

The new turbo mid SE has a high spec which includes platinum shocks and glass fibre shock absorber mounts.

single-minded approach. It will be interesting to see how the 'XL Mid' affects the ranks of the top drivers when it is released soon. At the moment however the standard car remains firmly established as the midfield favourite. This new 'SE' version will only help to underline the point.

#### What do you get?

Well, quite a lot really when you add up the sum of the 'SE's' parts. The most obvious are those you can see straight away such as the alloy style wheels which rally look the business.

Closer inspection reveals that the chassis is the gold-coloured 'Turbo' type complete with countersunk fixing holes. Disappointingly the body is just the same and no undertray is included which for most people will be a serious omission.

since they were used in the Kyosho team cars at the 1987 World Championships. The ball differential allows you to adjust the amount of 'slip' or differential action through an adjustment screw which passes through the drive cups. This screw acts on spring washers to regulate the amount of pressure being exerted on the drive washers.

On the drive pulley itself a flange is included to stop the drive belt from slipping off. On the other side a bright green washer is fitted for the same purpose but this has the annoying habit of slipping off. Because the review car was supplied without instructions it's not clear if this is a problem or not. The obvious cure if one is needed is to carefully glue it



# THE OPTIMUM MID

## Kyosho's Special Edition

**K** yosho's latest 'Mid' kit announces its pedigree with the subtle use of the initials 'SE'. This of course stands for Special Edition and gives Kyosho the chance to incorporate into one tidy package all the really useful 'Mid' tune-up parts produced by the Research and Development boffins over the past few months.

If this was a real car then it would be called a 'Ghia' or something similar to show that this is a high specification, top of the range car with all the really nice bits included but ever so slightly lacking in the 'go' department.

Of course if you want the absolute business then only the Turbo version will do which funnily enough is just what Kyosho think since a 'Turbo' mid kit is also available.

In reality however the main difference between Special Edition and Turbo is simply the price: £00.00 for the 'SE' as opposed to £199 for the other. What is more, the 'SE' includes everything the 'Turbo' does plus a motor and speed controller. Not surprisingly the 'Turbo Mid' will be phased out in due course.

The absolute top end of then 'Mid' range will be designated the 'XL' which might just stand for Extra Large since this is the long wheelbase, carbon fibre saddle pack chassis version. Whether you think bigger means better depends on your point of view but for sure bigger will mean more expensive with an XL price tag estimated

### Fancy a top of the range model?

#### Kyosho's SE fits the bill

at around £300. If you think L/W and S/P is a waste of time (some people do) then great, the 'SE' is your ideal car. If you are not sure then even better because a kit to convert the 'SE' to 'XL' status is also available. Also not everyone wants the hassle of mucking about with different battery pack layouts and would be quite happy to stay with the stick packs they have always used. This is the type of racer who competes mainly at club level and maybe does a couple of national races when there is one close by. Their requirement is for a car that can be built easily and quickly, performs well out of the box and is reliable week in, week out. To be honest the perfect car does not exist and never will but there is no harm in having a go at producing one and Kyosho are in just as good a position as anyone to try.

#### In the beginning

When they first produced the 'Optima' it was considered a revelation of quality components and easy construction. Tamiya obviously have the same reputation but somehow the 'Optima' had a more engineered feel to it which made you feel that here at last was a real piece of racing machinery.

Several versions of the 'Optima' followed until the World Championships over a year ago when the 'Mid' was first introduced. Since then, of course, the Kyosho Racing Team department have been filtering through all the modifications, improvements and innovations thrown up by over a year of top class international competition.

One of the really good things to be said about the Kyosho operation is that they take their racing seriously and don't waste any time bringing us the results. In this way Kyosho have consistently improved their product range in a way unmatched by any other manufacturer. More importantly their cars still remain suitable for all drivers across the racing spectrum despite this hi-tech approach.

