

# OPTIMA PRO 4WD

Model Cars reviews Kyosho's revolutionary  
new Optima Pro

I should like to point out right away that it is only coincidence which finds this contributor reviewing a second *Kyosho* product in the same issue.

My report on the 'Option House Ultima' which appears (hopefully!) elsewhere was penned some little time ago. This review of the latest 'Optima' development the 'Pro 4WD' was instigated slightly less in advance after a chance phone call to RCMC Editor Alan Harman.

This does not follow recent form however. Regular readers will have noticed that the ubiquitous Winton has been consigned to ringside reports of the 'Mustang'-'Cat' confrontation, Mr. Driver has the task of reviewing the unusual whilst Editor Harman has donned the mantle of chief *Tamiya* test driver.

My lot it would seem is to provide the *Kyosho* content — a situation which suits me fine as I am fast developing an ardent appreciation of this particular company's products. Since the early days of the 'Scorpion' *Kyosho* have continued to develop and refine their cars in accordance with what is happening on the race-track. This latest release is just such a case in point, combining as it does the needs of the regular club racer with their performance and handling associated with the 'Optima.' Cynics will no doubt be muttering "so what? just another 'Optima'." Well... yes and no. True this is another version of the car but there are substantial and worthwhile changes to a car that has already proven to be a winner.

## What you don't get

For a start you do not get either a motor or speed controller in this kit. An interesting move on *Kyosho's* part and probably the first such decision to be made by a major Japanese manufacturer.

The relevance is that *Kyosho* have obviously targeted the 'Pro' at the racing market. The majority of racers (myself included) never actually get round to taking the motor and the speed controller out of the blister pack let alone fitting them to the

car. Most people would rather have a cheaper kit and fit their own items. This then is the case with the 'Pro,' none of the bits you don't want and a cheaper kit price. Indeed the instruction booklet does show an electronic speed controller being fitted to boot.

## What you do get

This is the interesting bit as *Kyosho* have built into this car several detail design changes which you will not find in the 'Turbo,' 'Optima' or even the 'Salute.'

Firstly some of the more useful items on the 'Option House' tune-up accessory list are included as standard. The latest low-profile tyres and two piece, lightweight plastic hubs are for instance. The tyre tread pattern is a pattern of off-set pairs of spikes. Other 'Optima' parts are the damper mounting plates which are stamped alloy, and large enough to take the excellent 'Option House' shock absorbers. The kit is supplied with the smaller and less effective standard types which obviously have the virtue of being cheaper. Still, upgrading to the racing suspension spec will only be a matter of buying the shocks and not the mounting plates as well.

Other performance benefits with this kit include the new longer wishbones designed to give greater stability. These new 'bones' are also in tougher plastic which will not do anything for the importer's spares sales but will lessen the loads on our pockets considerably. They also have different mounting holes for the aforementioned 'Optima House' shocks.

The 'Turbo' chain (Turbo translated means thicker links) also finds its way into the 'Pro' with the obvious virtues of greater strength and longevity.

Finally you do get ballraces but only the four needed to carry the gearbox outputs. Again economy thinking from *Kyosho* as ballraces push up the costs considerably and a great many users will have the rest anyway. If not then these can be added at a later date.

