Fabricated rear clips are allowed, the rear clip is to be constructed of 2x3x.095 tubing Front and rear coil spring mounts must remain at stock datum points. MUST be a Minimum 2” x 3” .095” steel
- Leaf spring sliders permitted on rear spring mount only.

4.9 Next Gen SS:

Any constructed chassis permitted but must use: 71-81 Camaro STOCK front clip with pickup points and measurements on both the front and rear.

All newly constructed vehicles must conform to the measurements listed.

- 1. Stock front clip, attached to centre section at 90 deg, No Chassis offset permitted
- 2. The frame MUST be fabricated by a minimum 2” x 3” .095” Steel
- 3. Lower ball joint to center section 24”
- 4. Center section frame width 57”- 60” 8. LF Shock to “A” pillar 35”
- 5. “A” pillar to “B” pillar 45”-48”
- 6. Minimum top of the frame to halo 38”
- 7. Minimum halo width 46”
- 8. Minimum door bar height from top of frame 22”
- 9. Each side will have 4 door bars
- 10. Minimum side-to-side door bar width 70”
- 11. Must have center windshield bar
- 12. Must have a center halo bar
- 13. Rear clip width 36”-38”
- 14. Transfer bar from rear B pillar crossbar to RF frame mandatory
- 15. Camaro rear leaf springs only and must be mounted in stock location.
- 16. The rear clip is to be constructed of 2x3x.095 tubing.
- 17. Both the front and rear bay bars must be in line with the top door bars.
- 18. Driver’s foot box must incorporate intrusion protection bars
- 19. Dash panel complete from “A” pillar to “A” pillar

- 20. Dash panel complete from top of the crossbar, 90 DEG bend, level with the base of the cowl
- 21. The rear firewall to extend up from the frame to the top bay bar and extend to the base of the rear window
- 22. Sheet metal in the driver's area must be welded, the passenger side may be riveted. All interior sheet metal must be constructed with magnetic steel
- 23. Minimum 1/8" floor plate on driver's side from the firewall to "B" pillar

5 Suspension

5.1 Front Suspension: All suspension and frame components must be stock if not stated otherwise. No modification of stock suspension locating points unless otherwise stated. No rule below overrules any point in 4.7 unless specifically stated.

- Mounts for upper control arms can be changed to any location or height.

5.1.2 Lower Control Arms MUST be OEM fabrication type.

- 1 Left **OR** 1 Right lower control arm can be lengthened or shortened by 1" to achieve the desired alignment.

5.1.3 Non-adjustable tubular upper control arms are permitted on all cars.

5.1.4 Offset (problem solver) cross shafts are allowed in upper control arms.

5.1.5 Upper and Lower control arm rubber bushings may be replaced with urethane or solid bushings. **MoNo-ball type will not be permitted.**

5.1.6 Front load bolts are permitted on all clip styles.

5.1.7 Front Shocks can be relocated on all chassis.

5.1.8 Offset and extended stud Ball Joints are allowed. **MoNo Ball joints are not permitted.**

5.1.9 Larger stock spindles allowed (same side to side). All chassis.
- NO fabricated or modified spindles are allowed.
- Spindle holes can be modified to fit larger ball joints.

5.1.10 Steering must use stock-type tie rods.
- Steel or aluminum rods with minimum 5/8" threads are allowed to replace stock rods.
- Centre link, idler, and pitman arm must be steel.

5.1.11 No bump stops allowed.

5.1.12 Springs: Steel Racing Springs are allowed, 5" minimum diameter

5.1.13 Sway Bar: One-piece sway bars ONLY, may be mounted as a slapper bar on Street Stock and Next Gen chassis only.

5.2 Rear Suspension and Differential:

5.2.1 Leaf Spring Rear Suspension: All suspension and frame components must be stock if not stated otherwise. No modification of stock suspension locating points unless otherwise stated.