You can see this is true just by looking at what people are driving at the larger open and national meetings. True the top end of the scale is dominated by the Schumacher 'CAT' but in the middle to upper order the 'Mid' reigns supreme. Why? Because not everyone can get on with cars like the 'CAT', or to be more precise they can't be bothered. Getting to the top at National level demands a total commitment to every aspect of racing and not everyone can sustain the

Minor moans apart, the 'SE' is fitted with universal joint drive shafts at the front to increase the amount of steering lock available and stop the drive shafts from flying out.

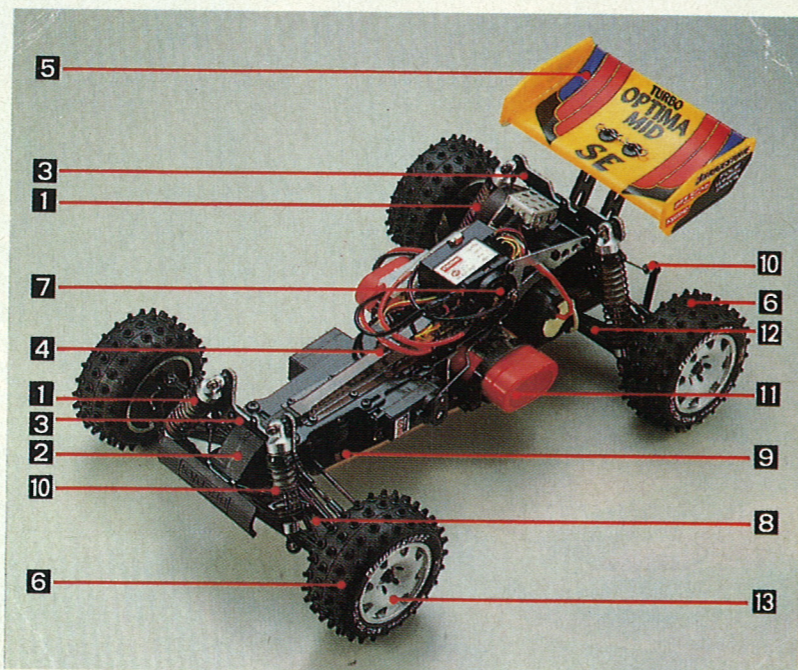
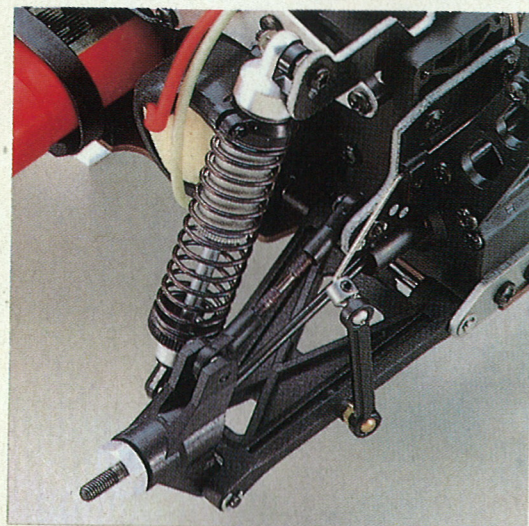
Anti-roll bars have their place also with adjustable versions fitted front and rear. Anti-roll bars are for many people a mixed blessing; either you can be bothered to mess about with them or you can't. Assessing the difference on the track requires supreme confidence in your driving and in your ability to convince others that you really know what you are doing. To be honest the anti-roll bars fitted onto the 'SE' would be hard pressed to do anything at all since they slop up and down in their mounts and the bar itself is of a very thin grade.

Interestingly (or unfortunately depending on your point of view) the upper suspension links are not the 'Option House' versions featuring a left and right hand thread to allow adjustment of the links without removing them from the car. It would have been far better to have the anti-roll bars and include these instead since easier camber adjustment has more effect than the ineffectual flexing of a piece of bent wire.

