



2022 & 2023 WIR ¼ Mile 602 Late Model Rules and Regulations

Purpose: All of our rules are designed to keep racing costs at a minimum and provide a way to get into an affordable low-cost late model stock car. This class will race on the WIR quarter mile every other week and travel to other race tracks, which will allow new drivers and teams to race, and experience setting up a late model chassis without the cost of more expensive classes. Our rules package will revive older late model chassis, get them back on the racetrack and help put more fans in the stands.

General: Rules and procedures will be set and enforced by the quarter mile late model Advisory Board. The division website quartermilelm.weebly.com will be the official QMLM site for division rules, information, schedule, updates and more. QMLM tech officials will handle the technical inspection process. Class rules will be locked in for a two-year period (2022 & 2023). Changes due to safety, rule clarifications or equipment costs will be the only reviewed items by the 5-member advisory board. Team driving is allowed. All car owners and drivers must fill out and sign QMLM Tech sheet before your first day of competition. All drivers must be FRRC members. Drivers must be at least 16 years of age to compete. A Driver of age 13-15 may be allowed to compete with approval from 5-member advisory board. Procedure for approval shall be as follows: The car owner must formally submit a driver request form documenting a minimum of at least 3 years of consistent racing experience to the 5-member advisory board. After reviewing this formal request, the final decision for approval will be made by the 5-member advisory board. Driver MUST receive approval prior to competing in any race events. Drivers under 16 and rookies must display stripe on bumper. Any questions regarding rules and regulations can be addressed by contacting advisory board members. (See Note 1 for contact list)

Procedures: A group scuff/practice session will occur each race night followed later by a group qualifying session. Races will consist of two 15 lap features. Money and gift certificates for payout come from FRRC and sponsors the Quarter Mile Late Model advisory board has solicited. Please support these sponsors. Decals provided must be displayed in specified locations on the car to receive payout (See Note 3).

2022 & 2023 WIR ¼ Mile 602 Late Model Specifications

SAFETY EQUIPMENT

1a. SEATS - Approved aluminum driver's seat is required. Seat must be fastened to frame/roll cage and located to give adequate distance from driver's arm to door bars. Shoulder supports are required on both the right and left side of seat along with a head support being required on the right side. Full containment seats are recommended (NO Carbon Fiber). Seat may not protrude outside 4 point upright or tap cage halo.

1b. SAFETY BELTS - Belts must be in like new condition. No frays, fading or damage. Minimum 3-inch wide lap belt, 3-inch wide shoulder harness. Submarine (crotch) strap required. 2-inch HANS approved shoulder harnesses allowed. Belts must be anchored to roll cage or frame. Grade "5" bolts and hardware required. Shoulder harness must not be anchored lower than 2-inches below driver's shoulder height. 6-point belts (double crotch strap) are recommended.

1c. DRIVING COMPARTMENT – Cockpit must be completely sealed off from engine compartment and fuel cell. Roll bar padding required around driver. A securely mounted operational 2-½ pound minimum fire extinguisher visible gauge for inspection purposes is required. The extinguisher must be mounted in a quick release bracket. Fire suppression systems are recommended.

Driver-side window net is required. Size minimum 16-inch x 20-inch ribbon or mesh style and must be mounted to roll cage so latch is at top front of window. Clearly labeled push-pull or toggle type kill switch accessible from either side of car. A gas pedal toe bar (kick-up) is highly recommended. No driver adjustable devices are allowed while car is in competition except a brake adjuster. No carbon fiber interior components will be allowed. No digital gauges allowed.

1d. DRIVER'S ATTIRE – Complete SFI- approved fire-retardant driving suit and gloves are required. Eye Protection and a Snell SA-2010 or newer helmet required. Snell "M" or D.O.T helmets NOT allowed. Head and Neck restraints (HANS Type), fireproof shoes, are recommended. Officials will monitor items related to safety, but ultimately it is the responsibility of the driver to monitor, maintain, and update their safety equipment.

