



## Brushed Mini/Hot Hatch Class.

'WOW' what a night's racing! Good or Bad! But why and what do I do about it?

### **Well, let us start with a bad night.**

Do you know what went wrong? If it was you just not driving very well then give yourself a good talking to. However, if it was car setup or a failure then let us look at a number of things! Keep it in your head that if the car did not go well, then something somewhere is not correct! Maybe it's Saturday morning and you have a couple of hours free! Firstly, you should give the car a good look over, can you see if anything is wrong or there are any loose screws? Check to see if things like the steering blocks are free on the kingpins and the rear axle rotate freely, next we need to clean everything, remove any dirt and carpet fluff from around the axles, clean the motor (More on this later).

Let's look at wheels, tyres and bearings, check that all the bearing are free from dirt, damage and rotate freely, check that your wheels are OK and that tyres are in good condition and without any bits of foam missing (chunked), also check on tyre diameter especially your rear ones, remember your rear axle is solid so any significant difference in tyre diameter will cause handling difficulties as one wheel will be trying to turn faster than the other, with a solid axel that's not good as you will lose grip on one side or the other. It is always important to swop your wheels over (left to right every other race) this will help to keep the diameters balanced.

Concentrate on the basics, other things we can fine-tuned later. The Mini/Hot Hatch cars are basic chassis, so my advice is to keep the setup basic, do not try to reinvent the world, go back to the setup you had when you got your car. Feel free to talk to other drivers and ask them for help on setup, look at how their car is handling (Don't follow the advice of someone who has a car that is going worse than yours!) only try one adjustment at a time or you could find that you end up not knowing what has done what.

### **OK, Let Us move on to a good night.**

Well, done! First thing is to give yourself a pat on the back for driving well! Then make a note (and keep it for future reference) of your setup, i.e. tyres, springs, gearing, where and when did you use additive on your tyres, ground clearance and any other setup. As above you should give the car a good look over, see if anything is wrong or if there are any loose screws anywhere, then you need to give the whole car a good clean, remove any dirt and carpet fluff from around the axles and clean and oil the bearings, also clean the motor (More on this later), check your tyres for wear and diameter, this should be OK as you will have swopped left to right as above. If you take anything off the car to check, replace and or clean it, make sure you put it back correctly, use the setup sheet you did earlier!

### **So, summing up:**

- 1/ Check that everything is how and where it should be.
- 2/ Give your car a good clean after each meeting! Please do not think "I can't be bothered to do that" and then moan that your car is in no good!
- 3/ Check for and damage or wear to your tyres and correct
- 4/ Check that your tyres are correct diameter (left to right, especially on the rear)
- 5/ If you take parts off your car to repair, replace and/or clean please ensure you put them back correctly!

**So how do I clean my motor!** Arguably the most talked about thing amongst brushed class drivers. There are lots of different views on this, there are pros and cons for most ways. Please adhere to any safety advice on the cleaning product you use.

Here are a few.

- 1/ Do nothing! I think this will only give you a slow motor and the dust and bits will be detrimental to the life of the motor.
- 2/ Water Dipping: This means to run your motor in a bath of water at slow speed, some people do this with a new motor as it can help 'bed' the brushes in, others do it to clean all the dirt out of the motor once it's been used. There are different views on this method. Some like it, some say it's a lot of work for little reward, one thing for sure is that you must dry and oil the motor bearings after you have dipped your motor.
- 3/ Spray Brake Cleaner: You spray brake cleaner into your motor at the brush end to remove any dirt and bits. Again, you must dry and oil the motor bearings after you have sprayed your motor.
- 4/ Cleaning during races: Using a cotton bud soaked in brake cleaner inserted onto the commutator and slowly revolve the motor a couple of times, then remove the cotton bud, it will be covered in carbon deposit off the motor brushes.

Items 2 and 3 above require removing the motor from the car prior to treatment.

**Comm Drops!** This is a fluid that helps increase power: A drop or two of comm drops can add a little performance to a brushed motor, they help lubricate the commutator and can help keep brushes from burning in a motor, again some people love them, and some don't! It is always advisable to clean a motor after a night racing and especially after the use of comm drops.

There is lots of advice and videos on the internet about cleaning your brushed motor, some great and some not so great. Talk to your fellow drivers to see what they do, again don't follow the advice of someone who has a car that is going worse than yours!