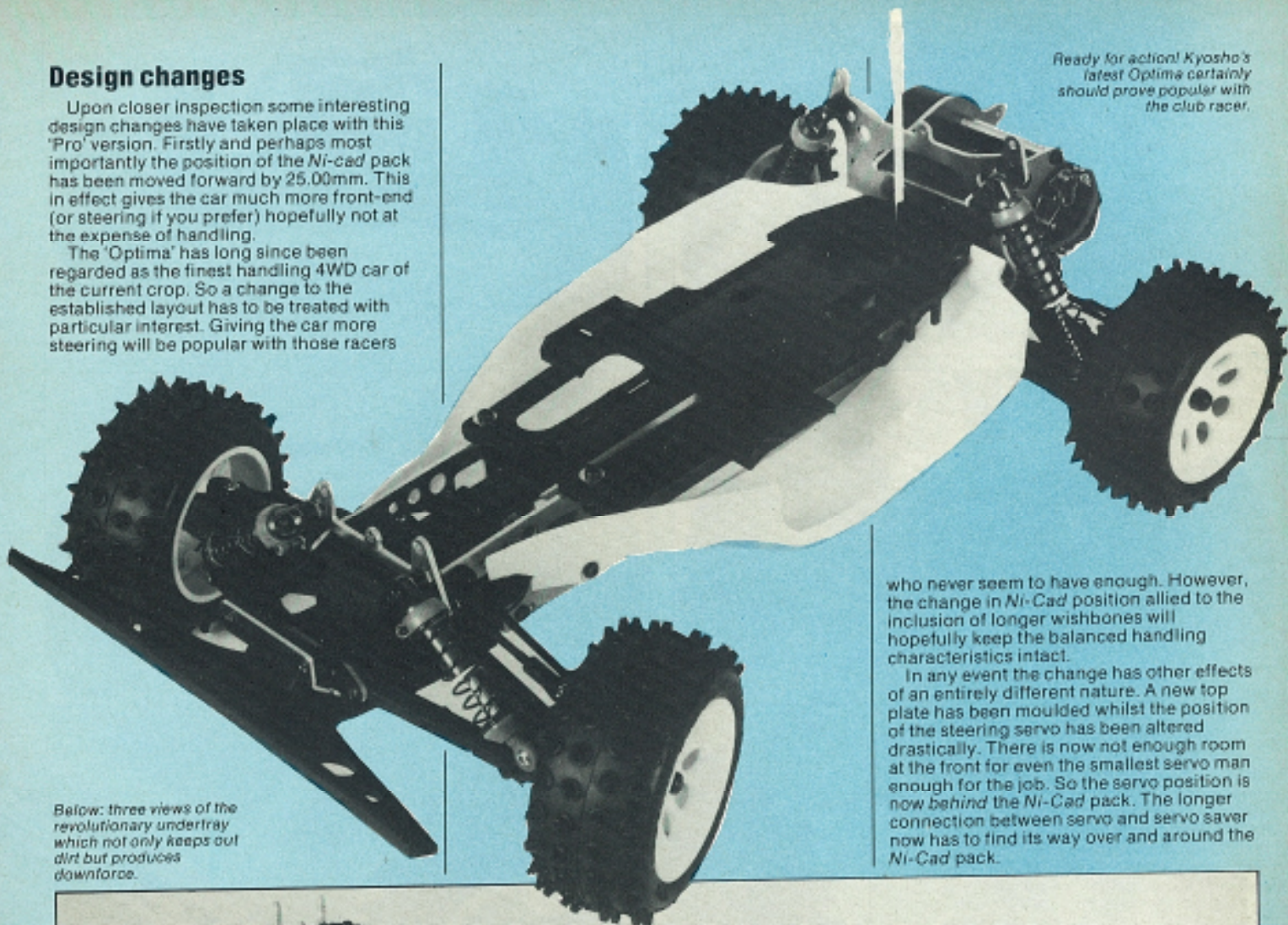


## Design changes

Upon closer inspection some interesting design changes have taken place with this "Pro" version. Firstly and perhaps most importantly the position of the Ni-cad pack has been moved forward by 25.00mm. This in effect gives the car much more front-end (or steering if you prefer) hopefully not at the expense of handling.

