

2024

600 Micro Sprint Competition Rules

Table of Contents

[**General Provisions** 3](#_Toc161303498)

[**General Rules** 4](#_Toc161303499)

[**Racing Safety Specifications** 7](#_Toc161303500)

[**2024-2026 600cc U6SA Engine Rules** 10](#_Toc161303501)

[1. Terms and conditions 10](#_Toc161303502)

[2. Overall Engine 10](#_Toc161303503)

[3. Bore and Stroke 10](#_Toc161303504)

[4. Head and cams 10](#_Toc161303505)

[5. Bottom End 11](#_Toc161303506)

[6. Clutch/Transmission 11](#_Toc161303507)

[7. Ignition 11](#_Toc161303508)

[8. Air Induction system 12](#_Toc161303509)

[9. Exhaust 13](#_Toc161303510)

[10. Charging system 13](#_Toc161303511)

[11. Self-Starting 13](#_Toc161303512)

[12. Fuel 13](#_Toc161303513)

[13. Minimum weight 13](#_Toc161303514)

[14. Transponder Location 13](#_Toc161303515)

[**600 Micro Sprint Competition Rules Acknowledgement Form** 14](#_Toc161303516)

# **General Provisions**

The 2024 Middleford Speedway 600 Micro Sprint Rules are published to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such events. These rules and regulations supersede all published or generally accepted rules and/or regulation and shall remain in effect until updated or amended, in writing, by the track administrators.

These rules and regulations shall govern the condition of all events and by participating in these events, all participants are deemed to have accepted these rules as governing. No express or implied warranty of safety shall result from the publication 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 participants, spectators, or others. If the rules do not state you can do something, assume you CANNOT.

Middleford Speedway reserves the right to reject any entrant for any reason. All participants are to conduct themselves in compliance with these rules and regulations and the laws of the State of Delaware. Middleford Speedway reserves the right to change any rule or regulation necessary to conduct events. Any deviation or exceptions to these rules are subject to the interpretation of the Middleford Speedway Officials and their decision will be final.

Middleford Speedway reserves the right to confiscate any part used in competition at any time for the purposes of verifying compliance with these rules and regulations.

If you have questions, ask a Middleford Speedway Official. In the event of a “gray” area, a committee of at least 3 class representatives will review the issue for interpretation. A 72-hour review period may be required to reach a decision. That decision will be final.