2. ENGINES – GM 602 Crate engine is the only engine allowed in this class for 2022 & 2023. The only exception to this rule per the 1 year run off plan in 2022 would be for car # 01,28,36,59.82, who ran the 361 Spec Motor in 2021 (see note 4 in Notes/Revisions) Stock and Sealed GM 602 Certified or IMCA sealed 602 crate engine: P/N #19258602 or 88958602. Must be used as produced from factory: Crate engine may not be altered from factory specs. Different, altered or missing GM seal, bolts or cable locks will result in disqualification. Tech staff reserves the right to impound motors for inspection or dyno testing. Stock 8 Inch oil pan required. The only exception to this rule per the 2 year run off plan in 2022 & 2023 would be car #15, 24, 73, 74, 76, cars who ran those pans in 2021. These drivers/cars must raise engine 1 ½ inches higher than the 8 inch pan to meet equal height. See Figure 2A showing 8 inch pan minimum height.

2a. CARBURETOR - GM 602 Create Holley 650-HP P/N 80541-1 or stock 500 CFM 4412 two barrel. no modifications or epoxy on boosters, 1 inch spacer Max 1.25 with gaskets tapered spacers and inserts not allowed. Double return springs required.

2b. IGNITION SYSTEMS- Stock HEI distributor with coil in cap only. **NO** multiple spark controllers allowed. MSD soft touch Rev control part # 018-8728 or 018- 8727 CT **required**. A maximum 6200 RPM chip required. Control must be mounted out of reach of driver. All cars must have ignition switch clearly labeled. Ignition disconnect switch must be located within reach when standing outside the car (easily accessible for emergency personnel.)

2c. HEADERS – GM 602 Crate cross over header Schoenfeld 135CM2 Part#: 007135 CM2: with a maximum collector size of 3". Exhaust must exit behind driver. Mufflers are mandatory.

2d. AIR FILTER – No cowl induction. Max 14" x 4" tall. Air filter may stick through hood 1 ½ inch.

2e. Engine location - Engines will be allowed up to 4" set back. Engine must be located so that the center of number 1 spark plug is no more than 4" behind the front axle centerline. 2" offset of the tire centerline will be allowed. Oil pan may not sit lower than the frame kick up point. (See Note 2 with figure 2a shown). Engine skid shield recommended. 1/8th steel or 3/16th aluminum.

3. CHASSIS & ROLL CAGE Chassis must be at least 5 years old. Fabricated chassis 2 x 3 x .083 tubing minimum or stock stub allowed. 4 post utilizing 1.75 x .095 wall tubing. Door bars and foot box must be plated. Steel front and rear bumpers must be constructed as a late model type. NO heavy-duty bumpers or nerf type bars allowed. Officials will inspect and approve chassis construction. Exotic, Lightweight or "Special" built cars NOT allowed (I.e. Toby Car, FURY, Rowdy). Exception to 2x3 rule would be older coleman type with 2.5 x 2.5 and 2x2 allowed

4. WHEELBASE & TREAD WIDTH - Minimum wheelbase 102". Maximum track width is 66 inches.

5. BASE WEIGHT- All cars 2800# with 60% Max left side. Total weight and deductions must be displayed on A post. All weights include driver. Weight is pre-race and qualifying with fuel allowance of one pound per lap for total weight. No moving weight devices allowed. Lead or steel type ballast mounted securely. All ballast must be painted white and lettered with car number.

5a. Weight deductions 25 pounds each - one or two piston GM style caliper, manual rack, stock mount starter, Solid rear axles, 7-¼ clutch, steel drive shaft, 4412 2bbl carburetor on 602 crate. The as produced GM 602 crate motors that are UMA, IMCA, FRRC certified and sealed.

5b. Weight additions 25 pounds - Clutch less type transmission.

6. FRONT SUSPENSION & SPRINGS - Independent front suspension with articulated upper and lower control arms are mandatory. Only (1) shock absorber, spring and spring rubber allowed per corner of car is permitted. Front springs must meet 200# minimum spring rate and must be magnetic steel with maximum MSRP \$105 per spring. NO bump-stops/rubbers, compression/rebound limiting or coil bind set-ups. NO chains, bolts, strap devices to limit or stop suspension travel. Pre-loaders of any type are not allowed.

7. SWAY BAR – 1 piece Sway Bar, or 3-piece splined bar.

8. STEERING - Power or manual steering allowed. No electronic power steering allowed. 25 pound weight break for manual steering.

