

There are often new cars and ideas coming into the RC market place, new launches of cars are always exciting especially when the car is radical in some way, but really a new car launch is only interesting not exciting.....

That's why Tenth Technology have caused such a stir. You will have seen their advertisements in RCMC over the past few months for their car, the Predator. Not only is the car radical, but the company is brand new, and so is the design, the thinking behind the car is to make it the best and fastest available.

Until recently the Predator has been something of a mystery, the project has been kept intentionally secret so that development can be carried out and the car sorted before its release. RCMC have of course carried the adverts for the car and have now been to the home of the Predator for a test drive and discussion with Richard Weatherley, the man behind Tenth Technology.

Why so radical a design?

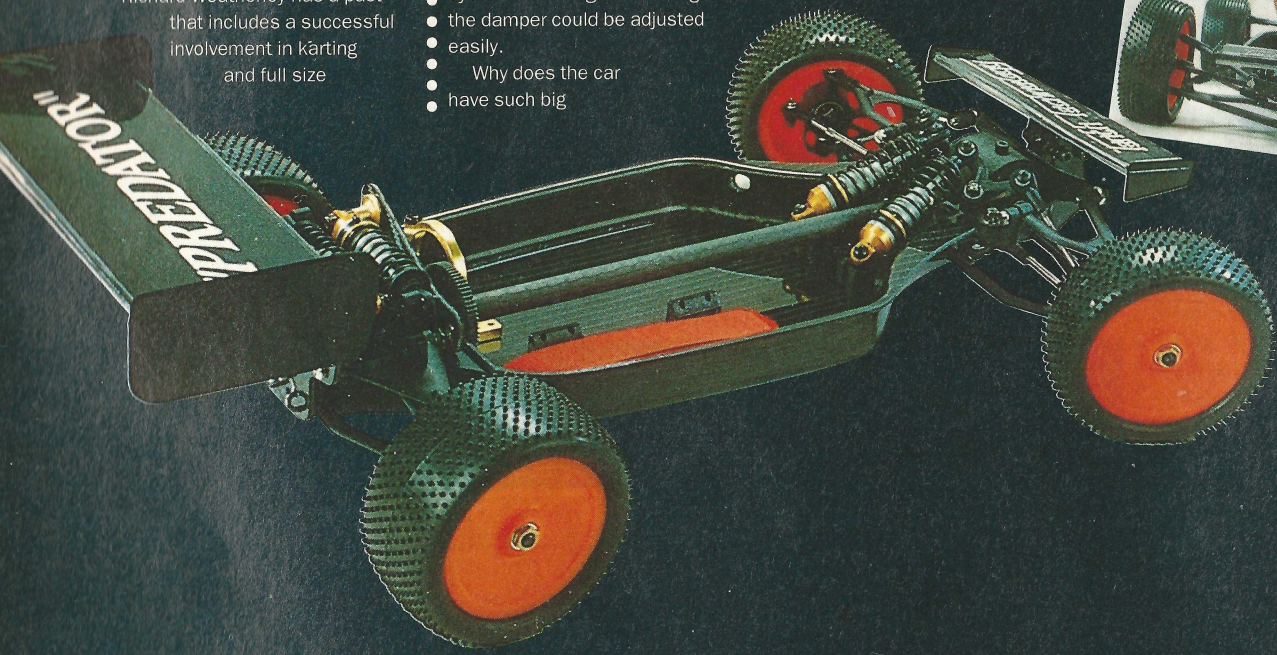
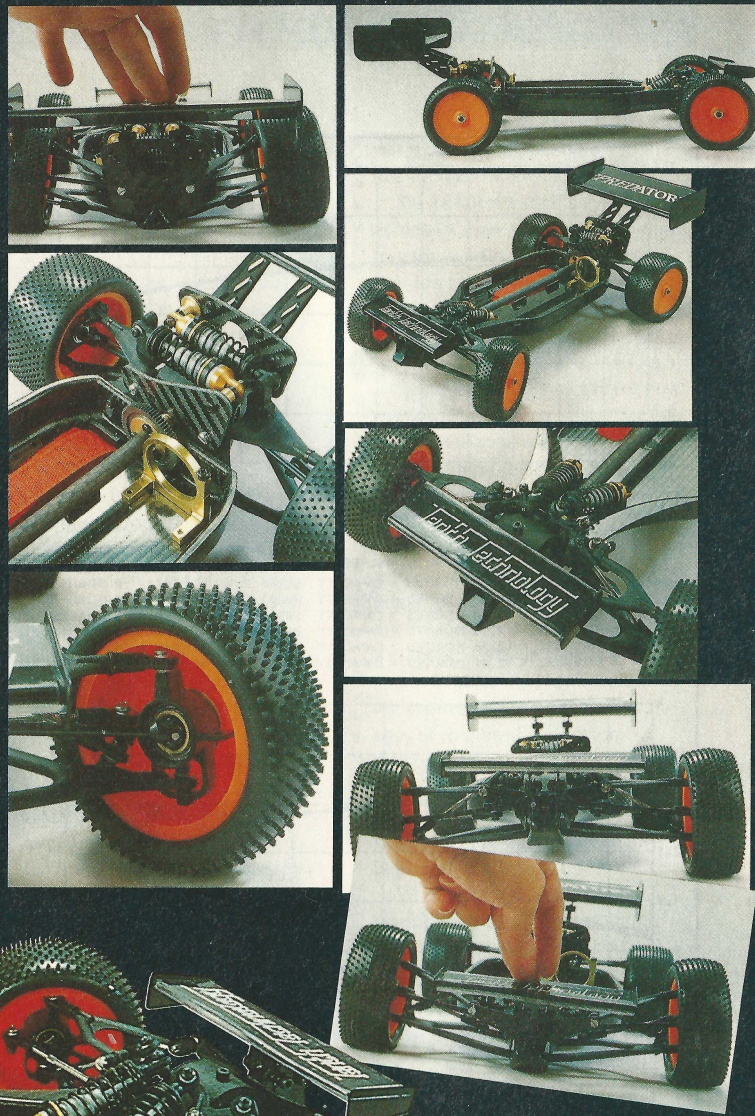
Richard Weatherley has a past that includes a successful involvement in karting and full size