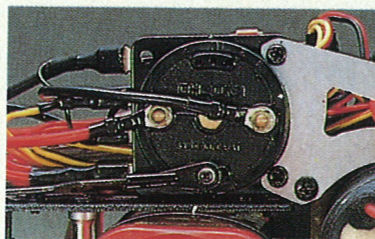
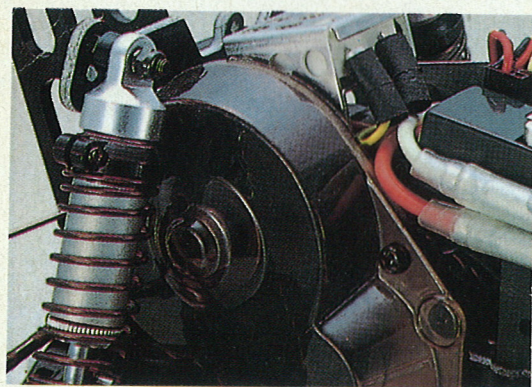
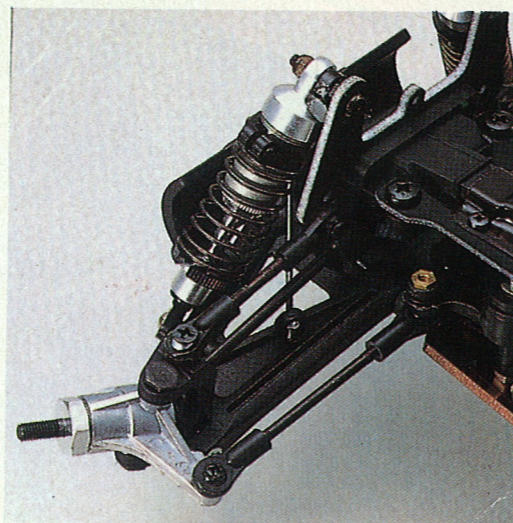
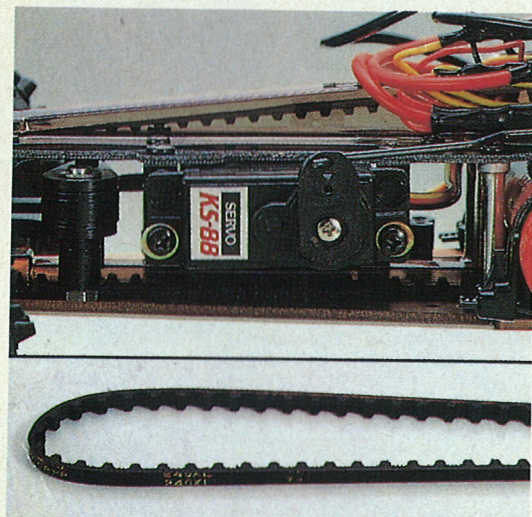
The real meat of the 'SE' specification becomes apparent during construction. The most obvious example is the inclusion of limited slip ball differentials against the more common geared type. The 'Option House' catalogue has carried ball-type replacement units as an optional extra ever







Above: 1 Oil-filled platinum shocks with adjustable damping. 2 Front and rear ball differentials. 3 GRP front and rear shock mounts. 4 Reinforced toothed drive belt. 5 Adjustable wing. 6 Low profile tyres. 7 Rotary (heavy duty) speed controller. 8 Glass filled wishbones. 9 Aluminium countersunk chassis. 10. Anti roll bars front and rear. 11 Installation of stick pack battery. 12 Long travel rear suspension. 13 Chrome plated aluminium-look wheels.