- Aftermarket bushings allowed no offset bushings, **no mono-ball bushings.**
- Rear sliders within 2” of stock location are permitted on leaf spring cars.
- Racing leaf springs are permitted, must be a direct replacement for stock-type leaf springs for year, and make of front clip being used.
- No composite leaf springs permitted.

5.2.2 4-Link Rear Suspension: 4-link suspensions are only allowed on chassis originally manufactured as coil link cars.

- No modification of stock 4-link mounting points.
- Aftermarket bushings are allowed
- No offset bushings solid or **MoNo ball bushings**.
- Load bolts are permitted.
- Stock type coil spring cars 4" minimum.
- Adjustable rear upper arms permitted. Maximum 1” of adjustment but no longer than stock.
- Rear lower control arms can be manufactured (1 x 2 or 2 x 2) steel tubing.
- Adjustable steel rods with minimum 5/8” steel heims and can be no longer than stock length.
- Adjustment is allowed by redrilling holes on the rear end bracket, front mounting must remain in the stock location.

5.2.3 3-Link Rear Suspension: 3-link suspensions are only permitted on OEM chassis with coil spring suspension.

- NOT PERMITTED ON THE NEXT-GEN CHASSIS.
- Rear lower control arms must be stock or can be manufactured (1 x 2 or 2 x 2) steel tubing or adjustable steel rods with minimum 5/8” steel heims and can be no longer than stock length.
- Adjustment allowed by redrilling holes on rear end bracket, front mounting must remain in stock location.
- Upper arm cannot be longer than the lower arms and must be solid steel upper arm with heim joints no absorbers and mounted in stock mount on the frame.
- Pan hard bars are to be fabricated from magnetic steel front or rear mounted. Rod ends (Heim joints) must be steel.
- Bar length may be adjustable to maintain the rear axle housing centered in the chassis.
- Bar attachment to be fabricated from steel and mounted with the pivot point on the rear axle tube no further than the inside of the rear spring and not lower than the bottom of the axle tube.
- Frame bracket may be braced towards the chassis.
- Bar attachment to the frame bracket may be a steel or aluminum slider type.
- No external adjustments allowed, and any access holes to allow such adjustments must be sealed, solid links allowed only.
- No rubber pucks or spring-type absorbers of any kind.

5.2.3 Rear End General

- No cambered rears.
- Rear-end housings must be unaltered stock width.
- Fabricated spring & shock mounts are allowed.
- Rear ends must be open (operational spider gears), or locked.

- Welded locked, Steel Full and Mini Spools are allowed.
- No posi-trac, Locker, or Torsen-style lockers.
- Disc brake conversions permitted
- Rear end must be centered in chassis.
- Must maintain stock mounting locations.
- No coating or lightening of any parts that are not mentioned.
- No lightweight components

5.2.4 Ford 9" Rear Ends Specific:

- Rear-end housing design must remain as produced.
- No fabricated style housings.
- 3rd Member/Gear set must use a stock steel case
- Lightweight/hollow axles are not permitted.
- Aluminum Hubs are not permitted.

5.2.5 Integral Rear Ends:

- Integral type rear end with C-clips holding the axles in may be tack welded to prevent fall out.
- If using an integral rear, you must use a hardened steel aftermarket racing axle.
- C clip eliminator kit is highly recommended.

5.3 Shocks:

5.3.1 Aftermarket steel-bodied, Non-adjustable racing shocks permitted, No high-pressure gas shocks. 1 shock per wheel.

5.4 Brakes:

5.4.1 OEM style single-piston calipers, Howe single-piston steel calipers allowed on SS and Next Gen.

5.4.2 Dual master cylinders permitted.

5.4.3 Proportioning valves permitted

5.4.4 No aluminum brake parts allowed.

5.4.5 Two-piece steel hubs and straight rotors allowed. On Street Stock and Next Gen only. No drilled or grooved rotors.

5.4.6 Rear disc or drum brakes are permitted.

5.5 Wheelbase & Track Width: wheelbase must be a minimum of 108".

- Maximum wheelbase variance of 1" from side to side.
- Maximum track width to be 77.5" to be measured at the bulge of the tire at spindle height.

