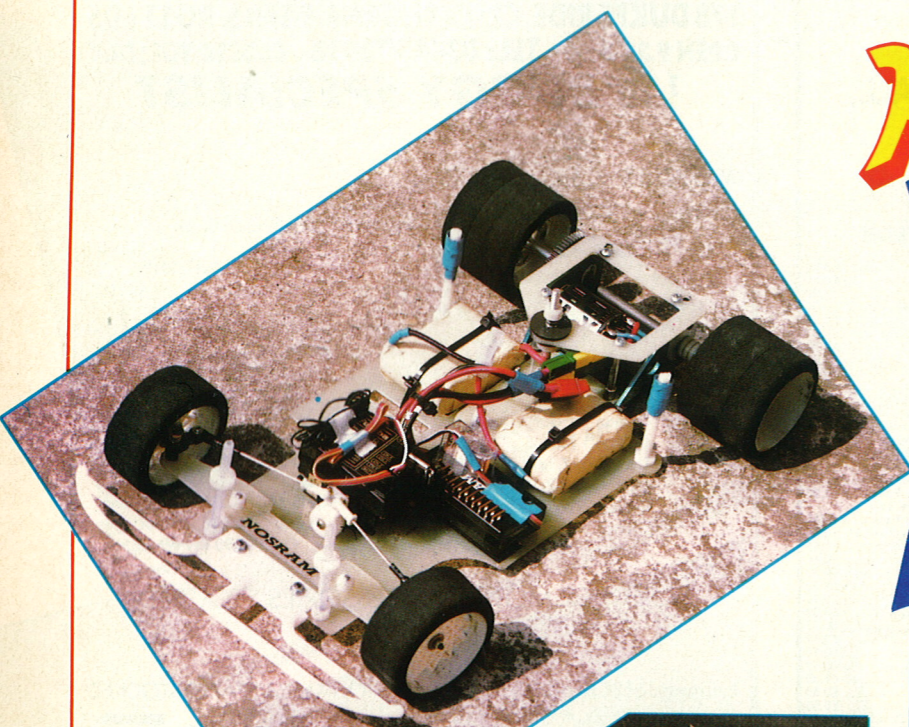
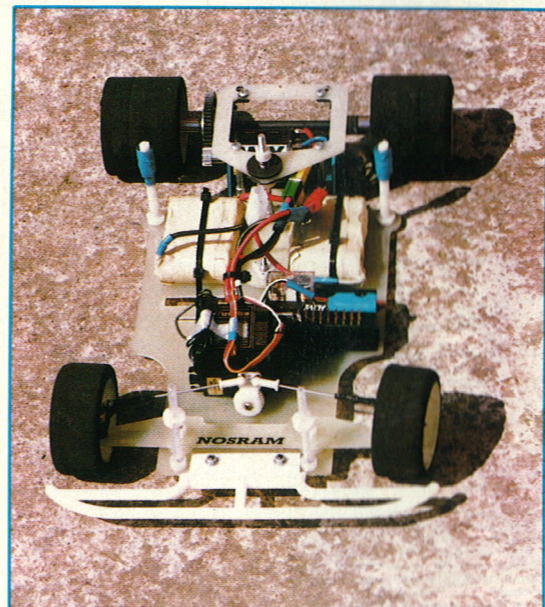
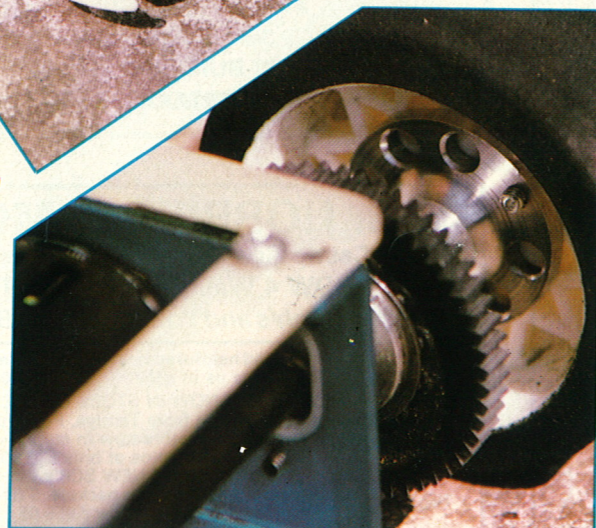


