

Port Royal Speedway 2018 355 Econo-Late Model Rules
Any changes/updates/revisions for 2018 are noted in RED

ANY CAR, TEAM AND/OR DRIVER THAT DOES NOT MEET THESE SPECIFICATIONS AND/OR EQUIPMENT REQUIREMENTS WILL BE SUBJECT TO PENALTIES AS DETERMINED BY THE PORT ROYAL SPEEDWAY LATE MODEL OFFICIALS.

Engines

11 to 1 compression ratio maximum.

All engines must have crankcase openly vented.

A maximum of 25.5 inches from the center of the ball joint to the front of the motor plate/engine bell housing flange will be permitted.

Mopar-Max.cu. in. 366 (.030 maximum over bore)

Ford-Max. cu. in. 357 (.030 maximum over bore)

Chevrolet-Max. cu. in. 355 (.030 maximum over bore)

Crate Engines - GM Crate Engines 88958602 AND 19318604 will be eligible to compete in sealed form with a 2 or 4 barrel carburetor.

Ignitions

A.) Only a single distributor or magneto will be permitted. Coil pack and/or engines that have individual ignition systems, electronic or mechanical for each cylinder will not be permitted.

B.) Aluminum intakes are permitted

C.) Headers are permitted.

Carburetors

A.) Limited to one two-barrel 500 CFM Holley only, checked with a no go gauge.

Camshafts

A.) Flat tappet cams only are permitted. No roller cams, no roller lifters, no radius lifters, no mushroom lifters permitted. Roller rockers are permitted.

B.) All blocks and heads must be cast iron.

GM Crate Engine 88958602 specifications:

Block part number: 10105123
Block type: cast iron with 4-bolt main caps
Bore x stroke (in): 4.00 x 3.48
Camshaft duration (@ .050 in): 212-degree intake/222 degree exhaust
Camshaft lift (in): .435 intake/.460 exhaust
Camshaft part number: 24502476
Camshaft type: hydraulic flat tappet
Compression ratio: 9.1:1
Connecting rod part number: 10108633
Connecting rods type: powdered metal steel
Crankshaft part number: 14088526
Crankshaft type: nodular iron
Cylinder head part number: 12558060
Cylinder head type: vortec iron; 64cc chambers
Displacement (cu in): 350
Engine name: Circle Track 350/350
Engine type: Chevy small block V-8
Ignition timing: 32 degree total @ 4000 rpm with vacuum advance disconnected
Maximum rpm: 5500

***NOTE:** distributor included with 350/350 engine has melonized steel gear part number 10456413. This must be used with engines with steel camshafts or engine damage will occur.*

Piston part number: 12514101
Pistons type: hypereutectic aluminum
Recommended fuel: 92 octane
Rocker arm ratio: 1.5:1
Rocker arms part number: 10089648
Rocker arms type: stamped steel
Valve size (in): 1.94 intake/1.50 exhaust

GM crate motors may not be unsealed and may not be rebuilt without track approval before the rebuild. If permitted, the motor must be rebuilt at a track authorized motor builder. Motors that are torn down for track tech must be reassembled with all of the exact same parts at the time of tear down except those that are determined by the tech official to be damaged by the tear down process. Any tear down damaged part must be replaced with the exact same GM part. Reassembled motor must be inspected and resealed by authorized tech center before further competition. By using a GM crate motor in competition, the race team acknowledges all

responsibility for the legality of the motor upon inspection at any event regardless of any previous motor verification.

Transmission/Driveline and Driveline Components

- A.) Direct drives systems of any-type will not be permitted.
- B.) The transmission must be bolted to the engine it must have forward and working reverse gear(s) and must be able to shift to forward or reverse with engine running.
- C.) All cars must be equipped with a working self-starter.
- D.) If a stock style clutch is used it must have a blow proof bell housing.

Driveshaft

- A.) The driveshaft must be a minimum of 2"-inches in diameter. All drive shafts must be painted white.
- B.) Only one (1) drive shaft connected from the transmission to the center section of the rear end will be permitted.
- C.) A minimum of one (1) driveshaft hoop / sling must be fastened securely to the frame. It is recommended that two (2) driveshaft hoops / slings be used.
- D.) No carbon fiber driveshafts permitted.