6. Firewalls and Interior

6.1 All upholstery materials, trim, and padding must be removed

6.2 The floor, front and rear firewalls must be 22 gage steel sheet metal. Firewalls MUST BE continuous from side .

6.3 Tunnel and floor may be raised No more than 13" on the right side to accommodate exhaust and transmission

6.4 Dash, rear deck and crush panels can be made from aluminum.

7. Fuel Cell:

7.1 A commercially manufactured fuel cell is mandatory. Max 22 US gallons

7.2. Must be specifically designed and manufactured for racing.

7.3. A minimum 20- gauge steel fuel cell container is mandatory.

7.4. Rollover/check valve balls are mandatory on all tank lines.

7.5. Cell must be mounted between the rear frame rails of the chassis, No lower than 8” from the ground.

7.6. A square tubing cage, or equivalent angle iron & flat bar mounting system is mandatory.

7.7. A fuel cell protection bar is mandatory.

7.8. Pump or Race fuel only.

- No alcohol, oxygenated or exotic fuels.

7.9. Any mechanical fuel pump allowed. No electric pumps.

8. Radiator:

8.1. Must be or resemble OEM and mounted in the stock location.

- No antifreeze is allowed in the cooling system.
- Aluminum radiators are allowed.
- Electric fans are allowed

9. Drive Shafts:

9.1. Drive Shafts and U-joints MUST be stock steel

9.2 Drive Shafts must be painted White

9.3 A Steel, 360-degree retainer loop, 1/4" thick 2" wide MUST be positioned at the front and the rear of the drive shaft within 12" of the u joint.

9.4 NO lightweight or composite drive shafts allowed.

10. Transmissions

Automatic Transmissions:

- ➢ Must be a stock production transmission with stock gear ratios.
- ➢ Functionality must remain stock.
- ➢ Removal of any gears including reverse is Not allowed.
- ➢ Stock operational torque converters only.
- ➢ Torque converters must be a minimum of 11” in diameter.
- ➢ Oil coolers are allowed.

Standard Transmissions:

- ➢ Must be a stock production transmission with stock gear ratios.
- ➢ Functionality must remain stock.
- ➢ Removal of any gears including reverse is Not allowed.

11. Clutch:

11.1 Must be stock style & weight. MUST Not be drilled or machined.

11.2 Flywheel must be stock, unaltered, minimum 10" diameter, and 14 lbs.

11.3 Hydraulic or mechanical release bearings are allowed

11.4 Bellhousing MUST be a steel scatter shield

12.Electrical:

12.1. All engine packages must utilize an MSD part #8728 or #8727CT rev limiter with a functioning RPM chip. All wiring must be clearly visible, easily accessible, and traceable for tech.

- GM Crate Engine - 6000 RPM
- Built Engine - 6500 RPM

12.2 Batteries must be securely mounted in an angle iron or equivalent base utilizing a bolt-on clamp style mount to hold the battery in.

12.3 Marine-style battery boxes are mandatory if the battery is mounted in the driver compartment.

12.4. All cars must have a Battery master disconnect On/Off switch mounted to the right OR left rear side of the main cage/main hoop. It must be clearly marked On/Off. The disconnect MUST be used to break power in the positive battery cable, Not the negative.

12.5 All cars MUST be wired in a manner that if the Battery disconnect switch is turned off the car will not continue running.

13. Tire & Wheels:

13.1. 15” Steel racing wheels on all corners mandatory

- Maximum 8” wide from bead to bead.
- No stock or homemade wheels.
- Minimum 2” backspacing.

