

Awana Grand Prix 101: Tips and Tricks



1. First and foremost, have your **clubber involved** with the process as much as possible!
2. Get the weight of the car as close to **5 ounces** without going over. This is the single most important thing to do for a competitive car. Some of the most inexpensive choices are
 - a. **Wheel Weights:** <http://a.co/cnf9WwW> (these are for actual cars that we drive, but work great with grand prix cars). They are $\frac{1}{4}$ **oz** each segment, and stick easily onto the car. You can also pick them up at any auto parts store
 - b. **BBs:** <http://a.co/dtKxYlm>. These are almost exactly **.01 ounces** each, so if you're looking to get precisely to 5 ounces, this is a good way to finish up. You can also find these at WalMart.
 - c. Gorilla Super Glue: <http://a.co/8ZBaslt>. A great way to keep those BBs on, or other attachments. Unlike regular gorilla glue, this won't harden and the bottle can be used over and over again, without worrying about the bottle drying up.
3. When putting the weights on, you want them to be **center of mass**, which is typically one inch in front of the rear axles. I've seen them applied successfully both on top of the car, as well as underneath (although be careful to keep enough clearance to qualify the car).
4. Make the car as **aerodynamic** as possible with either a wedge shape, or even something level, but most of the wood removed.
5. Lightly **sand** the wheels and axles. The best way that I've found is to use a dremel, and put the axle in the dremel itself and use a small piece of sandpaper. Likewise when sanding the wheels, you can put it on the axle that is in the dremel.
6. Use **graphite:** <http://a.co/0jTkxkm>! Put this liberally on your wheels and axles.
7. If you are having trouble getting the axles in, you can actually **drill your own holes** very easily with this really cool too: <http://a.co/9xT7L4G> (just make sure to do this *before* painting the car if the clubber chooses to paint).
8. If you want to get **advanced**, this is a great video to get you started: <https://www.youtube.com/watch?v=-RjJtO51ykYj> that goes over the 7 most important steps for a faster car.