

## **M.1.B.b. Race of Champions “602” Asphalt Sportsman Modifieds**

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 Race of Champions OFFICIALS. **Any new components, including engine components, body designs, frame designs and/or components of any type utilized in competition must be approved by Race of Champions Officials prior to being introduced into competition.**

**Any components for participants competing in Ontario, in events that may be held in accordance to rules other than Race of Champions Asphalt Sportsman Modified rules which are not defined by the following rules will be defined as pursuant to the 2021 Delaware Speedway and/or OSSCAR Rule Book.**

Open to Race of Champions-approved automobile manufacturers provided they comply with, and adhere to specifications as outlined for this Series.

### **NOTICE**

ALL MODEL, ENGINE OR EQUIPMENT CHANGES OR MODIFICATIONS NOT SPECIFICALLY ADDRESSED IN THIS RULE BOOK BY RACE OF CHAMPIONS MUST BE SUBMITTED, IN A COMPLETED FORM/ASSEMBLY, TO RACE OF CHAMPIONS FOR CONSIDERATION OF APPROVAL ON OR PRIOR TO NOVEMBER 1, 2021 UNLESS OTHERWISE AUTHORIZED BY RACE OF CHAMPIONS, TO BE CONSIDERED FOR COMPETITION FOR THE 2022 SEASON. THE APPLICANT WILL BE NOTIFIED OF APPROVAL OR REJECTION FROM RACE OF CHAMPIONS. RACE EQUIPMENT WILL NOT BE CONSIDERED AS HAVING BEEN APPROVED BY REASON OF HAVING PASSED THROUGH INSPECTION AT ANY TIME OR ANY NUMBER OF TIMES UNOBSERVED OR UNDETECTED. ANY RACE EQUIPMENT WHICH DOES NOT CONFORM TO SPECIFICATIONS OR TOLERANCES CONTAINED IN THE RACE OF CHAMPIONS RULE BOOK, OR IS NOT OTHERWISE APPROVED BY RACE OF CHAMPIONS, MAY NOT BE USED IN COMPETITION IN 2020. ALL SUBMITTED RACE EQUIPMENT MUST BE ACCOMPANIED BY COMPUTER AIDED DESIGN (CAD) FILES AND/OR MECHANICAL DRAWINGS AND REQUISITE FEE AS DETERMINED BY RACE OF CHAMPIONS.

**NOTE: Unless otherwise specified within Section M.1.B, the rules shall remain as published in section M.1.A., and section M.1.B. Only specified Race of Champions asphalt Sportsman Modified rules will appear in section M.1.B.b.**

**Note: Unless otherwise noted within Section M.1.G, the rules remain the same as presented in section M.1.E.**

### **15.1 Engines**

- a.) The General Motors (GM) / Chevrolet Performance Engine part number #88958602/19258602 is the only engine permitted in all Race of Champions 602 “Crate” Sportsman Modified events.
- b.) The engine and all components must remain in their original configuration and form as purchased and/or delivered from the factory. Any alterations to the engine will not be permitted. The Engine must remain as manufactured by General Motors with a stock 4”-inch bore. Overbore(s) will not be permitted.
- c.) Repairs will not be permitted to any engine.
- d.) All engines are to remain sealed from the factory. The original factory seals must remain unaltered, Tampering, removal, modifications of any type and/or broken factory seals will not be permitted. The GM Engine must remain unaltered in any way.
- e.) The GM Crate Engine seals (bolt-type / bottle cap) must remain unaltered. Race of Champions Officials may require specific sealing and verification of all seals on any GM Crate Engine. Tampering with and/or alteration of any seals will not be permitted and is subject to immediate penalty and/or suspension.
- f.) Only GM replacement parts of any type will be permitted for any type of replacement and/or repair work. Only GM Crate Engine specific valve springs may be used for replacement and/or repair, Part Number # 10212811.
- f.) All engines must be purchased and sealed with approved sealing devices through Rocket Performance.
- F.) GM Crate Engine repairs must be authorized by Race of Champions. GM Crate Engine repair procedure works as follows:
  - 1.) Contact Race of Champions Officials and/or Administrative Office.
  - 2.) The Race of Champions Officials will specify a repair location and instruct the driver/owner where to take the engine to get an estimate.

