#TechTipTuesday

Rear Hub Spacing and Tread Width

The common method of setting the hub positions is so that the RR wheel has about 1/8" to 1/4" of clearance from the frame (4-1/2" from outside edge of cassette to outside edge of hub is standard). This gives just enough gap to prevent the sidewall of the tire to "roll over" and come in contact with the frame. Normally, Maxxis tires have more of this "roll over" than Burris, so this gap will be wider on Maxxis.

The LR hub placement is based on your specific chassis' tread width (4" to 4-1/2" from outside edge of cassette to outside edge of hub is standard). Your tread width is measured from the outside edge of either tire where the surface actually meets the ground. You can check this point by setting the kart on the floor (race ready with driver) and seeing the spot on the tire where contact has been made with the ground. Common tread width is 38-3/4" to 39-1/4" depending on the chassis model.

Now, looking at each hub individually... moving the RR hub out will tend to make the RR bite less, reducing the amount of "work" that it does. However, moving it out can keep the kart from "planting" the RR - causing your kart to drift, slide, or not rotate as it should. Since the RR is normally ran as close as possible (for side bite), moving it in isn't much of an option.

Moving the LR hub in will cause the LR to carry more load, and make it bite/"work" more. This can prevent the back end from sliding if the kart is loose. Moving it out reduces the workload, and can help a push if the LR is overloaded.

Another thing to keep in mind is transfer rate - the closer the hub is to the center of the kart, the quicker the kart will transfer weight away from and back to that corner. So, on tighter tracks you may want to use a narrower tread width.

All in all, when it comes to your rear hub positioning just remember: moving a hub in will make that specific corner of the kart work/bite harder, and transfer quicker.

Moving the hub out will make it work less/transfer slower. Once you find your "sweet spot" we normally "set it and forget it."

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