

2025

EVANS MILLS RACEWAY PARK MODIFIED RULES Will follow ROC Modified Rules https://www.rocmodifiedseries.com/downloads/get.aspx?i=79233 With the following exceptions:

Last updated February 28, 2025

New, amended, and/or important items to note are highlighted in yellow.

Index

1-0 General Rules	3.
2-0 Safety	3.
3-0 Engine Options	4.
3-1 Crate engine Specifications	4.
3-2 ROC Built type engine Specification	6.
3-3 Approved Coolants and Additives	6.
3-5 Exhaust System	6.
3-8 Transmission	7.
4-0 Weight	7.
5-0 Shocks	7.
6-0 Radios and Electronics	7.
7-0 Wheels	8.
7-2 Tires	8.
7-2.a Tire Allotment	8
7-2.b Tire Bank	9.
8-0 Fuel Specification	9.
9-0 Equalization Rule	9.

1: GENERAL:

1-1.a The rules herein shall refer to Evans Mills Raceway Park as "EMRP." These rules are intended to create affordable and fair competition. While they offer a good outline. every item cannot be covered by a written rule. Any questions regarding any item not specifically covered in these rules should be addressed with EMRP Officials prior to proceeding. No car, component, or equipment will be considered as having been approved by reason of having previously passed through inspection unobserved or undetected. All equipment is subject to inspection and approval by EMRP Officials. You may be assessed penalties including, but not limited to added weight, fines, loss of points, loss of handicapping, and suspension, car parts, components, and/or equipment deemed as not in compliance with these rules. Any car part, component, and/or equipment which does not conform to the specifications or tolerances contained in the 2023 rule book or is not otherwise approved by EMRP may not be used in competition in 2023 and is subject to confiscation at the discretion of EMRP Officials. Competitors are solely and personally responsible for the safety of their race cars and racing equipment and are obligated to perform their duties (whether as a car owner, driver, or crew member) in a manner designed to minimize to the highest degree possible to risk of injury to themselves and others.

REMINDER: ANYTHING not specifically addressed in the rules – or any deviation from the above rules – MUST be cleared with and approved by EMRP Officials PRIOR to acceptance.

By competing at EMRP, you agree to have read the EMRP 2023 General Rule book and the 2023 Modified rulebook.

2: SAFETY

2-1 PERSONAL SAFETY EQUIPMENT

See 2023 Race of Champions Rulebook Pg.8 Section C 2-2

Fire Suppression

A securely mounted operational (2-1/2 pound minimum) fire extinguisher with gauge visible for inspection purpose is **mandatory**. Extinguisher must be mounted in a quick release bracket. **Automatic or manual fire suppression systems highly are recommended.**

2-2.a

IN-LINE FUEL CHECK VALVE

In-Line fuel check valve is MANDATORY!

(OBERG P/N SV-0828 FUEL SAFETY CHECK VALVE RECOMMENDED)

<u> 3: ENGINE</u>

E.M.R.P will accept the following Four (4) engine options

- * RPM Sealed GM 602 Crate engine
- * GM Sealed 602 Crate Engine
- * ROC Type Built Engine

* EMRP 5.3L GM LM7 Engine

3-1

GM CRATE ENGINE OPTION

The GM Performance circle track "602" crate engine is the only crate engine permitted. All engines must remain as delivered by GM including harmonic balancer, distributor, valve covers, springs, rocker arms, seals, etc. It is strictly forbidden to tamper with the factory seals in order to gain access to the internal workings of the engine.

Engine must conform to GM factory sealed 602 crate engine specs.

EMRP Officials reserve the right to confiscate any 602-crate engine for the purpose of inspection at any time track officials deem it necessary. No replacement engine will be offered.

Any dyno inspection performed will be based on a predetermined,

unpublished HP and torque limit. This limit figure will NOT be made public.

There is no tolerance. If an engine exceeds the limit, it will be deemed

illegal and become property of EMRP. No reimbursement will be provided.

3-1.a

OIL PAN

Champ # CP 106 K0RB W/ CHA 1010SB Pick-up

Canton #11-102T 6.5 inch pan W/ Canton #20-030 Pick-up

In the event of an oil pan other than those listed above was installed on a previously sealed 602 Crate engine, the oil pan must be inspected and approved by EMRP Tech Official(s).

3-1.b

CARBURETOR One (1) Four Barrel carburetor only. Polishing, Grinding or reshaping of any part or orifice is not permitted. OEM type gaskets, jets and power valves must be used.

3-1.c

CARBURETOR SPACER

Single hole, open plenum, aluminum, or phenolic spacer allowed. Maximum distance between intake and carb base is 1.125 inch

3-1.d

IGNITION SYSTEM

Stock ignition system that is supplied with the 602 crate engine. Engine must retain stock firing order. No traction control permitted.

