

KIT REVIEW

The Tenth Technology 95 Pro

Exactly one year ago, Radio Race Car brought you a full review of Tenth Technology's 'Predator' when the car was still very new to the competition scene, and had yet to make a name for itself. It had by then won a top National meeting (the Model Engineering Exhibition race) first time out though, and impressed us with its F1 style technology, its high quality construction, and its sheer speed around a track.

The car was so 'different' from the norm, with a quite radical approach to making a model car cross the ground quickly, that it initially wasn't readily accepted by the Off Road fraternity. As things turned out, we were quite right to be impressed, because Tenth Technology's continuous programme of development saw the Predator XT go on to win the '94 BRCA 4wd British Championships, the European Reedy Invitation Race, and the British Grand Prix at Southport. An incredible record of achievement for its very first season of competition!

1994 British Champion Kevin Moore has signed to drive for the TTech Team again in 1995, and presumably, feels that the 'new' car reviewed here is capable of taking him to his first World Championship title later this year at the Yatabe Arena in Japan...

There are three evolution versions of the original 'Predator' design on offer from TTech: The TTech 95 One, based on the '94 BRCA 4wd Championship winning Predator XT, the 'TTech 95 Pro' reviewed here, and the TTech 95 Tee, a dedicated Touring Car racer.

So, what's it like one year on...?

Like A Kid On Christmas Morn...

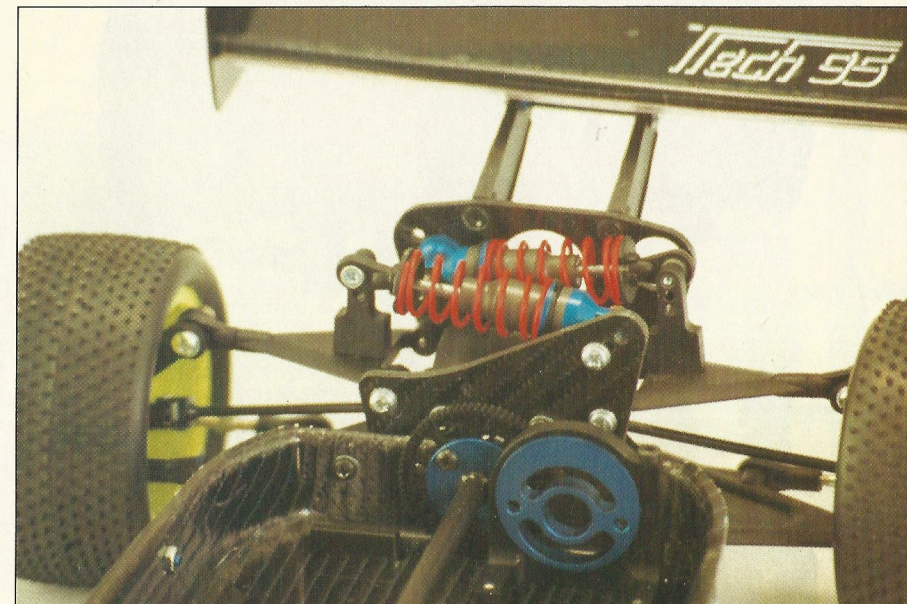
The dark grey box containing the 'TTech 95 Pro' was opened with eager anticipation. It's always exciting to see exactly what you get in a new kit, and this one looked to be something really special. Given a close examination, all of

the alloy parts were beautifully machined, and were anodised in a striking electric blue. The moulded carbon fibre 'tub' chassis looked really fabulous, and is just one of the car's features reminiscent of a F1 racing car! All of the mouldings were to a high standard, with almost no evidence of flashing etc. left for the builder to remove, and the screws, bearings, and the rest of the myriad bits and pieces with which to complete the car, gave a feeling of reassurance that the kit was overall of a very high quality indeed.

'Screwing A to B' was approached with a feeling of anticipation...

The TTech 95 Pro's lexan bodyshell is a new design that looks very much nicer than the original version. It has more features (air intakes etc) moulded into it, and is perhaps slightly more conventional looking than the original 'space ship'. Tenth Technology say that the new bodyshell does show a small increase in the drag co-efficient, but it does offer superior cooling for the internal equipment (the cells, motor and speed controller) resulting in better performance.

The new owners/instruction manual is beautifully presented, and although the original manual was very good, this one is a definite improvement, having clearer text (and less of it!) with plenty of good photographs and drawings pointing the builder along the right path.



