

Official PEI Kub Kar Rally Rules (2019)

2019 Kub Kar models only:

- 1) Every Kar must be a 2019 model
- 2) Kars must be built from official Kub Kar kits
- 3) No other nails for the wheels may be used than those supplied in the kit.
- 4) Kars must not exceed an overall weight of 5 ounces or 142 grams
- 5) Kars must not exceed an overall length of 7 inches or 180mm
- 6) Kars must not exceed an overall width of $2\frac{3}{4}$ inches or 70 mm
- 7) No suspension system of any kind is allowed.
- 8) Kars can not be altered or lubricated in ANY way after the Kar has been registered.
>>>Powder graphite is the ONLY lubricant
- 9) The minimum distance between the wheels is $1\frac{3}{4}$ inches or 4.5 cm)

Kars must run on all 4 wheels, no washers on wheels

- 11) Wheel profile (size) must not be changed

Each Kar must pass inspection before it can compete.

- 13) Only the Cub Kar owner can race the Kar.
- 14) The judge's decision is final

Guidelines/Tips for Youth

- 1) Make sure to read the official rules for Buggies, [Cars](#), and [Trucks](#).
- 2) No liquid lubricant can be used on the vehicles since it gums up the track
- 3) A dry lubricant called Powdered Graphite (usually available at Canadian Tire, Princess Auto, etc) can be used to lubricate the wheels of the cars/trucks to reduce friction
- 4) Make sure not to put decorations on the car that increase the width/height/length beyond allowed dimensions e.g. no headlights that stick out of the front of the car, exhaust pipes out the side of the car etc... This can only be done if the decorations are within the dimensions prescribed in the official rules for [Cars](#) and [Trucks](#).
- 5) Alignment of the wheels is very important to the speed of the car. Use the wheel slots pre-cut into the car so the car will not scrape the track but care should be taken to keep the wheels straight. To test the car, place it on a slight incline and roll it. The car should roll smoothly and run straight.
- 6) There are official Cub Car weight kits meant to be embedded in the cars. These are available at the Scout Shop, just search for "Pit Kit Kub Kar". The kit comes with two weights and three extra wheels/pins. The weights are meant to be put into a recessed area on the bottom of the car e.g. a spot that has been routed out of the bottom etc... This gives the car it's additional weight but keeps it aerodynamic. Cars can also be drilled and weights inserted into the car, just be sure you can easily get the weights out if the car is overweight when it arrives at the rally.
- 7) Reduce friction as much as possible. Air friction, track friction and wheel friction will all slow down your car. Try to reduce friction between wheels and axles, between wheels and the car body and between wheels and the guide rail. When the car races it does not sit between two guide rails, it sits on top of a guide rail [as shown in this photo](#) (not the actual PEI track). Friction can be reduced by sanding or polishing wheels and axles and making sure the car runs straight.
- 8) Paint the car early and paint often. This will improve looks of the car but is also good for speed. If paint is not well dried before the wheels are put on the paint will still be tacky and stick to the wheels, causing more friction.
- 9) Choose an aerodynamic car design
- 10) There are plenty of websites out there with good ideas for design and tips and tricks for speed. Most of them refer to Pinewood Derby races - these are the USA equivalent of the Canadian Kub Kar Races. Use these site for ideas etc... but make sure to follow the PEI rules above all!!
- 11) PLEASE REMEMBER - this is meant to be a fun and educational exercise for youth, not a race between parents. There is a parents race at the end of the youth races. ALL parents are encouraged to design and race a car on race day - show them how it's done, but let them design and

build their own car :-) me guidance and assistance is allowed by parents, particularly for younger members but should be restricted to guidance and assistance where possible.