

# Santa Maria Karting Association Spec Clone and Pilot Clone Regulations

## Kart:

There are two karts available for the Spec Clone and Pilot Clone classes. The Road Rat XR AKRA and the Road Rat XR. The two karts are the same chassis with a different engine accessory package. The Road Rat XR will require some upgrades to meet the engine rules, but the two chassis are the same.

Both are available from [GOKARTSUSA.COM](http://GOKARTSUSA.COM).

Contact them at 925-906-0330 or [gokartsusa.com](http://gokartsusa.com).

The regulations as set out below, and in the I.K.F. technical manual, for the SMKA Spec Clone and Pilot Clone classes are guidelines to keep these classes operating within the Spirit and Intent laid out in the SMKA Clone class perspective. Any regulation for the Spec Clone or Pilot Clone classes may be updated, changed, added or deleted by the SMKA at any time without notice. This is only to keep the class operating within the Clone class spirit and intent. The SMKA's interpretation of these regulations will be final and without appeal.

These supplemental regulations take precedent when in conflict with the I.K.F. regulations.

## Class Rules:

### Safety:

Safety tech per the 2013 IKF technical manual.

### Race Format:

Qualifying, Prefinal and Final. 1 lap qualifying in random order as drivers come to the grid (no pea pick for qualifying order.) Start 8 lap prefinal in qualifying results order with the fastest qualifier on pole. Start 16 lap final in prefinal results order with the winner on pole. The finishing order of the final is the overall result. This gives the full racing experience with no inexperienced drivers having to start in the front of the pack as in pea pick gridding. As one gains experience they will move forward on the grid. This makes the gridding and scoring system easy to understand and simple to implement.

The Clone Classes will not race for a year end championship. These are casual, no pressure or obligation classes strictly as an introduction to karting and/or for the plain fun of it.

If no electronic timing system is available for qualifying, three stop watches work very well. Throw out the high and low times. Timers should watch the start/finish line when taking lap times, it is much more consistent than following the kart to the line.

#### Engine:

I.K.F. Stock International (Clone) class 6.5hp 4-cycle engines with tech per the 2013 I.K.F. technical manual. No engine builders stickers, names or logos may be on any engine part other than those mandated by these regulations.

No modifications, additions, subtractions or alterations other than those listed below are allowed. This is critical to the success of these classes.

#### Gear Ratio:

18 tooth clutch per the 2013 I.K.F. technical manual without modification. The rear axle sprocket may have 67, 68 or 69 teeth. #35 chain only.

#### Gasoline/Oil:

Commercially available 87 octane unleaded pump gasoline at ambient temperature with no additives. A minimum of 15 ounces of Mobil 1 10w-30 or 5w-30 oil in the crankcase. The oil must be as manufactured with no additives, substitutions or amendments. No preheating or dilution of the oil.

#### Gas Tank:

The gas tank may be smaller than original and either floor mounted or steering post mounted.

#### Gauges/Instrumentation:

Only RPM, head temperature, run time, and or lap time gauges are allowed. There may be no other connections to the gauge or expansion box.

#### Chassis:

If in doubt about the legality of a change you want to make to the kart, assume that you can not. The chassis must be run with no modifications other than those allowed in these regulations. The front seat mounting tabs may be bent and or twisted to accommodate remounting the seat or a different seat. The rear seat mounts may be cut down to within 3/16" of the seat mounting hole to allow moving the seat rearward more for taller drivers. The rear seat mount tubes may not be cut or moved. The rear seat mounts may only be bent towards each other or away from each other to accommodate wider or narrower seats. The main frame rail bumper extension may have the end caps removed to make it easier to add a removable rear bumper. A hole may be put in the rear end of the main frame rails in order to put lead shot in the frame. The main frame bumper extensions must fit close enough to seal the shot in the frame. No additional braces, cross members, gussets, stiffeners may be welded, bolted or clamped to the kart. Holes may be drilled to allow for a quick release pin to retain the nerf bars or removable rear bumper. Any plastic rear bumper or bodywork is supplemental to the original stock bumper. The chassis and its components may be painted, powder coated or plated as long as the original metal temper and physical properties are not changed.