- 3.) Based on the estimate and the detail of the repair, the Race of Champions Officials will determine if the repairs may be made or if a new engine must be purchased.
  - 4.) If a repair is approved, a specified inspector will inspect the engine and work with the engine repair facility throughout the duration of the repair to ensure that the engine maintains the GM Specifications.
  - 5.) Upon completion of the repair(s) the engine will be 'resealed' before being released for competition.
  - 6.) All parts including the gasket repair kit(s) must be stock OEM Chevrolet Performance replacement parts. The receipt(s) generated from the Chevrolet Performance Dealer and/or parts department must be retained and a copy presented to the Race of Champions for verification.
  - 7.) Overbores will not be permitted. If a cylinder has scoring and/or needs repair it must be communicated to Race of Champions Officials before being sleeved to maintain the original bore size.
  - 8.) Valve jobs will not be permitted.
  - 11.) The distributor advance curve and/or all parts must remain stock as manufactured.
  - 12.) All engine information regarding repairs and/or engine introduction must be retained and turned into Race of Champions Officials, to track and manage engine database, including the driver, serial number, repair, type of repair and/or what type of service was performed to any engine.
  - 13.) If any repair estimates come back to the Race of Champions Officials that is determined to be detrimental to the purpose of this division, a new engine, a new engine must be purchased. The engine that was damaged will no longer be eligible for competition.
- g.) Race of Champions Officials reserve the right to technically inspect, exchange and/or confiscate any GM Crate Engine at any time. Failure to surrender the engine and/or submit the engine for inspection equals disqualification from the event and/or suspension.
- h.) The intended direction of the GM Crate Engine program is to maintain a cost-effective, affordable racing program. Rebuilding, balancing, blue printing and/or any other alteration made in an attempt to influence the integrity of this program will not be permitted. The judgment and determination of any such decision will be at the sole discretion of Race of Champions Officials.

#### Engine Verification.

- A. All motors must be repaired through Rocket Performance. The use of another Repair Centers will not be permitted.
- B. All current motors with GM Bolts/Bottle Cap seals or previously Race of Champions sealed engines may go through the verification program at Rocket Performance and have a QR seal attached to the motor. C. A new motor may also be purchased from Rocket Performance or Authorized Repair Centers and be updated to a verified motor with a QR seal.
- D. Seals from other sanctioning bodies are not accepted as verification seals.
- E. Verification pricing is locked in at \$550 (US) and \$750 (Can.)

### **3 Carburetor / Air Cleaner**

- a.) Only one (1) 500 cfm Holley carburetor, Part Number 4412 or Holley HP Carburetor Part Number 80583 will be permitted.
- b.) All engines and all components must remain in their original configuration and form as purchased and/or delivered from the factory. Any changes will result in disqualification from the event. Any alterations to the engine will not be permitted.
- c.) 4412, part #0-80583:
  - 1.) The carburetor must maintain the stock venturi and throttle bore dimensions.
  - 2.) The carburetor must maintain all stock dimensions, including mounting and stud location on intake manifold.
  - 3.) The booster height must remain stock OEM from Holley. Cutting, tumbling and/or polishing will not be permitted.
  - 4.) Modifications of any type will not be permitted.
  - 5.) The maximum height of the carburetor when measured from the bottom of the carburetor and/or the throttle plate to the machined horizontal surface of block will be in 7"-inches in
  - 7.) Gauge measurements (go/no-go) must be met at all times, regardless of carburetor temperature.
- f.) A single unaltered carburetor spacer plate with an unaltered square hole/opening including gasket with a maximum thickness of 1"-inch will be permitted. Tapering, machining and/or any other alteration to the spacer plate will not be permitted.

