Phantom Racing Chassis

#TechTipTuesday

Left Side Weight

Left side weight is defined as the percentage of the total weight of the chassis carried by the left side tires. To achieve this percentage, you will simply add the totals of the LF and LR corners on your scales, then divide by the total weight of the kart. Most modern scales have the capability of producing this percentage automatically for you.

With that said, the left side weight creates the "static preload" on the left side tires, and locates the center of gravity from left to right on the chassis.

Left is very important in that it keeps the left side tires on the ground, and keeps the kart mostly flat in the corner. In situations where you are on a higher bite surface, you will probably need more left. On lower bite, less left. It's all about finding the right balance.

Also, think about chassis stiffness in regards to left side weight. If the chassis is stiffer, then it will usually need less left since the stiffness of the chassis helps keep the kart flat. On chassis that flex more, you usually need more left to keep the kart flat and the LR on the ground.

Banking can also come into play in regards to left. A flatter track typically creates more G-forces and weight transfer. So, a flat track will sometimes need more left to keep the left side tires down. On a higher banked track, the kart will not experience as much load, and you can occasionally run less left.

Generally speaking, you will want to increase left if the kart is tight, and overloading the right side tires, especially the RR. You will decrease left if the kart is overloaded on the left sides, especially the LR (causing a push).

Obviously, there are many other factors that play key roles in how the kart transitions through the corner. You have to find the right match for all of these numbers for the kart to perform as it should. We provide baseline percentages for each kart because they have proven to perform well with those numbers. Start within the baseline and adjust based on what you feel.

Once you find your "sweet spot" leave it alone, as your set up should work on nearly every track you run (provided that the tires are right).