An MSD #8727CT External RPM limiter is mandatory. The MSD #8727CT must be mounted on the driver compartment deck, right of the driver. All Limiter wiring must be visible and harness must be intact. No Splicing!

RPM limiters must always be fully functional and operational.

602 Crate Motor to be set at maximum of 6200 RPM

3-1.e

ALTERNATOR

A functioning12 volt single alternator system with an internal voltage regulator And one (1) output wire must be used. External voltage regulators are not permitted. The alternator must be mounted on the front of the engine. Only standard

Production V type or flat type ribbed alternator drive belts will be permitted.

3-1.f

STARTER

A block mounted starter located in the stock location is mandatory.

3-1.g

Water Pump

Steel or Aluminum water pumps must be used. Combination Water pump/Alternator units are not permitted. Any serpentine, cog or v belt pulley system are permitted.

3-1.h

Fuel Pump

Fuel pump must be mounted to engine block in stock location. No Belt driven fuel pumps permitted

3-1.i Bell Housing

Only a commercially manufactured magnetic steel bell housing may be used. The bell housing must enclose the flywheel 360 degrees and be a minimum of 3/16-inches thick. Any modifications you make to the bell housing must be done with 3/16-inch steel and welded in place (no bolt on pieces).

(Example; QuarterMaster #008110440)

A bolt on bottom cover must be used for throw out bearing access and inspection. Maximum hole size not to exceed 3.5 X 4 inches. This hole may be covered in sheet metal.

3-1.j Clutch

7.25 inch Minimum clutch size with a 153 tooth Ring gear

3-2 ROC BUILT TYPE ENGINES

See Engine Rules M-1.b Race of Champions Asphalt Sportsman Modified https://www.rocmodifiedseries.com/downloads/get.aspx?i=792323

3-2.a

IGNITION SYSTEM

An MSD #8727CT External RPM limiter is mandatory. The MSD #8727CT must be mounted on the driver compartment deck, right of the driver. All Limiter wiring must be visible and harness must be intact. No Splicing!

RPM limiters must always be fully functional and operational.

REV Limiter must be set at maximum of 6800 RPM

3-2.b Restrictor Plate (Optional)

Track Provided 1.480 (See Weight Requirements)

3-3

EMRP 5.3L GM LM7 Engine

The Scope of this project is to provide competitors with an alternate engine package to race alongside our ROC 358 option as well as our 602 Crate engine package. Considering that this engine package is still in development, any of these rules are subject to change at any time based solely upon the discretion of the EMRP Technical Department. If you have any questions regarding this new package please contact the EMRP Technical Inspector at <u>emrptechinspector@yahoo.com</u> before proceeding. Engine Package is to be based on GM LM7 engine (1999-2007 5.3L)

3-3.a Short Block

Block Must be the Unmodified Factory Stock LM7 Unit Block Lightening Will NOT be permitted Block Material will be Cast Iron Only Maximum Bore Size will be 3.780" (+.001" Tolerance) Maximum Stroke Length will be The Factory 3.622" (No Tolerance) Pistons must be the unmodified Factory Stock Hypereutectic unit with an 8cc Dish Valve Reliefs are NOT Permitted Piston Rings Must retain Factory Stock 1.5mm/1.5mm/3.0mm Thickness Gapless Rings are NOT Permitted Connecting Rod must be the unmodified factory Sintered Powdered metal Unit Aftermarket Rod Bolts are NOT Permitted Aftermarket Rod and Main Bearings are permitted (+.001" Clearance Bearings are recommended) Crankshaft must be the unmodified Factory Stock GM LM7 Unit

3-3.b Cylinder Head

The only cylinder head casting numbers permitted for competition are as follows (706) (862)

Cylinder heads must remain the Unmodified Factory Stock Units, No porting / Performance Valve Jobs / Chamber Work Permitted

Valves Must be unmodified Factory Stock Units (1.89"/1.55" diameter)

Valve Spring and retainer upgrades are permitted for the purposes of increased valve lift. Head may not be surfaced for the purposes of increasing compression

Chamber Volume must be 60.5 cc Minimum (No Tolerance given for carbon deposits) Maximum compressed Head Gasket thickness shall be .051"

3-3.c Valvetrain

GM LS7 Style lifters are permitted Factory Style 3 piece pushrods with a length of 7.400" are the only type permitted Solid Lifters are NOT Permitted Rocker arm Trunnion Upgrades are permitted Rocker arm Must maintain Factory Stock Geometry, 1.7 Ratio, and Design, Aftermarket rocker Arms are not Permitted.

