



For 2024 Thunder Hill Speedway will use MN Micro Sprint Series rules*:

*(Thunder Hill Speedway reserves the right to amend these rules if deemed necessary. Any amendment would be announced prior to only apply at Thunder Hill Speedway.)



2024 A Class Micro Sprint Rules

1. AGE: 12 minimum Rookies:

-For their first three race nights, all pure rookies from a lesser class (i.e. go karts, quarter midgets, hornets, lesser cc form of Motorsports) will start each race from the back, longer if needed. In addition, for the entire first season, their car must display a rookie marker (i.e. yellow ribbon) can be obtained from the MMSS.

2. ROLL CAGE: Roll cages shall be at least 1" .062 wall thicknesses, or 1 1/8" .065 wall thicknesses, or 1 1/4" .065 wall thicknesses. 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" radius. No square or pointed corners allowed. Roll cage must be a minimum of 3" above the driver's helmet. It is mandatory to install a cross brace behind the seat to support the shoulder harness.

3. ELECTRIC'S 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 driver, other than from scorer's tower or flag man.

Transponders: Transponders are mandatory and must be mounted vertical behind back left upright of the frame.

No electronic air pressure sensors will be allowed.

4. FUEL: Methanol Only, (such as VP M1, Sunoco RM-99) Upper end lubricants are not allowed. NITRO products are NOT allowed. Fuel must pass specific gravity and or water test.

*Highly recommended for 2023 will be automatic fuel pump shutoffs. Available through Hyper Racing, part #608-419

NOTE: Fuel samples may be taken for analysis and prize money may be withheld until results are known. (Penalty for fuel infraction will result in forfeiture of all points and moneys won during event detected, and a fine up to \$250 for first infraction. 2nd infraction subject to suspension up to 1 calendar year.)

5. WEIGHT: (Winged 800lbs) minimum (775lbs Non-wing) with driver at the conclusion of the race.

6. COCKPIT: Only Wing adjusters are allowed. Absolutely no in cockpit or within reach of driver adjusters (shocks, jacobs ladder, panhard bars etc.) allowed. Panhard adjusters can be bolted solid to not allow driver to adjust during competition. All shock adjusters must be completely disconnected.

7. SUSPENSION: TREAD; MAX 50". MINIMUM 32", center to center of tires. WHEELBASE; max 70" min 50", 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.

8. SHOCKS: Any shock absorber legal, except: in cockpit adjustable shocks or electronic shocks.

9. TIRES: Hoosier ASCS2 Stamped Right Rear Mandatory (effective June 1st 2020). Hoosiers on all 4 corners is mandatory.

Any doping or treating of tires is illegal and will result in the disqualification and forfeiture of all points and purse money and suspension from series with a \$500 fine.

Tire must durometer 50 or harder in staging and or no later than five minutes after the checkered flag.

No electronic air pressure sensors will be allowed.

10. BODIES: All cars must have complete bodies. Tail sections must be in place for time trials and all races.

There must be a metal firewall between driver and engine, made of 24-gauge steel or .0625: Aluminum.

Body of car must be made of aluminum, metal, fiberglass or high impact plastic. If the body is made from aluminum it must be secured with plastic fasteners. (dzus or screws)

No rear view mirrors.

The only part of the car allowed to be dismantled for driver to egress or exit is a quick release steering wheel hub.

The minimum opening on the right side of the car will be 12" from the top of the roll cage to the top of the mud guard or sissy bar and 18" minimum from the front down tube to the back. Left side window/ door opening top of the arm guard to bottom of the roll cage 20" and 18" minimum from the front down tube to the back.

All fuel tanks must be equipped with a bladder (methanol) and a one-way check valve designed to prevent the spillage of fuel from the fuel tank vent in the event of a rollover.

11. TRANSMISSION: Four-cylinder motors must have transmission with all stock gears in working order. 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.

12. WINGS: 10 square ft. max, nose wing 4sq max. 1" wicker Max allowed on top wing only. Offsets are allowed. Nose wings cannot exceed 8 ½" tall or 21" wide.

