



2020 WIR 1/4 Mile 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 which will allow new drivers and teams to race and experience the setting up of a late model chassis, without the expense of a half mile late model costs. Our rules package will revive older late model chassis and get them back on the race track and more fans in the stands. The following rules will be very similar to the UMA 602 rules package allowing you to race at Madison and the Dells.

General. Rules and procedures will be set and enforced by the Advisory Board. WIR Tech officials may assist with post-race tech inspection. Changes in rules can and will be made to keep costs down and maintain equality in engine, chassis and body type. Team driving allowed. Drivers must be a FRRC member, visiting drivers exempt. Any questions on rules contact advisory member Pete Berken 920-915-7630 or Jim Duchow 920-323-2229

Procedures. Qualifying will be set from fastest practice lap. Two 15 lap features will be run. Money and gift certificate for payout comes from FRRC and sponsors the Advisory Board has solicited. Please support these sponsors. Decals provided must be displayed on the car to receive payout.

2020 WIR 1/4 MILE LATE MODEL SPECIFICATIONS

1. SAFETY EQUIPMENT

1a. SEATS - Approved aluminum driver's seat required. Seat must be fastened to frame/roll cage and located to give adequate distance from driver's arm to door bars. Shoulder supports on right and left sides of seat and head support on right are required. Full containment seats recommended (no carbon fiber). Seat may not protrude outside 4 point upright or top 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 drivers 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 with gauge visible for inspection purpose is mandatory. Extinguisher must be mounted in a quick release bracket. Fire suppression systems are recommended. Driver-side window net required, minimum 16 inch by 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 allowed while car is in competition except brake adjuster. No carbon fiber interior components will be allowed.

1d. DRIVER'S ATTIRE - Complete SFI- approved fire retardant driving suit and gloves 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 his safety equipment.

2. CHASSIS- Fabricated chassis or stock stub allowed. Chassis must be at least 5 years old. Front and rear clips may be replaced. Steel front and rear bumpers must be constructed as a late model type NO heavy duty bumpers or nerf type bars allowed.

2a. Engine Location- Engines will be allowed up to 4" setback. 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 tire centerline will be allowed. Oil pan cannot be mounted below front cross member. Engine Skid shield recommended. 1/8th" steel or 3/16th" aluminum. Level with bottom of front cross member.

3. ROLL CAGE AND CHASSIS CONSTRUCTION. Officials will inspect and approve chassis built to FRRC & UMA specs.

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

5. BASE WEIGHT-All Cars 2800#. W/60% Max left side. Total weight must be displayed on A post. All weights include driver, Weight is Pre-Race 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, stock 602 oil pan, stock HEI distributor with MSD soft touch rev control part #018-8728 or 081-8727CT, solid rear axles, 7-1/4 clutch, steel drive shaft.

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 the car is permitted. Front springs 200# minimum spring rate, must be magnetic steel with maximum MSRP \$100 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, No birdcages. Trailing arm must be under the rear end axle tube and attached at 6 o'clock position.

10. SHOCKS-Nonadjustable shock absorbers with current MSRP of \$190 or less, excluding coil over kit. No changing or altering shock in any way. No shock covers. Front shocks cannot exceed 400# at 1"/sec shaft speed on a 4"/ sec shock dyno test. Advisory board reserves the right to have the shocks dyno tested and certified at racer's expense.

10a. UMA Shocks allowed, must meet 400# at 1"/sec shaft speed 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" wheel studs required, No gun drilled studs permitted. Wide five 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 of \$190 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, Minimum 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 both sides. Gun drilled axles must be same ID & OD both sides. Solid axle's 25 pound weight break. One-piece straight spline drive plates only. No light weight EDM ring & pinions, polished or light weight internal parts. Drain plugs must be safety 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 backward. Transmissions must be stock GM or Richmond 2, 3 or 4 speed No high dollar transmissions such as Roltec, G Force, Hightower. Performance grade stock or racing clutch permitted. Minimum diameter 5.5". 7 1/4" clutch 25 pound weight break. Spoked flex plates not allowed. No carbon fiber clutches allowed. Aluminum Drive Shaft minimum O.D. of 3". Steel Drive Shafts 2-1/2" 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 safety wired.