Rear End

- A.) Any type of rear end differential / center section will be permitted.
- B.) Live-axle type rear ends will not be permitted.
- C.) Independent rear suspensions will not be permitted.
- D.) Floater-type wide-five hub assemblies will be the only hub assemblies permitted.

Fuel, Fuel Cells and Fuel System

- A. All cars must have fuel cells that meet and/or exceed FT3 specifications. The fuel cell must have a maximum capacity of 35 gallons.
- B. The fuel cell must be enclosed completely in a container that is a minimum thickness of 20-gauge magnetic steel and/or .060"-inch aluminum.
- C. The entire container must be visible for ease of inspection.
- D. The fuel cell must be mounted behind the rear axle between the rear tires, a minimum of 4"-inches ahead of the rear bumper. The bottom of the fuel cell must not be any lower than the bottom of the rear end/quick change housing.
- E. The fuel cell must be mounted with a minimum of two (2) .125"-inch thick steel straps. The straps must cover the entire cell. Fuel cells that are mounted in a square tubing frame will be permitted.
- F. The fuel pick up must be positioned on the top or right side of the fuel cell and be constructed of steel. The fuel pick up must have a check valve.

G. Only racing gasoline or alcohol will be permitted for competition. Nitrous oxide, nitro-methane and/or propylene oxide will not be permitted.

H. Only mechanical and/or belt driven fuel pumps will be permitted. Fuel injection system(s) and/or electrical fuel pumps and/or any type of pressurized fuel system will not be permitted.

Exhaust - Muffler and Sound Reduction Devices

A.) The exhaust flow must be parallel to the ground. Exhaust systems that direct the flow toward the ground will not be permitted.

B.) All exhaust systems/headers must end with a collector.

C.) Mufflers are mandatory on exhaust systems. No specific muffler model is mandated.

D.) If/when racecar noise levels becomes an issue PRS will adopt a decibel level rule. Notification could be as recent as a one-week notice.

Traction Control Devices

A.) All electronic and/or computerized wheel spin and/or ignition retardation and/or acceleration limiting and/or traction control devices of any type will not be permitted.

B.) Adjustable ping control devices, dial a chip controls, timing controls and/or automated throttle controls will not be permitted.

C.) Adjustable restrictor plates will not be permitted.

D.) Remote control components of any-type will not be permitted.

E.) Radios and/or devices for transmitting voice and/or data will not be permitted.

F.) Data acquisition systems will not be permitted.

Chassis/Frame

A.) The wheel base minimum will be 103"-inches with a maximum wheel base of 105"-inches.

B.) All frames must be fabricated from magnetic steel with a minimum of 2"-inches x 2"-inches or approved rectangular magnetic steel with a minimum material thickness of .083"-inches.

C.) A minimum of 1.75" Outside Diameter magnetic steel tubing, 4130 Chrome Moly or DOM with a minimum material thickness of .083"-inches, will be permitted for frames that are fabricated from round tubing.

D.) Rear bumpers that are stubbed may only extend a maximum of 8"-inches beyond the frame. Any stubbed rear bumper that extends further than the maximum of 8"-inches must be formed and directed 8"-inches toward the front of the car.

E.) External rub rails will not be permitted.

F.) All cars must be equipped with a tow hook and/or strap for the purpose of towing.

G.) All battery supports and/or mounts must be secure and braced in two (2) horizontal positions and one (1) vertical position.

H.) Any frame built on or after January 1st, 2006, must have the builder's unique serial number plate prominently attached to the left side roll cage

upright. The plate must be welded in place. All characters on the plate must be a minimum of ½”-inch in height and the serial number must not exceed 8 characters.

Weight / Ballast

A.) A.) The total weight of the car with the driver will be 2,250 pounds if a crate 602 GM engine is used; 2,350 pounds if a non-crate engine is used; and 2,400 pounds if a dry-sump motor is used with 50 pounds of the weight located at or in front of the mid-plate. Maximum weight for all cars without driver will be 2,550.

B.) Weights up to 50 lbs must be positively fastened by 2 ½-inch, minimum grade 5 bolts with a minimum of two (2) weight clamps. Threaded rods will not be permitted. All weights must be painted white and clearly labeled with the car number on it.

