Tires are one of, if not the most important aspects of any kart racing program. Not only having the proper tires, but the choice of which ones to select is an issue every kart racer faces every week at the track as well as at the shop.

Whether you prepare your tires yourself or have them prepared for you, the tires must be maintained weekly in order to have the performance we count on. In the event of tires that sit for a couple of weeks or more between races, this becomes even more important.

Rubber in racing tires tend to act in a similar fashion to aluminum, in the aspect that it forms a protective barrier, or “crust” to protect itself. We must remove this, and prepare the rubber at and below the surface in order to have the grip we desire.

Tire preps and conditioners alter the composition of the rubber to provide the grip characteristics that we search for. However, this comes at a cost. Most all of these chemicals have compounds that over time dry the rubber out. The more aggressive the prep, the quicker this happens. The less aggressive chemicals take a longer period of time to see this. In this case, it is definitely going to be better to be proactive rather than reactive.

One of the best tools for keeping up with your tire program is a notebook detailing each set, listing the chemicals and the procedures have used on each. Begin by marking each tire on the rubber as well as the rim with a number or other identifying character to specify the set that it belongs to. I mark both the tire and wheel so that if the mark is removed from one, it is still visible on the other. This will save a lot of headaches from trying to decide which set a particular tire belongs to. List each set in the log book accordingly. This way, at any time we can look back to make sure how the tires were originally prepared. It becomes a very tough task to remember just what you did or used over several sets of tires.

Let’s begin our maintenance. Hopefully all our tires were cleaned at the track, if not get them clean first. Remove all the tires from the trailer and lay out in sets on the shop floor. Cardboard laid out helps prevent a mess on the floor. Measure each set and make sure our stagger is correct. I don’t like to add any extreme heat to my tires after I begin my maintenance program, as I feel the heat is cooking out the chemical that I am trying to add. Clean each set thoroughly with a good tire cleaner, or light conditioner, rubbing in a couple good hard coats. Older, or tires that have been a while since use may require a couple additional coats. Soft or intermediate tires I like to coat thoroughly with a couple coats of WD-40. Wiping it on is my preferred method, however the spray works as well, just a bit messier. This adds a bit of oil back into
the rubber to replace a bit of what the more aggressive preps remove and dry out the rubber. Follow this up with a couple coats of the prep originally used on the tires. Use this to help maintain the durometer reading we desire. The tires we use on the harder, drier tracks we want to be careful not to ruin the tires by overloading with chemicals. In this case, I would thoroughly clean, and wipe a light coat of WD-40 to these. Follow up with a couple coats of the conditioner that the tires were originally prepared with. Stay within the same family of preps when working tires, some brands of prep are not compatible with other brands.

The main objective here is to maintain a good fresh surface on all our tires. Any tire that has a grayish appearance is not ready for use. Preparing the surface will leave it with a nice dark black color. Tire maintenance and our regular prep program will keep all our tires ready for use and helps keep the rubber fresh. This way, our tires are patiently waiting for their moment in the sun, and are ready when we need them. Having the tires and them not being ready to use, is not any better than not having the tires at all.