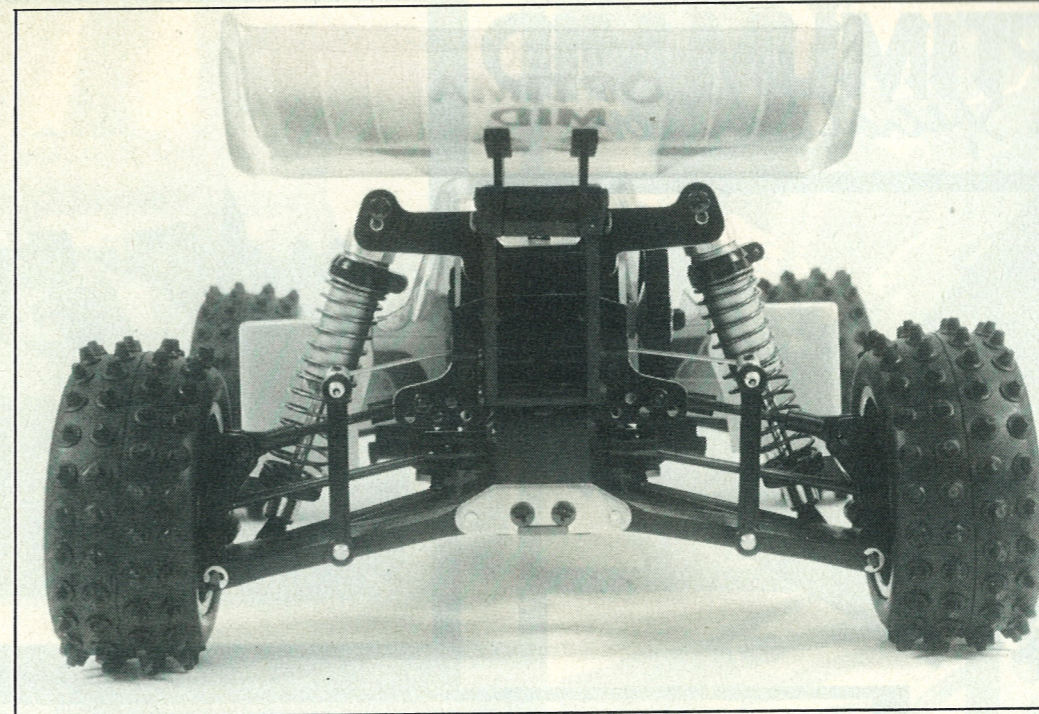


on with a couple of dabs of superglue. Building the differential units should not present a major problem but be careful with the various parts used. Inside the drive cup which carries the adjustment

screw sit several tiny balls which act as a thrust race. Getting them in is a fiddly operation so take our time and make sure to stand a box or something underneath to catch them if they fall out. If they

land in the carpet, you'll never see them again. At this point it is worth mentioning that the 'SE' comes supplied with a full complement of ball races. Another addition to the

'Option House' catalogue in recent months has been new design of shock absorber. 'Platinum' is the name for them although none of the metal actually features in their construction. What they do



have is a clever system of adjusting the damping rate of the shock without having to take the unit apart.

Opinion is divided on whether the system works effectively or not or indeed if such complication is necessary at all. Having an adjustable damping rate built-in does take all the mess and hard work out of changing the oil and pistons. On the other hand it is more difficult to achieve four shock absorbers with exactly the same amount of damping when only a small amount of adjustment can make such a large difference. Those who have used the platinum shocks say that there is more damping one way than the other, this is because the piston is pushed away from the retaining cap on

the up stroke (when the damper is compressed) allowing the oil to pass through more quickly. On the down stroke the piston is forced up against the cap and restricting the flow of oil. This means that there is less damping when the wheel of the car is deflected upwards and more when it returns. The common consensus of opinion these days is that it anything it should be the other way around.

Whatever your point of view there is one fact concerning the platinum shocks which is worthy of mention. They don't leak!

The shock mounts are made from black glass reinforced plastic (GRP) and have a choice of two damper

mounting holes to adjust the ride height. The mounts also carry the inboard location for the upper suspension links and once again these have a choice of locations available.