PARMA PRO PANTHER, ONE TENTH CIRCUIT CAR

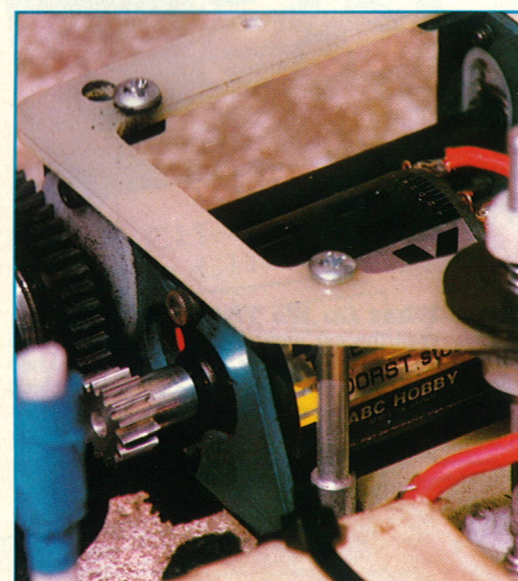
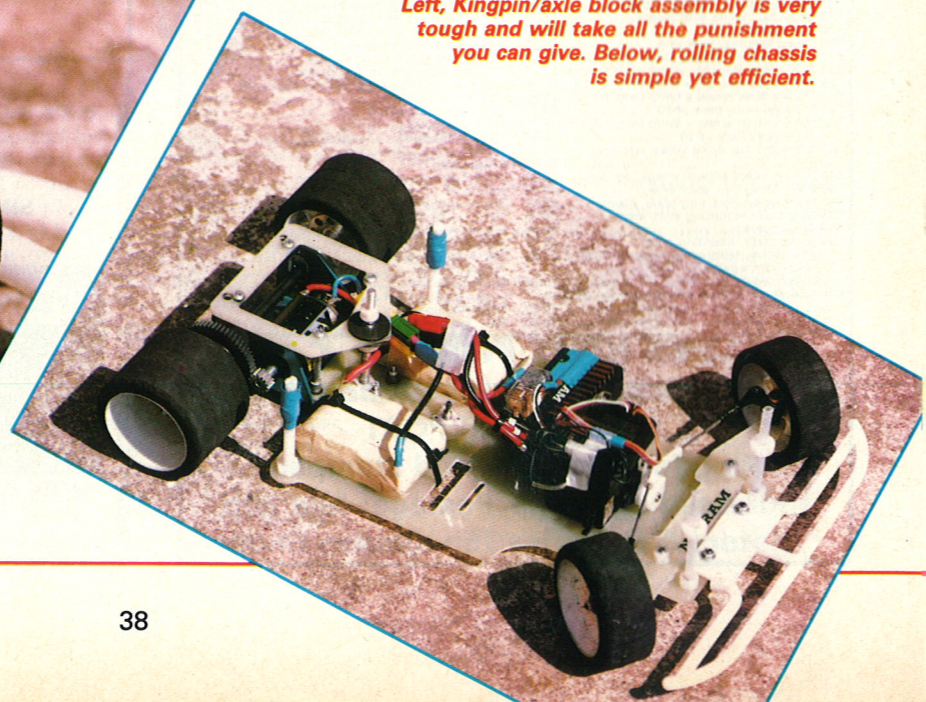
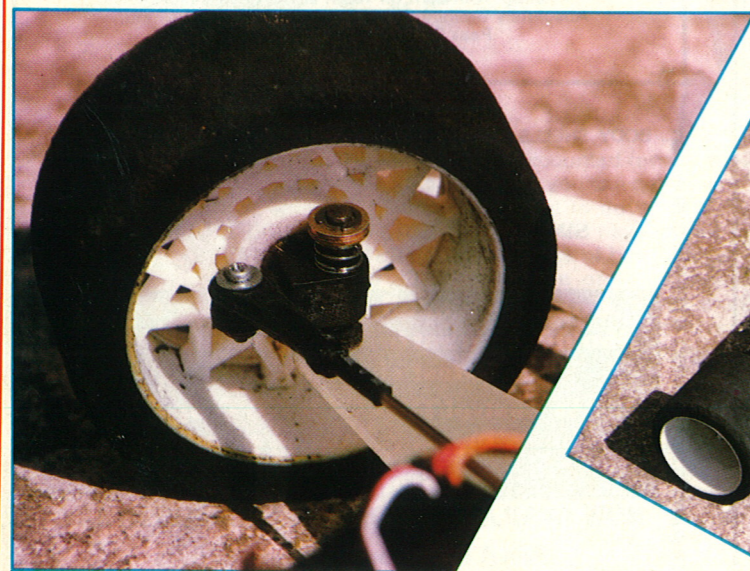
PRO 10