#### Motor Mount:

The engine comes mounted with tensioning eye bolts and urethane grommets. The engine may also be mounted with a ½" thick plate replacing the urethane grommets. The tensioning eye bolts may be removed. On the Road Rat XR an angled mount may be added to the stock, flat, welded on motor plate. It is not recommended to mount the engine directly to the welded on steel plate, it may cause cracking in the engine block or chassis.

#### Bodywork:

CIK style nose, sidepods and driver fairing mandatory. No reinforcement of bodywork to make it easier to push, rub or hit another kart. An I.K.F. legal full width rear bumper or bodywork is mandatory. Rear bumper must extend at least from the left rear tire center line to the right rear tire center line. Kart numbers must be on all four sides of the kart, be legible and be contrasting to their background. Black numerals on a white background is best.

#### Track width:

Outside to outside measurement of the rear tires is a maximum of 51"

#### Seats:

Any conventional fiberglass or plastic seat mounted in any position. No special built or modified seats that allow the mounting of the seat in a position other than that of a conventional karting seat. No carbon fiber, kevlar or other high strength seat materials allowed. Repairs to cracks or holes in seat may not be used to alter the seat's strength or rigidity. 1 (one) strut per side is allowed from the seat to the bearing hangar, Struts may be a maximum of .79" (20mm) outside diameter.

#### Caster/Camber adjustments:

Caster/camber pills are allowed. The maximum diameter hole in the chassis spindle yoke is ½". Any washer may be used to adjust spindle height.

#### Tie Rods:

Longer tie rods may be used to allow for use of the center steering shaft arm hole. Tie rods may be aluminum or steel.

#### Steering Wheel:

Any commercially available full circle karting steering wheel. May be flat on top. No carbon fiber or exotic materials. A single steering wheel spacer may be used, angled or straight. 2" long maximum measured axially. A steering lock for doing chassis setup may be added to the steering shaft. Any upper steering shaft support may be used.

#### Pedals:

Pedal extensions may be added to bring the pedal surface closer to the driver. Heel rests may be added on the floor pan to raise the drivers feet to reach the pedals easier. These platforms may not interfere with the pedal operation or allow the drivers feet to become hooked or entangled with them. (1" high, 3.5" wide and 6" long seems to work well.) Pedals may be replaced or moved for tall or short drivers if they are very well built.

#### Fasteners:

Fasteners must be magnetic steel and of at least the same strength grade as the original fastener for that position.

#### Rear Axle:

The rear axle diameter is 40mm with a 4.65mm wall thickness (1.208" inside diameter.) Magnetic steel only. The axle may use two or three bearings. If there are only two bearings, they must be the outermost ones. The rear axle bearings may only be of the sealed type with steel balls and races. No shielded bearings or bearings with the seals or shields removed. No ceramic, coated or exotic bearings. The axle may be located by set screws and/or a maximum of two split collars clamped on the axle. A steel split collar is recommended for use on the brake disk side due to heat that may expand an aluminum collar faster than the axle causing it to become loose and slip.

#### Tires:

Duro Excelerator tires only. 10-4.50x5 fronts, 11-7.10x5 rears. Rear wheel/tire assembly to be no wider than 8.00". Durometer readings must will be compared to a known new tire. Tires may be balanced with 1/4 ounce adhesive backed weights. No tires may be doped or prepped chemically or thermally in a way to enhance grip or softness. Tires may not be cut, trued, ground, shaved or machined in any way.

#### Wheels:

Rat Rod original equipment only with no machining, cutting, grinding, etching or any treatment to change the wheels.

Note: There is always a desire to try and find loop holes or areas to be exploited in the rules for any class, but it is a false gain. Using after market or blue printed parts is an example of side stepping the rules. The long term cost is that everyone in the class ends up with the same setup, spring or widget putting everyone back on the same level but spending more money.

Racers have a tendency to turn into lawyers over rule books. Reading the literal wording or parsing every phrase to their advantage is the rule of the day. Just because a rule says "You can not bore the carburetor venturi," that does not give you the green light to "ream" or "hone" it. Please, please, do not ruin this class for all the people who just want to have fun on a budget. Reading around the rules only costs everyone money in the long run.