Getting It Together

The initial stages of the build involve mounting the gearboxes onto the chassis and the assembly of the transmission. This is actually quite time

The new 6mm diameter drive shaft leaves a little more room inside the chassis tub for the radio equipment and cells etc. The latest nylon, shock absorbing spur gear features a spoked design for light weight, another contributory factor to the car's incredible acceleration.

The motor mounts to the electric blue anodised 'cam', which is clamped in position when the correct pinion to spur mesh has been achieved.

consuming, although with the diffs now supplied factory pre-assembled, this operation is quicker and easier than before. The diffs are very smooth in operation, and despite being something of a perfectionist, I found no need to strip and rebuild them, as can sometimes be necessary with the odd factory built diff. The diffs in the TT95 Pro retain the spiral track design from the original car, so consequently wear of the diff plates and balls is known to be practically non-existent, meaning less maintenance should be needed. The

pinions on both ends of the driveshaft and the rear diff gear are made from a hardened and PTFE impregnated alloy, whilst the front diff gear is produced in a new black composite material.

The nylon, shock absorbing spur gear is spoked, so is also therefore very light in weight, again to reduce the transmission's inertia and another factor which contributes to the car's brilliant acceleration. The motor is, as before, mounted to a cam type mounting plate, which is rotated within the alloy outer clamping ring to achieve the desired gear mesh, after which the clamping ring is tightened to hold the motor in place.

The new prop shaft is made of unidirectional carbon fibre, much smaller in diameter (6mm

THE 'UNFAIR ADVANTAGE!' ONE YEAR ON!

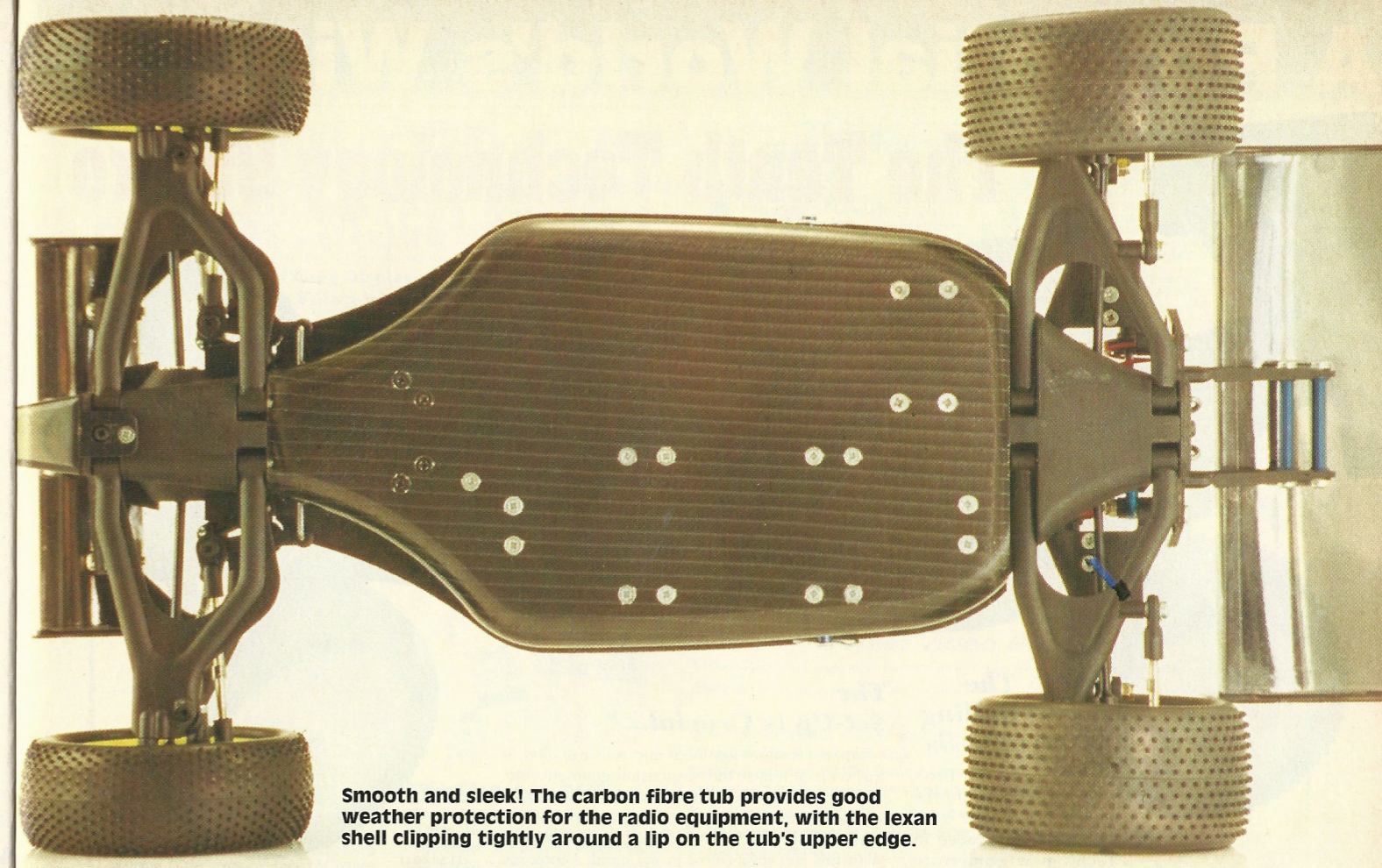
A Potential World's Winner?

