

# Mid Missouri Modified Midget Racing Association

## STOCK Class Rules

### --2010--

Stock class rules apply to ALL STOCK Classes with the exception of the following additions in these specific classes:

#### Stock "Wing" Class:

- 10 sq. ft. wing (Rule #13)
- Drivers must be 14 years of age or 12 years of age with 2 years experience in the Restrictor Class
- 750 lb. minimum weight

#### Stock "Non-Wing" Class:

- NO WINGS
- Drivers must be 14 years of age or 12 years of age with 2 years experience in the Restrictor Class
- 750 lb. minimum weight

#### Stock "Restrictor" Class:

- 10 sq. ft. wing (Rule #13)
- Drivers must be 10 years of age or older
- 725 lb. minimum weight
- Carburetors Only! No Fuel Injection!
- $\frac{3}{4}$ " Restrictor Plate (Stamped NMMA) must be installed Horizontal in the carburetor boot with the carburetor on top of the restrictor plate.

#### GENERAL:

- 600cc stock engine (Rule #17)**
  - No cockpit adjustments. Any adjustment *reachable by driver* MUST be disabled, except for carbs.**
  - HOOSIER "NMMA" or "ASCS2" Spec. RR tire, Grooved & Siped O.K. (Rule #10)**
  - Fuel Bladders NOT Required, but STRONGLY RECOMMENDED!**
  - HOOSIER Tires at all 4 wheel positions!**
- 1. Roll cage.** Roll cages shall be at least 1 inch diameter x .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.
  - 2. 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 beyond the outside of tire.
  - 3. 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 09 may be used in 2010, 2011 and 2012.) 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 and one of the three latest SNELL SA approvals. All drivers will wear a name brand flame-retardant uniform SFI 3.2-1 or higher. Neck braces, cage nets and/or head and neck restraints 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.
  - 4. 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.
  - 5. Battery.** All wet cell batteries mounted in the cockpit must be covered and vented outside the cockpit area.
  - 6. Fuel.** "Stock" Class cars may run gasoline, ethanol or methanol. **No performance enhancing additives are allowed!**
  - 7. Suspension.**
    - Tread:** Maximum 63 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.

**8. Shocks.** Any shock absorber legal, except **No Cockpit Adjustable Shocks.**

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

**10. Tires And Wheels.** **Tires at all 4 wheel positions must be HOOSIER.** 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 4 or more standard lug nuts or knock-off hubs. Right rear tire must be a minimum 50 durometer compound **HOOSIER** tire **PLATED "NMMA" or "ASCS2"**. **Tires may be grooved and siped.** Tire durometer check should be done at least 15 minutes after the races to allow for cool down.

**11. 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 13" from the bottom of the roll cage to the top of the mud guard or sissy bar and 16" 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.**

**12. Transmission.** 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.

**13. Wings.** Cars must run a 10 square foot **maximum** Top Wing with a one piece center section (**no multi stage airfoil wings allowed.**) Airfoil must be parallel with roll cage side to side. No offset sideboards (front to rear). Sideboard, left side, maximum 24" tall x 48" long. Sideboard, right side, maximum 18" tall x 48" 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). Wing position no farther back than the rear of the roll cage behind driver's head (roll cage may not be altered to change this point). Measurements for the wing placement will be taken from the back edge of the center section of the wing, not the sideboards. No mechanical, electrical or hydraulic adjustments are allowed in the cockpit area.

**Nose Wings are allowed.** If a nose wing is used, the center section may not exceed 18" x 24" with sideboards no larger than 9" tall x 21" long (**no multi stage airfoil wings allowed.**)

**14. 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.

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

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

**17. Engine Rules. (4 cycle multi-cylinder engines not exceeding 600cc with stock bore & stroke with charging unit.)**

Engines must be stock as the engine was run on the motorcycle with the charging unit. Pistons, rods, cams, etc. must be stock parts as used on the motorcycle the engine came from. No engine work (no ported heads, no lightened cranks, no lightened flywheel, no lightened pistons, no cam degreeing, no head cleanup). Valve jobs will be allowed as long as they are within manufacturer tolerances. Stock valves must be retained. Aftermarket timing advancers are illegal. Cam gears that are redrilled, slotted or altered are illegal. Internal charging system components must remain in the engine. Crank case ventilation (to atmospheric pressure only) is allowed. Any exhaust will be allowed, but all cars must start each race with a muffler. All original transmission gears must remain intact and functional. Any engine sprocket (520 or 530) is allowed. Outer cosmetic changes will be allowed to mount the engine in the car (i.e. cut part of the engine off to get it to fit, relocate oil pan drain plug, etc.). CDI black box must be stock appearing OEM without external adjustments (RPM limit modification is allowed).

