## Mid Missouri Modified Midget Racing Association "Winged Open" Class Rules --2021--

## **GENERAL:**

- a.) 640cc (Rule #19)
- b.) 16 Sq. Ft. Top Wing, 54" Max. sideboard, Nose Wing 4 sq. ft. (Rule #15)
- c.) 65" Max. Outside Rear Tires (Rule #9)
- d.) Fuel Bladders NOT Required, but STRONGLY RECOMMENDED!
- e.) HOOSIER Tires at all 4 wheel positions! <u>Tire Prep/Dope is NOT allowed</u>
- f.) Weight 750#

1. Age. Drivers age 14 and up may compete in the "Open" Class.

**2. Roll cage.** Roll cages shall be at least 1 inch .062 wall thickness. .065 wall thickness allowed on tubing 1 1/8 inch diameter or larger. Roll cage shall be made of chromoly steel or equivalent material. The front section of the cage shall be no further back than the steering wheel. Roll cage shall have sufficient fore and aft bracing and strength to support the weight of the car & driver in case of an upset. Cage shall have gussets at the intersecting bars to the uprights. Bends must have at least 3 inch radius. No square or pointed corners allowed. Roll cage must be a minimum of 3" above the drivers helmet. It is mandatory to install a cross brace behind the seat to support the shoulder harness.

**3.** Bumpers And Nerfs. Car must have bumpers extending beyond the front and rear tires. Nothing may extend beyond a tangent line from the outside edge of the tires to the bumpers. Nothing may extend beyond the outside edge of the tires or wheels, whichever is the widest. No sharp corners or design as to hook or damage. All cars must be equipped with nerfing bars. Nerfing bars must extend to inside edge of tires, but not more than 1 inch beyond the outside of the rear tires.

**4. Safety.** Seat belts must be securely attached to the car and used at all times. Metal to metal latches only. 5 point seat belts, shoulder harness and sub strap are required. Belt dates must not be over three years old. (Example: Oct 16 may be used in 2017, 2018 and 2019.) Arm restraints are mandatory and must be adequately adjusted to keep the drivers hands below the top of the roll cage. Helmets must be full head coverage competition type with one of the three latest SNELL approvals (2005, 2010, 2015) or FIA 8860 or SFI 24.1 for Youth Helmets. Nomex head socks recommended. All drivers will wear a name brand flame-retardant uniform. Neck braces and\or cage nets with a SFI 3.2-1 rating or higher or Total Head containment seats are mandatory. SFI gloves are mandatory for safety. Flame retardant undergarments (long underwear, long sleeve shirt, socks and head sock) and shoes are strongly recommended.

**5.** Electrics and Electronics. On and off switches must be on dash, top of the cowl or on steering wheel. On/off switch must be connected and functional. No radio communication is allowed with the car or the driver.

6. Battery. All wet cell batteries mounted in the cockpit must be covered and vented outside the cockpit area.

7. Fuel. "Open" Class cars may run gasoline, ethanol or methanol. No performance enhancing additives are allowed!

8. Weight. "Open" Class cars, minimum car and driver weight 750 lbs.

## 9. Suspension.

**Tread:** Maximum 65 inches outside to outside of rear tires. Minimum 32 inches, center to center of tires. **Wheelbase:** Maximum 70 inches. Minimum 50 inches, center of front axle to center of rear axle. **Steering:** Front wheels must be connected by a solid or tubular tie rod. Rear wheel drive only. All suspension bolts except wheel nuts must be secured by some type of locking device.

10. Shocks. Any shock absorber is legal.

11. Brakes. Brakes will be of sufficient strength so as to slide the wheels while the car is in motion at any given time.

**12.** Tires And Wheels. <u>Tires at all 4 wheel positions must be *HOOSIER*</u>. Any wheel size and tire size combination may be used, but tires may not exceed 22 1/2 inches in height. Wheels must be held on with 3 or more standard lug nuts or knock-off hubs. (<u>Tire prep/dope is NOT allowed</u>).



**13. Bodies.** All cars must have complete bodies with tail section in place. There must be a metal firewall between driver and engine, made of 24 gauge steel or .0625" aluminum. No rear view mirrors. The only part of the car allowed to be dismantled for driver to enter or exit is a quick release steering wheel hub. The minimum opening on the right side of the car will be 10" from the bottom of the roll cage to the top of the mud guard or sissy bar and 14" minimum width (a 1" tolerance in either direction is allowed). Floor pan must extend from the front of the seat to a place forward of the driver's feet on top of cross members and lower frame rails. All mechanically operated devices must be mounted below the driver's shoulders for safety. All fuel tanks must be equipped with a one-way check valve designed to prevent the spillage of fuel from the fuel tank vent in the event of a rollover. Body Panels may not extend more than 1" beyond the rear cage downtubes.

**14. Transmission.** Any type transmission is legal. Any car equipped with a shifting mechanism must have this device mounted in the driver's compartment. Shift levers may be mounted outside the driver's compartment on opposite side of car from the chain drive. Chain guards will be made of .090 inch thick aluminum or equivalent and will run on top of chain from the front of the front sprocket to the center of the rear axle. Driver must not be able to touch the chain or sprockets while sitting in the cockpit.

**15.** Wings. <u>Max 16 Sq. Ft. Airfoil</u>. Sideboard, left side, maximum 26" tall x 54" long. Sideboard, right side, maximum 24" tall x 54" long. No part of the wing may extend beyond the width of the tires as driven (including but not limited to the center section, sideboards, or bracing).

Top wings are mandatory to enter a night's event. Cars may finish without a wing if no replacement is available.

## MEASUREMENT DETAILS (Taken at SSMC Scales):

Left to Right (Side to Side) – Measure with a straight edge on outside of tires.

Nose Wings

If a nose wing is used, the center section may not exceed 4 square feet.

**16.** Numbers. All cars must have legible numbers on both sides of car and the nose. Minimum height of numbers is 8" on the nose or nose wing, 10" on each side of the tail and 12" on the wing.

17. License. No license is required to enter a night's event (Minimum age requirements must be met, Rule #1).

**18. Ballast.** Any material used for ballast must be firmly attached as a part of the car's structure. No loose ballast allowed (including fuel).

**19. Engine Rules.** Any multi-cylinder 4 cycle motorcycle engine with <u>Maximum Displacement of 640cc</u>. <u>Naturally</u> <u>Aspirated only, No Turbo Charger or Supercharger allowed!</u> Must have cockpit operated electric starter, manual lever clutch in car and on-board battery capable of starting the engine. Must also remain chain-driven off of the original countershaft. All cars must start each race with a muffler. Any other modifications allowed.

Richard Kreisel 3/31/20

- Rev. 1- Right side Opening 10" x 14" 05/08/14 Rev. 2 - Stock Bore & Stroke - 12/08/14 Rev. 3- Added SFI 24.1 to Helmet - 01/15/15 Rev. 4- Revised Nerf Bar projection - 02/27/15
- Rev. 5- Updated Helmet & Seat Belt spec. 12/14/16
- Rev. 6- 640cc max. 02/09/20