THE 'UNFAIR ADVANTAGE' ONE YEAR ONLY!

The front wishbones are now braced by strengthening webs, yet still retain their low profile.



Richard Weatherley, 'Mr TTech', gives BRCA Champion Kevin Moore's Predator XT (the forerunner of the 95 Pro) a quick visual check over before a Heat at the '94 T.E.M.A.C. National.

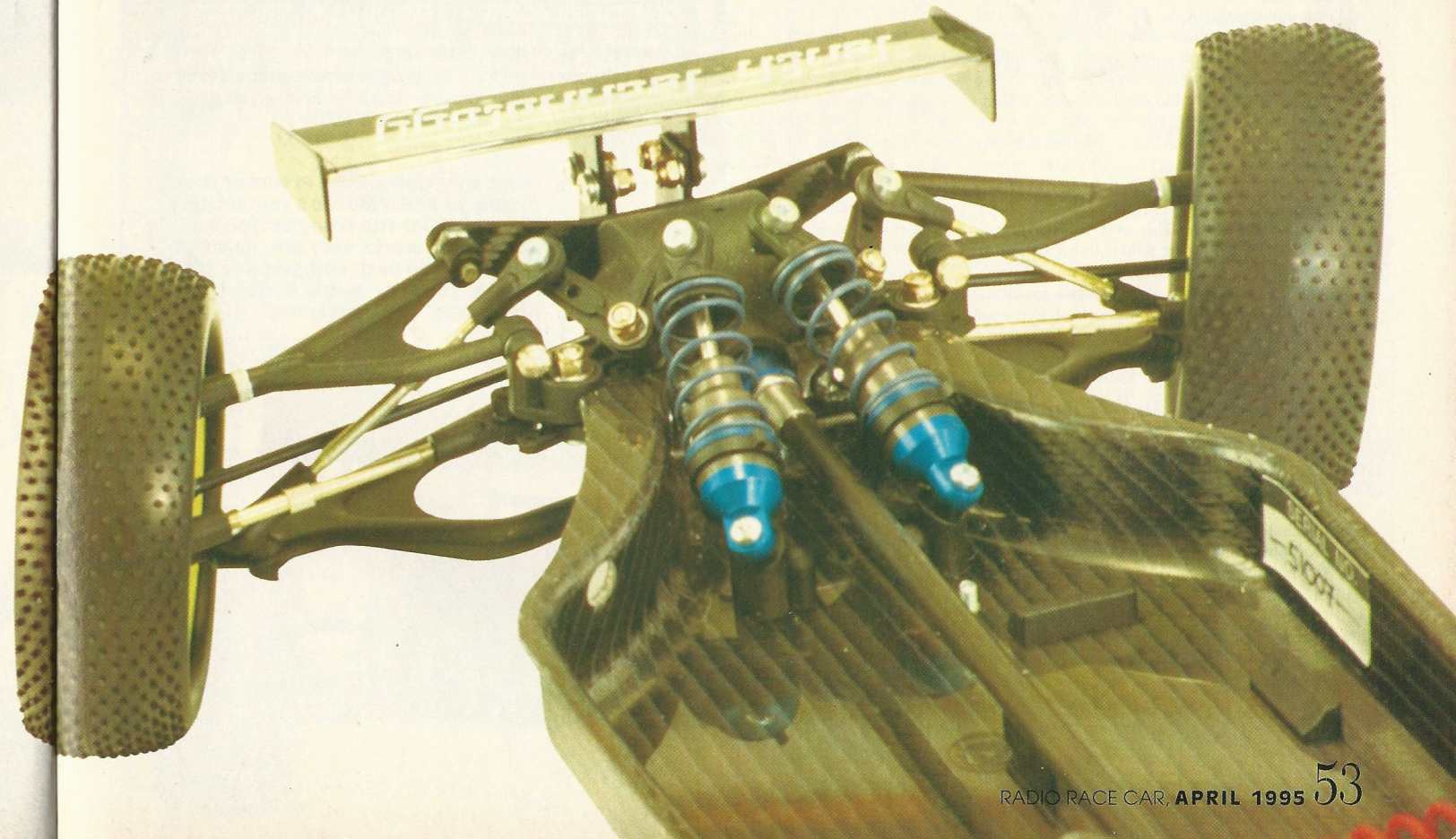


Smooth and sleek! The carbon fibre tub provides good weather protection for the radio equipment, with the lexan shell clipping tightly around a lip on the tub's upper edge.