13.2. Minimum ⅝” wheel studs. Stud threads must protrude through wheel nuts.

13.3. Bleeder Valves are not allowed.

13.4. Maximum of 1” wheel spacer per wheel is allowed.
- No stacking of wheel spacers allowed.

13.5. AR P265 Tire is mandatory.

13.6. Altering of Tires in any manner to obtain a performance advantage is NOT allowed.
- Tire softener, conditioner, or any other substance to treat tires is not permitted.
- The use of solvents to enhance tire performance is completely prohibited.

14. Weights

14.1. Weight Packages:

Base weights listed below are the minimum at all times, including after the race with driver (No refueling after the race).
- Races longer than 50 laps will have a ½ lbs. per lap over 50 laps allowance.
- 55.0% Maximum left side weight at all times.
- 50.0% Maximum Rear weight at all times.

Chassis	Engine	Base Weight
Classic Chassis	All Engine Combinations	3000lbs
Street Stock/Next Gen	Built Engines	3200lbs
Street Stock/Next Gen	602 Crate with 8 genuine GM Seals **Resealed 602 Crate	3100lbs 3125lbs

* Any Crate engine that does not retain all 8 genuine GM seals will be subject to the 25lb penalty. listed above. Including any combination of Penticton speedway seals and GM seals. Regardless of the reason. Any crate engine with seals other than GM and or Penticton Speedway seals is subject to an additional penalty as outlined in 16.4.

15 Engine Height and Location

15.1 Engine height will be a minimum of 13" measured from the ground to the center of the crankshaft.

15.2 Engine Location: #one Spark plug of the engine must be in line or ahead of the upper ball joint and center in the frame & cross member may be altered to achieve this.

15.3 Solid engine and transmission mounts are permitted

The Penticton Speedway will continue to assess the competitiveness of the various Street stocks to make adjustments that will maintain reasonable parity in the class.

16 GM Circle Track 602 Crate Engine

16.1.1 GM 602 part #88958602 or #19258602 only.

16.1.2 The engine must remain sealed by the factory and possess all 8 of the Genuine GM seals installed by the factory in an untampered state.

- Penticton Speedway reserves the right to inspect any crate engine, by means of teardown, at any time. Should the engine be deemed legal, it will be replaced with a New 602 GM engine (As delivered by GM). If it is found to be modified from the stock form in any way, the offending engine will be returned in its unassembled state and no compensation will be paid. The driver will forfeit all points for the season.
- All crate engines must meet original specifications as per G.M. Performance (9.1 -1 compression ratio)
- GM part # 14088765 counterbalanced flex plate is suggested.

16.2 Rebuilt 602 Crate Engines

16.2.1 Rebuilt 602 crates must be rebuilt as outlined in the Circle Track Crate Engine Technical Manual and sealed by the approved seal-installing engine builder that your home track allows.

- ALL rebuilt crates are subject to 25lb weight penalty.
- All rebuilt crates engines possessing seals other than Penticton Speedway seals are subject to chassis-dependent penalties as outlined in 16.4 Until such time they are inspected and re-sealed with Penticton Speedway seals as outlined in 16.3.
- Penticton Speedway reserves the right to inspect a crate engine at any time. Should the engine be deemed a conforming rebuilt engine, it will be reassembled and sealed with Penticton Speedway seals. If it is found to be modified beyond the rebuild guidelines in any way, the offending engine will be returned in its unassembled state. The race team will forfeit all points for the season.
- Any denial of a teardown will result in the forfeit of all points and payouts for the race event. (event means all days over the course of the weekend.)

16.2.2 All crate engines must meet original specifications as per G.M. Performance (9.1 -1 compression ratio)

- GM part # 14088765 counterbalanced flex plate is suggested.