The "Optima" has long since been regarded as the finest handling 4WD car of the current crop. So a change to the established layout has to be treated with particular interest. Giving the car more steering will be popular with those racers

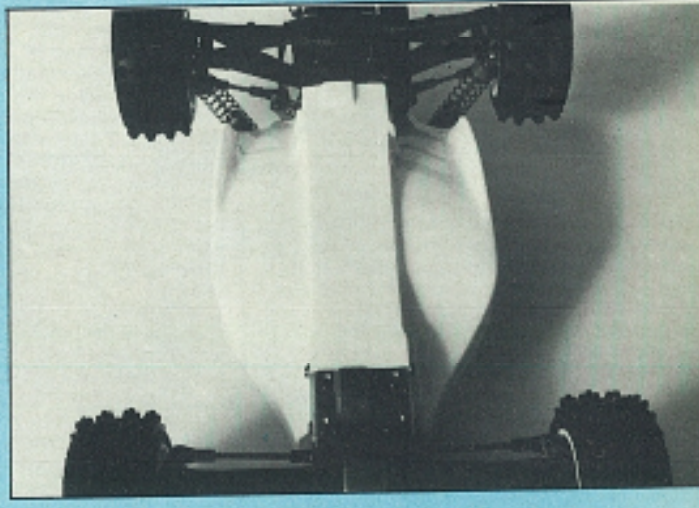
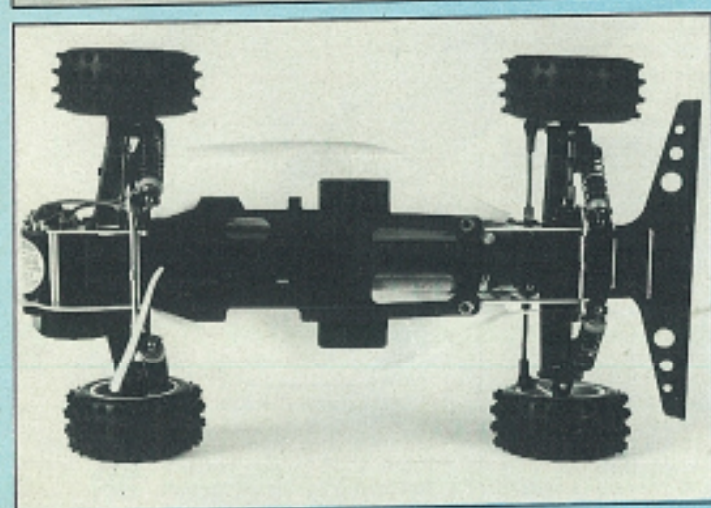
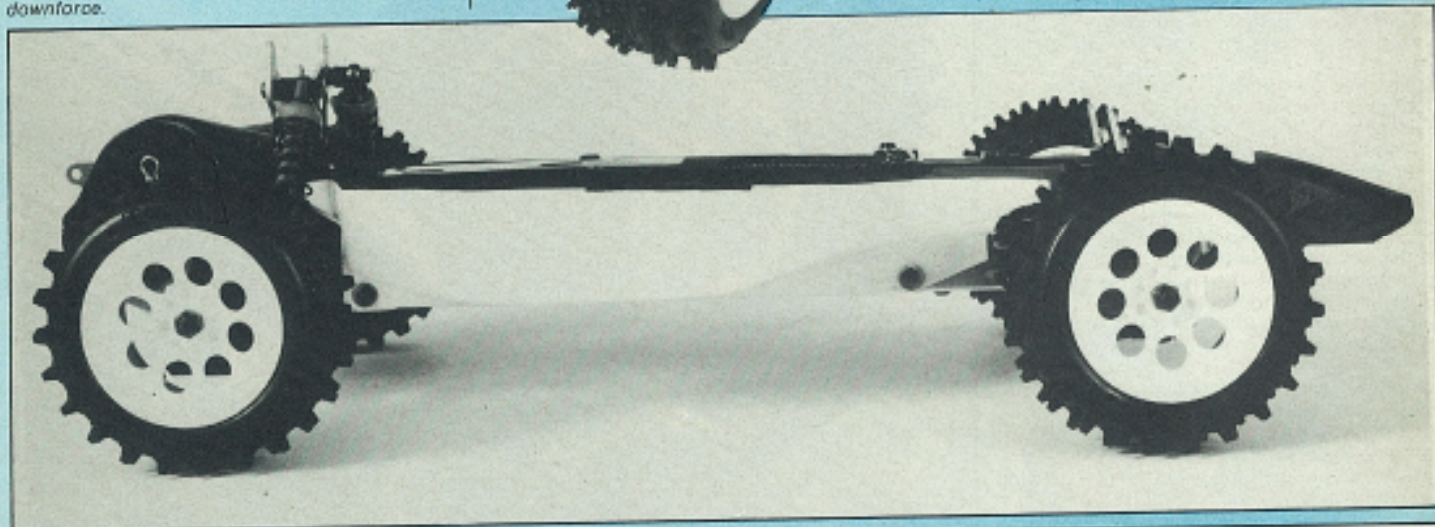
Ready for action! Kyosho's latest Optima certainly should prove popular with the club racer.

