Tech Article - About your weight

Q. I'm running on Scaley plastic and I have a couple of Slot it cars which have had the magnets removed as the down-force is way too strong, I tried with smaller magnets but still too much. Running with no magnet is very close to where I would like the car to be but maybe a little weight would do the trick.

Could anyone advise the best way to add just a little weight? lead / putty / etc and how to apply it.

A. Before you get into adding weight, get everything else right, or the weight is just hiding tuning faults. – Round tyres are the obvious start point. I notice that some continental car builders deliberately leave a bit of lateral movement in the rear axle of sidewinder cars when setting up for plastic track racing. I won't bore you with their convoluted theory, but they say it helps. Personally I don't like it, I prefer half a pooftenth of nothing lateral movement – just not binding. But you could experiment.

But more importantly you should experiment with how loose you run the body screws, and for podded cars, the pod screws.

A good start point is pod tight-ish – just no movement, body screws one turn back from tight- so the body visibly moves half a mm or so up and down. Play with 1/18th turn looser and tighter. Once you have that optimised, repeat exercise on the pod screws starting one turn off tight.

Once you have the best there, work on the body screws again as the needed

relationship of body screw looseness will have altered.

Once all that is done, try adding a strip of webbed tape under the car, running from the outside of the chassis across the pod and motor to the other side – this dampens the pod movement, and often improves performance.

When all that is done – head for the weight to improve overall balance characteristics.

With podded cars, my first place for adding weight is the pod itself. I find that if the pod has more weight – and thus the drive wheels, they are less unsettled by the body / chassis moving in relation to them, than if I add weight to the main chassis.

Typically I might be adding anything from 3 to 8 grams

If I feel the car is not really "planted" at front, I add a little triangle of lead in the area behind the guide, in front of the front axle – usually about 1.5 grams.

If it is a higher body saloon car such as the Slot.it DTM, which adds more "tipping load" to the outside wheel in corners, I will also experiment with a little weight right at the back of the chassis/car to induce tail action that eliminates rolling over, and allows for more predictable car behaviour if I slightly over-cook the speed into a corner. [rollover is unrecoverable, a little flick of the tail cost little time and tells me to back off a fraction next lap for optimal corner speed.]

Experiment, it's fun.