# **General Rules**

1. All persons entering the pit area must sign the insurance waiver.
2. For the purposes of clarity:
   1. Any heat race, qualifier, consolation (consi) race or feature is considered a race.
   2. The event constitutes the entirety of the activities while the track is open for admission.
   3. Track Officials
      1. President - Greg Mitchell
      2. Race Director – Chris “Tippy” Martinez
      3. Registration Official – Tammy Rust
      4. Pit Steward: Gage Betts
      5. Technical Official - John Jones
3. Middleford Speedway rules and regulations will be in effect at all invitational races.
4. Middleford Speedway track tire rules will be in effect for all events unless otherwise noted for special events.
   1. The right rear tire must have a minimum durometer reading of 50 before entering the racetrack and directly after the race (no cool down period will be offered).
      1. Multiple readings will be taken at random locations across the tire (inside, center, outside).
      2. Two readings that fall below 50 before the race will require that tire to be replaced with a tire that meets the minimum.
      3. Two readings that fall below 50 after the race will result in a disqualification for that race.
   2. Cutting, Siping, and Grinding is ALLOWED
   3. Hoosier or American Racer tire may be used.
5. WiFi accessibility to the ECU is strictly prohibited during race conditions and will result in disqualification.
   1. For example: The Guhl WiDefy jumper wire is a WiFi device and will result in an automatic disqualification.
6. No mirrors permitted on or in any race car.
7. All vehicles must have legible numbers on the right side of the car at the highest point of the upper sail panel.
   1. Micros must have legible numbers on both sides of the tail/wing and on the front of the body.
   2. The minimum number height is ten inches (10”).
   3. The recommended number width of two inches (2”).
   4. The numbers must stand alone from any advertising.
   5. If the Chief Scorer cannot clearly distinguish and read the number, the driver will not be scored for that race resulting in a Did Not Start (DNS).
8. Middleford Speedway will not form an official tech committee.
   1. A committee of at least 3 or 5 class representatives will be established to address technical competition issues.
   2. All technical questions will be addressed by class representatives. **At no time are technical questions to be directed to the Track President - Greg Mitchell.**
   3. The class representatives will determine the tech procedures for the race including:
      1. What is being teched.
      2. Who is completing the tech.
      3. Location of the tech.
      4. Penalties associated with failing to meet technical standards.
   4. Cars can be teched in the pits prior to the start of the night’s races.
9. In the event of a disqualification or if a “gray” area is observed, the class representatives will review the issue for interpretation.
   1. A 72-hour review period may be required to reach a decision - that decision will be final.
   2. If a car is found to be illegal, the car and driver will be disqualified from that race and the car will be teched before the next entered race.
   3. If the car is found to be illegal a second time, the car and driver will be disqualified for that race, suspended from competition for the next event, and will be teched before the next entered race.
   4. If the car is found to be illegal a third time, the car and driver will be disqualified from that race and suspended for the remainder of the season.
10. Only the owner or driver of a car involved in the race may file a protest.
    1. If the owner or driver chooses to protest a car, he/she must finish within 5 positions of the car being protested.
    2. Protests must be made in writing and given to the class representatives by the driver or car owner within fifteen (15) minutes after completion of the race in which the car competed.
    3. The protest fee is $1,500 and must be presented in cash with the written protest.
    4. If the protested car is found to be illegal, $500 will be used to cover associated tech fees and $1000 goes back to the person who filed the protest.
       1. The disqualification process noted above will begin.
    5. If the protested car is legal. The car being protested receives $1000 and $500 will be used to cover associated tech fees.

# **Racing Safety Specifications**

1. Drivers must have an SFI rated head and neck restrain system.
2. Chain guards will be installed on all cars where chains are exposed to the driver.
3. All nuts, bolts and component parts of each car’s suspension and steering system must be secured and have lock nuts, lock washers, cotter keys, or be safety wired.
4. “R” or similar clip is required to be used at the ends of all splined axles.
5. Car must be equipped with a functioning on-off or kill switch. Clearly labelled and within easy reach of the driver while in a racing position visible to the on-track safety crew
6. Functioning fuel shut off valve must be clearly labelled, within easy reach of the driver while in a racing position, and visible to the on-track safety crew.
7. Oil cooling systems will not be allowed in the driver's compartment or on the roll cage exposed to the driver's compartment.
8. Fuel Cells are mandatory and must be deemed to meet or exceed the FIA-FT3 Standards. NO EXCEPTIONS.
   1. Bladder tank required.
   2. No pressurized fuel tanks will be permitted.
   3. No fuel tanks permitted in the cockpit.
   4. All outside mounted fuel tanks must be protected by nerf bars or rear bumper.
9. Radiator hoses of automotive heater or hydraulic quality.
   1. No clear plastic or plastic reinforced hose.
10. There must be an approved firewall between the driver and the engine.
    1. Sheet metal, aluminum, fiberglass, carbon fiber, or high impact plastic may be used.
11. Nerf bars firmly attached to the car using bolts and lock nuts.
    1. Must extend towards the center tread of tire but not beyond the outside edge of the tire without the driver in car.
    2. Must be axle high to the body.
12. Bumpers extending forward of the front tires and behind the rear tires must be secured using bolts and lock nuts.
13. No parts extend beyond the outside edge of the tires.
14. No sharp corners that can damage another car permitted.
15. Cars must have a floor pan extending from the front of the driver's seat to a place forward of the driver's feet.
    1. Floor pans may be installed above or below the frame rails. They must be secured using metal fasteners - No wire or plastic wire ties.
16. Batteries must be securely attached to the car.
17. No Carbon fiber wheels will be allowed.
18. Brakes must have sufficient strength to lock the wheels and stop the car while in motion on the track.
    1. Rear brake rotors on all 600cc cars must be at least 9 ¼ inches in diameter.
19. Steering wheel - quick release hub push-in, non-removable, metal release pin, or Troyer type - no bolts or nuts.
20. Roll Cage must be made of the materials as specified by the rules in which the car competes.
    1. Padding on the roll cage bracing or padded head rest behind the driver's head is mandatory.
    2. There must be a minimum of 1 ½ inches measuring below the bottom of roll cage and above the driver’s helmet with the driver seated upright in the car.
    3. Cars must be equipped with a roll cage of sufficient strength to support the weight of the car and driver.
    4. Roll cage must have gussets at the intersecting bars to the uprights.
21. All cars must have complete bodies as specified by the governing rules of the class in which they are competing.
    1. All car body sections, bumpers and nerf bars must be in place at the start of all races.
    2. Portions of the car bodies such as nose, tail or side section may be left open for cooling.
       1. The amount of opening is subject to approval by the Technical Committee.
    3. Perforated metal tail section is permitted.
    4. Air scoops must have no sharp edges.
    5. Bodies must be of aluminum, metal, fiberglass, carbon fiber or high impact plastic.

