National Capital Kart Club
Technical Bulletin

Sanctioned by ASN Canada FIA

Subject: Acceptable fasteners for use on chassis components
Date: June 26th, 2008
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Introduction

The following guidelines around acceptable locking nuts, fasteners and wire come into effect as of June 26th, 2008. ***As of this bulletin release date, the use of non-locking hardware such as regular nuts can no longer be used on any part of the chassis***. Regular nuts may still be used on parts of the engine such as the carburetor and other non-safety areas.

Please see the appendix below the guidelines for examples of acceptable fasteners.

1. **Brake Caliper Mounting Bolts**
   Any bolts that secure the brake caliper to the mounts that thread into the caliper and do not use a nut **must** have the heads drilled and wired together. This is the only acceptable method of locking these bolts. Using a thread lock compound such as Loctite is not acceptable in these areas due to the heat generated by the brake system.

   All other bolts that pass through the caliper and use a nut **must** use a metal top-lock nut **and** also be secured by a circlip or cotter pin

2. **Brake Rotor Mounting Bolts**
   Any bolts that mount the brake rotor to the axle hub **must** have minimum of top-lock nuts on all bolts. If bolts have grooves or holes installed in them, then the appropriate locking device **must** also be used.

3. **Steering Assembly Fasteners**
   All steering assembly fasteners (i.e. steering wheel to hub, tie rod to linkage arms, steering shaft to frame) **must** use self locking nuts. If bolts have grooves or holes installed in them, then the appropriate locking device **must** also be used.

   Front wheels **must** use a nylon locking nut **and** also a circlip or cotter pin.

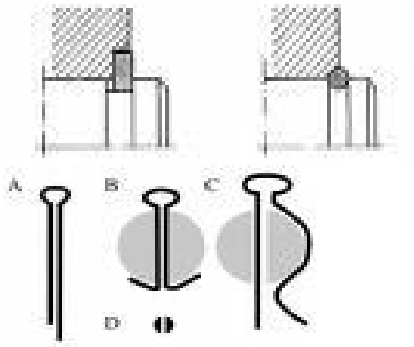
4. **Securing of Weight to the Kart**
   Extra weights **must** be bolted on with a minimum 5/16 grade 5 bolts. One bolt **must** be used per 5 pounds of weight. if these bolts are secured to

the seat, a large diameter washer **must** be used on the seat side to prevent the bolt head from pulling through .Self locking nuts (either Nylock or top-lock) **must** be used to secure them.

It is recommended that a wire is tightly wrapped around the protruding part of the bolt thread that is left sticking out after the nut has been tightened. If 2 bolts are used, run the wire over and around it also securing both bolts together. This extra step is taken because of the seat being made of fiberglass and the weights being made of lead can cause the bolts to come loose.

All weights *must* be painted yellow.

Fastener Types

	**Nylock locking nut** • Uses nylon as a retainer • To be used one time only • Not to be used where it will be affected by heat or would need to be removed often • Ideal for steering wheels, seats, pedals and other items that are installed on the chassis.
	**Top-Lock nut** • Crimped at top to deform its threads • Gives a positive metal to metal lock • These are to be used where heat is an issue (Brake components, exhaust mounts, etc.)
	**Grooves in the end of the bolts or shafts** • must have a Snap ring or circlip installed as per the drawing on upper left • Can be secured with a round-wire style clip or safety wire • These style of grooves are found at the bottom of the steering column, any brake mounting, tie rods, king pins or spindles, • If there is no groove machined in the spindle where the wheel attaches, then a hole **must** be drilled in the end of the spindle and you **must** use a cotter pin or a positive locking pin.
	**Positive Locking Pin**
	**Circlip or snap ring**