



#TechTipTuesday

Adjusting Air Pressure on Each Individual Tire

Adjusting individual tire pressures is a quick and useful tool in fine tuning your kart at the track. You can "customize" each tire's contact patch size and stiffness, along with the kart's cross. Changing the tire's stiffness will also change how the weight is transferred. So, now let's dive into the individual tire pressures...

LF - The LF is typically the most common corner that you will make individual air pressure adjustments. The main reason for this is to adjust your kart's cross. More pressure will remove cross, and less pressure will add cross. The normal range of adjustment is +/- 1 psi in 1/4 psi increments.

RF - More psi will stiffen the tire, which causes it to take weight transfer quicker at corner entry. This can add grip at that part of the corner. However, it makes the contact patch smaller which tends to reduce grip. Because these two effects compete against each other it is difficult to predict what will occur. Only testing this yourself will tell you what happens at your track under your conditions. More air in the RF will also add cross. Reducing psi will have the opposite effect(s).

LR - More air will increase cross. This will also narrow the split between LR and RR. This can help the kart get off the left side tires and help the chassis work. More air in the LR can also decrease the amount of grip that it makes, which can help a push center-off.

RR - Much like the RF, more air can cause faster weight transfer, but creates a smaller contact patch. Sometimes increased PSI will help the RR plant quicker on entry giving it more grip... but other times the reduced grip can cause the tire to slide. Similar to the RF, the effects vary and you must test them for yourself to figure out what will happen in your environment. Also, more air can sometimes help the kart free up center-off if the RR was being overworked prior to the adjustment.