# **2024-2026 600cc U6SA Engine Rules**

## Terms and conditions

* 1. If a change or modification to the stock engine or its parts is not included in these rules, then the modification is considered legal.
  2. The word “stock” means un-modified factory original parts or components.
  3. No mixing engine parts from other motorcycle manufacturers. For example: Only Yamaha parts can be used in a Yamaha engine.
  4. The case determines the model year and that is what determines the stock bore & stroke for that engine.

## Overall Engine

* 1. No limited production race motors allowed. Must be a production motorcycle engine, 4 cylinders 4 stroke.
  2. No titanium anywhere in or on the engine, unless it comes stock form manufacturer of engine on the production bike or used as bolts in aftermarket rods.
  3. Must have engine, clutch, and transmission all in one unit.
  4. Must be Chain Drive.

## Bore and Stroke

* 1. 600cc Maximum displacement for an engine model that was new in 2006 or newer. Older engines maximum displacement is 637cc. Engine model is defined as a manufacturer redesign of overall engine. See Specification list.
  2. No strokers or de-stroked engines.

## Head and cams

* 1. NO PORTING or deporting of intake or exhaust runners.
  2. Valve jobs, valve grinding, valve seating, valve seal modification and valve seat cutting are allowed.
  3. Valve seat inserts may be reworked or replaced with any seat of original dimensions.
     1. Any dimensional thickness of the stock inserts may not be increased. Valve seats can be ground with multiple angles.
     2. Blending of the valve seat into the head is permitted but cannot extend more than ¼” into the aluminum head measured from where the seat meets the head.
  4. OEM Head only.
  5. Valves cannot be larger in diameter than factory stock valves.

## Bottom End

* 1. No machining to remove weight from the crank (balancing of crank is ok) (no after-market cranks) (no lightweight cranks) No polishing or coatings of any kind.
  2. No aluminum connecting rods.
  3. No dry sump systems are allowed unless it comes from the motorcycle manufacturer as original equipment.

## Clutch/Transmission

* 1. No removal of clutch.
  2. Clutch must remain operational.
  3. No modification to the stock transmission gears, no close-ratio gears or nonstandard gear-ratios.
     1. All gears must remain in transmission, no removing any gears. No polishing or coatings of any kind.