16.3.1 Rebuild procedure

- The only approved crate rebuilder is K&S Machine located in Kelowna.
- All rebuild parameters will follow the guidelines and part numbers provided by GM as outlined in the Circle Track Crate Engine Technical Manual. Except for the following allowances.
    - The only permitted pistons other than GM 12514101 and its direct supersessions for rebuild are Silvolite 3470HC and Sealed Power H815DCP
    - Maximum overbore of 0.020”
    - Timing chain part numbers Melling 40400 or Cloyes 93157
    - Absolutely no low tension rings.

16.3.2 Reseal inspection procedure.

Reseal inspection is required in order to reseal and be deemed a Penticton speedway sealed crate (conforming crate). In the event that minor work is desired such as upgrading the timing set, or any maintenance that involves breaking any seal, the following steps are to be applied.

- Resealing inspections can be done by either K&S Machine or an authorized representative of the Penticton Speedway.
- K&S inspections can be booked and scheduled directly with them.

Local inspections must follow the listed steps below.

To book a reseal inspection, emails must be sent to racetech@pentictonspeedway.com a minimum of 7 days prior to your desired inspection date. Provide 2 options for the date and time that you are requesting. This will help us select an inspector that will work with the desired timeline.

- No seal is permitted to be broken prior to the arrival of the inspector. In the event, a seal is broken without supervision a mandatory full tear-down inspection by K&S is required at the race team's expense.
- Engine must be on an engine stand so that the engine can be rotated upside down, cleaned, and drained of all fluids.
- Correct engine gaskets, sealers, and tools must be on hand for reassembly.
- Allow for 3 hours from disassembly to reassembly and final seal installation.
- Please understand that a representative is on hand to supervise seal removal, measure and inspect, and install track seals. They are not on hand as a tech.
- Cost of inspection is $175. This price includes the price of the seal package and the provided inspector's time. Additional travel costs will be assessed on an individual basis.
- All payments are to be made directly to Penticton Speedway and NEVER to the inspector.
- Copies of all measurements will be provided with the receipt of the transaction.

  If at any time during communication before, after, or during the inspection, additional remuneration is implied or offered for a favorable outcome. The race team will be suspended for one year. Zero exceptions

Penticton Speedway is aware that this is a sizable rule change and that rebuild arraignments may be in motion. In that event, it is the racer's responsibility to email the tech department at racetech@pentictonspeedway.com to initiate a discussion to work together toward a favorable result.

16.4 Carburetor:

- Holley Part # 01-80541-1 & Quick Fuel Part # Q650CT 650 CFM Crate engine Carbs only.
- Restrictor plates are required on all Next Gen Chassis running crate engines.
  - GM Crate engines maintaining ALL 8 GM seals, or Penticton Speedway seals are required to run a 1" restrictor.
  - **ALL CHASSIS** classifications running crate engines with other than the above-listed seals are required to run a .950" restrictor plate. Until such time the engine is inspected and resealed in accordance with the guidelines listed in 16.3.2.
  - Plates must be purchased from Penticton Speedway or Alien Race Cars (1-250- 477-8444)
  - At any time, restrictor plates can be swapped among competitors or be replaced with a same-size plate. But must follow the above-listed requirements based on seal requirements.
- An air cleaner is mandatory. The air cleaner base must be round and may not be any bigger than 16" in diameter.
- Ram air induction, fresh air ducting, cowl induction, or modified air cleaner bases are allowed.

General engine rules below pertain to engines as described in 16.1 and 16.2.

Exhaust: Mufflers are mandatory and be able to be removed for inspection. Decibel reading of 98 or less.

- Headers are allowed with a maximum 1 5/8" tubes to 3" collectors.
- NO stepped headers.
- No Tri-Y headers.
- No crossovers/X-pipes, H-pipes, or 2 into 1 system where the flow is merged outside of the muffler as described below.
- Howe 2-into-1 muffler is permitted with a maximum of 18" long tailpipe with a maximum O.D of 5".
- Exhaust pipes must exit behind the driver ahead of the rear wheels or out the right side past the center of the door. Exhaust pipes must be securely mounted under floor pans and have no sharp edges or protruding outside of the bodyline.