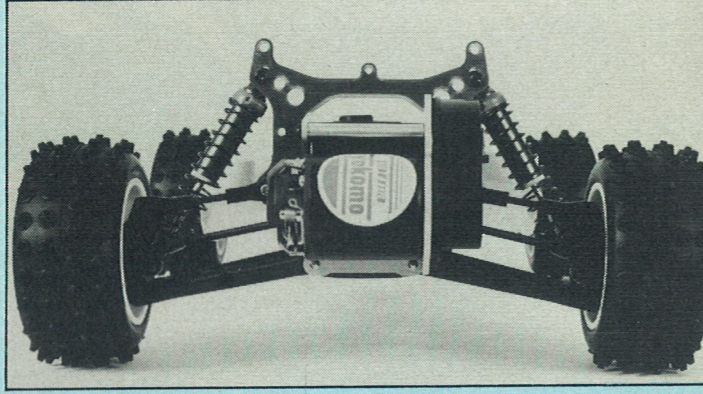
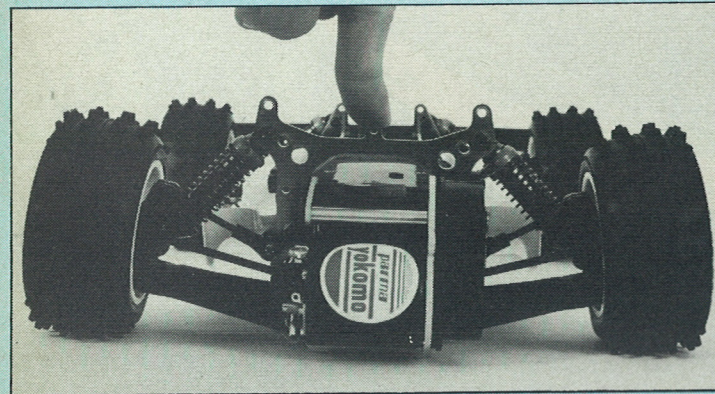
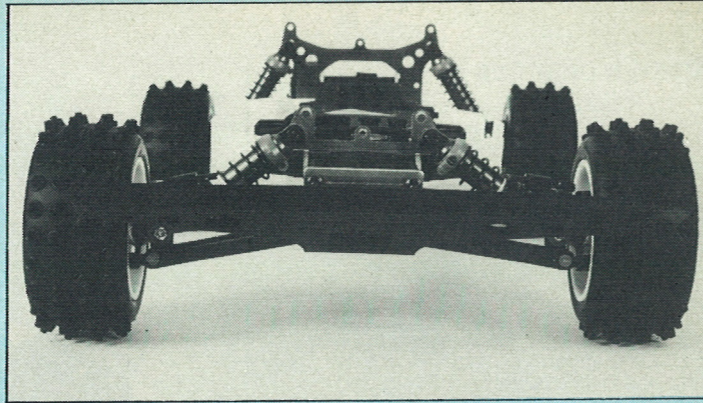
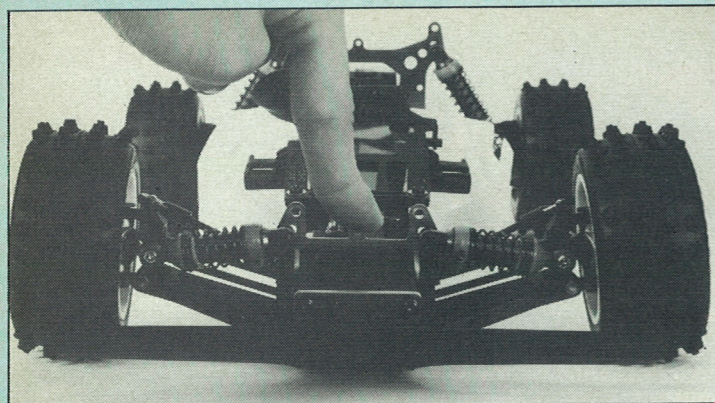