- g.) Only a single conventional round type air cleaner housing with a bottom 5"-inch center hole will be permitted. Ram air, air box and/or heat shield type devices will not be permitted. The air cleaner must remain in place when the hood is removed. The air cleaner must remain in place when the hood is removed.
- h.) Air cleaners that provide ventilation through the top cover (such as the K & N brand) will be permitted.
- i.) Air induction plastic carburetor insert and/or other devices that direct air into the air intake will not be permitted.
- j.) Metal attached to the air cleaner will not be permitted.
- k.) The air cleaner must be centered on the carburetor.
- l.) Air diffusers will not be permitted.

## **6 Ignition**

- a.) Only stock OEM distributors will be permitted. The distributor must maintain the factory mechanical advance curve to stock OEM specifications. Alterations and/or adjustments will not be permitted with the exception of, lock plates may be added to the mechanical and vacuum distributor advance system. When both lock plates are added, mechanical weights and springs are to be removed along with the vacuum advance canister.
- b.) The ignition amplifier box ("rev box") and coil must be mounted under the hood and on a panel on the rear side of the firewall shielded from heat (out of the driver's reach) for ease of inspection. The black wire must be grounded to the motor. When the hood is removed the "rev box" must be clearly visible and not covered.
- c.) The car must be fitted with one (1) unaltered approved MSD RPM (rev) limiting box, maximum 6000 RPM. The box and the chip must remain operable and working condition, prior to, during and after all racing events. The MSD 8727CT will be the only MSD RPM (rev) limiting box permitted for competition.
- d.) Trigger-type and/or crank trigger-type ignitions will not be permitted.
- e.) The ignition must be mechanically driven in the stock OEM location.
- f.) Only the stock OEM H.E.I. ignition coil will be permitted.
- g.) The wiring must remain as specified by the ignition amplifier box manufacturer.
- h.) One American Passenger Car sized battery with terminals on top and a maximum of 12 volts will be permitted. The battery voltage must not measure more than 14.3 volts. Step up transformer and/or any other device designed to increase voltage will not be permitted.
- i.) OEM stock firing order must be maintained for all engines. Standard GM Firing Order 18436572.
- j.) Ignition amplifier boxes, "rev boxes", RPM limiting chips, may be inspected, confiscated and/or exchanged at any time.
- k.) Traction control devices will not be permitted. Braking devices that control traction will not be permitted.
- l.) Race of Champions Officials reserve the rights to analyze and/or switch ignition boxes and/or rev chips at anytime.

## **m.8 Suspension**

**NOTE: Unless otherwise specified within Section M.1.B, the rules shall remain as published in section M.1.A. Only specified Race of Champions asphalt Sportsman Modified rules will appear in section M.1.B**

### **1. Suspension**

- a.) All suspension systems and components must be approved by Race of Champions Officials. Prior to being used in competition, all suspension systems and components must be submitted, in a completed form/assembly, to Race of Champions Officials for consideration of approval and approved by the Race of Champions. Each such part may thereafter be used until the Race of Champions determines that such part is no longer eligible. All suspension fasteners and mounting hardware must be made of solid magnetic steel.

### **2. Coil Springs**

- a.) All downward chassis movement while the race car is in competition must be limited only by the normal increasing stiffness of the springs or the bottoming of the chassis against the race track, whichever occurs first. **Intentional mechanical binding of any type will not be permitted.** Any device or procedure that in the judgment of Race of Champions Officials attempts to detract from or compromise the above will not be permitted. Only coil spring suspension will be permitted. All coil springs must be constructed using round magnetic steel wire, wound in a clockwise direction. Ovate and flat wire will not be permitted. The coil spring wire diameter must be the same size from the top to the bottom of the springs. All of the coils

in a spring must be active. The coil springs at all four (4) wheels must be active and permit suspension movement. All coil springs must not be colder than ambient temperature.

