

NORTH FLORIDA KART CLUB

PRE RACE SAFETY TECH GUIDELINE

THE INFORMATION CONTAINED IN THIS GUIDE HAS BEEN COMPILED TO ASSIST THE RACER IN PREPARING HIS OR HER KART FOR ON-TRACK COMPETITIVE RACING. THE PRE-RACE SAFETY IS A GUIDE TO KEEPING YOUR KART AND EQUIPMENT SAFE FOR COMPETITION TO PREVENT INJURIES TO YOURSELF AND OTHER RACERS.

EACH ITEM IS NOT CHECKED AT EVERY PRE-RACE SAFETY TECH SESSION, BUT IS CONSIDERED AS A TOTAL SAFETY EFFORT TO PREVENT INJURIES.

PLEASE BEAWARE OF THE FOLLOWING RULES AND PREPARE YOUR KART AND EQUIPMENT TO YOU CAN MEET THESE REQUIREMENTS WHEN PRESENTED.

PRE RACE SAFETY TECH INSPECTION GUIDELINES

General Safety and Tech

All competitors with methanol kart participation should have a large water spray bottle or 5 gallon water pails on hand in the grid area in case of fire. Each Karting competitor must have a fire extinguisher or 5 gallon pail of water in his or her paddock/pit area. Water is considered the most effective extinguisher for alcohol due to its diluting properties. Extinguishers rated for burning liquids will work fine but do not dilute alcohol as well.

The main focus is the safety of the driver, karts and all participants. Loss of parts from the kart during competition i.e., exhaust system, air intake components, LEAD WEIGHT, body-work etc. will be black flagged.

Items to check are as follows.

Driver Protection

- ✓ Driver Protective Clothing: Applicable WKA safety rated Full faced Helmet,
- ✓ Gloves, Abrasion resistant full length pants and full sleeve jacket, Closed toe footwear, Neck brace of proper size and fit. Gloves are highly recommended.
- ✓ Collar, Chest Protection (Kid Kart, Junior 1 & 2, Cadet classes only) per WKA
- ✓ 2013 WKA Competition Regulations & Technical Manual familiarization
- ✓ Header pipe properly wrapped to prevent burns

Braking system

- ✓ No Fluid Leaks
- ✓ Solid Pedal No Sponginess or air in system
- ✓ All attachment hardware for braking system should be snug. Hardware must be drilled and safety wired or cotter pinned. Rotor shall have stamped self locking nuts or be safetywired.
- ✓ Brake system must be caliper type, lawn kart band brakes are not allowed.
- ✓ Brake pads must be in good condition with adequate lining visible.

Fuel System

- ✓ No Fluid Leaks
- ✓ Attachment hardware must be snug
- ✓ Appropriate class fuel tank must not be leaking and in good condition. All fuel carrying lines shall have retention device at all connections (zip ties or safeties)

- ✓ In general all fuel tanks must be securely fastened to the primary structure of the kart frame/floor pan. Tank must be located within the main frame rails beneath the steering shaft. Fuel line must be of necessary length to connect to the carburetor, excessive length not allowed. Pulse line shall not be of excessive length. Fuel line must be secured to top of frame rails away from ground or other devices that may damage it. Tanks must be made of a puncture resistant material and have a leak proof fill closure. Fuel and vent lines must be positively retained at all connection points (zip ties or safety clips). Vent lines should be routed out below the seat. No pressurization of fuel system allowed.

Throttle Linkage

- ✓ Throttle return spring must be mounted and active.
- ✓ Carburetor must have a return spring in place, in addition to the pedal return spring.
- ✓ Spring must be stiff enough to overcome any friction in the system.
- ✓ Throttle action must be smooth and pedal must snap back when released quickly.
- ✓ Cable must be free of frays and clear of all interference.