The sheer quality of the 95 Pro shines out in this shot. The latest suspension arms have substantial strengthening webs, developed over the '94 season, whilst the Teflon coated ball joints are now of an increased diameter for added security and wear properties. The steering and inboard shock operating rockers are ballraced for smooth, free movement.

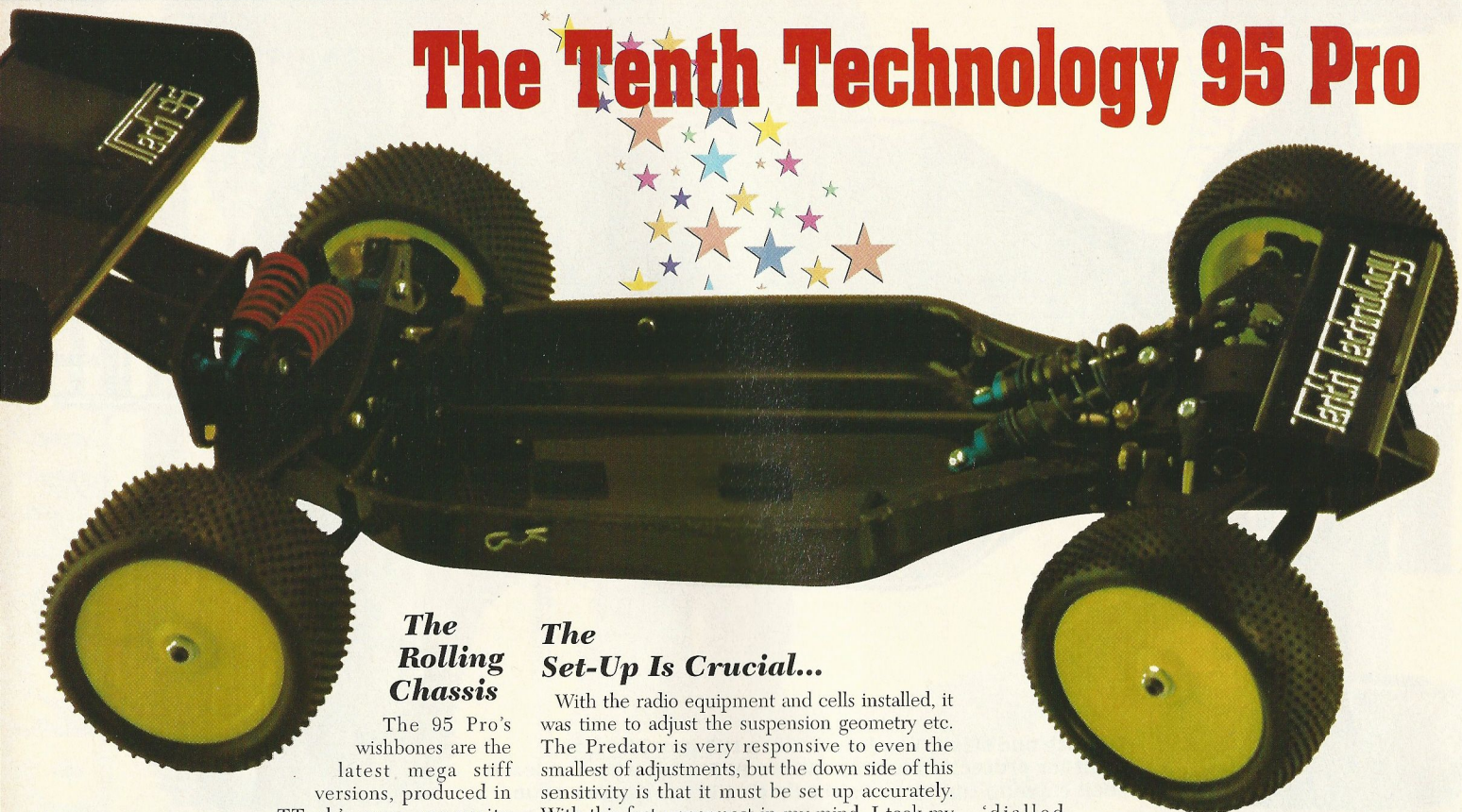
dia) and therefore lighter than the (10mm dia) original version. This further reduces the transmission's inertia, and should endow the car with even greater punch and acceleration than before (will I cope?). A useful side effect is that it creates more room inside the chassis tub for radio gear etc, and for Tenth Technology's