As mentioned above the 'SE'

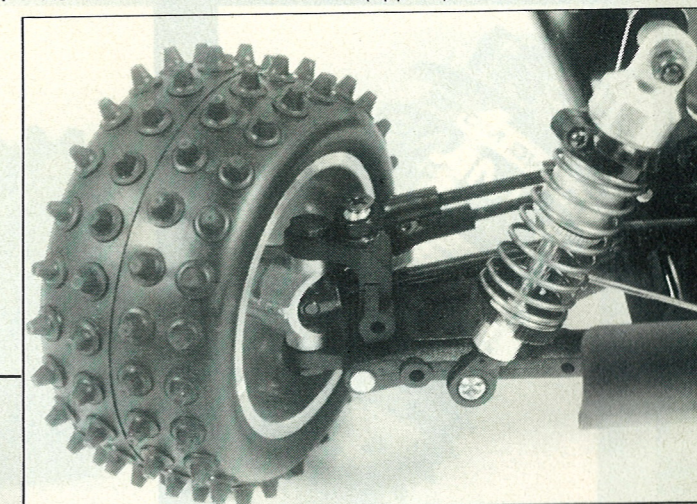
is supplied with a motor and speed controller which surprisingly still makes this kit cheaper than the 'Turbo Mid' which has neither. The motor is designated as a 240ST which roughly translates into a 19-turn single wind standard motor. In other words, pretty darn hot and definitely not legal for BRCA racing which is a shame.

The speed controller is also new, and features fully enclosed mechanics with three speeds forward and of course one reverse.

Finally, at the front is Kyosho's world famous front bumper. Manufacturers of replacement bumpers must be rubbing their hands in anticipation since there is no way this example is legal for BRCA racing. It's very nice though and slots onto the front of the chassis perfectly.

The Mid in all its various guises has proven to be one of the best cars on the market and the SE cannot fail to produce the goods on that score. This Special Edition's main strength is that for the middle to high order club racer this car has everything necessary in one box to get the best out of their racing.

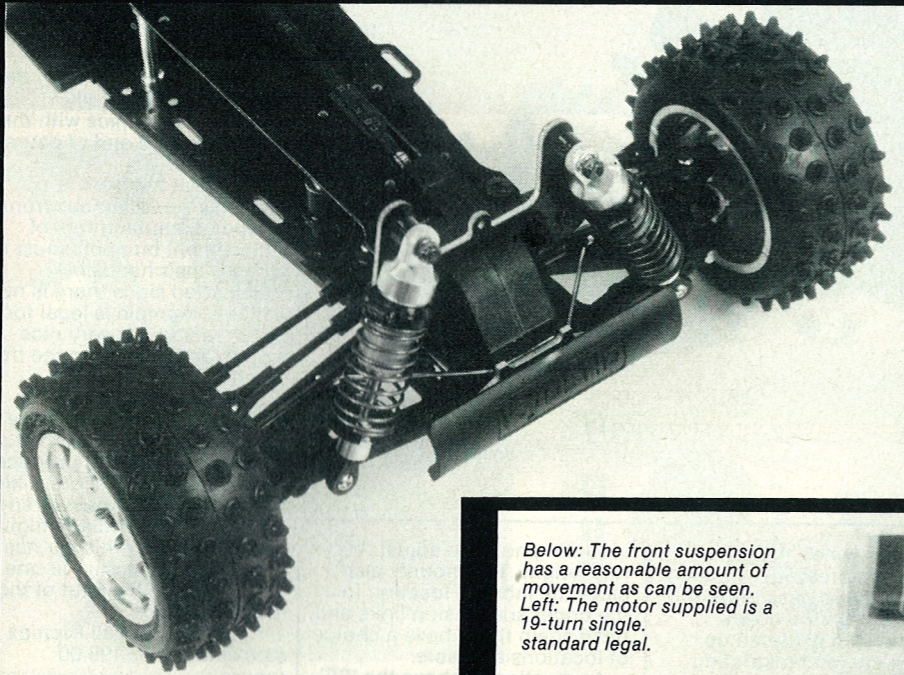
Available from all Ripmax stockists price £199.00 (approx).