9. REAR SUSPENSION - Rear suspension must be solidly mounted. Heim joints only, no rubber bushings, 3 link only, and no birdcages. Trailing arm must be under the rear axle tube and attached at 6 o'clock position.

10. SHOCKS - Nonadjustable shock absorbers with current MSRP of \$219 or less excluding coil over kit. No changing or altering shock in any way. No shock covers. Front shocks cannot exceed 450# at 1"/sec shaft speed on 4"/sec shock dyno test, no tolerance. Advisory Board receives the right to have the shocks dyno tested and certified at racer's expense.

10a. UMA Shocks allowed, must meet 450# at 1"/sec shaft on a 4"/sec shock dyno test

11. SPINDLES & HUBS - Any steel spindle allowed. Aluminum steering-arm and ball-joint mounts allowed. Aftermarket hubs with 5/8 inch wheel studs required, no gun drilled studs permitted. Wide 5 hubs and spindles allowed, no magnesium with MSRP of \$180. Oil filled (or oil filled design) hubs do not meet price limitations and will not be allowed. Roller bearing only, ball bearings not allowed.

12. BRAKES & ROTORS - Four wheel brakes required at all times. Four piston calipers with maximum MSRP \$250 each. Single or dual piston "GM" type calipers, 25 pound weight break.

12a. Dual master cylinder after-market brake pedal is allowed. Only one brake bias adjusting unit allowed.

12b. No scalloped, floating or self-centering rotors. No ABS units, brake recirculation systems, thermo lock pistons or floating caliper brackets. No brake ducting, "wheel fans" or blower motor devices allowed. Directional vane rotors allowed. Maximum MSRP \$130 each.

13. REAR END - Stock or quick change units with steel tubes, spool or locked, maximum 10" ring & pinion. No cambered tubes or bolt on snouts allowed. Magnetic steel axles only and must be a minimum 1.125" O.D. with same size on both sides. Gun drilled axles must be same ID and OD on both sides. Solid axles 25 Pound weights break. One piece straight spline drive plates only. No lightweight EDM ring and pinions, polished or light weight internal parts. Drain plugs must be safely wired.

14. DRIVETRAIN - CLUTCH, TRANSMISSION & DRIVESHAFT - Must have at least two forward gears and one reverse, plus a neutral position, with engine running and car in still position, must be able to engage car in gear and move forward, then backwards. Transmissions must be stock GM or Richmond 2, 3, or 4 speed. No high dollar transmissions such as Roltek, G Force, Hightower. Performance grade stock or racing clutch permitted. Minimum diameter 5.5". 7 ¼" clutch, 25 pound weight break. Spoked flex cleats not allowed. No carbon fiber clutches allowed. Aluminum drive shaft minimum O.D. of 3". Steel driveshafts 2 – ½" O.D. min only. must be painted white, 25 pound weight break. Safety hoop required on front half of drive shaft. Driver must be protected from drive shaft by a 1/8" plate along the right side of the seat and leg. all plugs must be safely wired.

14a. Bert, Brinn & Flacon transmissions allowed with the expectation of Bert 2nd Gen, Brinn Predator & Pro 2.0. Spoked flex plates not allowed.

15. RADIATOR/COOLING - Must have catch can or exit at windshield, no anti-freeze. Radiator may have oil cooler however, radiator, hoses & oil cooler system must not exceed total \$500 (no high dollar radiator and oil cooler systems).

16. BATTERY – 12-volt system max. Batteries must be securely mounted ahead of rear axle, away from fuel cell and lines. All batteries in driving compartment must be in approved sealed battery box. Battery disconnect switch mandatory and must be located in center of driver compartment accessible to the safety team from the passenger side window. No alternator.

17. FUEL & FUEL CELL – 8 to 22 gallon fuel cell with flexible bladder and 1/8 / 11– gauge steel fuel cell can recommended. A 1/8 inch steel or 3/16 Aluminum fuel cell protector plate required front, side, and rear if you are using a plastic cell or if fuel cell can be made from steel less than 1/8 steel. The top of the can will use 18 or 20 gauge top and cell must be banded both ways with two steel (1" x 1/8") straps in each direction. No remote dry break fuel filters or U shape fuel cells, all fuel cells must be mounted behind the rear end. Fuel cell minimum height is 10 when checked on body inspection 4-inch blocks.