## Ignition

* 1. No aftermarket ECU’s, stock appearing ECU only.
     1. ECU must be a production ECU that was originally supplied by the same manufacturer as the engine.
     2. Racing ECU’s may be used, as long as they were originally supplied by the same manufacturer as the engine. Ex: Honda motorcycle engines must run ECU’s that were supplied by Honda on their motorcycle engines.
     3. Re-flashing of ECU and factory race ECU’s are allowed.
     4. Rev limit for all 600cc (nothing larger than 600cc) engines is 16,100 rpms.
     5. Rev limit for all 636cc engines is 14,800 rpms.
     6. U6SA specified Rev Limit must remain intact at all times (no switched or gear specific limiters).
     7. If a computer is hooked up to check the ECU it must be set to U6SA specified rpm’s, no tolerance. See specifications list for RPM limits.
  2. All cars must have the PA standard connector for the track to check engine rpm rev limit.
     1. These are available from the chassis manufacturers, engine builders, and at the track.
     2. All cars must leave intact the rpm wire coming from the ECU.
  3. No gear position sensor may be used.
     1. The sensor may be in place on the engine but cannot have any wires connected to it.
     2. Gear position wire from ECU may not be switchable.
  4. No traction control device.
  5. No more than one ECU box present in or on car.
  6. A 50 rpm over rev tolerance for the purpose of tech inspection is acceptable. (Note: this does not mean you can turn up the rpms in any ECU by any amount).
  7. Switchable wires for changing ignition maps, fuel maps, or rev limits must be contained and secured in the wiring harness.
     1. (the wires must be taped up, not visible, and unable to be switched in any way).
  8. Electric fuel pump safety relay must be installed on all cars equipped with an electric fuel pump, including lift pumps for Mechanical Fuel Injection systems
     1. This relay must automatically shut off the electric fuel pump when the engine stops running.

## Air Induction system

* 1. No mechanically forced induction (turbo charging, supercharging).
  2. Any carburetors may be used on any engine, regardless of year of engine.
     1. Note: Switching to carburetors on engines that came with fuel injection usually increases the rev limiter due to the removal of the injectors as the ECU cuts fuel to limit rpm’s before it cuts the ignition.
        1. A reflash of the ECU will be required if using carburetors in order to comply with the rev limit rule 7. a.
  3. If the engine did not come from the factory with fuel injection, fuel injection may not be used.

## Exhaust

* 1. A muffler must be used with the exhaust system that will keep noise levels within individual track limits.

## Charging system

* 1. No removing the charging system, it must remain in complete working order, no factory racing charging systems.

## Self-Starting

* 1. The engine must self-start at the beginning of the event. If it does not self-start, the car may be pushed off and must start at the rear of the event as the penalty.

## Fuel

* 1. No fuels other than alcohol, gasoline, and/or top lube.
     1. Nonflammable top lube only, no exotic fuel additives, no oxidizers, no fuel enhancer top lube.
  2. Fuel tanks must contain a bladder.
     1. A fuel tank with a bladder is further defined as a plastic outer shell with a rubber inner container.

## Minimum weight

* 1. The minimum weight at all times is 800 pounds for winged classes and 775 pounds for wingless classes, car and driver.
     1. If weight is added it must be firmly bolted in place.

## Transponder Location

* 1. Transponder location is 21” from center of front axle towards rear axle and 6” from the bottom frame rail.

**MIDDLEFORD SPEEDWAY**

# **600 Micro Sprint Competition Rules Acknowledgement Form**

*PLEASE FILL OUT THE FOLLOWING FORM TO ACKNOWLEDGE RECEIPT*

*IF YOU HAVE ANY QUESTIONS OR CONCERNS, DISCUSS THEM WITH THE CLASS REPRESENTATIVE*

*THIS ACKNOWLEDGEMENT IS REQUIRED TO BE ON FILE WITH THE TRACK PRIOR TO PARTICIPATION IN ANY EVENTS*

I HAVE RECEIVED AND READ THE MIDDLEFORD SPEEDWAY 2024 600 Micro Sprint Competition Rules.

BY SIGNING BELOW, I AGREE TO ABIDE BY THE RULES, REGULATIONS, AND OPERATING PROCEDURES.

|  |  |  |
| --- | --- | --- |
| RACECAR CLASS: 600 MICRO SPRINT | CAR #: | |
| CAR OWNER: |  |  |
| (print) | (Signature) | (Date) |
| DRIVER: |  |  |
| (print) | (Signature) | (Date) |
|  |  | |

***THANK YOU FOR YOUR COOPERATION & SUPPORT!***