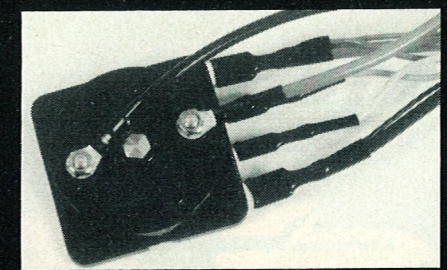
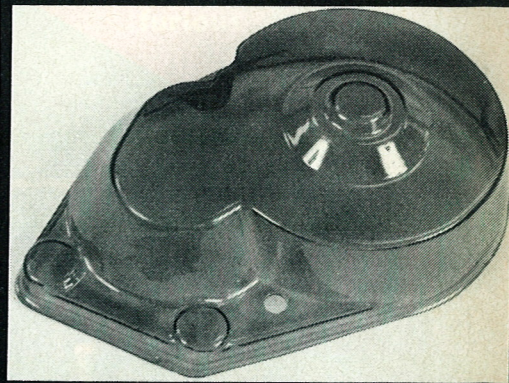
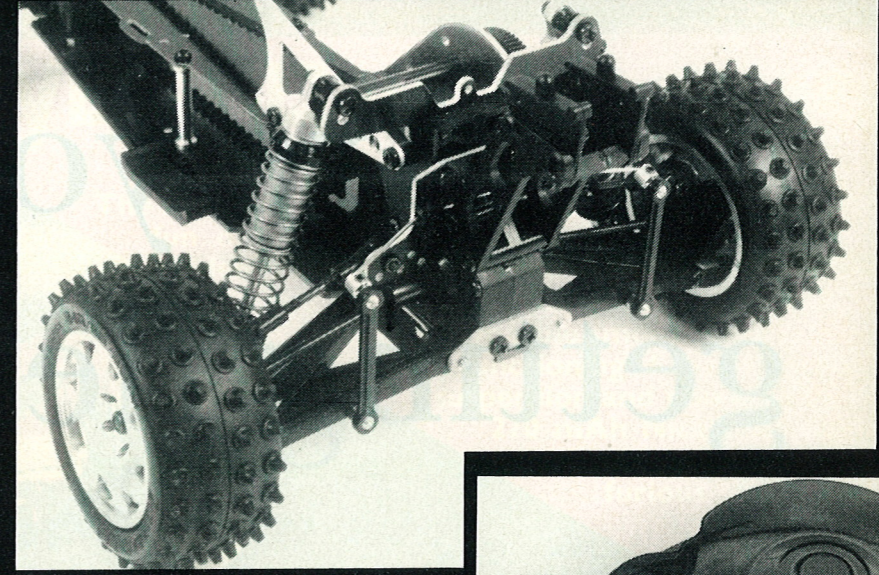
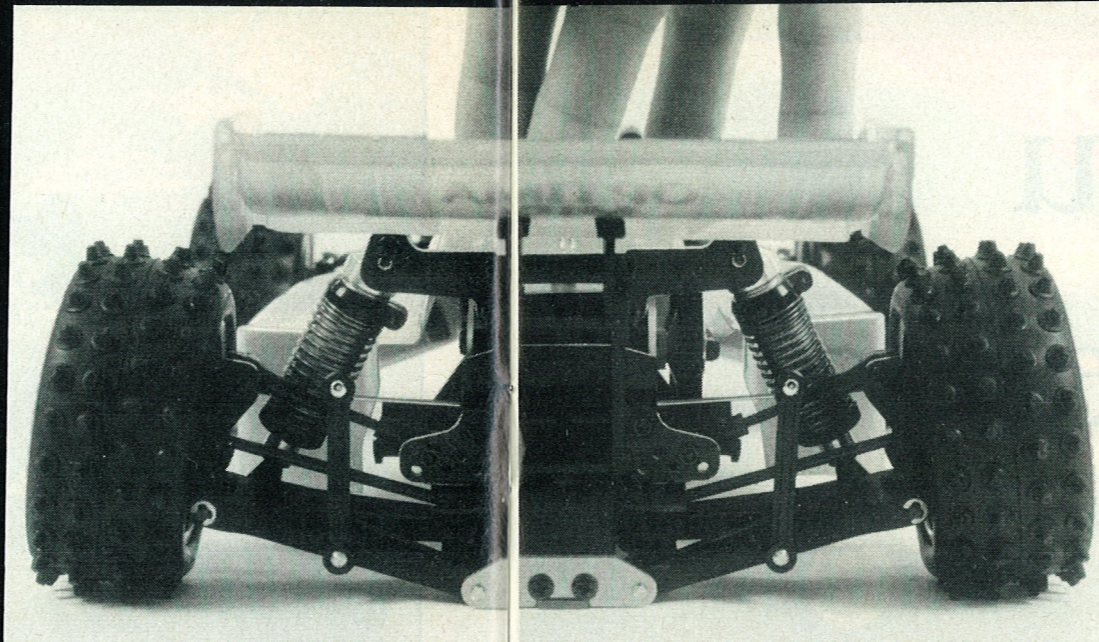
The sticker set supplied makes the car easy to look good. The wheels are coated to look aluminium. Right: Front end detail showing knurled damper collar for adjustment.

