

KIT REVIEW

Reviewed by Graham Creasey



Yokomo's

Whatever the sport, the World Championships is the event everyone wants to win. In model car racing, drivers and manufacturers get the opportunity once every two years. Win, and fame and fortune is yours; lose and sometimes obscurity beckons. Trinity's victory in the 1992 Pro-10 World Championship with its revolutionary Evolution-10 car showed just what a powerful marketing tool a World Champs win can be.

If a car can beat the best in the world then it has to be worth looking at when it comes to choosing your next drive and that is exactly what many people did after Joel 'Magic' Johnson dominated the big event in California. In 1994 it was Europe's turn to host the event and the magnificent Tamiya Raceway at Sonneberg in Germany provided a superb venue for this hotly contested event.

Once again there were plenty of manufacturers trying to make sure their car was the one that got noticed and, at the end of the week, one manufacturer had certainly ensured that one of those cars was theirs.

Sonneberg success

The Sonneberg circuit was one of the quickest you are ever likely to see Pro-10s race on. Four straights, a flat-out sweeper, three hairpins and two chicanes; the design was straight-forward enough, but a well set-up car was an absolute necessity if a fast time was going to be set.

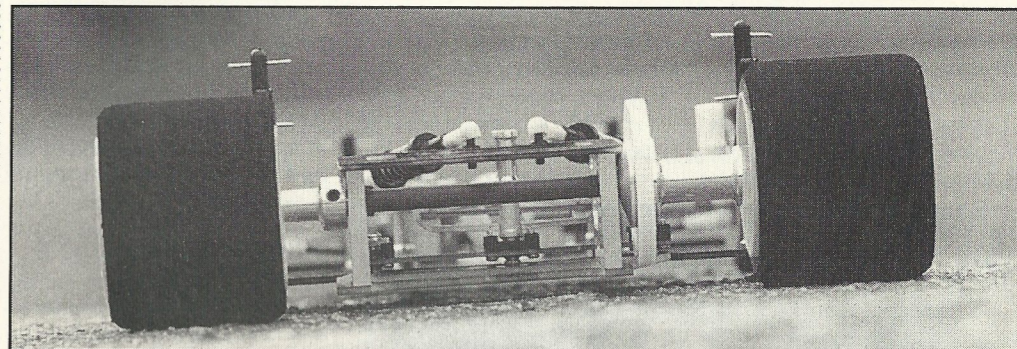
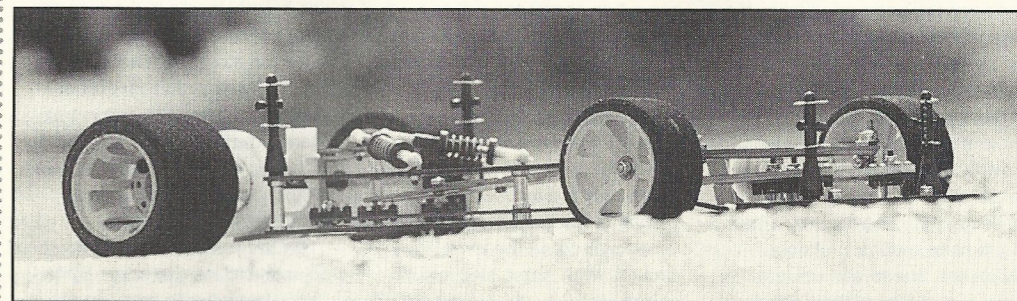
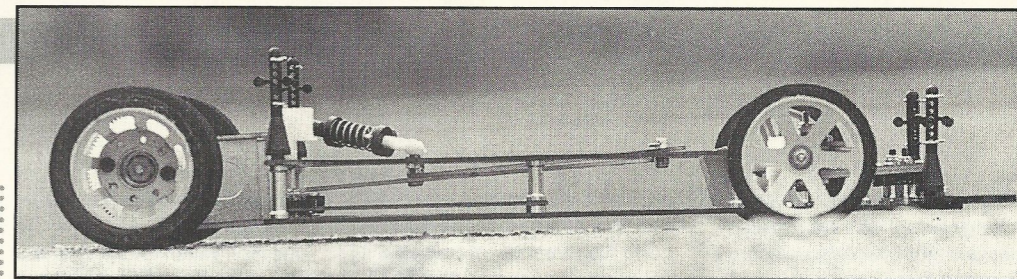
A positive steering response was the key to success, since if the front traction was good, the car could be powered through the tight chicanes with a deft flick of the steering stick, losing little in the way of time. Plenty of rear-end stability and traction was also required though, as the entry to one of the hairpins was a little slippery and the sweeper was a genuine flat-out affair.

All in all, Sonneberg wasn't a particularly difficult track to drive round, but it did demand a perfect car set-up, and throughout qualifying and the finals it was clear that one driver had a car that was well and truly sorted. His name was Masami Hirosaka, a driver possessed with awesome car control and already a multiple World Championship winner.

Japanese superstar

This event was to see yet another Masami win, the flying Japanese superstar taking TQ and two of the three A-final legs, with Britain's David Spashett the only driver who could challenge him. Like Joel Johnson's win two years earlier, what made Masami's victory even more remarkable was the fact that he did it driving a brand new 'prototype'.

