

No sooner had I made my stand for 2-wheel drive in 1988 in October's issue's 'Ultima' review than a new 2WD car from *Kyosho* thumps onto my doorstep. Presumably our illustrious editor now thinks he has found the ideal depository for any 2WD kit that comes his way (perhaps this would explain why I didn't get to review the 'Optima Mid' last issue!) In any case I don't really mind, particularly when the car in question is easy to build, has quality components.

**Such a car is the Raider**

At this point I have to confess to some initial misgivings about the car. Firstly, why have *Kyosho* produced another 2-wheel drive car so soon after the introduction of their excellent 'Ultima'?

Secondly, why have *Kyosho* produced another 2-wheel drive car which in my humble opinion isn't as good as the aforementioned 'Ultima'?

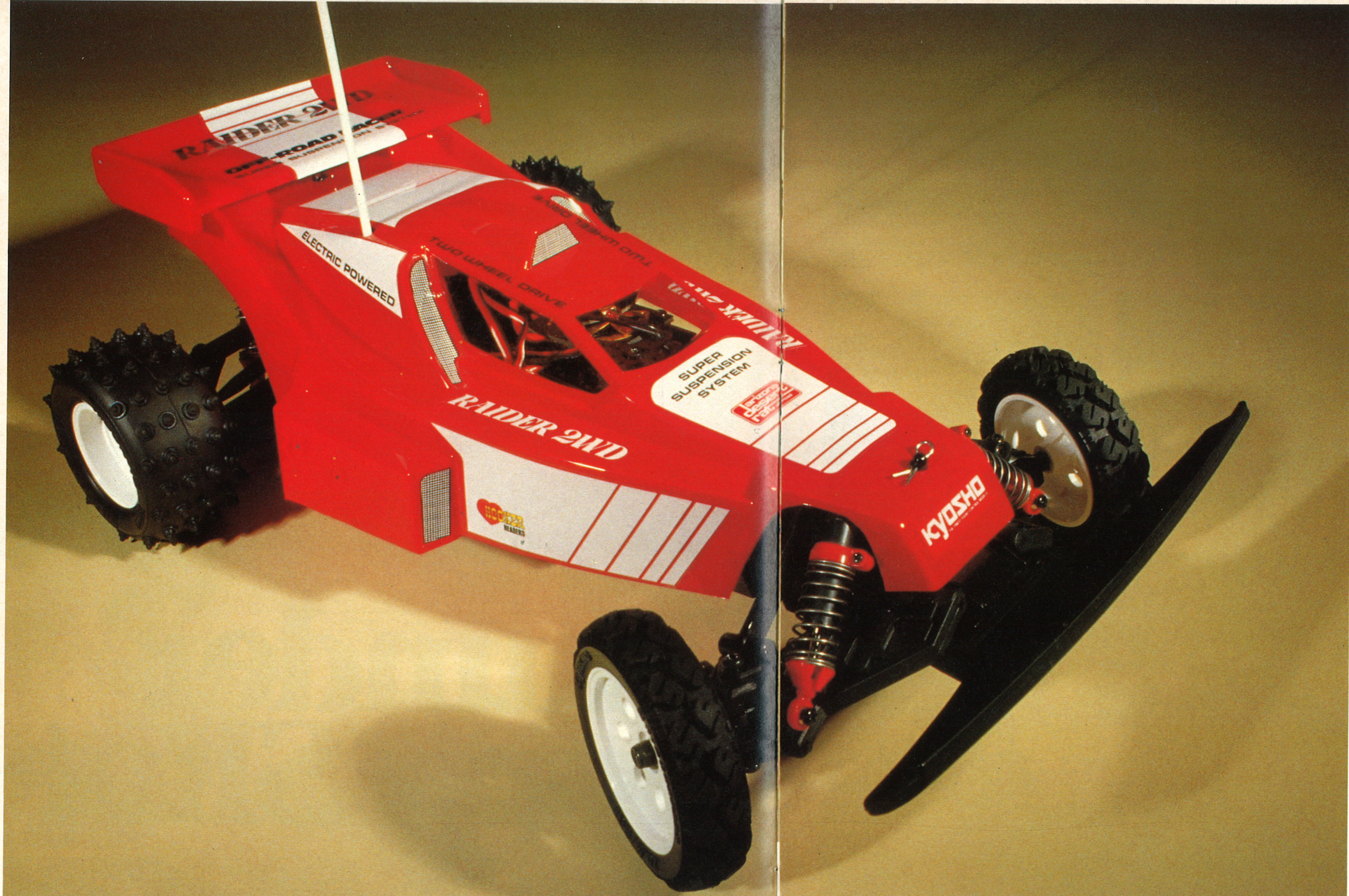
Fortunately I soon got the whole picture, particularly in respect of the price difference between the two cars. The Ultima sells at approximately £100 whilst I am reliably informed that the 'Raider' will retail for less than £60.