- Maximum 3" O.D. pipe size before the muffler and maximum 3"O.D. after the muffler.

Distributors:

- Stock style & functioning HEI distributors only.
- MSD part # 8362 is the only aftermarket distributor allowed.
- Accel Module part # 35361 is allowed.
- Vacuum advance may be disabled or removed.

Valvetrain: Replacement springs are allowed. Must be one of the following Part #'s:

- GM Performance #10212811
- Elgin #RV943xs - Inner springs must be removed.

- Match sets of the above valve springs permitted. Maximum 84lb measured on any spring.
- Only Melling 40400 or Cloyes 93157 double roller timing chain permitted.
- Must be installed at 0 deg.
- No offset keys or bushings permitted.

The timing chain (double roller) upgrade is the only deviation from a stock 602 that is permitted. Understand that this will no longer possess the 8 original GM seals required to be classed as a GM-sealed crate engine and will be subject to the same additional 25lb penalty. Refer to section 16.3 for the procedure.

Water Pump & Pulleys:

- Stock standard-length water pumps only.
- Stock or aftermarket pulleys are allowed.
- Aftermarket reduction pulleys are allowed with max 30 % reduction.

Alternators & Power Steering Pumps:

- Alternators and power steering pumps are Not mandatory.
- Any alternator is allowed. Must be driven off the front of the engine.
- Stock or aftermarket cast steel power steering pumps are allowed. Must be driven off the front of the engine.

17 Built Engines

General:

- Unless specifically identified in these rules all parts must be automotive OEM Stock or OEM replacement for the engine being run.
- Marine parts are Not acceptable replacements for automotive OEM stock. • GM, FORD, & CHRYSLER performance racing parts are Not acceptable replacements for automotive OEM stock.
- Engine must be Corporation to Corporation with chassis being used and MUST be mounted in stock location.
- Any steel wet sump oil pan is allowed.
- Solid Motor Mounts are permitted

Engine Blocks:

- Cylinder deck may be machined for cleanup and truing only.
- Zero decking is Not allowed.
- No lightening or altering of engine blocks.
- Aftermarket steel Main caps are allowed.
- Camshaft tunnel must remain of stock dimensions.
- Displacements are as follows: (bore x stroke + overbore = Max Displacement)
    - ➢ Chev 350 c.i. 4.00" x 3.48" + .060" = 360 c.i. MAX
    - ➢ Ford 351 c.i. 4.00" x 3.50" + .060" = 363 c.i. MAX
    - ➢ Chry 340 c.i. 4.04" x 3.313" + .060" = 350 c.i. MAX
    - ➢ Chry 360 c.i. 4.00" x 3.578" + .030" = 364 c.i. MAX
- Lifter bores must remain stock size:
    - ➢ Chev 350 = .842"
    - ➢ Ford 351 = .874"

    - ➢ Chry 340 = .904"
    - ➢ Chry 360 = .904"
- Steel double roller timing chain and gears only.

Camshafts & Lifters:

- Hydraulic or solid flat tappet Camshafts only.
- Hydraulic or solid flat tappet lifters only.
- Anti-pump-up lifters are allowed.
- Lifter diameters must remain stock for the engine block being used.

Crankshafts:

- Stock OEM or aftermarket Stock Style replacement crankshaft, minimum weight 48.5 lbs, are allowed.
- Stock stroke must be maintained.
- No strokers or lightweight cranks allowed.
- Recognized part #'s are as follows:
    - ➢ Scat 4-350-3480-5700
    - ➢ Scat 9-10442
    - ➢ Eagle 4305348057sp*
    - ➢ Eagle 435034805700
    - ➢ Eagle 103503480(CM)
- If you choose to use a crankshaft other than one of the recognized Part #'s provided, it is your responsibility to present it to Penticton Speedway Management/Tech for approval BEFORE use.