14a. Bert, Brinn & Falcon transmissions allowed with the exception 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. AIR FILTER- No cowl induction. Max 14" x 4" tall. Air filter may stick through hood 1 1/2 inch.

17. BATTERY- 12-volt systems 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 & must be located in center of driver compartment accessible to the safety team from the passenger side window. No alternator.

18. FUEL & FUEL CELL- 8 to 22 gallon fuel cell with flexible bladder an 1/8 / 11-gauge steel fuel cell can recommended. A 1/8 inch steel or 3/16 aluminum fuel cell protector plates required front, side and rear if you are using a plastic cell or if fuel cell can 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 fillers or U shape fuel cells, all fuel cells must be mounted behind the rear end. Fuel cell minimal height is 10 when checked on body inspection 4 inch blocks.

18a. APPROVED PUMP FUEL ONLY- Pump Gas Only, 93 octane. 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.

19. WHEELS-Aftermarket made for racing, 15"x 10" inch maximum. Minimum Wheel Weight 17 lbs. Steel Wheels only permitted. No tire pressure reliefs or bleeders of any kind allowed.

20. TIRES- Used 3035-3045 marked super late model take offs only! The Tire Marshalls will determine a "used tire" based on previous marking on SLM tire, where the used tire was raced at, race team acquired from, the 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, the bar codes on six tires (4 for racing and 2 for spares) per race event with the Tire Marshalls. Once approved, 4 tires will then be marked before qualifying. If you would need to change a tire you must get approval by the Tire Marshalls. .

20a.TIRE PENALTIES- Chemical treatment of tires (softening), alteration of any marked SLM tires, bar codes, or miss representation of where tire came from, will result in the disqualification from the event and loss of prize money and points. Also suspended for the next night of racing. A second offence results in suspension for one year. Tire Marshall's decision will be final. Please respect this tire rule. Used tires will provide equality and competitive racing, saving money, keeping this class affordable.

21. RADIOS- ELECTRONICS- TRANSPONDERS

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

21b. RACE RECEIVERS- Mandatory for Race Director Communication's frequency is 454.000

21c. RADIOS- 2-way-radios are not allowed.

21d. ELECTRONICS- No Data Logging gauges or Data recording/acquisition equipment are allowed. No computer or video analysis equipment of any kind allowed.

22. LOCAL TRACK VISITING EXCEPTION- Cars from local neighboring tracks that have similar but differing rules, and/or similar performance, may be allowed to participate during the 2020 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 & disqualification will result. All illegal parts are subject to confiscation.

ENGINE OPTION- There are two engine options: Option 1 which is highly recommended being more economical and allowing 4 weight breaks. Option 2 allowing 2 weight breaks. Engine will be closely monitored and inspected (also not UMA legal).

25. ENGINE OPTION 1- GM 602 CERTIFIED or IMCA SEALED 602 CRATE ENGINE: P/N #19258602 or 88958602.

Must be used as produced from factory; Crate engines 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. Oil pan may be replaced with Champ pan #CP57LTRB or #CP106LTRB or Kevko pan #1090NRHw/ISP and Kevko pick-up #1003-3/4. Stock 8 inch oil pan 25 pound weight break.

25a. CARBURETOR- GM 602 Crate 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 & inserts not allowed. Double return springs required.

25b. IGNITION SYSTEMS- 602 Engines. Stock HEI distributor with coil in cap only. MSD Soft Touch Rev Control Part #018-8728 or 018-8727CT recommended. (25 lbs. weight break) A maximum 6200 rpm chip required. Multiple spark controller allowed. Box 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 to emergency personnel.)

25c. CRATE HEADERS- GM 602 Crate cross over header Schoenfeld 135CM2 Part#: 007135CM2; with a maximum collector size of 3". Exhaust must exit behind driver. Mufflers are mandatory.

26. ENGINE OPTION 2 -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. MSD Soft Touch Rev Control #018-8728 or 018-8727CT recommended (25lbs weight break). 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 are 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. .