The Michigan Motorports Rocker Arm Kit SKU 25100 Will be permitted and is recommended Camshaft Must not exceed .600" Valve lift, or .353" Lobe Lift

Double Roller Timing Sets with adjustability in Cam timing are permitted

3-3.d Induction

Intake manifold must be a Factory Stock, Unmodified, Unported Holley 300-130 Dual Plane Intake Manifold

(1) -1" Open Plenum Carb spacer between Carb adapter plate and intake manifold will be permitted

3-3.e Carburetor

Only the Holley 4412 500 CFM or the 4412 500 CFM HP will be permitted for competition. The 4412 500 CFM and 4412 500 CFM HP are separate carburetors and the interchanging of parts from one to the other will not be permitted. Other Holley carburetor designations for the 500 CFM carburetor will not be permitted for competition. Only Holley replacement parts as designated by the part number will be permitted.

Alterations of any type, grinding, polishing, machined, coating and/or otherwise; internal or external to the carburetor base and/or any of its components will not be permitted.

The carburetor must be mounted in the standard position on the intake manifold. Sideways mounting of the carburetor will not be permitted.

The ventures must remain unaltered.

Removal of the casting ring will not be permitted.

The base plate must remain unaltered.

The throttle shafts must remain unaltered. Machining, polishing, cutting and/or thinning of the throttle shafts will not be permitted.

The throttle plates (butterflies) may be drilled for idle holes only. Alteration to the shape, thinning, knife edging, rounding, tapering and/or any other type of alteration to the throttle plate will not be permitted.

Changing and/or tuning of the power valve, pump cam and/or accelerator pump and/or jets will be permitted, but must be Holley components and manufactured for the carburetor; OEM. Aftermarket and/or components that fit the carburetor that are not Holley OEM components for the part number of the carburetor will not be permitted.

Removal of the choke horn will not be permitted. Removal of the choke plate and choke linkage will be permitted. The gasket ring must remain unaltered from the manufacturer. The carburetor boosters must maintain their stock OEM size and must remain in their original mounting location in the main carburetor body. Any alteration to the booster, the booster bridge, including but not limited to the raising or lowering of the booster height, will not be permitted.

Alterations that permit additional air to be introduced below the opening of the venturis such as altered gaskets, base plates and/or drilling holes into the carburetor will not be permitted. Epoxy fillers of any type will not be permitted.

Only mechanical throttle type linkage will be permitted.

Two (2) throttle return springs must be utilized. Cable type and/or any other type of throttle linkage will not be permitted.

3-3.f Oiling System

Aftermarket Oil Pan and Pickup is permitted for the purpose of ground clearance (Kevko LS1007/LS1007-1 is recommended) Oil Pump must be the factory Stock / Stock Replacement Unit Located behind timing cover

3-3.g Ignition

Ignition Box must be an MSD 6014CT unit Ignition Coils Must be factory stock / Stock Replacement units Maximum allowed Ignition Timing will be 30 Degrees Maximum Engine RPM will be 6,500 RPM Ignition Box must remain easily accessible for the purposes of technical inspection via the integrated USB Port.

3-3.h Fuel

Fuel must be Pump Gas No High Ethanol Blends (E15 Max)

<mark>3-3.i DriveTrain</mark>

Because of Ground Clearance requirements, The 5.3 Package will be allowed to compete with an ALUMINUM reverse mount bellhousing and a 2 speed Falcon / Bert / Brinn Transmission Ball Spline Tailshafts will not be permitted Magnesium Bellhousings will not be permitted

3-3.j Addendum

For the purposes of this rulebook "Unmodified Factory Stock" shall be interpreted as: Retaining all dimensions provided by the Manufacturer with no modifications performed to increase performance / Gain a competitive edge over fellow competitors "Stock Replacement" Shall be interpreted as: Made by GM or an aftermarket replacement parts supplier; solely intended for the replacement of a defective factory component, not to improve upon the original design

3-4 APPROVED COOLANTS

No Anti-Freeze! Coolant Additives must be approved by Only an E.M.R.P official.

3-5 EXHAUST SYSTEM

3-5.a ROC Built Engine See Exhaust Rules M-1.b Race of Champions Asphalt Sportsman Modified **https://www.rocmodifiedseries.com/downloads/get.aspx?i=792323**

3-5.b GM 602 Crate

Beyea P/N AMSST-602NI-3 (15/8-inch primary tube with a 3-inch collector)

The exhaust header flange must mount directly to the cylinder head with no

Spacers between the flange and the cylinder head. A maximum header flange thickness of ¹/₂ inch is permitted. No Stainless-Steel Headers Permitted.

Inserts are not permitted in any part of the header or collector. Merge, crossover, and pyramid collectors are not permitted.