C.) Any weight(s) must be securely attached to the frame below the body decking.

D.) Any car that loses any weight/ballast during an event may be subject to a penalty.

E.) Weights attached to the rear bumper and/or outside the frame will not be permitted.

F.) Pellet-type and/or liquid-type weight/ballast will not be permitted.

G.) Driver operated weight adjustment, ‘weight jacking’ devices will not be permitted.

Body (Port Royal will use WOO dimensioning)

Overall Appearance

A.) The car must be neat in appearance and must display the car number of the front nose and the rear fuel cell. The minimum height for the number will be 6”-inches.

B.) The car must have legible numbers on each side and on the roof a minimum of 18”-inches high,

C.) The driver’s last name must be placed in legible letters on both doors or the rocker panels.

General Body

A.)The nosepiece must match the body style of the make and manufacturer of the car and be the same as the make and manufacturer of the motor (GM, Ford, Mopar).

B.) All cars must have a minimum half-inch (1/2”) and a maximum of one (1) -inch radius at the top of fenders, doors and quarter panels. Sharp edge(s) will not be permitted.

C.) The floor boards and firewall must completely cover the driver’s area with no openings.

D.) Fins and/or lips of any-type will not be permitted anywhere along the entire length of the car.

E.) The body line must be a smooth even line from front to rear.

F.) Wedge shape cars and/or body styles will not be permitted.

G.) “Belly pans” or any type of enclosure on the bottom of the car will not be

permitted. A skid plate to protect the oil pan is permitted. A maximum 1/8" skid plate will be permitted.

H.) Wings and/or tunnels and/or any type of air deflection device will not be permitted underneath the body and/or chassis of the car.

I.) A maximum of one (1) stone deflector, for rear mounted oil pumps, oil filters, and for the main oil tank will be permitted. The deflector may be made of steel, aluminum, or heavy gauge wire. The cover may only be mounted near the unit it is designed to protect with a maximum size of 18" x 18" and only mounted from the upper right frame rail to the lower right frame rail.

J.) Panels of any type under the rear deck running from the front to the rear of the car will not be permitted.

K.) Any style air cleaner scoop used must be positioned in front of/or around the air cleaner and must not exceed 1"-inch in height above any part of the air cleaner. Any type of flange and/or air deflection device and/or fin that is designed to direct airflow will not be permitted.

L.) Cockpit adjustable components with the exception of brake bias adjusters will not be permitted. Adjusters of any-type, including but not limited to adjustable shocks, hydraulic or pneumatic weight jacks, trackers, ignition boxes or similar adjustable components will not be permitted inside the cockpit of the car or within reach of the seated driver.

Nosepiece

A.) Only approved nosepieces may be used. A list of approved manufactures and part numbers for competition in Late Model competition follows:

- 1.) MD3 – Performance Bodies
- 2.) ARP
- 3.) Five-Star MD3 type

B.) All nosepieces must be made of molded type material.

C.) Two piece noses must be positively fastened together in the center. Spacers added to gain width will not be permitted.

D.) The nosepiece must be mounted in a manner that does not alter its original shape.

E.) The nose shall remain flat above the nose lip/wicker bill. Alterations and/or additions may not be made to this area other than cooling holes will be permitted.

F.) The nosepiece can extend a maximum of fifty-two inches (52") from the center of the front hub to the farthest point extending forward.

G.) The nosepiece must display a headlight decal package. A one-race grace period, running contrasting color tape in the shape of a headlight will be permitted.

Roof

A.) The roof length from front-to-back must be a minimum of 44"-inches with a maximum of 54" inches.

B.) The roof width from side-to-side must be a minimum of 48"-inches to a

maximum of 52"-inches.