forthcoming slipper clutch, due in March. When building the transmission, a little extra time spent making sure that everything meshes nicely will really pay dividends in the long run. The finished drive train is smooth, easy to work on and incredibly efficient.



A Potential World's Winner?

The Tenth Technology 95 Pro



The Rolling Chassis

The 95 Pro's wishbones are the latest mega stiff versions, produced in TTEch's new composite material. I found, as mentioned in the instructions, that the lower arms in the kit needed a little filing to make them really free moving, although TTEch tell me that this bug has already been eradicated. The car is very satisfying to build, and most of the parts fitted together perfectly. Once a number of the assemblies have gone together, the car's true quality begins to show through, and its solid, slop free construction becomes evident. The suspension in particular is beautifully engineered, with free play non-existent.

The geometry of the 95 Pro has been altered slightly at the rear, the wishbones having had an extra 2.5 degrees of anti-squat (rear castor) added to help the car absorb any vicious steps in the track and to keep it level under hard acceleration.

The alloy bodied shocks are also an improvement on the earlier Predator's already very good units. They include TT's low volume damper caps, plus a superb new body with a hardened and PTFE impregnated surface for a super smooth action. The new bodies give a tighter piston to bore fit which helps to create more 'pack' (the car won't bottom out so easily when landing from a jump), and the resultant shocks rank as some of the smoothest I've ever built.

Development Does Pay Off

When comparing the 95 Pro with the original car reviewed nearly one year ago now, what struck me was the new car's robust feel and solidity. The wishbones now have sleek but significant strengthening webs, the new front ball joints are physically bigger, and the front uprights and gearbox have strengthening ribs in all of the critical areas. The rear wing mountings have also had the original slots removed, and are now braced by two blue alloy tubes, making them now a much stronger (the old ones used to break) and very rigid assembly.

The Set-Up Is Crucial...

With the radio equipment and cells installed, it was time to adjust the suspension geometry etc. The Predator is very responsive to even the smallest of adjustments, but the down side of this sensitivity is that it must be set up accurately. With this fact uppermost in my mind, I took my time to make sure that the car was adjusted exactly as shown on the setting-up sheet supplied with the kit.

And So To The Track....

A gentle squirt of the power and the TTEch 95 Pro launched itself into the distance. The acceleration is really breathtaking, and does take some getting used to! After a few laps to bed everything in and get used to the car, I begin to push it a little. The response to the smallest of inputs and the very 'sharpness' of the car is fantastic, and as before, I couldn't help but be impressed. If I do have a criticism, it is that the car is perhaps a little too sharp, unless you can get to the track regularly to keep those thumbs well in practice! Whilst the ultra quick response did catch me out now and again, this new car was just so fast and rewarding when I got it right, that driving it is really quite exhilarating.

The sheer level of grip it generates is very high, thanks in part to the aerodynamic downforce generated by the large front and rear wings, and the resultant speed through the corners is devastating. The car's handling can be easily

'dialled in' to suit a driver's individual style or a particular track's requirements, thanks to the 95 Pro's response to small adjustments, so those who haven't got quite the degree of talent exhibited by Kevin Moore need have no fear!

A true 'racing' car, the TTEch 95 Pro is a car with real character, a beast with a soul and blood in its veins. It actually bears comparison with a Ferrari, come to think about it! Talk to the people at Tenth Technology, and their passionate commitment to making the 95 Pro the 4wd car to beat at this year's World Championships really comes across. They are very keen to maintain their 'Unfair Advantage'!

The TTEch 95 Pro is manufactured and distributed by Tenth Technology, tel (0474) 824 444. Fax (0474) 8234 445.

The only view of the Predator that many of Kevin Moore's competitors had in 1994! The true aerofoil section rear wing works very efficiently at keeping the back end glued to the track. The very 'clean' design results in 'low drag' and high speed.