Below: three views of the revolutionary undertray which not only keeps out dirt but produces downforce.

who never seem to have enough. However, the change in Ni-Cad position allied to the inclusion of longer wishbones will hopefully keep the balanced handling characteristics intact.

In any event the change has other effects of an entirely different nature. A new top plate has been moulded whilst the position of the steering servo has been altered drastically. There is now not enough room at the front for even the smallest servo man enough for the job. So the servo position is now behind the Ni-Cad pack. The longer connection between servo and servo saver now has to find its way over and around the Ni-Cad pack.





Getting the track rod bent into exactly the right position is tricky particularly to ensure that the route is clear from snags. Several trial fits will be needed to get it exactly right. In the final analysis the new set-up looks unsatisfactory and with the new servo mounted servo saver seems to provide too much flex for positive operation. Definitely an area to be looked at.

Last and by no means least we have the bodyshell. In my previous report on *Kyosho's 'Ultima'* I bemoaned the fact that the body shape in that kit was something of a let down in view of recent design trends. Well the shell supplied with the 'Optima Pro' breaks new ground all together. Not because of what happens on top of the car (which is fairly conventional) but rather because of what happens underneath.

Whilst undertrays to keep dirt out of the mechanics is nothing new, ones with moulded in aerofoil sections are. The 'Optima Pro' has the distinction of being the first kit with this feature. I am informed that this wing section actually helps to keep the car in contact with the ground or at least ensuring a flatter, more economical glide angle when the car becomes airborne after a jump. I have to confess I have my reservations about this latter point although I must remain ambiguous until the car is driven in anger. Whatever the outcome I will be thankful of the undertray's ability to keep the track out of the mechanics.

### Conclusion

Take out the changes and additions outlined above and what you have is a fairly standard 'Optima.' This means that the build quality and track performance is assured (although we hope the latter is enhanced somewhat). It is never my intention to bore you with the details of how I built the car, so I will not bother now. Generally speaking there were few problems although I should like to suggest that the idler gear shaft should be moved over so slightly sideways on the motor

mounting plate to ease the gear mesh slightly. This can be accomplished in a matter of minutes with a small needle file. This fact aside the 'Optima Pro' should prove popular, probably with existing 'Optima' owners who need to replace a worn out car. In this respect *Kyosho* has identified a ready market for a new variation on an old theme. It also has the benefit of keeping the *Kyosho* following loyal until the 4WD mid-engined, belt drive super car arrives some time next year.

In true RCMC style the actual running report will be produced for a future issue with further reports to follow that. Alas it seems that I will not be the one to continue the story as the 'Pro' has been ordered back to base. The Editor has picked it to spearhead his challenge on the 1988 BRCA National Championship series. It would seem that secret track testing sessions with

the *Tamiya* 'Lunchbox' have not gone well and so the 'Pro' has been given the job. We wish him well!  
**UK importer: Ripmax.**  
**Price: £120.00 (approx.).**  
**Reviewed by: Lewis Eckett.**



Opposite page: the front and rear suspension up and down showing amounts of ground clearance and suspension travel. Bottom: front and rear drive-shafts are of ball and pin type, note adjustable top suspension links. The rear gear train which requires some attention. Front steering set up gives a very positive movement.