13. ENGINE: 600cc 4-cylinder 4 stroke as comes on a stock production bike for public sale in the U.S.A. No current year production engines. Except as noted, all internal and external engine parts must remain stock with no modifications, metal removal, blueprinting, or coating added.

Valve seat inserts may be reworked. Valves must remain as produced with no modifications. Valve springs may be shimmed with standard or aftermarket shims.

Cylinder head combustion chambers may be cleaned by bead blasting with valves seated in place. Intake and exhaust ports may not be bead blasted or altered

Cylinder head gaskets may be replaced only with original equipment manufacturer's stock parts (All 3 layers of the head gasket must be used). All other gaskets may be replaced with duplicate aftermarket parts. Light cleaning of gasket surfaces with steel wool, Scotch-Brite, etc. is allowed.

Transmission gears may be shimmed only for the purpose of proper engagement. Standard or aftermarket shims may be utilized.

Aftermarket cam chain tensioner allowed for safety of motor.

Fuel injection engines can run carburetors. Fuel injection engines running carburetors may change all fuel metering devices to tune fuel curve. Any type of fuel Injection is allowed (i.e. mechanical, electronic, carbureted) Billet intake boots allowed.

Modification of oil pan & pick up allowed or aftermarket ok.

Modification to thermostat cover allowed or aftermarket ok.

Modification to water pump Cover allowed or aftermarket ok.

Any air box, stock appearing CDI, aftermarket washable replacement air filter is allowed.

Any 600cc OEM CV carburetors. Stock ECU, PE3-IG2 and PE3-8400 Engine control units are permitted for use with carburetors and Fuel Injection.

All stock classes will be allowed to run Electronic or Mechanical Injectors with an electric or mechanical fuel pump.

No Wheel or axle Sensors of any kind for speed and or traction control. No Sprocket or Transmission sensors are allowed.

NO TRACTION CONTROL of any type specifically listed or not.

14. Ballast: Any material used for ballast must be firmly attached as a part of the car's structure. No liquid or loose ballast such as water, fuel, oil, sand bags, rocks, log chains etc. allowed.

Seats: Type optional

15.SAFETY EQUIPMENT

Arm restraints: Use is mandatory. Must be adequate to keep driver's hands below roll cage.

Drivers helmet: Must be full head coverage, condition to be one of three latest SNELL approved.

Driver's uniform: Must wear a name brand flame retardant uniform. High top tennis shoes or wrestling shoes are acceptable.

Neck brace: Recommended. Cage net or seat mounted head-rest required unless wearing an approved immobilization device (i.e. Hans's device)

Gloves: SFI rated driving gloves are mandatory.

Seat belts and shoulder harness: Seat belts must be securely attached to the car and used at all time. 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 05 may be used in 2006, 2007, and 2008)

It is mandatory to install a cross brace on the frame behind the seat to support the shoulder harness.

Quick release pins are recommended in wing H for easy removal in emergencies.

Strongly Recommended Equipment

-Rock screen

-Head and neck restraints

-High impact roll bar padding

-Fire resistant "Impact Dissipating Race Seat Padding," "Crash Pad," or a "Visco-Elastic Polymer -----Padding" product for race seats that are designed to distribute impact forces.

*Automatic fuel pump shutoffs will be mandatory in 2024. Hyper Part #608-419.

AMENDMENTS TO THESE RULES MAY BE MADE IF NECESSARY. MMSS AND TRACK OFFICIALS DECISIONS ARE FINAL!

Rules disclaimer: The rules and regulations set forth are designed to provide for an orderly conduct of racing events. These rules shall govern the condition of all events and by participating in the events, all participants are deemed to have complied with these rules. No expressed or implied warranty of safety shall result from publications of, or 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. Tech official(s) shall have full authority, at the discretion of the MMSS official(s) in charge, of any competitor and the competitor may be disqualified for rule violations, hazardous equipment, or hazardous actions. Vehicle approved by the tech inspector means only the inspected vehicle is approved for participation in a competitive event and shall not be construed, in any way, to mean the inspected vehicle is guaranteed mechanically sound. Be it further declared the tech official shall not be liable for any mechanical failure nor for any losses, injuries or death resulting from inspection.