Connecting Rods:

- Stock OEM or aftermarket replacement rods are allowed.
  Eligible aftermarket Part #'s:
    - ➢ Eagle SIR5700BBLW
    - ➢ Eagle SIR5700BPLW
    - ➢ SCAT ICR5700P
    - ➢ SCATICR5700
- OEM rod length must be always maintained.
- No lightweight aftermarket rods allowed.
- Balancing of rotating assemblies is allowed. No removal of serial numbers or manufacturer emblems.

Pistons:

- Flat-top or Domed pistons are allowed.
- Maximum 0.125 dome allowed.
- Flat-top pistons must be used with cylinder heads having a chamber size less than 74cc
- Domed pistons may be used with cylinder heads having a chamber size of 74cc or greater.
- Maximum Compression ratio 11:1

Cylinder Heads:

- Vortec heads are not allowed.
- Unaltered stock cast iron O.E.M. production cylinder heads only. Cylinder heads showing any signs of alteration in any way other than outlined in the rule book will be deemed illegal.
- Machining for screw-in studs and guide plates is allowed.
- Opening of push rod slots in cylinder heads is allowed.
- Steam relief holes may be drilled to a larger size. Multi-angle valve job permitted.

- New valve seats are allowed.
- No grinding or blending of bowl into bottom cut of valve job.
- No titanium or hollow stem valves.
- Maximum Valve Sizes are as follows:
    - ➢ G.M. 1.94” intake 1.60” exhaust
    - ➢ Ford 2.04” intake 1.66” exhaust
    - ➢ Chrysler 2.02” intake 1.60” exhaust
- Stock diameter replacement valve springs and retainers or Comp valve springs part #26981 with retainer part #787 hardened keepers are allowed.
- Rocker arms must be unaltered Stock or Stock replacement. No Roller Rockers of any kind.

Water Pump & Pulleys:

- Stock standard-length water pumps only.
- Stock or aftermarket pulleys are allowed with max 30% reduction.

Intake Manifold:

- Stock unaltered Cast iron 2bbl intake manifold only.
- Stock high-rise/marine manifolds are not allowed.

Distributors:

- Stock style & functioning HEI distributors only.
- MSD part # 8362 is the only aftermarket distributor allowed.
- Accel Module part # 35361 is allowed.
- Vacuum advance may be disabled or removed.

Carburetor:

- Rochester 2G 500CFM unaltered 2bbl carburetors (For example Jet part #37001).
- 1 11/16” max throttle bore size.
- Phenolic spacer with a MAXIMUM of ⅜” permitted to mitigate heat soak from iron intake.
- Carburetor adapters are not allowed.
- An air cleaner is mandatory.
- Air cleaner base must be round and may not be any bigger than a 16” diameter.
- Ram air induction, fresh air ducting, cowl induction, or modified air cleaner bases are allowed.

Exhaust: Mufflers are mandatory and be able to be removed for inspection. Decibel reading of 98 or less.

- Headers are allowed with a maximum 1 5/8" tubes to 3" collectors.
- NO stepped headers.
- No Tri-Y headers.
- No crossovers/X-pipes, H-pipes, or 2 into 1 system where the flow is merged outside of the muffler as described below.
- Howe 2-into-1 muffler is permitted with a maximum of 18" long tailpipe with a maximum O.D of 5".
- Exhaust pipes must exit behind the driver ahead of the rear wheels or out the right side past the center of the door. Exhaust pipes must be securely mounted under floor pans and have no sharp edges or protruding outside of the bodyline.

- Maximum 3" O.D. pipe size before the muffler and maximum 3"O.D. after the muffler.

Alternators & Power Steering Pumps:

- Alternators and power steering pumps are Not mandatory.
- Any alternator is allowed. Must be driven off the front of the engine.
- Stock or aftermarket cast steel power steering pumps are allowed. Must be driven off the front of the engine.