

The Schumacher Nitro 10 BMW is the latest edition to an ever increasing family of Radio Control Model Cars designed and manufactured by Schumacher Racing Products here in the U.K.

By all accounts, Cecil Schumacher is an extraordinary man. Firstly, he took the world of 1/12th scale Circuit Racing by the scruff of its neck and showed it who was boss, then, having exhausted all the possibilities of 1/12th scale, he moved on to his most successful 1/10th scale off road Racing Buggy - The Cat. Over the past few years, we have been witness to an ever evolving face of 1/10th scale electric buggies where Schumacher have been at the forefront both here in the UK and abroad with racing successes far too numerous to mention here.

Last year saw a departure from the usual trend for Schumacher as they introduced a range of 1/10th

scale IC engine cars based primarily around the components of their existing 2WD electric buggy - The Cougar.

The departure is in the power source used to drive the car. Up until now, Schumacher has concentrated on areas within the boundaries of electric motor driven cars whereas, the Nitro 10 family is Glow Engine powered.

Although the purists will scream, a Glow Engine is essentially very similar to a petrol engine in a real motor car and this similarity has led to many people referring to

the cars as Petrol cars. Unfortunately, these engines do not run on 4 star or super unleaded otherwise we could pop down to the local garage and get a gallon. Instead, they run on a type of fuel called Glow Fuel which mainly has an additive called Nitro in it - hence the name Nitro 10. Glow Fuel is what is also used a lot in R/C Model Aeroplanes and in the 1/8th scale Model Cars. An important note is that Glow Fuel can be bought with varying percentages of Nitro in it but, for these engines, the best fuel to use is between

a 10-16 percent nitro mix (any good model retailer will be able to advise which is the recommended fuel anyway).

Upon inspection

The first thing you notice when you open the box is that the car seems to be virtually built. In fact all that is done is that the engine



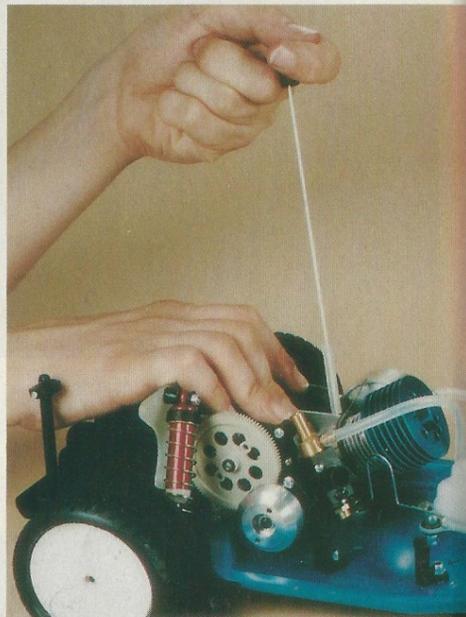
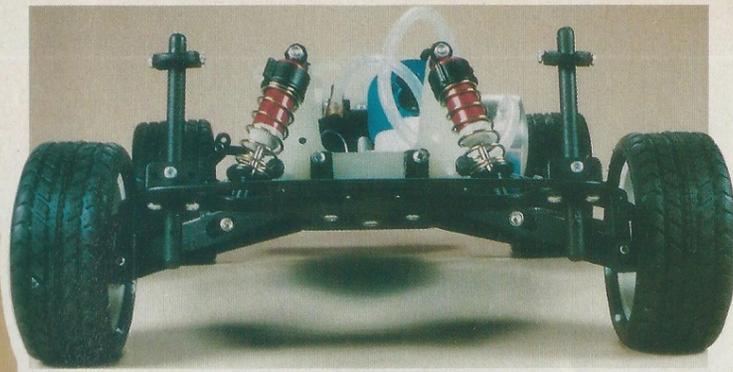
WARNING: New Schumacher Nitro 10 BMW can be addictive! - Andy Carter

'Basically, these cars can be very fast'

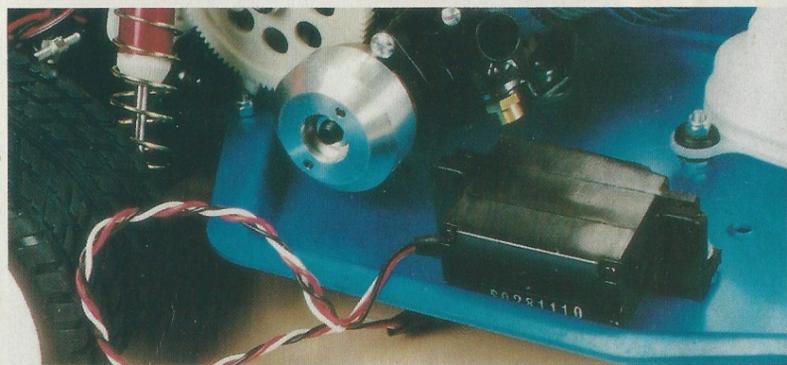


It's a
CRAS!

