# 2024 Michigan 24 Hour Race Rules

#### General

- A) No modifications allowed to chassis or body unless otherwise specified.
- B) Any 1/32 scale GT, LMP or Daytona Prototype, EXCEPT the NSR Mosler, with a plastic chassis and body is allowed.
- C) Track voltage will be set at 12.0 volts for practice and the race (actual voltage may vary by +/- 0.10 volts).
- D) There will be a pre-race tech inspection.
- E) Unless otherwise noted, all car parts/components used by teams must be commercially available at least 30 days prior to the event.

### Body

- A) No exterior modifications to the body allowed modifications to interior of the body cannot be visible from the exterior. "Glass" must be present in all locations that the stock body comes with.
- B) Lexan interiors and windshields are allowed. Interiors and windshields must be taped or glued in place.
- C) Tape is allowed on the exterior of the body or wing.
- D) All cars must have numbers in at least three (3) places.
- E) Light kits are mandatory. We will be running a portion of the race in darkness. Lights do not need to be on until the beginning of the first heat in the darkness segment of the race.
- F) Cars must have at least one front and one rear light on for all green flag racing during all heats that make up the darkness segment of the race. Rear lights may NOT be yellow or white. Cars not meeting this requirement must be removed from the track for repair (refer to "Repairs" section).
- G) Light kits must be a commercially available slot car lighting kit. The light kit must include a capacitor.
- H) Custom paint schemes are allowed (refer to Body Rule D).

## Chassis

- A) Any stock, plastic 1/32 chassis used on a production 1/32 slot car is allowed. The only allowable chassis modifications are as follows:
  - a. You are allowed to remove flashing and sand the chassis to allow for body float (maximum gap of 1/32" between chassis and body).
  - b. You are allowed to have 2 small lubrication holes in the chassis below the rear bushing/bearing carriers. Lubrication holes should be only large enough to permit insertion of a standard needle commonly found on needle bottles used to hold bushing/bearing lubricant.
  - c. For chassis without built-in adjustable front axle height adjustment using set screws, SCC adjustable front axle mounts may be installed. When using adjustable front axle mounts, the stock axle mounts may be removed to allow full vertical adjustment of the front axle blocks.
  - d. No other chassis modifications are allowed.
- B) Slot.it HRS or Scaleauto RTR chassis is allowed (subject to all applicable rules described herein)
- C) Commercially available 3D printed chassis is allowed (subject to all applicable rules described herein).
- D) Chassis may not be reinforced or impregnated with metal. This includes, but is not limited to, placing sections of tubing (plastic or metal) between the front axle mounts.

# 2024 Michigan 24 Hour Race Rules

- E) Homemade or scratch built chassis are not allowed. Metal chassis, including chassis with a combination of plastic and metal components, are not allowed.
- F) You may use a different chassis than was intended for the car body ONLY if the chassis fits the body without ANY modification to the chassis and/or the body (e.g. Scaleauto Radical chassis with a Toyota GT1 body). You may also use any updated chassis for a car (e.g. Slot.it EVO6 chassis instead of Slot.it non-EVO6 chassis).
- G) Any brand of 1/32 guide flag may be used, minor modification is allowed (e.g. trim to length, adjust depth, blade profile), you may also shim inside the guide post hole to remove guide slop. Guide post may not be modified or strengthened. Guide spacers may be used to adjust guide height. Guide flag may NOT extend beyond the front of the car body or chassis (whichever protrudes further).
- H) Front axle screws maybe used and installed to adjust axle ride height.
- I) Pick up braid and motor wire is free choice.
- J) Independent front axle is allowed.
- K) Suspension is allowed.
- 2WD or 4WD with commercially available 4WD components only (i.e. no custom fabricated components)
- M) Wheel /tire must not protrude past the body when viewed from above.
- N) When placed on a standard setup (tech) block, the tires, guide and pickup brushes should be the only parts of the car that come in contact with the tech block. Minimum clearance for all other parts of the body, chassis, gears or any other parts is .010".
- O) Tape is required on the bottom of chassis to cover screw holes so screws don't come out and damage the track or cars.
- P) Tape is allowed across the motor pod to control float.

### Motor / pod

- A) Motor is free choice with no RPM restrictions. Motor CANNOT be opened for modification.
- B) Motor pod is free choice but must be plastic and fit the chassis with no modifications except as described in Chassis Section A.
- Commercially available 3D printed motor pod is allowed (subject to all applicable rules described herein).
- D) Motor pod may not be reinforced or impregnated with metal.
- E) Flashing may be removed and light sanding to allow for pod float (refer to Chassis Section A).
- F) Motor may be glued or taped to chassis or motor pod, screws are allowed.
- G) Motor can only be mounted in stock mounting location in the motor pod or chassis plate.

## Weight/Ballast

- A) Ballast/weight may be added. ONLY flexible lead sheet weight, flexible tungsten discs, or tungsten putty may be used. Putty may NOT be impregnated with other material. Metal rod, tubing, sheet or any ballast that stiffens/strengthens the motor mount and/or chassis is NOT allowed. No other type of weight/ballast is allowed.
- B) All ballast/weight must be securely fastened to the inside of the car it may be secured to the chassis, motor pod and/or body. No weight is allowed on the bottom of the car or outside of the body.
- C) Ballast/weight must be secured using tape or flexible glue (e.g. GOOP). Epoxy or other rigid adhesives are not allowed.

# 2024 Michigan 24 Hour Race Rules

#### **Gears**

- A) All gearing are free choice of commercially available brand(s).
- B) Free choice of gear ratios.

# Wheels / Axles / Bushings

- A) Any brand of wheel designed for 1/32 cars is allowed. Refer to chassis section M
- B) Hollow axles are allowed.
- C) Axles must be 3/32" (2.38mm), 2.5mm (Ninco) or 2mm (NSR) in diameter.
- D) Free choice on axle bushings except Sloting Plus "Combi Plus" or similar (not allowed). Ball bearings are allowed.
- E) Axle spacers are allowed (refer to "Chassis", section M)
- F) Wheels must have GT or LMP appearance (i.e. no plain wheels). Wheel inserts are allowed.

#### Tires

- A) Rear tires must be silicone. Any commercially available brand of silicone tire designed for 1/32 cars is allowed
- B) Front and rear tires may be glued and trued.
- C) Front tires may be coated (e.g. nail polish) to reduce friction.

### **Repairs:**

- A. Repairs must be in accordance with all applicable rules as stated earlier in this document.
- B. Repairs requiring tools or new parts may only be done in the team's designated pit area with a race marshal present.
- C. Repairs may only be done during the time between the heat start and the heat end.
- D. Repairs may continue even though a track call has momentarily stopped the racing.
- E. Mechanic must step away from repairs during intermission/lane change time between heats.
- F. Any part on the car can be replaced as often as needed. Exception: Body may not be replaced, only repaired.
- G. Minor use of tape or glue is acceptable as long as it does not represent a risk to other cars or the track.
- H. Body repairs are required to be done if body is at risk of damaging the track or impeding other cars on track.
- I. Pre-assembled parts/modules that are allowed:
  - a. Pinion on motor is okay.
  - b. Motor pod with motor, pinion and bushing/bearings is okay.
  - c. Tires on wheels are okay.
  - d. Braid in guide is okay.
  - e. Rear Axle with gear is okay.
  - f. A ferrule on pickup wire is okay.
  - g. Solder blob on wire is okay.
- J. Pre-assembled parts/modules that are not allowed:
  - a. Chassis plate with any part (guides, Axles, spacer, wheels, motor pods) is not allowed. Chassis plate must be bare.