b.) Coil Over Front Springs

- (1) Coil over springs must mount to the lower A-frames.
- (2) Strut bars will not be permitted for mounting of coil over front springs.
- (3) Coil over springs must be heavy-duty magnetic steel and must be constructed with both coil ends closed and ground.
- (4) Only one (1) spring per wheel will be permitted. The minimum front spring rating will be 400 lbs.. Springs may be inspected and/or "rated" by Race of Champions Officials at any time.
- (5) Coil springs may be coated but coating thickness and material must be acceptable to Race of Champions Officials.
- (6) Unless otherwise authorized by the Race of Champions Officials, coil spring rubber inserts will not be permitted.

c.) Coil Over Rear Springs

- (1) The rear spring position may be changed, but both rear springs must be located either inside or outside of the frame rails.
- (2) Coil over springs must be heavy-duty magnetic steel and must be constructed with both coil ends closed and ground.
- (3) Only one (1) spring per wheel will be permitted. The minimum rear spring rating will be 150 lbs. Springs may be inspected and/or "rated" by Race of Champions Officials at any time.
- (4) Coil spring rubber inserts will not be permitted.
- (5) Progressive or digressive rate springs will not be permitted.

**d.) All coil over springs and shocks must remain visible at all times. Covering of the coil over springs and shocks will not be permitted.**

3. Sway Bars (Anti-Roll Bars)

- a.) Front sway bar(s), when used, must be for the purpose anti-roll only. The front sway bars must freely rotate in their mounts. The movement of the front sway bar arms must not be prevented or restricted beyond that of normal use as an anti-roll bar. The minimum sway bar rating permitted will be 300 lbs. The maximum sway bar rating permitted will be 500 lbs.
- b.) Only magnetic steel front sway bars will be permitted.
- c.) Rear sway bars (anti-roll bars) will not be permitted.

4. Shock Absorbers

- a.) Coil over shock absorbers may be used. Shock absorbers and coil over shock and spring, by visual reference, must remain within the outline of the body and no holes can be cut in the outer body for the mounting of shocks.
- b.) Only the specified PRO Shocks (Shock absorbers) will be permitted for competition; RF; AC550B - LF; AC557B - LR; AC746B - RR; AC750B
- c.) Shock absorbers and internal components are subject to inspections in any manner necessary by Race of Champions officials.
- d.) Race of Champions Officials may use a shock absorber provided by the respective manufacturer as a guide in determining whether a Competitor's shock absorber conforms to the specifications in the Rule Book.
- e.) A maximum of one (1) shock absorber per wheel will be permitted.
- f.) Quick disconnect shock mounts will not be permitted. The shocks must be attached with nuts and bolts.
- j.) Air scoops, covers or any aerodynamic devices on or around the front shock absorbers will not be permitted.
- k.) It is the responsibility of the crew chief, not the Race of Champions, to ensure the shock absorbers are used in accordance with the manufacturer's instructions and specifications.
- m.) A shock absorber claim rule will be in effect for all shock absorbers. The claim will be \$200.00 per shock absorber claimed. The rules for the claim will be as follows;
  - 1.) In order for a competitor to claim another competitor's shock absorber, the competitor initializing the claim must complete the race on the lead lap and must not have finished in the top five finishing positions of the race.
  - 2.) All claims must be made in writing within 15 minutes of the conclusion of the feature race.
  - 3.) The competitor who is having his shock absorbers claimed must surrender the shock absorbers to a Race of Champions Official for the claim and will receive payment from the Race of Champions.
  - 4.) In the event that any competitor refuses a written and acceptable claim, the competitor will be disqualified from the event.
  - 5.) The price of claiming each shock absorber will be \$200.00.

6.) Grudge claims will not be accepted. In the event that a grudge claim is threatened and/or placed, the competitor placing the claim may be penalized per the section K of the rule book.

7.) The Race of Champions reserves the right to claim any competitors shock absorbers at any time during any event.