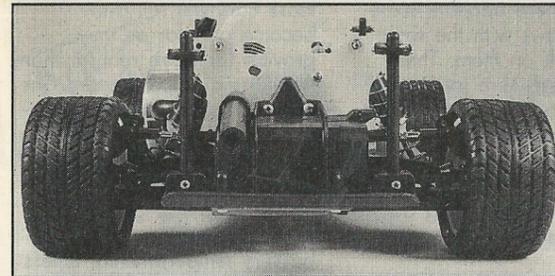
The lines of the BMW M3 are well known from the British Touring Car Championship and the Parma body is a good resemblance. Bottom; Giving the engine the start signal! Placing the servos in the car on the plastic angle brackets.



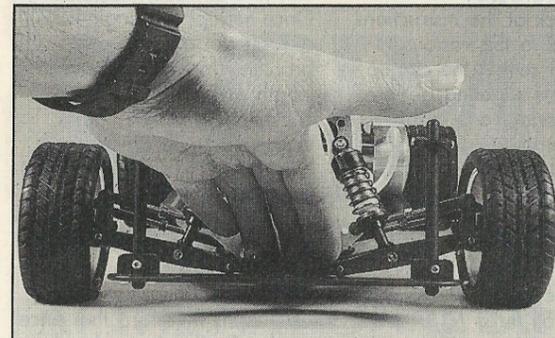
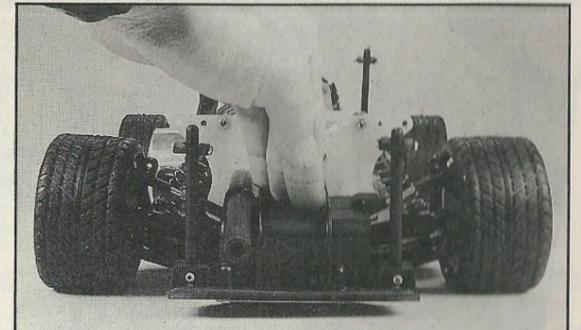
Unfortunately, these engines do not run on 4 star or super unleaded!



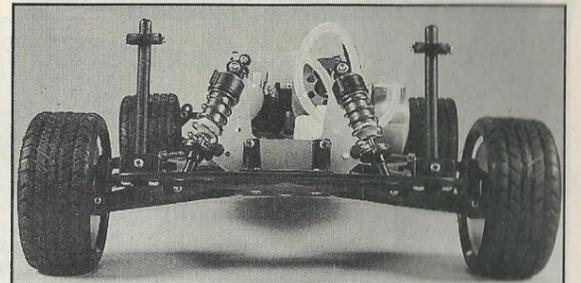
It's a GAS!



Suspension on the Nitro road version is limited but should handle car parks easily!



Red anodized dampers and the electric blue chassis enhance the appearance of the Nitro.



and gearbox has been built up and installed onto the chassis.

True Blue

The next thing that strikes you is the colour of the cooling head on the engine and the chassis. Both have been anodised and finished in an Electric Blue colour which I must say I am very partial to. It's a shame that Schumacher have decided to keep the blue for the Nitro's and the red anodising to the electric buggies!

Power

The power source itself is a 2.5cc ball raced ABC performance engine with a pull start facility. This is a really good idea as it eliminates the necessity of having to buy a separate starter and battery. The pull start is very reminiscent of a lawn mower as can be seen from the photos.

Another ingenious device from Schumacher is the on board glow facility. When starting a Glow Motor, you need to be able to make the glow plug in the top of the engine glow which ignites the fuel under compression (a bit like a spark plug - but only a bit!). On most glow engines, this is done via a separate glow clip and battery box but, on the Nitro 10, this is done via an on board glow. This means that the glow is provided by a 1.2v nicad pencil which is

actually situated on the car via a glow lead straight to the top of the glow plug.