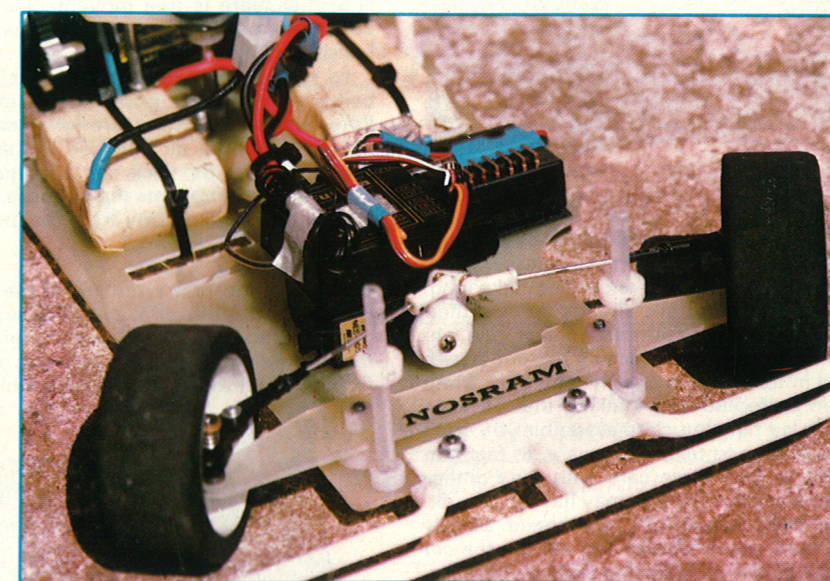
Right, despite initial worries no problems were encountered with the exposed spur gear.



Left, Kingpin/axle block assembly is very tough and will take all the punishment you can give. Below, rolling chassis is simple yet efficient.



All fibreglass construction makes the Pro 10 light and strong whilst aluminium motor pod acts as a tough protector for the axle, diff and motor whilst doubling as a heatsink. Front beam axle is simple and effective.



Radio Race Car takes a look at Parmas new 1/10 circuit racer.

