



## **Bullet Cuts**

Cory Messick

765-230-0759

### **Detailed Tire Maintenance:**

**\*\*\* Taking care of your tires can be done in numerous different ways. These recommendations are simply what have worked well for us over the years.**

#### **Post Race Cleaning:**

- Once you come off the track, clean the tires with water and a squeegee (or put them in your tire washer).
- The next day (or when you can) spray the tires down with a degreaser. I like to use Dawn Power Wash. It's not super abrasive or harsh on the tires, but it still does a good job of deep cleaning. Let it soak for a couple minutes, then rinse with water. Repeat until the suds look clean before rinsing with water. (If you clean the tires after coming off the track, you will likely only need to do this step once).
- Let the tires dry, then put them inside.

#### **Resurfacing:**

- If there is any potential that you plan to add layers of prep through the week before race day, getting the tires resurfaced early in the week will be important. (I would shoot for Wednesday at the latest).
- Make sure the tires have air in them (8-12 lbs). They will sand easier.
- Use some sort of liquid when surfacing (some people use Windex, Simple Green, Water and Soap, etc... Your choice!)
- If the tires were feathered in the slightest, I like to use an 80 grit flapper wheel to knock the feathered rubber off quickly and easily. (This will only take a pass or two).
- From there, finish the tire. There are a number of ways to do this. I personally like using a DA sander. I will get the tire close with a 60 grit paper, then finish it with 80 grit. (Remember that when using a DA sander, the grit is actually doubled. For example, 80 grit paper is really more like 150-160 grit).
- You can lightly wipe the tires with a towel or something similar to clean the excess rubber from surfacing.



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## Stagger:

- Tire stagger is very critical in terms of kart setup. I prefer to have the roll out of the tires be the same (or as close as I can) from set to set.
- I would plan to work on setting your tire staggers 2 weeks before your next race. (If running back to back weekends, check the staggers as early in the week as you can)
- I recommend setting the air pressure you plan to scale at when checking your stagger. (For example, if you know that you prefer to run split air compared to inverted air, then check your staggers with the air pressures set at a split). This will likely be very close to the air you will race at as well.
- I usually use a 6-5 psi split when checking staggers.
- To make it easier, I always measure the right side tire first. Then measure the matching left side tire. The tape measure will give you your stagger very easily:
  - Simply locate the right side tire measurement on the tape while measuring the left side tire.
  - From there, go directly across from the right side tire measurement, and it will give you your stagger.
  - For example, the right side tire measures 34". The Left Rear tire measures 32-3/4". While measuring the left rear tire, go to the 34" mark and go straight across to the other side of the tape. It will read 1-1/4". This is your stagger.
- Recommendations will vary, but I would prefer to see no more than 1/16" difference in stagger from set to set, and not more than 1/8" difference in tire roll outs from set to set.
- I do not recommend the use of an oven when setting tire staggers (although many people use them, which is their preference). I believe that the excessive heat for extended periods of time can weaken the sidewall of the tire. Burris tires already have softer sidewalls than other tires, so we do not want to soften them anymore than they already are.
- You will find your own methods to setting tire staggers, but here is what I usually do:
  - The left side tires are usually more sensitive to change than the right sides. If the left sides need to be enlarged, put air in them until they measure 1/4" bigger than what you need them to be. Let them sit for



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4-5 days. If they need to shrink, take the valve stem out, squeeze all the air out you can, and then put the valve stem back in.

- The right sides usually need more air than being 1/4" bigger than what you need, so I usually shoot for 1/2"-3/4" bigger than what you are shooting for. (How small the tire truly is compared to what you need can make this vary as well.)
- If they need to shrink, same method as the left sides.
- Setting the tires in the sun can help speed up this process, but I would not recommend setting them outside for more than a week at a time before checking them.
- When it becomes time to re-check staggers, reset your standard air pressure for checking staggers and let the tires sit that way for at least a day. (Rubber is elastic. It has a memory. It needs time to settle.)
- After the day has passed, double check the air again and measure your stagger. If the staggers need more work, repeat the process. If they are good, then you make take some small preventative measures. For example, the tires that needed swelled, put a few extra pounds in them until race day. Vice versa for the tires that needed to be shrunk.

\*\*\* If you have an offseason during the winter, use this time to experiment with what will work for you.

### **Durometer:**

- I highly recommend getting a durometer to keep on hand. (I personally use the Longacre brand. Intercomp has a durometer as well). I would use whichever one you prefer and stick with that brand as your standard. (Sometimes the brands will read differently).
- Try to take note of where your durometer readings compare from set to set as well as tire to tire within those sets. I like to see them all pretty close (within 2-4 points).

### **Consistency:**

- It will take some time, but you will find a routine and rhythm that works well for you and your program. Taking the time to do all of these critical steps helps take out any unneeded variables when changing tires at the track.



You need to be able to put a fresh set of tires on your kart and not have to worry about it upsetting the balance of your setup drastically.