- C.) The roof must be stock appearing and be mounted level to the body.
- D.) The minimum height of the roof will be 45"-inches with a maximum height of 48"-inches. The roof will have a maximum rake of 3"-inches.
- E.) The roof must be mounted parallel to the body and near the center of the car as viewed from the front of the car. The entire rear edge of the roof, when measured from the bottom of the roof to the top of the interior decking, shall maintain the same height measurement across the entire width of the roof.
- F.) A maximum 1-1/2" roll, turned downward will be permitted along the front edge of the roof. A maximum 1"-inch roll, turned downward, will be permitted along the rear edge of the roof. These modifications will be permitted to improve the strength of the roof. Any other modifications to the roof will not be permitted.
- G.) Flat and/or odd shaped roofs will not be permitted. Bellied and hollowed roofs will not be permitted. 4.3.8. Any sun/antiglare shields may not exceed a 4" drop from the top roof line, and must hinge for easy exiting.
- H.) A maximum of two (2) roof edge bead rolls of a maximum height of 1/2"-inch the length of the roof will be permitted.
- I.) The roof posts and spoiler support(s) may not overlap.
- J.) Only single plated roofs will be permitted.
- K.) The maximum thickness of the roof at any point will be 1/2"-inch.
- L.) The roll cage and associated frame members above the interior panels (decking) must remain open. Enclosures will not be permitted.

Roof Supports and Window Side Panels

- A.) All roof side panels must extend to the edge of the body.
- B.) The roof side panel window size must be a minimum of 10"-inches x 15"-inches and must match drawing number -4- side view. A maximum crown of two (2) inches will be permitted, measured from the center of a common tangent point on either side of the crown.
- C.) The left and right side window panels must match.
- D.) A maximum bow of two (2")-inches outward on the window side panels as viewed from behind will be permitted.
- E.) The front roof supports up to 2"-inches in width must extend forward to the rear of the hood. Lips and/or fins will not be permitted.

Front Fenders, Fender Flares and Hood

- A.) The hood and the front fenders must be level and flat from the left to the right side of the car.
- B.) The outside edges of the hood and/or the fender must remain inside the overall bodyline.
- C.) The front fender may be a maximum of 37"-inches in height, measured vertically from the ground to the top of the fender behind the front tires.
- D.) The front fender flares must be made of plastic and must not alter the original shape of the nose piece.
- E.) The front fender flares must not extend beyond the front tires more than

1"-inch per side to a maximum width, edge-to-edge, of 90"-inches in width with the wheels pointed straight.

F.) The front fender flares can have a maximum increase in height of 2 inches.

G.) The front fender flares must have collapsible supports.

Doors

A.) The door-to-door measurement must not exceed 76"-inches in width at the top of the doors.

B.) The door-to-door measurement must not exceed **85-90"-inches** overall width when measured at the bottom of the doors in the center of the car.

C.) The doors must not exceed 37"-inches in height when measured from the ground to the top of the door.

D.) The door sides may not break inward from the top 76"-inches and bottom **85-90"-inch** measurements. Hollow and/or belled doors will not be permitted.

E.) The minimum ground clearance will be 3"-inches.

Quarter Panels

A.) The maximum distance from the center of the rear hub to the top quarter of the panel is fifty three (53")-inches. See drawing #2 1.7A.

B.) The quarter panels must not exceed 76"-inches in width at any point as measured at the top of the panels.

C.) The rear deck must taper in a symmetrical manner from the center of the rear hub to the rear spoiler with a maximum width of 72"-inches. See drawing #5.

D.) The maximum width for the quarter panels measured from outside-to outside measured 19"-inches from the ground and/or at the bottom of the quarter panel will be 86"-inches.

E.) Any breaks and/or bends formed in the sides of the quarter panel that move the panel toward the center of the car will not be permitted. Hollow and/or bellied panels will not be permitted.

F.) The maximum distance from the center of the rear hub to the rear trailing edge of the quarter panel will be 48"-inches. See drawing #2 1.7A.

G.) The maximum height from the ground to the top of the rear deck at the top of the rear quarter panel is 38"-inches.

H.) A minimum of 2"-inches of tire clearance between the tire and the body will be required.

I.) Skirting that extends behind the rear quarter panel will not be permitted.

Spoilers and Spoiler Braces/Supports

A.) Only aluminum and/or Lexan and/or Lexan-type rear spoilers will be permitted.

B.) The maximum overall height of the rear spoiler will be 8"-inches. The maximum width of the rear spoiler, including braces and/or supports is 72"-inches.

C.) The rear spoiler must begin at the deck and extend 8"-inches from that

point. Suspending the spoiler to create a wing-type device will not be permitted.