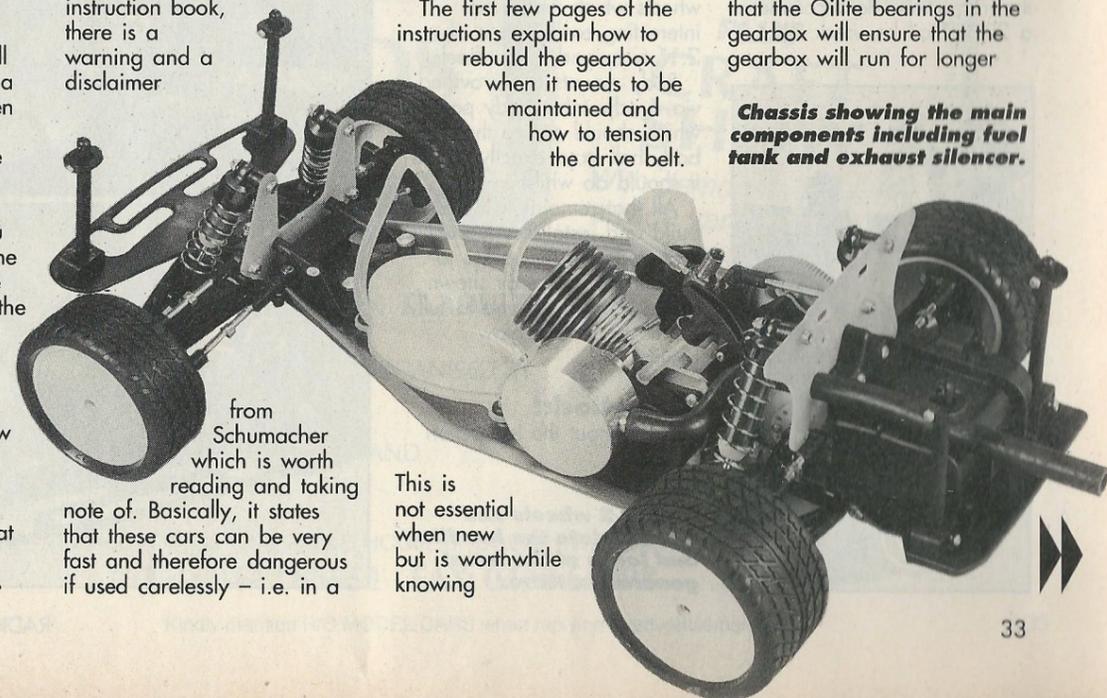
Once the engine has started, there is no need to keep supplying the glow plug with current so the glow lead just needs to be switched off and kept in place instead of disconnecting a glow clip all the time.

The on board glow has to be supplied with a 1.2v pencil nicad which will provide up to 10 minutes of glow which may seem like a lot of time but, if you have problems starting the engine, 10 minutes can quickly be used up so - beware!

Back to the book of words!

Warning

Upon opening the instruction book, there is a warning and a disclaimer



from Schumacher which is worth reading and taking note of. Basically, it states that these cars can be very fast and therefore dangerous if used carelessly - i.e. in a

crowded street for example. If you use your common sense, there shouldn't be any problems though.

The instructions have come a long way since the early kit instructions and are now very good. It is important to note however, that all instructions should be thoroughly read and not just skimmed through as these cars will not tolerate being built incorrectly. The Schumacher cars have always been well engineered and the Nitro 10 is no exception but, it is worthwhile thinking about how the car is supposed to work rather than bolting it together haphazardly as we found that many parts did require deburring or holes slightly enlarged for a smoother fit.

The first few pages of the instructions explain how to rebuild the gearbox when it needs to be maintained and how to tension the drive belt.

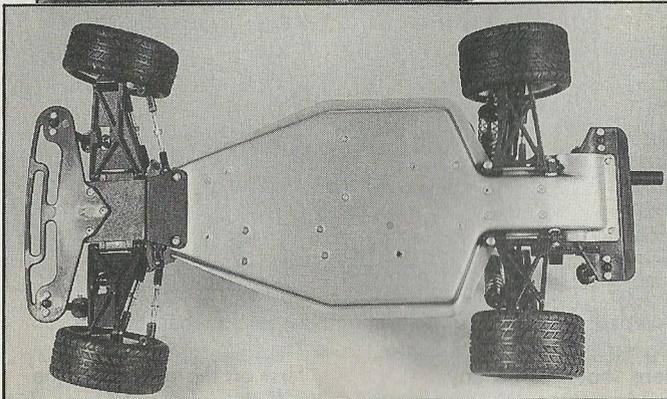
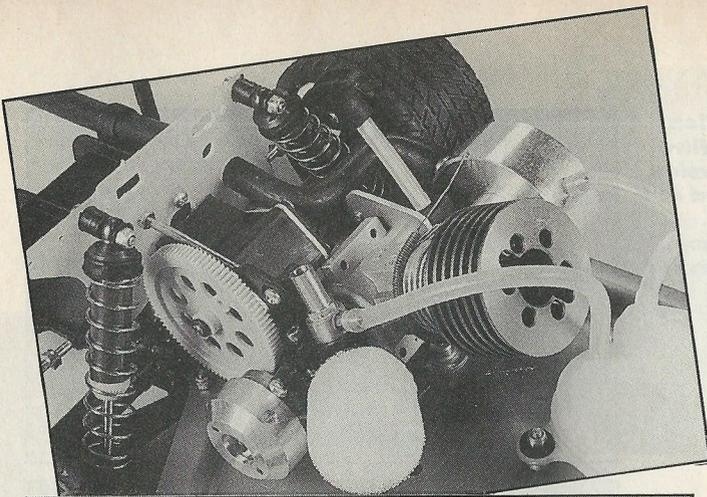
how to do when the gearbox is run in.