17a. APPROVED PUMP FUEL ONLY - Pump gas only, 93 octane maximum. No race fuel. No oxygen bearing or performance enhancing additives may be introduced into the inductions or fuel supply, either at the fuel cell or upstream in the system. E– 85 is not allowed.

18. WHEELS - Aftermarket made for racing, 15" x 10" inch maximum. Minimum wheel weight 17 pounds. Steel wheels only permitted. No tire pressure reliefs or bleeders of any kind allowed.

19. TIRES – Used 3035 & 3045 marked super late model take offs only! The tire marshals will determine a used tire based on previous markings of SLM tire, where the used tire was raced at, race team acquired from, tread depth and durometer reading along with physical condition of the tire will also be factors. 3035s may be mounted on left or right side. Upon arrival to race event competitor must document where tires were acquired from, and the bar codes on 6 tires (4 for racing and 2 for spares) per race event with the tire Marshalls. Once approved, four tires will then be marked before qualifying. If you would need to change a tire you must get approval from the Tire Marshall.

19a. TIRE PENALTIES - Chemical treatment of tires (softening), alteration of any marked SLM tires, bar codes, or misrepresentation of where the tire came from, will result in disqualification from the event, loss of prize money and points for the entire race night. You will also be suspended from the next racing night. A second offense will result in suspension for one calendar year. Tire Marshalls decisions will be final. Please respect this tire rule. Used tires will provide equality, competitive racing, save money, and keep this class affordable.

20 BODIES – ABC body rules apply to all cars. Five Star Gen 6 body **NOT** allowed

20a. RUB RAILS – 1x1 rub rails allowed with tapered ends.

20b. AIR FILTER – May stick through hood 1 1/2 inches

21. RADIOS – ELECTRONICS – TRANSPONDERS

21a. TRANSPONDER - Mandatory and located 8" forward from center of rear axle.

21b. RACE RECEIVERS - Mandatory for race director communications frequency is 454.000

21c. RADIOS- 2-way-radios are suggested. Not mandatory. Cars without radios must display a No Radio decal on left corner of spoiler

21d. ELECTRONICS - No Data Logging gauges, or data recording/acquisition equipment are allowed. No computer or video analysis equipment of any kind allowed. A maximum of (2) Go Pro type cameras allowed and must be pointing out the front or rear windows.

22. LOCAL TRACK VISITING EXCEPTION - Cars from local neighboring tracks that have similar or differing rules, and or similar performance, may be allowed to participate during the 2022 season in the interest of welcoming competition. These cars will be granted temporary eligibility at the discretion of the officials on a case-by-case basis for eligibility and rule book conformity.

23. TECH INSPECTION - All cars are subject to inspection ANYTIME before, during, or after a race. Officials reserve the right to disqualify cars, require changes, and confiscate illegal parts.

24. ILLEGAL EQUIPMENT– Penalties & disqualifications can result in up to a 1-year suspension, loss of points and earnings. All illegal parts are subject to confiscation. The final decision on penalties and disqualifications will be determined by the 5 member advisory board. The board may seek input from the tech officials and division representative.

RULE BOOK DISCLAIMER

The rules and/or regulations set forth herein are designed to provide for the orderly conduct of racing events sanctioned by QMLM and to establish minimum acceptable requirements for QMLM sanctioned events. These rules shall govern the condition of all QMLM events, and by participating in QMLM events, all participants are deemed to have complied with these rules.

NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATIONS OF COMPLIANCE WITH THESE RULES AND OR REGULATIONS.

They are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to a participant spectator or official.

The QMLM advisory board shall be empowered to permit reasonable and appropriate deviation from any of the specifications herein or impose any further restrictions that in his/her opinion do not alter the minimum acceptable requirements.

NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM SUCH ALTERATION OF SPECIFICATIONS. Any interpretation or deviation of these rules is left to the discretion of the officials. **THEIR DECISION IS FINAL.**

Any new components including engine components, body designs, frame type utilized in competition must be approved by QUARTER MILE LATE MODEL officials prior to being introduced into competition.