D.) The rear spoiler must begin at the rear most point of the quarter panels.

E.) Only three spoiler braces/supports will be permitted. The front edge of the spoiler brace/support must be in line with the spoiler.

F.) The outside spoiler supports must not be mounted any-wider than the top of the quarter panel(s) and must be centered on the rear deck.

G.) In the event that aluminum angle is used to bracer the upper edge of the spoiler, the angle must not add to the height and/or length of the spoiler in any way.

Interior

A.) The interior of the cockpit must be a minimum of 11"-inches below the top of the roof and/or roll cage, measured perpendicular to the ground from the bottom of the roof to the cockpit deck. Roof rolls are not part of the measurement.

B.) The side window opening(s) must be 15"-inches from the top of the door to the bottom of the roof.

C.) Supports bars that block the right window from the driver exiting the cockpit will not be permitted.

D.) A single rock guard (Lexan screen) tapered back from the steering wheel to the height of 1"-inch in line with the driver's chest providing the 11"-inch minimum clearance is met at any point from the roll cage to the body and/or rock guard.

E.) If the interior deck drops the drop must begin at the rear of the engine plate with a maximum of 4"-inches and must not drop below 4"-inches rear of the hood. The start of the dropped interior must remain closed as a part of the fire wall. The entire width must be closed off with sheet metal.

F.) The interior must gradually taper up to the quarter panel height and must be level for a minimum of 20" inches from the rear spoiler forward..

Driver Compartment

A.) A full metal firewall fabricated from magnetic steel and/or aluminum must encompass the driver's compartment from front-to-rear, on both sides and floor boards.

B.) The driver's seat must be a high back aluminum seat, designed specifically for racing, located on the left side of the car and mounted per the manufacturer's instructions securely to the frame.

C.) The seat design should be one from a current manufacturer and/or recommended to include the full containment design. Installation of the full containment seat should follow the manufacturer's instructions.

D.) All cars must be equipped with a quick-release type **fully round** steering wheel.

E.) The driver compartment must have a starting switch and/or button within reach of the driver.

F.) A clearly labeled electrical on/off 'kill' switch must be within reach of the driver is recommended.

- G.) Mirrors of any-type will not be permitted.
- H.) Radios and/or electronic and/or data communication devices will not be permitted.
- I.) Any edge and/or sheet metal end in and around the driver compartment must be protected with trim and/or beading and rounded. Sharp and protruding edges will not be permitted.
- J.) A substantial rock guard with a minimum of three (3) additional roll bars must be mounted in front of the driver. The rock guard must be made from wire screen. Windshield screens must be a minimum of .090-inches and must be securely fastened.
- K.) A fully charged fire extinguisher meeting SFI 167.1 specifications with an activation push and/or pull knob within reach of the driver is recommended

Suspension

- A.) All cars must be equipped with an operating four wheel disc brake system.

Shock Absorbers

- A.) Only one rebound and one compression adjustable steel or aluminum shock is allowed. Shock bumpers are permitted. More than one shock per wheel is permitted. Driver adjustable shocks or driver adjustable weight jacks are not permitted. External canister gas shocks are permitted. No torsion bar suspension is permitted. No electronic adjusting is permitted.
- B.) Shock absorbers may not contain any “internal” spring that functions as a load bearing suspension spring, “internal” coil bump spring above or below the working piston, nor “internal” bump stop of any kind. No pneumatic springs, “air” springs or “air” shocks permitted.
- C.) Only solid material bump stops are permitted; rubber, urethane, and plastic. No coil spring or valve spring-type bump springs permitted. No convex disc bump spring permitted. The only nitrogen charged parts allowed are the shock bodies themselves and must run standard conventional springs on ALL shocks. Stack springs are permitted.
- D.) Gas or oil shocks are permitted.

Suspension Components/Springs

- A.) Coil springs must be magnetic steel.
- B.) Leaf springs may be composite material or magnetic steel.
- C.) ONLY coil springs or leaf springs will be permitted. No pneumatic springs, “air” springs, or “air” shocks permitted. No more than 2 springs per shock. Must be one on top of the other.