motorsport, he is also a successful business man and decided to get involved in manufacturing RC cars because he wants to finally run a winning team, developing the car continually aiming for ultimate success. The car has undergone a long period of design and testing using some methods not normally associated with off road car design, including extensive wind tunnel testing.

I spoke to Richard about the design and asked him why he had decided upon certain aspects of the car. Firstly why a tub? The main thinking was that it was light, stiff and protected the internals. He does seem to have a point, the car is incredibly stiff, with no twist at all, also the car keeps very clean on the track.

Why was the suspension as it was, slim wishbones, inboard dampers? Aerodynamics had played a major part in the design of the car. The wishbones were slim and aerodynamic, and were strong enough and stiff enough as they needed to be. The dampers were kept clean and also totally protected from other attacking cars. Again he had a good point..... Also with the bellcrank damper system the rising rate setting on the damper could be adjusted easily.

Why does the car have such big



RCMC bring you the radical Tenth Technology Predator....

The unfair advantage?

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wings, and why a front wing? Richard had tested off road wings in a wind tunnel and on set distances to judge the drag of each wing. His wings gave more downforce for less drag – simple. The front wing was to balance the car, if the rear wing has a lot of downforce then the car would understeer at high speed, his set up would in theory even all this out. I guess many of us run wings for the right 'look' – Richard wants them to work or not be there, he even did testing with a fin instead.

'...Many may feel he has ignored all the lessons learnt by other car makers. This seems to be untrue...'

The drive system

The car has the most simple of drive systems. A centre hollow carbon shaft runs the power from the rear mounted drive gear, through a pinion gear at each end and onto the crown wheel. The diff

is fairly conventional but the diff balls run on different paths to keep the action smooth. There is no slipper on the car though, why? Richard's view is that slippers are a way of getting over a problem. The problem is normally a handling one. Therefore he feels he will make the car handle properly and there should be no need for a slipper. The same theory goes for the suspension angles. There is no anti-squat, again this is a feature used by manufacturers to get over handling problems, it does though cause understeer and Richard feels his car will work better as it is.

All the time when speaking to Richard he has a very good, logical answer to all questions. It does become apparent that he knows what he's doing, he has good sound theories behind his thinking and most of them seem to be the right way to go.

Many may feel he has ignored all the lessons learnt by other car makers. This seems to be untrue. Sitting at his Cad/Cam computer set-up he has all the different cars suspension systems logged and on file. He can show all the different set-ups of rival manufacturers cars and compare to his own, he also proudly shows and explains why his is better! His comment is also that the Yokomo design is probably the best design around, again he would appear to be right....

The ultimate test?

After a long chat and a look around the assembly area it was time to drive the car. A grass test track is set-up in the garden of Richard's place which is small but a good basic shape with bumps to test the car. A fully charged battery is in the car and with a strange transmitter in hand and with out driving a car for 6 weeks I set off. Within a few feet the car is making a little too much noise. The motor mounting set-up on the car is very clever yet simple. An alloy motor mount sits permanently in the car and the motor is fixed to another alloy component. The two when mated together form a solid mount that involves a cam system for setting the motor. Both of us were in a rush to get a run of the car before it rained and the motor was not set correctly. A single screw resets the position and the unusual body is put in place.

The car drove a lot better than I expected. It felt positive and sure footed right from the start. The main feature that impressed me was its turning, the car was very sharp on turn-in and reacted immediately to a command. The rear of the car followed sharply without sliding out, and after a couple of crashes due simply to the driver, I managed to string a set of good laps together. The car wanted to be pushed hard especially out of the corner, it held its line through a corner very well and I was really impressed with the speed of entry to corners that was capable.

Down points on my quick test were that the car was noisy, and that it felt a little too long. The car reaches

all the maximum allowed dimensions and it felt sometimes as though the long machine would get into a slight sway due to its length. My overall impression though was favorable. The car was nice to drive, punchy because of the light drive system and no slipper, sharp because of the excellent turn-in. The car does look a little weak, the aerodynamic edge that has been gained may be paid for in a delicate front end?

A success or not..

Not many drivers can help but be impressed by the car, it looks good and feels good in the hand. I have strong opinions about certain aspects of the car, some are excellent, some I feel will have to be altered due to the rigours of off road racing. The car though I'm sure will be good. So far testing has taken place mainly at Eden Park. Richard has had a top Schumacher driver testing the car and recently they have been very impressed with the times they have been able to attain from the car, of course driving a car around a track against the clock is a good test and the car seems to be up with the best, whether it will be able to withstand a ten car heat will remain to be seen. As for winning that will depend on who drives it. At the moment it seems possible it will get the caliber of driver required – so who knows?

The choice of buying a new car is made on many criteria, if owning a car that is radical, is better than most to show your friends what a model car is and has its own personal serial number is on your list the Predator could well be for you...

