



# #TechTipTuesday

## Toe and Front End Alignment

Toe (toe-out and toe-in) is described as a measurement that determines how much the front wheels are turned in or out from a straight-ahead position. The amount of toe, whether it's toe-in or toe-out, is expressed as the difference between the track widths as they are measured at the leading and trailing edges of the tires.

In oval karting, we almost always run toe-out, which means that the front tires point away from each other. With our karts today, it's common to set the LF straight (0"), so that is aligned in the exact same direction of the LR, then set the RF so that it points "out" or away from the LF tire in the range of 0" to 1/8". The reason we only toe out the RF has to do with "scrub radius" which we will cover in another edition.

The best way to set your toe is on the scales, race ready with the driver in the kart and a laser alignment toe system such as the Accutoe. You can use toe plates, but they are not nearly as accurate.

So what does toe-out do for my kart?

Toe out basically helps the kart turn into the corner. The more toe out, the better it will turn in. However, there are consequences in running too much toe, as the kart will try to resist running in a straight line, and can be harder to drive down the straightaway than in the turns. This will increase rolling resistance & hinder your speed.

We normally recommend using 1/16" toe-out at most common-sized tracks, then "set it and forget it."