First on the agenda is the installation of the 2 servos. In order to do this, the engine must be removed. Next up is the front wishbones and bulkhead. This shouldn't prove to cause any problems as it is the same set up as used on the Cougar 1.

Dejavu

Once again, the rear suspension is taken directly from the electric powered Cougar which will ensure that spare parts can be easily obtained. Ballraces are fitted to the wheels but not to the gearbox. To me, this seemed a step back but after speaking to Tim Walden of Schumacher, he pointed out that the Oilite bearings in the gearbox will ensure that the gearbox will run for longer

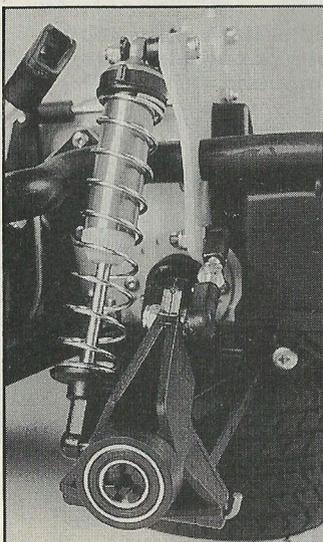
Chassis showing the main components including fuel tank and exhaust silencer.



Main centre gear is improved from early Nitro now in tougher plastic.

without needing to be maintained although at the expense of a slight increase of friction. Do not worry if the gearbox seems quite tight when new, as Tim also assured me that this is a common feature which, once run in will disappear as the gearbox frees up.

Standard Schumacher shock absorbers provide the necessary damping but oil is not supplied in the kit and the instructions do recommend a 20 WT oil be used. Do



take care when assembling the shock absorbers and oil the shaft before inserting it through the O-rings or otherwise the seals may become pierced – if assembled correctly, these units will provide good service before they require any maintenance.

Wheels and Tyres

Once again, these are straight from the 1/10th scale electric cars which means that there is already a huge range of tyres available for the car, our car came supplied with the "Road and Track Tyres" complete with aerodisc 2.2" wheels which makes an interesting combination of 2.1" tyres and 2.2" wheels.

Body mounts are provided via 4 adjustable body posts which should ensure that the bodyshell stays exactly where it should do whilst in use.

All that remains to do is to build and install the fuel tank and route the fuel pipes to the correct places as shown in the instructions and to fully install the remote glow facility.

Threadlock!

Throughout the instruction

New 2.2 wheels and tyres update the handling and looks of the latest generation Nitro.

booklet, there appears some black arrows with the word Threadlock on them. These are not just there for good measure and it is important that a threadlock (not supplied) is applied to these parts, else you run the risk of your car disintegrating during use!

Its a Set Up!

The back of the instructions is devoted to the various aspects of setting the car up and trouble shooting but the most important one is the engine set up. Glow engines are not like electric motors and they require more care in setting up just to get them to run. There are 3 setting screws on the Carburettor; High Speed, Low Speed and Idle and all three MUST be correctly set before the engine will run properly.

If this seems daunting, do not fear as the box settings are fairly close to perfect without needing much (if any) adjustment. Once again, the instructions are very informative with cartoon like drawings used extensively to explain how to start and set the engine up.

Conclusion

There is no doubt that

these cars will sell and become popular as they provide far more realism than the electric powered cars. The spares base for the cars is already established and, I am told, that it's worth investing in a spare set of wishbones and a couple of glow plugs.

The engines can appear to be very temperamental unless they are correctly adjusted. Once set up, the engines will run without giving many problems for a considerable length of time.

Having very little experience with driving a Nitro 10, all I can say is that surprisingly, they are very quiet, not surprisingly, they are very fast and also not surprisingly, they are also very addictive.

It seems therefore that once again, Cecil Schumacher has found a little exploited market and has filled it with minimal extra manufacturing costs whilst ensuring that the Nitro 10 has good spares availability already.

All that's needed now is a few clubs to run these cars (even along side electrics at the same events) for them to really take off and, I must admit that I love the noise and the smell of the fuel – it's great!