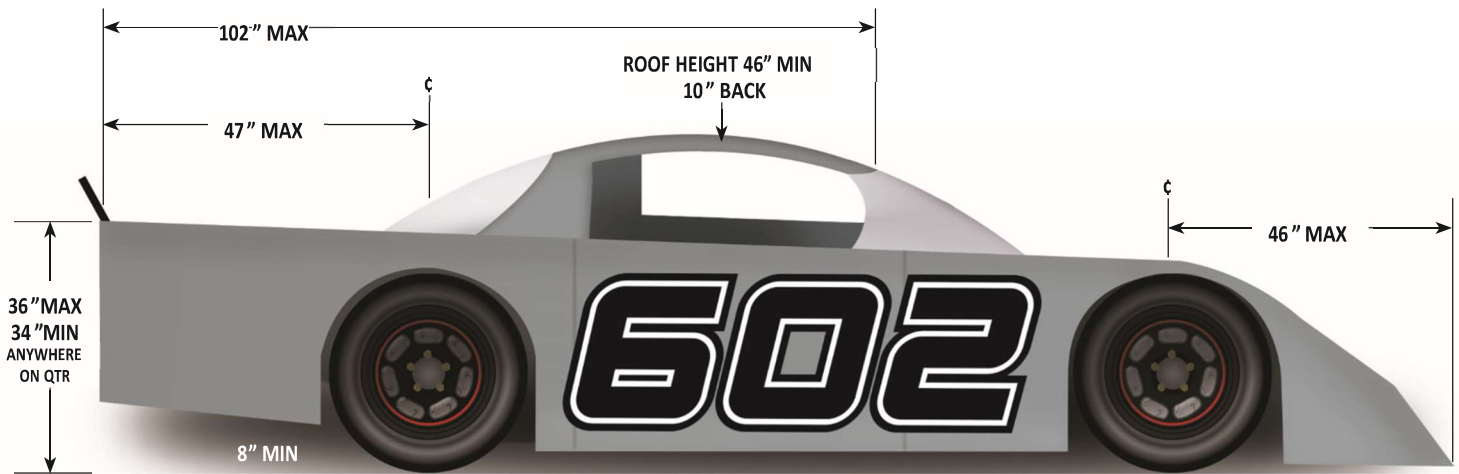
BODY OPTION- There are two body options

27. OPTION 1 - ABC body rules apply to ABC body cars. New 2019 style body not allowed.

27a. RUB RAILS-1x1 rub rails allowed with tapered ends.

27b. AIR FILTER- May stick through hood 1 ½ inch.

28. OPTION 2- Non ABC Body- Michigan outlaw, UMA and homemade style bodies allowed. We are using UMA body template as a guideline .Any question contact advisory board.



- MAX WIDTH OF QUARTER PANELS 76"
- REAR SPOILER MUST BE CLEAR. CHOICES 5 1/2" X 72" OR 6 1/2" X 61" MAX
SPOILER BRACES ARE TO BE ROUND TUBUING. NO FORWARD SIDE PODS ALLOWED
- REAR EDGE OF QUARTERS AND SPOILER MUST BE CENTERED RIGHT TO LEFT OVER REAR TIRES
- BODY MUST BE WITHIN 2" FROM OUTSIDE OF TIRES
- ALL MEASUREMENTS BASED ON 4" FRAME HEIGHT
- MAX DISTANCE OUTSIDE OF TOP OF RS DOOR TO A-POST, B-POST & WINDOWS = 8"
- MINIMUM ROOF MEASUREMENT 38"L X 45"W — NO MORE THAN 2" DROP ON THE ROOF
- NO FENDER OR WHEEL FLAIR CAN EXTEND 2" PAST THE OUTER FACE OF THE TIRES AND WHEEL FLAIR CANNOT EXTEND BEYOND THE REAR OF THE TIRE
- REAR FILLER PANEL NOT ALLOWED
- ANY NOSE YOU DESIRE IS LEGAL
- THE MAXIMUM WIDTH OF THE NOSE SPLITTER IS 4"
- THE SIDE NOSE FLAIRS MAY NOT STICK OUT PAST OUTSIDE OF TIRES MORE THAN 1"
- MAXIMUM HEIGHT OF REAR BUMPER = 12"
- TOW HOOKS - ON FRONT REAR - PAINTED WHITE

28a. RUB RAILS-1x1 rub rails allowed (WIR only)