It looked a particularly neat, if somewhat complex design, and was awesome on the track, enabling Masami to see off the challenge of Corally, Associated and Trinity with some ease.



Yokomo are one of a few companies to have made cars that win world championships in differing classes. Their Pro 10 car is the world champion and this is the kit version.

Since then, Yokomo has been busy turning Masami's car into a kit form and the finished product has finally arrived in Britain as the Yokomo YRX-10. You and I may not be blessed with the same car control skills as Masami, but if the kit version goes half as well as his car did then it is bound to be a competitive prospect, and well worth looking at if you are searching for the ultimate in flat-pan speed machines.

Building delight

Construction of the YRX-10 is straightforward. It is probably the best Pro-10 kit I have ever built; every component goes together beautifully. There is no messing around filling components to get them to fit properly. It's just a case of methodically following the instructions and before long, 'hey presto' one finished car!

The instructions are clear, with plenty of diagrams, although the text does look a little messy thanks to the inclusion of both Japanese and English dialogue on the same page.

Graphite chassis

As you would expect of a car of this class, the main chassis is graphite, although many of the other components are actually manufactured from black fibreglass. Yokomo has really gone to town on the number of chassis pieces; there are upper braces, lower braces, upper suspension arms, battery plates — you name it, this car has got it. The way they all fit together is quite ingenious though and before long you will find yourself with an extremely rigid chassis.

Front suspension is provided by a split-beam system, somewhat

World Beater

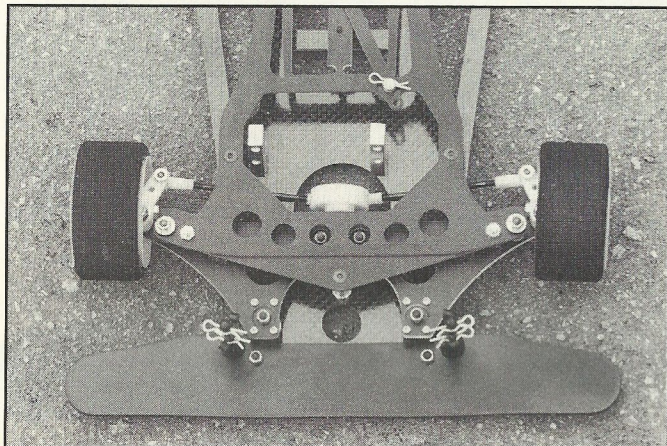
reminiscent of the old Schumacher 1/12th car. Small springs control the suspension travel and these can be changed to adjust the car according to the level of grip on the track.

Front suspension travel is smooth, albeit with a slight touch of bump-steer. At the rear of the car, a flimsy roll-plate is used to provide suspension travel. This flexes quite markedly, but its movement is controlled by a pair of top-plate mounted shock-absorbers. These are actually more like dampers than shockers and do not require any shocker oil, but they do function as intended, ensuring the rear pod

can float freely, keeping the rear tyres firmly planted on the track.

One disadvantage of using a dual shocker system, is that the same two shock-absorbers have to damp both the fore-and-aft and sideways movement of the rear pod. This means that you cannot adjust the two movements independently, unlike the tri-shock Trinity car for example, which may prevent you from getting the handling absolutely spot-on at some the more tricky circuits. With some silicon lube on the pistons, the movement of the rear pod is exceptionally smooth though and is well damped in all directions.

Yokomo's chassis is designed like no other with large sections of glass fibre forming the suspension. Bottom; Rear damper set up controls rear end traction.



Rear car set-up

One big oversight at the rear of the car is the lack of adjustable ride height inserts in the rear axle blocks. Almost every Pro-10 car since the dawn of time has come supplied with plastic insert ride height adjusters, allowing you to change the height the rear axle is held at in order to compensate for different sizes of tyre or the bumpiness of the circuit.

On the Yokomo, there is no such adjustment; instead some limited ride-height adjustments can be made by tightening or loosening the spring tension on the rear shock-absorbers. 'Hop-up' ride height adjusters are available from Yokomo, but it would have made a lot more sense to have included them in the kit in the first place.

Diffs and bumpers

The ubiquitous ball differential is included, and once again this functions extremely well, given a smooth movement. A front bumper has been thoughtfully provided, which should save the expensive chassis from any damage in the event of a head-on crash, and all of the required steering linkages, servo-saver, etc. are sitting there in the box.

A full set of smart and strong red wheels are also included, along with a pre-trued set of tyres, so you have everything you need to complete a full rolling chassis.

Yokomo has popped an excellent sheet of set-up tips into the instruction book. These clearly illustrate how the YRX-10's toe-in, camber and castor can be adjusted and also shows how the ride-height can be adjusted without using ride-height blocks.

Bodyshells

Two bodyshells are recommended: the Protoform Nissan and the Associated Nissan. This is sound advice as both work well at most circuits. The advice given on using tyre additives was somewhat amusing though. On tracks that do not allow tyre additives, Yokomo suggests that you should 'try and select the tyres which work best on the track without liquid traction additives'; this definitely sounds like a good idea to me.