Seat

- ✓ Driver and seat must be a tight fit. Large adult seats will not be allowed for children.
- ✓ Seat must be mounted solidly to the frame in at least 4 places.
- ✓ The seat bottom must be level with or only slightly below (3/16" Maximum) the karts frame cross members.
- ✓ The seat back should not be beyond the rear axle.
- ✓ Seat design must prevent any part of the driver's body from passing through it and contacting the track.
- ✓ Minimum seat height 8-11 year old 10", 12-15 year old 12", all others 14". Measurement is from ground to center/highest point of seat back. NO seat additions to bypass this rule.
- ✓ No loose cushions or pads allowed. If padding is added to the seat it must be securely retained.

Steering Shaft and Linkage

- ✓ Steering linkage must be free of play.
- ✓ All steering fasteners must be at least grade 5.
- ✓ All steering hardware must be drilled and safety wired or cotter pinned. This includes all mounting hardware used right down to the frame of the kart.
- ✓ Rod end style linkages are required at tie rod pivot points. They must be tight and in good working condition.
- ✓ Steering shaft must be one-piece .625" solid or .700" tubing no welding of sections or steering wheel is allowed.
- ✓ Steering wheel must be 10" diameter minimum 3 spoke design or butterfly type with 10" width and 5" grip area with 4 spokes.

Nerf Bars and Bumpers

- ✓ Must be installed and securely mounted to the kart. See WKA tech manual for tube dimensional and diameter requirements
- ✓ Front and Rear Bumpers must be present and solidly attached to the frame with through bolts or welds.

Frame and Bodywork

- ✓ Frame must be in good condition with no visible bends, heavy rust effecting structural rigidity, cracks or crash damage. It must be of a proven safe design constructed of nominally round tubing.
- ✓ Floor pan shall be of a design that will prevent any portion of a driver's body to pass between the frame-work and contact the track surface.
- ✓ Bodywork must be in good repair and mounting method must be secure and of good workmanship. Loose panels must be removed or tightened/repared to prevent them from falling off during the event.
- ✓ No sharp panel edges or added metal material for body mounting or rigidity. Typical mounting straps are allowed. NO additional bumper material and or plates may be added to nose cone area.
- ✓ Senior and Junior (12-15) body height is 17 inches steering fairings allowed
- ✓ Junior Sportsman body height is 14 inches and *no steering fairings allowed*.

Attached Weight

- ✓ All Weight Mounting Bolts must be 5/16" minimum, Double-Nutted or Nut w/ Safety Wire;
- ✓ Weight Painted or Coated White
- ✓ Each weight piece must have kart number marked on it.
- ✓ Large weight pieces lead, 7.5 lbs or more must utilize 2 mount bolts
- ✓ Weight must be located within main frame rails. No mounting of lead on nerf bars or rear bumper.

Wheels, Tires and Axles

- ✓ Tires must be pneumatic and designed for racing applications. Open tire and compound for all classes.
- ✓ Tires must be properly inflated and no cord showing. Rain tires must have visible tread with no cord showing.
- ✓ Rear wheels hubs/axle must have safety to prevent hub from coming off. Clips or snap rings ok.
- ✓ Wheels must be in good working condition with no bends or visible damage.
- ✓ Wheel bearings must be tight and of a ground ball bearing construction. Split race bearings are not acceptable.
- ✓ Wheel hubs must be metallic.
- ✓ Rear axle may be solid or tubular one-piece design minimum diameter 25mm. Both driving wheels must be locked to the rear axle.

Drive Line Components

- ✓ Clutches are mandatory. Outboard mounted clutches must be guarded against crankshaft breakage. Clutch mounted between engine seat shall have driver protection, to prevent driver contact and in the event chain breaks
- ✓ All karts must have chain/gear guards in place to retain a broken chain, drive gear or clutch from striking the driver.
- ✓ Exposed gears without chain on them must be covered by guarding or have chain wrapped around them.

Miscellaneous Components

- ✓ Catch can properly mounted and valve cover vent properly routed and attached.
- ✓ Kart numbers visible on nose and side panels.
- ✓ Kart rear number panel visible.
- ✓ Seat Heights from ground to top of seat back highest point. No material may be added to increase the manufactured seats back height.
 - Senior 14'
 - Junior 12"
 - Sportsman 10"