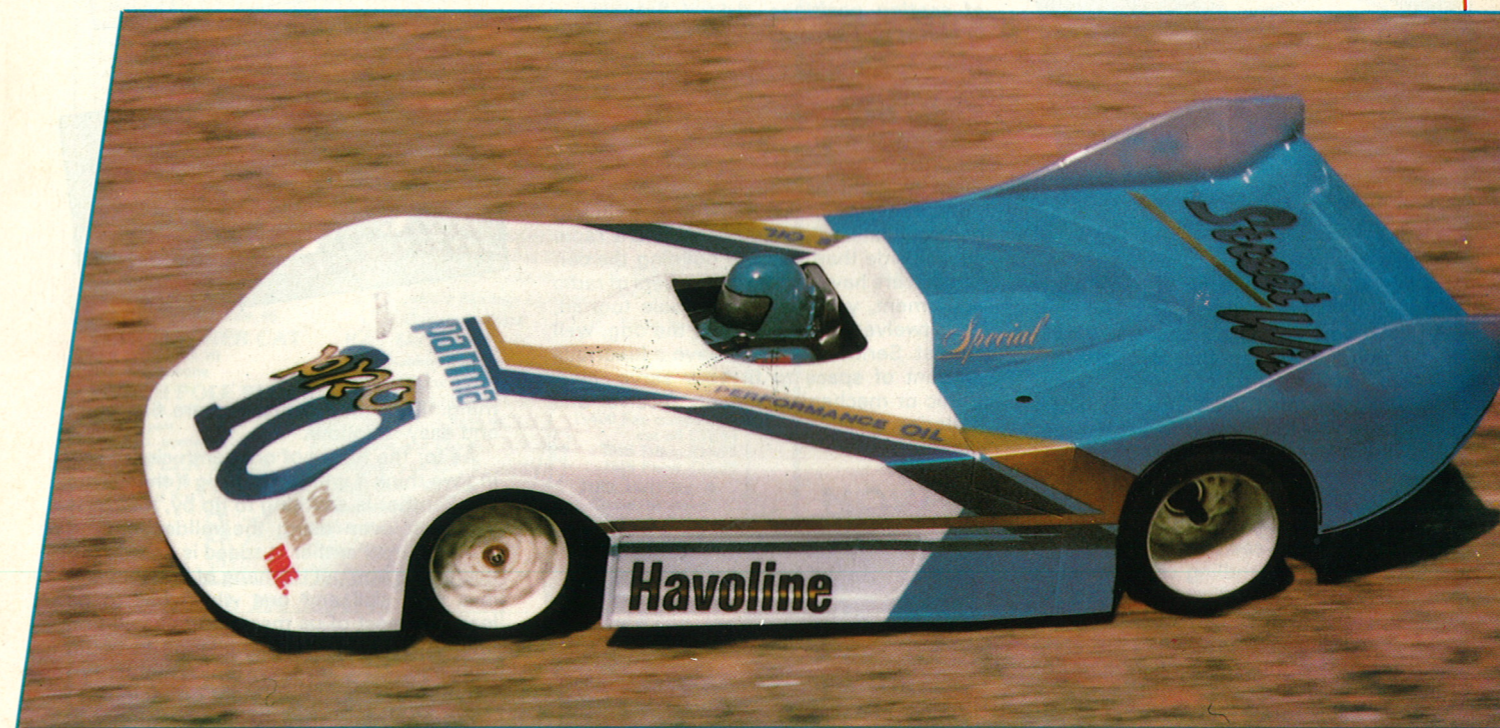
Late last year and early this, we in the UK saw the humble beginnings of what must surely become the biggest thing since the wheel. That thing is one tenth circuit racing. As regular readers will remember the Birmingham buggie Club held a series of Tarmac races culminating in the Tarmac National event which we reported. Several other clubs are also racing in this style, little did Birmingham know that they may well have started something big!

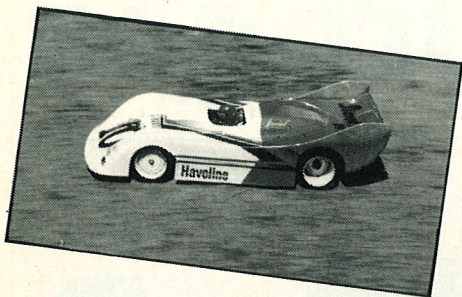
The USA were actively involved in circuit racing one tenth cars and have been for some time, so it was only a matter of time before some bright spark added two and two together and came up with the idea of importing these cars into the UK and allowing the class to grow. The question you must be asking is why, surely we have our own cars? Well we don't you know, a one tenth circuit car and a one tenth off road car are about as different as you could hope to get, even the fastest and surest footed of the converted off road cars wouldn't stand a snowballs chance of keeping up with the new circuit cars. The reasons for that sweeping statement are obvious at a glance, gone is the engineering elegance of

the off road car replaced by harsh, functional reality, everything that can be removed or lightened has been to the point where the cars take on that half starved look of a thoroughbred race horse, in fact just like the thoroughbred, circuit cars are designed for just one thing and that is speed.