#### Carburetors & Airbox

Carburetors must be OEM Production Motorcycle, CV style. No Flatslides or Lectron style carburetors allowed! Carburetors may have metering rods, jets and springs changed to tune fuel curve to match the car requirements. There will be no cones in the carburetor or the carburetor boots. TPS sensors not required. **Aftermarket Airboxes are allowed.**

#### Fuel Injected Engines running Fuel Injection - (NOT Allowed in Restrictor Class)

Fuel Injected engines are allowed except current year production. Engines running Fuel Injection may run alcohol or gasoline (alcohol recommended). **Aftermarket Airboxes are allowed.** Powercommander module allowed to tune fuel map only! (No modules that allow ignition remap!!). Oil Pickup modifications are allowed. Outer cosmetic changes to mount the engine in the car are allowed (i.e. cut part of the engine off to get it to fit, relocate oil pan drain plug, etc.). Stock appearing OEM CDI black box without external adjustments.

### Fuel Injected Engines running Carburetors

Engines originally equipped with Fuel Injection (except current year production) are allowed with any OEM production Motorcycle CV Style Carburetors. Aftermarket Airboxes are allowed. Interchanging of Injected and Carbureted cylinder heads is allowed.

Engines must be run with an OEM/Stock Ignition system from either the carbureted or injected engine, using the unaltered, stock, Motorcycle OEM components. No MSD, MoTec, Tec3, or any other aftermarket ignition systems allowed! Stock appearing OEM CDI black box without external adjustments.

### Acceptable Combinations (Engine, Carburetor, Ignition)

Make	Fuel Injected Engine	Carburetors (OEM, CV)	Ignition (Stock, OEM Matched Components)
Honda	F4i		F4 or F4i
	RR		RR
Kawasaki	ZX6-RR	Any OEM Production	ZX6-RR or other 600cc Ninja
Suzuki	GSXR-600	Motorcycle - CV Style	GSXR-600 carb or injection
Yamaha	'03 & up R6		'99 & up R6 carb or injection

**18. Engine Claiming Rules.** There will be a \$1500.00 "A" Main (engine only) claim or exchange on the first three finishers by the 10th finisher forward. The person being claimed has the option of taking the \$1500.00 or the other person's engine. If your engine is claimed, you will retain the complete exhaust system including the exhaust nuts, the carburetors or fuel injection system and air cleaners, the coils and spark plug wires, the CDI (black box), the voltage regulator and the wiring down to where it plugs into the engine or into the connectors coming from the engine, the shift lever, the chain drive sprocket & bolt/nut, plus all of the plates, thermostat housing, billet or modified stock, non stock water pump housing provided stock is available from engine owner night of claim, chain guard designed to protect engine from broken chain and bolts etc. required to mount the engine.

The person claiming the engine gets the engine with all covers, pan, starter, charging system, carburetor boots, water neck, head and valve cover intact. The person removing the engine will unplug all wiring and unhook all hoses at the engine. Do not cut wiring or hoses. Any driver, owner or crew who tries to damage the engine, car or parts of the opposite party while the engine is being removed for a claim will be subject to fines, suspension, or disqualification as deemed appropriate. You need to remember that when you sign in at the races each night with a "Stock" Class 600cc four cylinder engine, you are agreeing to have your engine claimed. **If you refuse a claim you will be disqualified from racing at SSMC until the beginning of the next season.** If two people claim the same engine, the highest finisher of the two would get the engine.

When requesting an engine claim, the \$1500 must be presented in cash or certified check. **Absolutely no personal or company checks** will be accepted for claiming purposes.

### **19. Items Subject to Tech Inspection**

- Internal Engine Components
  - Stock parts as used on the motorcycle the engine came from
- Fuel
  - No performance enhancing additives
- Bore & Stroke
  - Stock Dimensions, 600cc Max.
- Cam Shafts
  - Stock, OEM, unaltered, in proper location - Exhaust cam in front, Intake cam in back
- Cam Gears
  - Stock, OEM, unaltered bolt holes, unaltered bolts
- Cam Chain Tensioner
  - Stock, OEM
- Intake & Exhaust Ports
  - Stock size & finish, NO PORTING!
- Ignition Trigger Wheel/Advancer
  - Stock, OEM, unaltered indexing tab and crank shaft slot, CDI Box matching trigger wheel a.k.a. signal rotor
- CDI/ECU – Black Box
  - Stock appearing OEM CDI black box without external adjustments (RPM limit modification is allowed)
- Flywheel
  - Original stock, OEM charging system must be intact, unaltered and in place

- Transmission
  - All gears intact and functional
- Carburetors & Airbox
  - OEM production Motorcycle CV Style Carburetors (No Flat Slides)
  - Aftermarket Airbox is allowed
  - No cones in carburetors or airbox

Richard Kreisel  
1/19/10