All rules are designed and implemented to support a balance between competition and entertainment value. QMLM may change any rule at any time in an effort to reduce the cost of racing, maintaining equal competition, or improve safety.

NOTES/REVISIONS

NOTE 1:

Advisory Board

Berken, Peter	920-915-7630	Peteauto04@yahoo.com	3695 Rifle N Range Road 54913
Devine, Dan	920-851-9878	Dantruck40@gmail.com	N2934 Meade St 54913 App
Duchow, Jim	920-323-2229	jimmyleroy@new.rr.com	1204 W Packard 54914 App
Nechodom, Joe	920-277-6000	Racetech01@yahoo.com	
Reichenberger, Brandon	920-284-1915	Brandon.Reichenberger@gmail.com	2313 S Telulah Ave, App 54913

Driver Representative

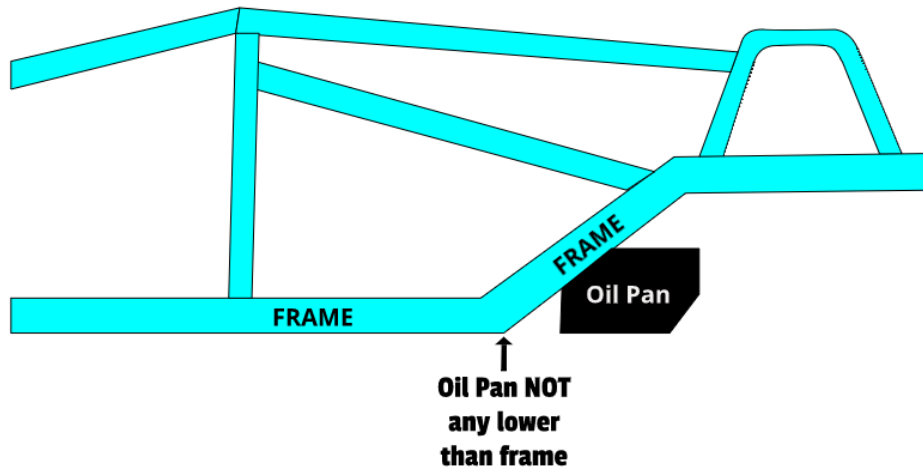
Baumann, Tim	920-858-3179	TimBaumann6@yahoo.com
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Tech Official

Smits, Jerry	920-360-1240
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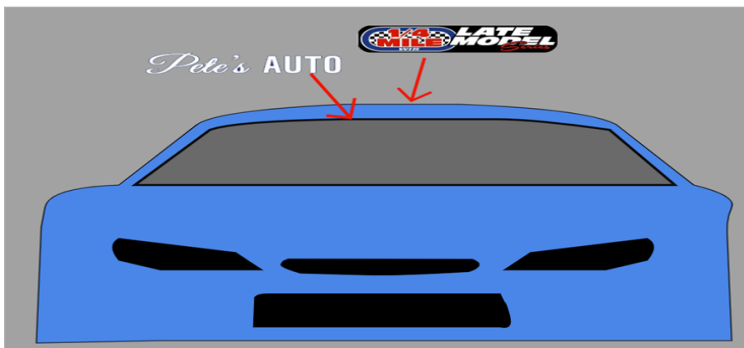
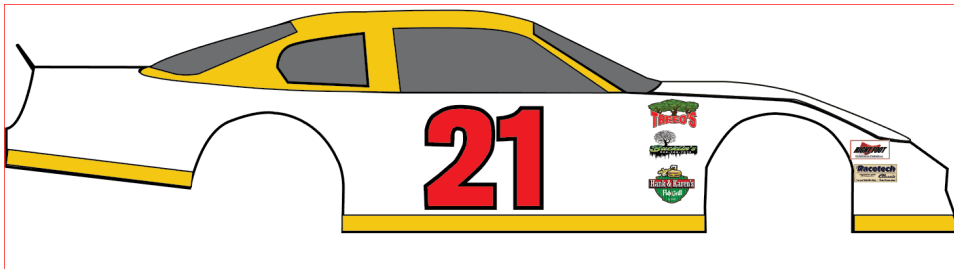
NOTE 2: Figure 2A – Oil Pan height

Right Side Frame View



NOTE 3: Sponsor and contingency decal placement

All contingency sponsor logos/decals provided to teams, should be placed in the specified locations on the car.