# THE OPTIMUM MID

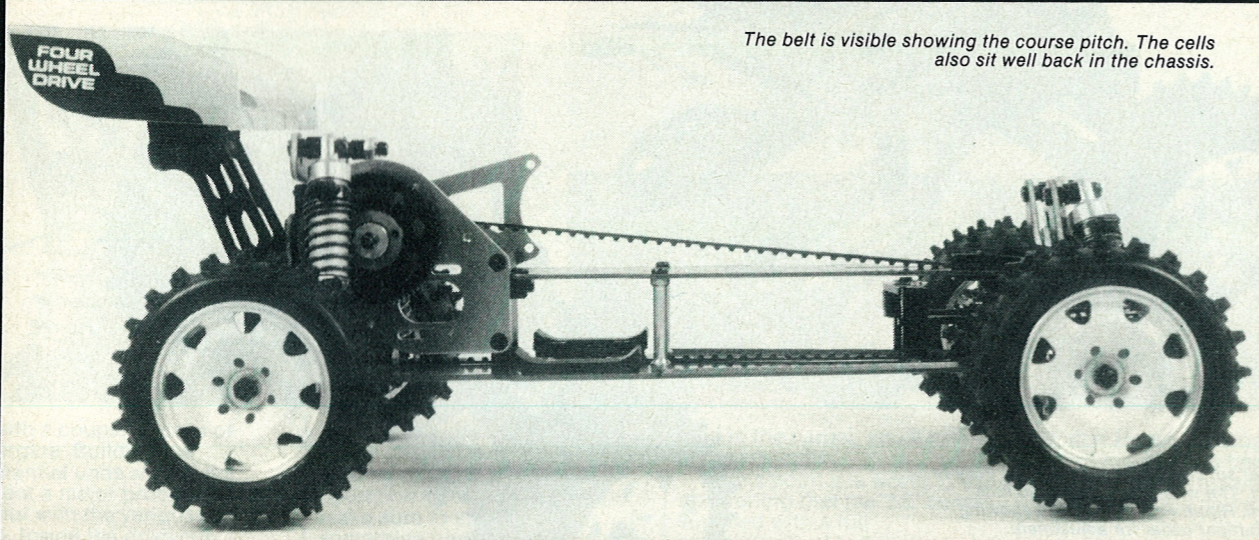
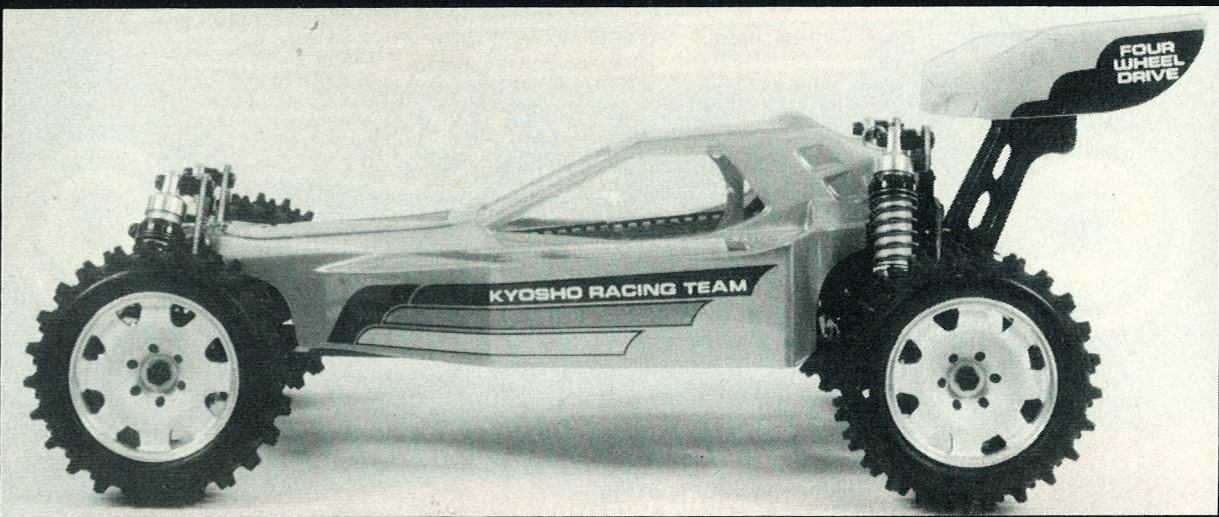
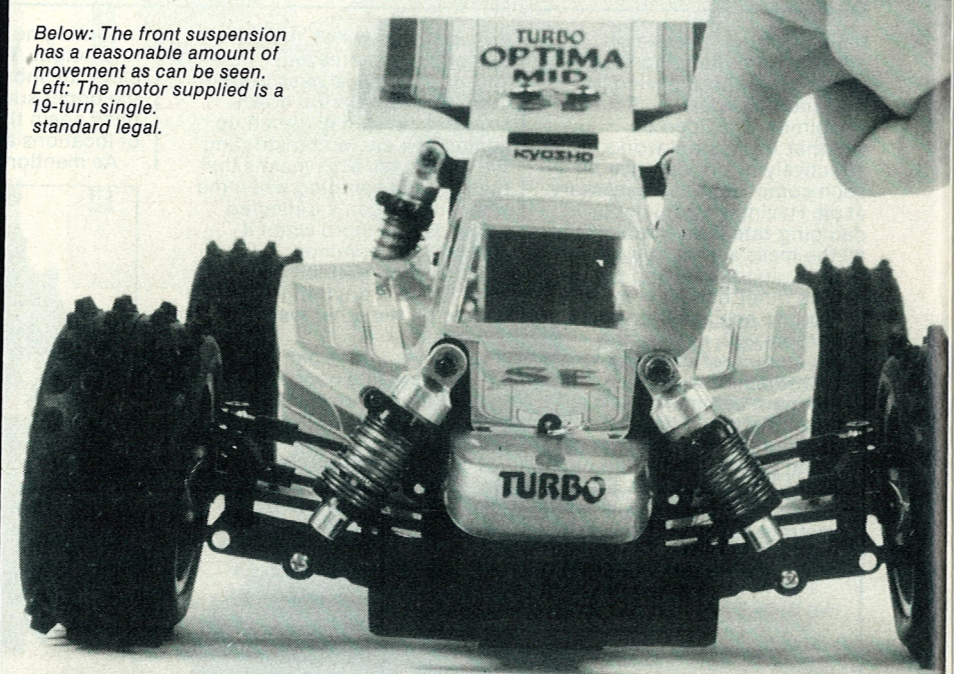
*Kyosho's Special Edition*



Below: The front suspension has a reasonable amount of movement as can be seen. Left: The motor supplied is a 19-turn single standard legal.



Far right: The gear-box cover is moulded in tinted lexan. Right: The rotary speed controller supplied is tough and looks great. Below: The neat bodyshell fits well and looks good too!



The belt is visible showing the course pitch. The cells also sit well back in the chassis.

