



***Technical
Support***

Hercules Chassis Ballast Placement Guide





Technical Support

Every Hercules Chassis comes with a variety of adjustments that can help make the car do its part in a winning combination. One of the main concerns in a car's setup is traction and reaction time. There are quite a few ways to achieve these goals. This guide will walk you through proper ballast placement to help optimize the car's performance for your particular program.

The Hercules Chassis has five available locations for ballast. There is the Rear Tank, or Rear Catch/Weight Tank, Torpedo Tank, Mid Tank (behind driver), Footbox Tank, and Nose Mounted Weight Pucks.

Rear Catch Can/ Weight Tank



Torpedo Tank

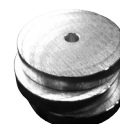


Mid Tank



Footbox Tank

Weight Pucks



Rear Weight Tank **30 lbs**
Rear Catch Can/ Weight Tank **16 lbs**

Nose Mounted Weight Pucks **3 lbs**

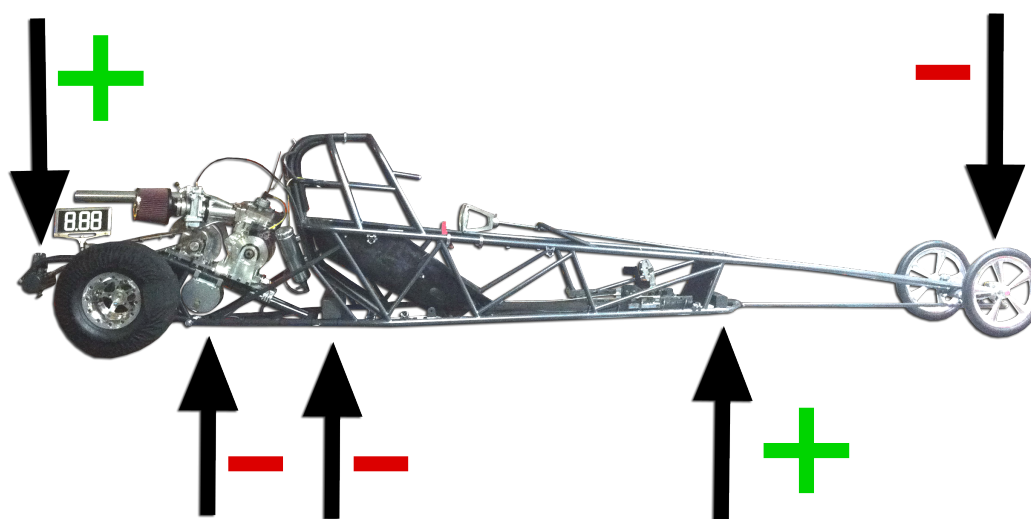


Torpedo Tank **18 lbs**
Mid Tank **35 lbs**

Footbox Tank **8 lbs**

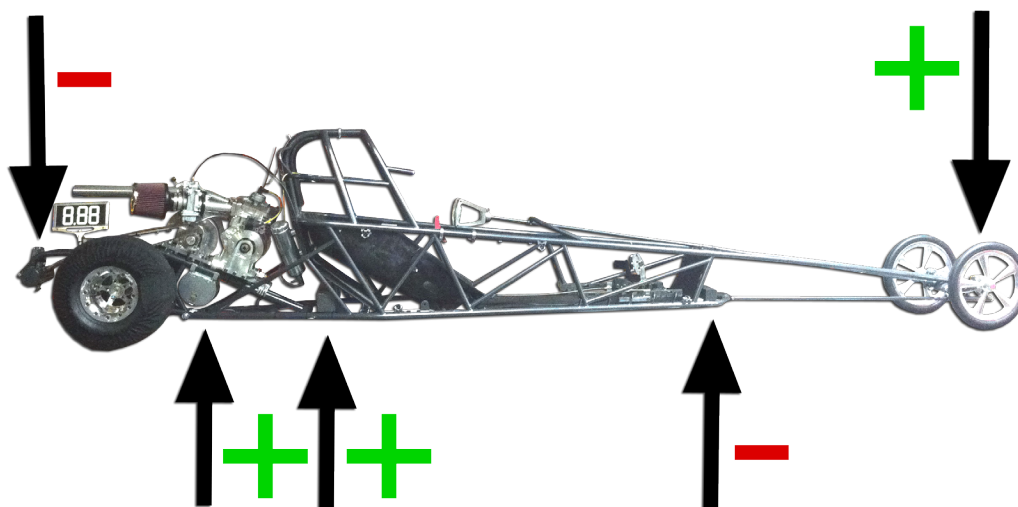
Fastest Reaction

Typically on a good track you will see your fastest reaction times if you fill the rear tank as much as possible and put at least 5 lbs in the footbox tank. It is important to remove the weight in the nose, while the mid weight and the footbox dont have to be empty, it helps if they are as light as can be afforded. The rear tank preloads the chassis and the footbox gives an anchoring effect to the chassis, keeping it from flexing and absorbing forward motion.



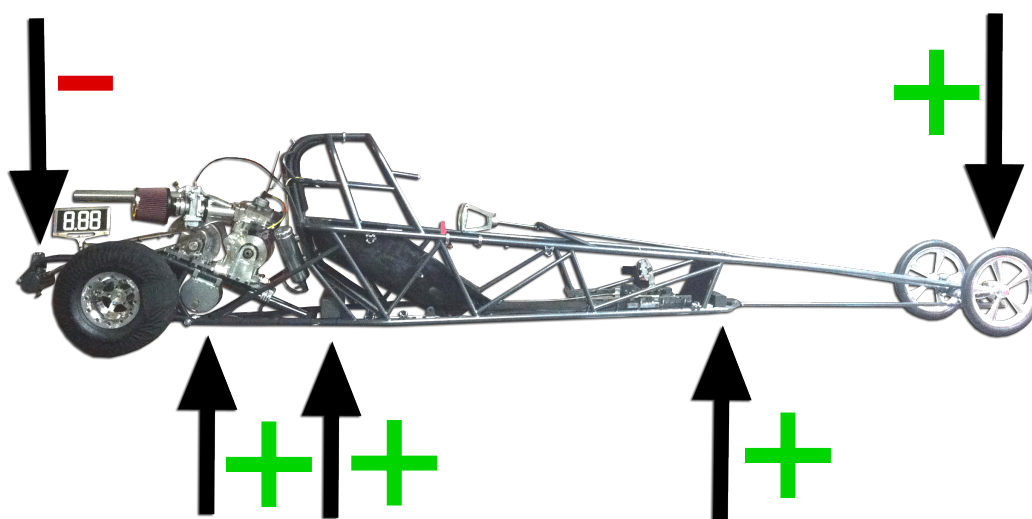
Slowest Reaction / Best Initial Hook

On a good track we are doing the opposite of the fast reaction to slow the car's reaction down. In this step we are trying to encourage flex. This is most of all achieved by the 3lbs of weight on the nose and the loss of weight in the footbox. Typically the mid weight and torpedo tanks dont have to be full, but can increase traction with minimal effect on reaction.



Best Overall Traction

On a bad track we are going to try to encourage flex but in a slower more controlled manner than the slowest reaction setup. We want to use the front weight pucks to plant the front wheels and give the car something to work against. We will leave the rear tank empty to allow for the most flex and the least "bump" leverage on the tires. Lastly to keep the car from flexing too quickly it is best to put about 5 lbs of weight in the footbox. This acts against the chassis flex and can give it the best opportunity to have a sustained traction, rather than a bounce that can happen from too much flex. The Mid and Torpedo Tank will encourage traction, but are not necessary to get the car to work well.



Best For Bumpy Tracks

On a bumpy track you can sometimes have the problem of the bumps "jumping" the car, carrying the tires away from the track due to the momentum of the ballast weight. When this happens you will see the best results by taking the weight away from the areas closest to the tires and placing the weight closer to the center of the chassis. This puts the center of gravity more in the middle of the chassis rather than directly over the tires allowing the tires to return to the track faster after an extreme bump.