What the drivers think

Unfortunately we didn't get the opportunity to test our Yokomo YRX-10 out on the track. On our test day, a thick layer of dust at the West London Racing Centre meant the level was extremely poor and even the Touring Cars were having difficulty getting round the circuit without spinning out.

Instead, we spoke to the team drivers — those on-road stars who CML has signed to drive the YRX-10 in this season's competitive BRCA Pro-10 National series.

• **Robin Hammett:** Mr. Consistent of Pro-10 racing. At each National, you can guarantee Robin is going to be in the A-final and usually in the top half too. His performances in the 1994 BRCA championship were superb, taking his HPI tricked Associated RC10LS to victory in the opening round at Mendip, setting a new track record at West London a few weeks later, and finishing an excellent third in the championship at the end of the year.

Over the winter he turned his hand to Touring Car racing, driving the awesome Yokomo YZ-10 for CML. A victory at Aldershot was his highlight of the season and CML was so impressed with Robin's driving skills, they offered him a Yokomo YRX-10 drive for the new Pro-10 season.

Robin put his new car on pole for a while at the opening National, but he eventually had to settle for 2nd place on the grid behind the current Pro-10 superstar, Chris Grainger.

"To be honest, I haven't really needed to change the car much from standard," said Robin, "To

get the rear dampers to work properly, I had to drill a 1/16th hole to get rid of the air-lock, but I have found them to be very easy to adjust; all you need to do is put some silicon syrup on them to get them working really well.

"At the front, I have been running the medium springs, which are a grade harder than the springs that come with the kit. I have also fitted an O-ring to give some damping action. Shortening the front posts has given a bit more front ride height, but I think you could also do this by fitting the ball-cups up on top instead. This would lower the roll centre a bit but at least you would be able to run small tyres.

I use the hop-up Yokomo ride-height adjusters at the back and the standard Yokomo rear-axle. I have made my own lexan diffuser for the back of car and have fitted a thin piece of aluminium plate to the bottom of the chassis, so that the bottom of the cells are not worn away when the chassis scrapes. I have also made my own cell retaining plate as I didn't like the one that came in the kit.

"On the track, the car handles really well. It's difficult to compare it with my old Associated car though, as last year we were not racing with tyre additives. I tried the Yokomo at Mendip a few weeks ago and set a time within one second of my best with last year's Associated, but since then I have improved the Yokomo even more. I usually run Green compound rear tyres and Ellegi 28 or ABC Red fronts and the car grips really well, not wearing the front tyres down much at all."

• **Paul Isaac:** Paul hit top form at the start of last year, quickly becoming the top UK Corally driver and by mid-season was challenging for National race wins. His battle with Chris Grainger at Tibshelf last year was one of the highlights of the season and he followed this up with a competitive showing at the World Championships in Germany.

A move to Luxembourg meant Paul's 1994 season came to a premature close, but his enthusiasm for Pro-10 racing remained and he has returned to the National scene in 1995, now driving the YRX-10 for CML. Having to travel from Luxembourg for each National means Paul will have a tiring year, but he is looking forward to the challenge of developing the new car.

A superb 2nd place at the first BRCA National showed he has quickly got to grips with his new drive, so what set-up tips does he have?

"At the front of the car, I shimmed down the upper plastic pieces to

Extra low centre of gravity in the design of the Yokomo makes for sharp handling.

increase the front suspension travel a bit, but made sure these still put some retaining pressure on the spring. I moved the rubber O-ring from the top of the beam and put it underneath, giving some damping action, and lubricated this with some damper syrup. This meant I had to bring the top brace up about 2mm so that the springs were not being compressed too much.

"At the back of the car I changed over to Trinity shock absorbers, but you can get similar performance from the kit shockers by fitting an 18-20 gauge front suspension spring on the shaft. I fitted the Yokomo ride height adjusters so that I can run different sizes of tyre and have also fitted some of the Yokomo graphite chassis pieces, which saves about 4 grammes of weight on each front wishbone.

Recently, I have also been trying out an ERS polymer rear axle, which narrows the rear-end of the car slightly and stops some of the chattering coming out of the slower corners. Tyre choice has proved to be simple. With additives, the Yokomo always seems to go best with Green compound tyres on the back and a soft Jap compound on the front.

Compared to the Corally I drove last year, the Yokomo gives similar rear-end grip but turns in more like a Trinity, whereas the Corally always tended to understeer slightly. The Yokomo does seem to work the rear tyres quite hard though, which means you have to be a bit careful in the last minute of the race as the additive starts to wear off, although this does depend a lot on the grippiness of the circuit."

Competitive prospect

The performances of these two drivers over recent weeks has clearly shown that the Yokomo YRX-10 is a competitive prospect indeed. It handles superbly well, giving the driver plenty of confidence and has also proved to be easy to set-up. If you are looking for a quality Pro-10 that is going to be on-the-pace straight away, then the YRX-10 should definitely be high on your shopping list. Who knows, with enough practice, the next World Championship winner might even be you.