Roll Cage

- A.) All cars must have a roll cage fabricated from a minimum of 1-1/2” outside diameter with .065”-inch thick seamless magnetic steel tubing.
- B.) The side roll bars and/or door bars must extend into the door panels.
- C.) A minimum of three (3) bars must be utilized on the left side of the car in the door area.
- D.) Any of the bars that are utilized for the top portion of the roll cage, including, but not limited to the front and rear hoops, the top hoop and the

uprights, must extend a minimum of 1"-inch above the driver's helmet.
E.) All new frames and/or roll cages built on or after January 1st, 2006 an additional vertical side brace is required on the left side in vertical alignment with the steering wheel.

Wheels

- A.) Only steel or aluminum wheels will be permitted for competition.
- B.) The wheels must be mounted to the hubs utilizing lug nuts. "Knock off" and/or single type wheel mounting systems will not be permitted.
- C.) The maximum wheel width that will be permitted is 14"-inches.
- D.) The maximum front track width will be 90"-inches and the maximum rear track width will be 88"-inches, measured from the outside edge of the tire to the outside edge of the tire.
- E.) Wheel spacers will be permitted provided the track width(s) do not exceed their maximum dimensions.

Tires

- A.) All four tires must be:
 - Hoosier: 1300 or harder
 - American Racer: 44 or harder
 - Minimum durometer reading of 32 at anytime
- B.) The maximum size for any tire in competition is 11"-inches x 29"-inches x 15"-inches, unless otherwise specified in written form to all competitors.
- C.) The maximum outside circumference of the tire will be 93"-inches, unless otherwise specified in written form to all competitors.
- D.) The maximum width of the tires measured from the outside edge(s) of the sidewalls across the face of the tire will be 16 ³/₄"-inches. There will be a tire hoop used for inspection and the tire must pass through the tire hoop freely, without any manipulation or outside contact.
- E.) The tire rule for any event may be amended in written form, to all competitors per any technical bulletin.
- F.) The altering of any tire compound, by any means will not be permitted. Chemical alteration of the tread carcass and/or tread compound, such as tire 'soaking' and/or the introduction of tread 'softener' and/or physical defacement (removal, altering and/or covering) of tire sidewall markings in any manner will not be permitted. If any competitor is found to have altered their tires any penalty deemed appropriate by Late Model Officials may be issued. Any tire may be inspected and/or analyzed for alteration at any time. This will consist of a process as determined by the independent laboratory that performs the analysis. A "Chain of Custody" process will be outlined with the competitor upon inspection of the tires. The analysis process will require shipment of the tire to the selected laboratory.. If a penalty is issued, the event the tire was used in will be penalized.
- G.) Monies won in an event may be held until the final determination is made by the independent laboratory.

H.) Chemical alterations, vulcanizing, tire softening, defacing and/or altering the face of the tire lettering and/or tire stamping will not be permitted.

I.) Chemicals or tire softening is not permitted at any time. Tires may be inspected at any time. Any violation with any tire presented for competition may result in immediate disqualification from the events and/or other penalties including but not limited to; loss of money, fine, loss of points and/or suspension.

J.) Only approved tires will be permitted for use in competition.

Other

A.) Cars will not be permitted to make a qualifying attempt without passing technical inspection. All cars must be available for inspection prior to the time of the driver's meeting. Following the driver's meeting, covers of any-type on the racecar will not be permitted.

B.) All cars may be subject to technical inspection at any time.

C.) Full or partial car covers will be permitted only when there is inclement weather and/or the car is in its designated pit stall. All covers shall be removed prior to the car leaving its designated pit stall.

D.) SFI-approved and labeled seat, roll bar, knee and steering pads and/or padding is recommended.

E.) It is recommended that all teams have a fire extinguisher in the rear of their transporter. The fire extinguisher is recommended to be a minimum of 2.5 gallons FFF type chemical and/or equivalent.

F.) All drivers are required to have a one-way radio. The one-way radio must be working and active prior to any 'on-track' activity. Two-way radios, crew-member to driver and/or any other means of electronic communication, other than the one-way radio, will not be permitted.

ANY DEVIATION FROM ANY OF THE ABOVE RULES MUST BE SUBMITTED TO PORT ROYAL OFFICIALS FOR APPROVAL

