



Body Tech 101

There have been a lot of questions regarding body lengths and heights. The dimensions of the body will vary a great deal depending on a number of factors including

Variables:

- Type of track
- Glue conditions
- Car class
- Body style
- Racer skill and experience

Body Length:

- Rule of thumb:
- Chassis length plus 1 inch/25mm. Measure this from guide center to axle center.
- This will put the back of the body over the rear edge of the struts.
- The new Gerding tracks are looking for slightly shorter bodies. .040 to .060.
- On a difficult track or spray glue you can go a bit longer. If it's just tight track with flat turns add about 3mm to the length of the body and have that stick out back. For a rough track add 3mm to the front
- C-12 cars will always be a bit different. The little tiny motors and the limited horsepower make these cars handle incredibly well. Don't be afraid to go shorter and lower.

Body height

- Rule of thumb:
- Most of the time you will cut your bodies to 29mm tall
- For C-12 cut the bodies to 27mm tall
- Some difficult track can use bodies cut to 30mm

- If you get to a Gerding King, for some of the classes you can be lower the body by 2mm. I heard that one racer used one of my Hurricanes at BP for a G-27 race, cut to 25mm.

Body Cutting

- For high-speed tracks, like Port Jeff and above, many of the bodies can benefit from a different cut. Traditionally, slot car bodies are cut in the front. Some bodies, in particular, the Out-I-site Vipor and Proformance Z-28 will give you better bank speed if you run them full in the front and trim them to length by trimming the back. This will loosen the car up and make you drive it more. Of course you must be careful not to trim to close to the rib. The Hi-Speed Hurricane body must be trimmed that way regardless. On the ProMounts I supply to the raceways, I call this the "speedway cut". One well-known raceway wants ALL their Vipors trimmed this way.

Chassis lengths.

- On the high-speed tracks, shorter is faster, but will you make more laps with it? The best way for me to explain this comment is to tell you a true story. I went to a race and watched a guy practice with very short cars. His lap times were slow and the cars looked terrible. I tried the cars and they were terrific. Very smooth and fast. This racer was finishing in the bottom half of all the races he ran. I suggested he try a longer car. He did and won, if I remember correctly, 3 in a row with the long car (4.45 if I remember). Unless you are running with the big dogs, don't worry to much about ultimate lap times. Get the car running good. Get it to run smooth and stable, but be careful not to lock the car down. Remember that the track will change with 7 other cars out there. The glue will build, you will not have as much power available etc. You will be more stuck, so free the car up more than you think. I know we all try to make the car quite on the straight, but listen to the really fast guys. Their cars are quite in the turns as well.

Spoilers:

- Keep the spoiler relaxed and laid well back. I like to make the next to last segment 90 degrees to the track surface and the top segment tipped forward. The biggest mistake I see is standing the spoiler up to high. I see a lot of racers bending their spoilers up in an attempt to make their cars handle. Wrong!!! Normally one of two things will happen. One, yes the car will handle better because you slowed it down by putting more spoiler in the car. More often, I see the car start to tilt. I lay my spoiler back more and re-bend those last two segments. Another way to tune the spoiler is to stiffen the back of the body. I only tape ¼ inch of the spoiler to the back of the body. Try mounting a spoiler with a ½ inch segment taped to the body

Spoilers, part 2:

- As the track builds up many racers will punch holes in their spoilers. A better way is to cut the spoiler into a trapezoid. You have to be sure on this because if you are wrong there is no fixing it like you can with the hole punch method.

Spoilers, part 3:

- Here's one that will knock your socks off and test your pit crew's skill to the max. Cut your body a bit longer than normal in the back. For the gutters, put the spoiler all the way back. For the center lanes, pull the spoiler off and move it forward. I've tried it, it works, trust me!

No body or cut will be perfect all the time, so TEST, TEST and then TEST some more. Take a variety of bodies in different sizes and yes, test them. Watch and look at what the fast guys are using in practice and race. Next time make sure you have one of those with you.

Body Cutting Dimensions							
Chassis Length		Body					
Inch	mm	std mm	cut to	short deck	cut to	long deck	cut to
4.3	109.22	134.22	135	131.22	132	137.22	138
4.35	110.49	135.49	136	132.49	133	138.49	139
4.4	111.76	136.76	137	133.76	134	139.76	140
4.45	113.03	138.03	138	135.03	135	141.03	141
4.5	114.30	139.30	140	136.30	137	142.30	143
4.55	115.57	140.57	141	137.57	138	143.57	144
4.6	116.84	141.84	142	138.84	139	144.84	145
4.65	118.11	143.11	143	140.11	140	146.11	146
4.7	119.38	144.38	144	141.38	141	147.38	147
4.75	120.65	145.65	146	142.65	143	148.65	149
4.8	121.92	146.92	147	143.92	144	149.92	150
4.85	123.19	148.19	148	145.19	145	151.19	151