NOTE 4: Engine Option 2 – Applies only to the drivers who competed with this engine in 2021 (Car #01,28,36,59,82). These cars will receive 2 weight breaks, and these engines will be closely inspected and monitored. Engine documentation and checklist must be completed and signed by car owner. Chevy 361 Spec Engine w/stock 500 CFM 4412 two-barrel carb 1.0" carb spacer allowed (1.25" max w/gaskets). Tapered spacers and manifold inserts are not allowed. Stock HEI distributor with coil in cap only. A maximum 6700 RPM chip required. Multiple spark controller allowed. Engine must use a stock GM steel block & OEM (stock type) heads, crank and rods. Engine can be built by racers or local engine builders. Ford & Chrysler engines not legal for this class. GM Bowtie components are not allowed. GM approved block numbers are: 10105123, 10066034, 3892657, 3914660, 3914678, 3932388, 3932386, 3956618, 3970000, 3970006, 3970010, 3970014, 10066033, 10066036, 10243880, 14010207, 14010209, 14010287, 14016376, 14016379, 10054727, 14088528, 14088548, 14088552, 14093638 and 14101148. Stroke must match block. No 400 or larger cubic inch parts allowed. Maximum 361 cubic inches. Maximum compression ratio is 9.0 to 1. **NO** tolerance. Compression ratio checked using Whistler and cubic inches checked using pump, OR by visual inspection of part and/or casting numbers, pistons, etc. (track option which method is used). Flat top or dished pistons only, no gas-ported pistons. OEM or OEM appearing replacement steel crankshaft only – cannot be lightened. No arrowing, bullnose, knife edge, undercut or drilling of second or third rod throws. OEM or OEM appearing replacement steel rods only – GM 5.7 inch, 6 inch or GM Vortec rod part number 10108688 allowed. Connecting rod cap screws allowed. No splayed main caps. Conventional flat tappet cam and lifters only, cannot alter lifter bores. OEM firing order cannot be changed (GM: 1- 8-4-3-6-5-7-2). May use oil restrictors. 'Wet' sump oiling system only. Steel oil pans only. Racing oil pans allowed. Dry sump systems and/or crank case evacuation systems are not allowed. Mandatory one inch inspection hole in all pans – no obstructions to crank and rods. Accumulator allowed. Cylinder heads must be unaltered steel approved OEM with minimum 76 cc combustion chamber. The only GM OEM approved head numbers are: 14079267, 3986336, 3986339, 3986339X, 3986388, 3932441, 376445, 3928454, 3932454, 3876487, 3973487, 3973487X, 3973493, 3951598, 468642, 330862, 333882, 3998920, 3998991, 3998993, 3998997, 3970126. Maximum size valves on these heads is 2.02 inch intake and 1.60 inch exhaust. May use Stock Replacement (SR) cylinder heads: Engine Quest (EQ) GM part number CH350I, 1.250 inch ($\pm .015$ tolerance) maximum O.D. valve springs. All SR heads must remain as produced, seat angles and valve sizes cannot be changed: three angle valve job only (absolutely no casting removal in valve pocket of EQ head, for any reason). No porting, polishing or unapproved alterations allowed to any cylinder head or intake. Guide plates, screw-in shouldered studs (GM 0.375-inch max) and poly locks allowed. No stud girdles. No roller rockers. Steel roller tip rocker arms allowed. GM – 1.250 inch ($\pm .015$ tolerance) maximum O.D. valve springs, no beehive valve springs allowed. Only unaltered aftermarket aluminum intakes allowed are: Weiand GM #7547, #7547-1; Edelbrock GM #2701. Heads may not be ported or polished. Cooling lines allowed on aluminum intakes. Unaltered OEM type harmonic balancer only. OEM type steel or aluminum water pumps only. Exhaust system cannot exceed \$500.00 No tri-y's, merge collectors, 4/7 swap, inserts, cones, balance tubes or other expensive modifications. Mufflers are mandatory with exhaust exiting behind driver. Differences in performance between Crate Engines and Spec Engines will be adjusted by the Advisory Board to maintain fair and equal competition. Typical performance adjustments will be weight and RPM limits