Exhaust pipes must come out of the engine at cowl and must extend a minimum of six (6) inches past the cowl. Right exhaust pipe may run beneath the car but must turn down and out toward the bottom of the right-side frame rail.

Mufflers are optional.

Thermal wrap is not permitted anywhere on the exhaust system. Only one exhaust pipe and muffler (if used) allowed per side.

Exhaust system subject to approval by EMRP Officials.

Interior coatings are not permitted.

Exterior coatings other than paint are not permitted. All other coatings including powder coatings are not permitted.

3-5.c EMRP 5.3L GM LM7 Engine

Beyea P/N AMSST-LS-N1W Header

3-6 Transmission

3-6.a ROC BUILT ENGINES

See Engine Rules M-1.b Race of Champions Asphalt Sportsman Modified https://www.rocmodifiedseries.com/downloads/get.aspx?i=792323 3-6.b Optional Transmission for 602 Crate engine only Bert LMZ or Falcon P/NWIN60100 may be used

4: Weight

All specified weight requirements will include the driver and race gear POST RACE. Drivers must stay in the seated position with gear on to determine Left side weight percentage. Drivers will not be able to stow gear on right side of car while on scales

4-1.a

602 GM Crate with RPM Alliance Seals

2,450 Pounds

Maximum 56.5% Left Side Weight

4-1.b

602 GM Sealed Crate without RPM Alliance Seals

2,500 Pounds

Maximum 56.5% Left Side Weight

4-1.c

ROC BUILT TYPE MOTOR

2,600 Pounds

Maximum 56% Left Side Weight

4-1.d ROC BUILT TYPE MOTOR W /Track Provided 1.480" Restrictor Plate 2,450 Pounds Maximum 56% Left Side Weight

5: Shocks

EMRP will comply with the ROC rulebook

<u>6: RADIOS & ELECTRONICS</u>

6-1.a

One Way Radio

One Way Raceceivers are mandatory for Race Director Communication, The frequency is **454.000**.

6-1.b

Two Way Radios

Two Way Radios are allowed for spotter purposes only. Spotter must use designated spotter stands provided by E.M.R.P. Abuse of Two way radios will not be permitted. E.M.R.P officials will have full discretion.

6-1.c

TRANSPONDERS

AMB X2 Car or AMBTranX X260 car transponder is always required on all cars (NO MX or Kart transponders). Any driver caught improperly mounting their transponder in order to gain an advantage will have their finish position adjusted and/or be disqualified from the event (including forfeiture of points and prize money) at the discretion of EMRP Officials. Transponder must be mounted144" from the furthest forward point of the front bumper. Must be mounted on the lower right-side frame rail.

7: Wheels and Tires

7-1 Wheels
7-1.a
Steel wheels only. Any offset may be used.
7-1.b
Wheelbase will be 106" to 107" +/- .5 inches

7-2 Tires

NOTE: A participant competing in any race at EMRP specifically agrees that he/she acknowledges it is illegal to soak or treat racing tires and that said soaking or treatment of racing tires is against EPA regulations and further contains carcinogens and hazardous material which are unfit For his/her health and the health of all competitors and spectators. Any participant found violating the rule is subject to suspension. The track tire will be the American Racer EC-31 10" slick tire 26.0, 26.5 and 27.0 may be used in any position.

Tires may only be purchased through EMRP.

7-2.a

Tire allotment

Competitors may purchase up to four (4) tires on week one of competition and four (4) tires on week two of competition. One (1) tire credit will be earned on week three of competition and for the remainder of the regular season. Competitors making their first appearance after week two, will be allowed to make a onetime purchase of up to four (4) tires.

7-2.b

Tire Bank

The above tires will be scanned and recorded into Speedway database for each competitor. **The Database will stay with the DRIVER, Not the CAR**. It is the competitor's option to use a newly purchased tire or save it for use at a later race date. If a new tire is damaged, the tire will be inspected and deemed either usable or unusable. If the tire is found to be unusable, a new tire will be granted to the competitor.

*Note to above damaged tire – a new tire will NOT be granted if the tire is damaged on the racetrack. In the case of tires damaged during racing, a replacement tire will come from the competitor's pre-scanned inventory

8: Fuel Specification

Blending and/or mixing of the fuel will not be permitted with any other chemicals, hydrocarbons, additives, nitrous, nitrous additives and/or any other fuel enhancement. **8-1**

602 Crate Sunoco Track Fuel (Can-Am Enterprise Crate fuel) or "Pump' gas (93 octane maximum).

8-2

ROC Built motors Sunoco Track Fuel (Sunoco 110)

9: EQUILIZATION RULE

EMRP reserves the right to exercise an equalization rule at their discretion. 25# may be added to a competitor's race car at any time. Additional weight may be removed at the tracks discretion.