Boxes, Bits and Ball Differentials!

The Pro Panther 10 arrives in a very neat, nicely decorated box which would certainly not be missed by anyone paying a visit to his or her local hobby shop, lift the lid however and the packaging would put off even the least discerning amongst us, don't let



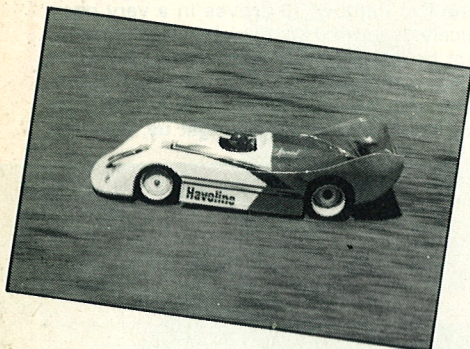


it. Underneath the vast quantities of tissue paper lies a beast waiting to be assembled.

The assembly time should not take long, as most of you have already spotted their isn't much to assemble, in fact one observer likened their car to a big one twelfth and in truth that is exactly what it is. Don't then be fooled into thinking that because there isn't that much to assemble you don't really have to take much care, in fact you need to take more care with the Panther than any other car you may have ever built. The main reason for this is speed. Simply because you are travelling so fast the car must be set up, adjusted and running perfectly, results if the car were otherwise would be, note the choice of words, not might or maybe but would be disasterous.

Worth noting at this stage is the fact that the Pro 10 comes complete with mechanical speed controller, motor and six nicads, making it about the most complete car there is!

The last point of brief note before we go into detail is the rear axle, differential set up. This may at first glance look a little confusing to the beginner, however simply follow the assembly and adjustment instructions and the car runs perfectly.



Assembly

The overall assembly time is quite short and should take no longer than a wet Sunday, including paint and stickers, Parma have a range of stickers that suit these circuit cars just fine. The front axle is assembled first, kingpins and steering posts being added to the straightforward beam axle. Care must be taken when mounting the axle to the car, especially when adding the castor wedges, first ensure that both wedges are of the same type, one two or three degrees of castor can be added depending on the handling characteristics you are looking for. Parma say in the instruction booklet that two degrees gives comfortable straight line and cornering characteristics without too much under or oversteer, in other words, about as neutral as it is possible for one of these cars to be (those who have first hand experience can

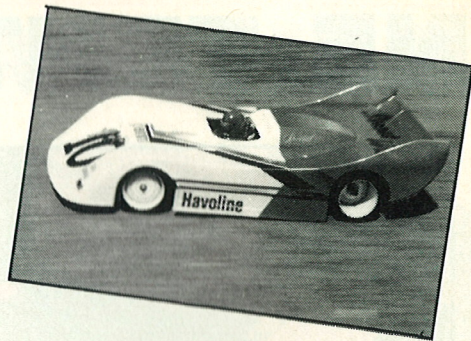
take a few seconds to laugh at that last statement).

Rear pod next, again no problems here as long as the instructions are followed. When you join the pod to the chassis ensure that there is free movement around both pivot balls otherwise the car will not handle as it should.

As previously mentioned the axle/diff is ball type but should pose no problems as long as the instructions are followed, one tip which should be followed is that you pre-thread the diff lock nut prior to final assembly, this prevents the diff boss being accidentally pulled away from the axle.

