

## **SUNDANCE VACATIONS SPEEDWAY 2010 270cc/600cc WINGLESS MICRO SPRINT RULES**

The Wingless Micro Sprint division is a work in progress, for 2010. Both 270cc and 600cc cars will compete together, with weight provisions for the 270cc cars. Additional rules may be added, in the fairness of competition. No rear engine cars or aluminum frames will be permitted. Dirt style cars only. No independent front suspension allowed. Purpose built(for asphalt) cars will NOT be permitted to compete. Cars must be built to withstand the stress of high speeds.

**APPEARANCE:** The body must give the appearance of completely covering the car frame and must be fully painted. May be constructed of aluminum, metal, fiberglass or high impact plastic. All cars must have large legible numbers at least 12" high displayed on both sides of the tail. Colors used for numbers must stand out on the car. No duplicate numbers permitted.

**ROLL CAGE:** Roll cage must provide protection with suitable space and head room in the driver's compartment and extend at least 3" above driver's head. Minimum roll cage diameter of 1 1/8 OD x .083 or 1 1/4 OD x .065 wall thickness (no 1" x .065 roll cages). Roll cage may be drilled to be checked at the discretion of Track Tech Personnel. Roll cage should be made of chromoly steel or material equivalent in strength.

**WHEELS & TIRES;** 10" maximum wheel diameter. Must be approved racing wheels. Right Rear spec tire will be utilized. Tire must be purchased from track. Tire will be stamped. Call (570)788-7544 for track tire info.

**CHASSIS:** Minimum wheel base of 55". Maximum wheel base of 65". Must have accessible fuel shut off valve and kill switch clearly marked. Cars must have approved fire wall between the driver and the engine compartment as well as between the driver and the fuel cell. All cars must have side nerf bars. Metal belly pan is required (minimum .040 thick). It must run from in front of the seat forward past the driver's feet. Cars must have front and rear bumpers. Rear bumpers must be suitable for push starts. No belt driven cars. No centrifugal clutches. Chain guard is mandatory. Front radiators must be shielded. Hose connections or hoses within the cockpit should be sleeved. Radiator and fuel vent hoses must extend to the bottom rail of frame. Driver's compartment adjustable suspension parts-ok. No part of the car can extend out past the side walls of the tires.

**BRAKES:** All brakes must be in good working order at ALL TIMES!

**STEERING:** No nylon steering hangers. Steering mechanism must be constructed of a minimum 5/8" rod and 3/8" heim ends. All universal joints on steering must be racing approved. Spring loaded quick release type steering hub required.

**SAFETY:** Seat belts must be 3" wide 5 point approved racing harness. Belts must be in good condition and be attached to the car in a safe manner. Shoulder belts must run over a cross bar at shoulder height. Snell 2000 or newer helmet and approved full face shield required. Approved fire suit mandatory. Nomex underwear, head sock and two layer suit is highly recommended. Arm restraints, neck collars and racing gloves must be worn at all times, while on the Track. Open wheel cage net is recommended. Aluminum racing seat is mandatory. Must have headrest and be padded. Seat must be securely fastened to the car.

**250 cc ENGINES:** Single cylinder 250cc full production motorcycle engines (maximum total displacement of 270cc). No fuel injection. Gas or alcohol only. Nitrate fuel is illegal and will be checked at the discretion of Track Personnel. Mufflers/silencers mandatory on all exhaust systems.

### **600cc Micro Sprint Universal Engine Rules**

#### **Bore and stroke**

- 600cc Maximum for engine model that was new in 2006 and up. Other engines are 637cc maximum.
- Standard Stroke only (no strokers)

#### **Head and cams**

- NO PORTING, Blending the Bowls, or Blending the Valve Seats (exhaust or intake) Valve jobs are acceptable.
- Cams do not need to be stock, but the lift must be no greater than stock. (duration is open)
- Cam timing may be adjustable
- May use any valves, but they may be no larger than stock valves.

- Head may be resurfaced
- Any head gasket may be used

#### Terms and conditions

- Internal Stock parts – must use original manufacturer parts for the particular year and make engine except where noted. No mixing of parts from different year and make engines, even if made by the same manufacturer. Non stock external bolt on parts may be used (example: billet oil pan, starter, water pump cover, oil cooler, pipes, etc.)

#### Overall Engine

- Must be a Production Motorcycle Engine, 4 cylinder, 4 stroke
- Current year engines allowed
- No Titanium anywhere in or on the engine, unless it comes stock from manufacturer of engine on the production bike
- Must have engine, clutch, and transmission all in one unit
- Must be Chain Drive

#### Pistons

- Any Piston may be used, must be within cc limit specified under bore and stroke

#### Bottom End

- No machining to remove weight from the crank (no after-market cranks) (no lightweight cranks)
- Stock connecting rods must be used (no after-market rods)
- Aftermarket rod bolts may be used

#### Clutch/Transmission

- The clutch does not need to remain stock, but must remain operable
- Transmission gears must be stock, no close-ratio gears or nonstandard gear ratios
- All gears must remain in transmission, no removing any gears.

#### Ignition

- Stock Rev Limiter must remain intact at all times (ex: no switched or gear specific limiters). No hot ECU boxes, no modified ECU boxes. Factory race boxes are ok, but must have the rev limit set to the street bike stock rev limit. If a computer is hooked up to check the ECU it must be set to factory stock specifications, no tolerance.
- All cars must have the PA standard connector for the track to check engine rpm rev limit. These are available from the chassis manufactures and engine builders. All cars must leave intact the rpm wire coming from the ECU.

- Stock appearing ignition must be used (no after-market ignition systems, factory race ignitions are ok) may use different year ignitions from same manufacturer as long as stock rev limit of engine (not ignition) is retained.
- No aftermarket coils
- Engines that came with stock fuel injection may use after-market add ons (example: Power Commander, Dim Sport) to adjust the fuel curve and/or timing (essentially the same as adjusting jetting and using an ignition advancer).
- Ignition advancers may be used

#### Induction system

- No mechanically forced induction (turbo charging, supercharging)
- Any carburetors may be used on any engine, regardless of year of engine.
- If the engine did not come from the factory with fuel injection, fuel injection may not be used.
- If the engine came with factory fuel injection, the fuel injection may be used and may be converted for use with alcohol. The stock fuel injection throttle bodies must remain, but may be modified for use with alcohol. Any number of injectors may be used regardless of stock number of injectors.

#### Exhaust

- Any exhaust may be used, as long as there is a muffler included with the system.

#### Charging system

- The stock original factory charging system may not be removed, and must remain in complete working order. No factory racing charging systems.

#### Self Starting

- The engine must self-start, at the beginning of the event.

#### Fuel

- Alcohol or gasoline may be used, no exotic fuel additives, non flammable top lube only, no fuel enhancer top lube.
- Fuel tanks must contain a bladder. A fuel tank with a bladder is further defined as a plastic outer shell with a rubber inner container. Fuel cell highly recommended.

#### Minimum weight

- Minimum weight at all times;  
600cc = 775 pounds, car and driver.  
270cc = 600 pounds, car and driver.  
If weight is added, it must be firmly bolted in place.

#### FRAME HEIGHT

All cars must maintain a 2" minimum frame height-at all times.

#### TRANSPONDERS

Transponders must be mounted-minimum 18" behind front axle.

NOTE: Anything not covered in these rule specifications, will be up to the discretion of the track Tech Personnel, without recourse from any driver or owner-in the fairness of competition. All rule specifications are subject to revisions.