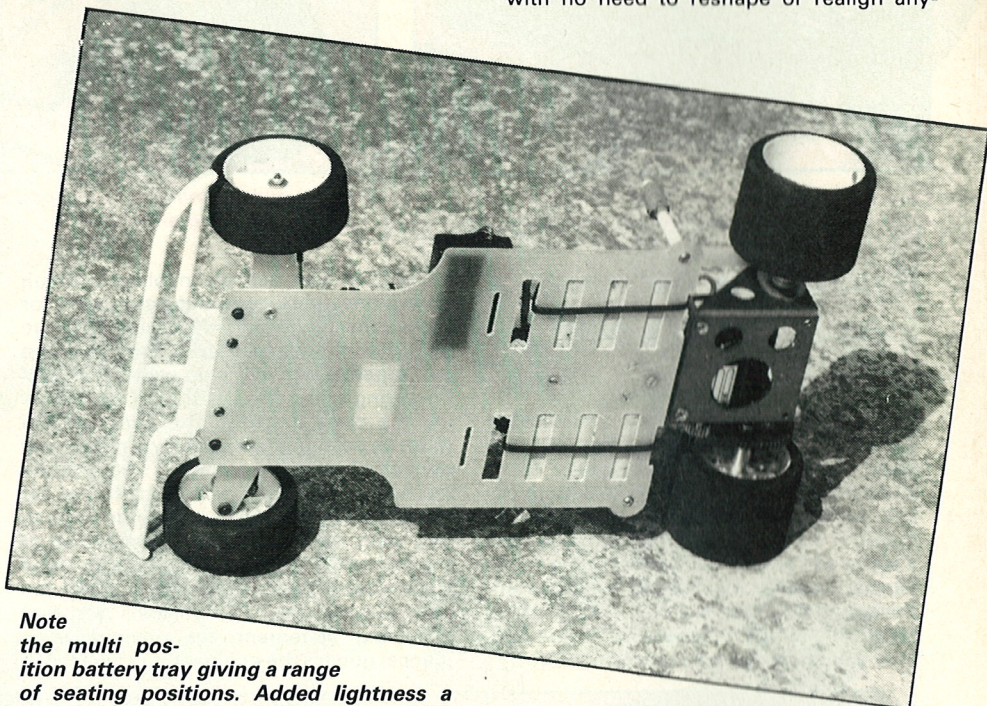
Wheels And Tyres

Both front and rear tyres are of the foam type for increased grip, the tyres are pre-glued to the wheels to save you time and a messy job. Wheels and tyres are simply fixed to the hubs using cap head bolts.



What Do We Think

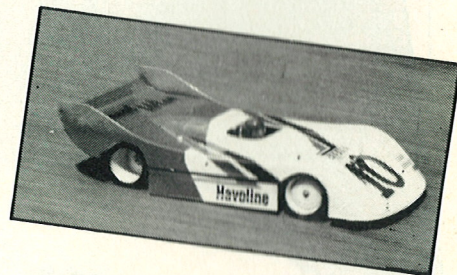
Well the car went together very well with no problem areas at all, this was due to two major factors. One, all the parts fitted well with no need to reshape or realign any-



Note the multi position battery tray giving a range of seating positions. Added lightness a la motor pad appears where ever possible.

Radio Gear

It seems that present design parameters for one tenth off road body shells are, make them as tight as you can, preferably so tight that you spend more time trying to get your latest 'loadsamoney micro radio gear' inside than you did building the car. Circuit cars have room for four sets of radio equipment, your hands, a whole tool kit, your twelve volt battery and the dog, well almost. Seriously you do have a luxurious amount of space to fit your servo, electronic or mechanical speedo, receiver and batteries.



thing. Two, the instructions are first class and easy to follow.

As for the future of one tenth circuit racing we think it will be very big if the Parma Pro Panther is anything to go by, the car is very fast even using the mildest motor. Running the Panther at speed is not too difficult once you get the hang of it however it is a new skill and one which has to be learned, most of us mere mortals will find driving these beasts a challenge to begin with, so take it easy, enjoy your Pro Panther and most important go racing.

Pro Panther series of cars available at your local Parma stockists everywhere.