Hmmm. £40 difference, that could mean a complete set of ball races, or a full complement of 'Option House' shocks or even a modified motor.

Then, after a little prompting from UK *Kyosho* importers *Ripmax*, the penny dropped. The basic idea behind the 'Raider' is to provide a low-cost starter car with one major difference. Most starter cars are only able to keep their owners interested until they have actually mastered the rudiments of learning to drive. Once the skills start to come, so does the need for a car with better all-round performance to match. Basically, you need a new car.

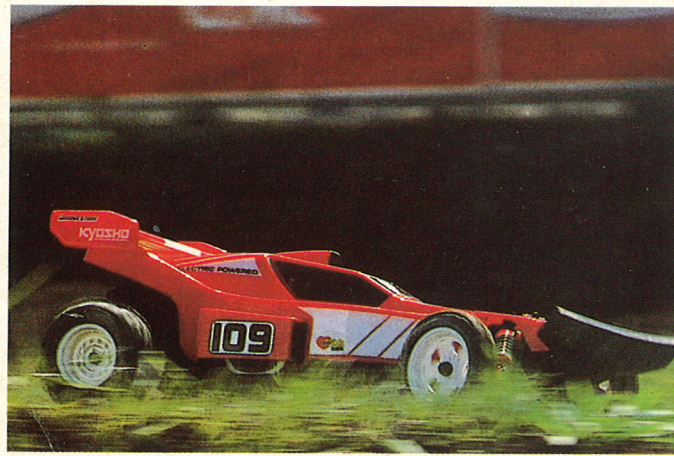
Well the 'Raider' is an attempt to make that unnecessary by giving a standard car with the option to uprate as and when necessary. The basic car has been designed to accept a whole range of high specification parts from *Kyosho's* 'Option House' catalogue such as the above-mentioned ball races, shocks and motor plus a few other goodies to boot.

The idea is a good one because not only does it keep the costs down (remember you don't need a new car) but also allows the beginner to compete at higher levels as their skill factor increases.



Lewis Eckett  
tries his hand  
at two-wheel  
drive

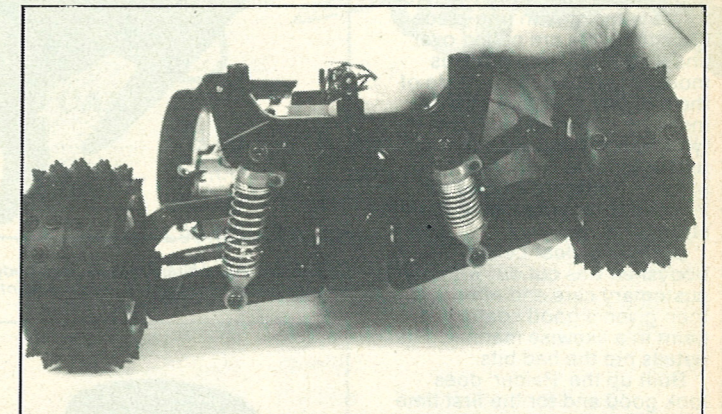
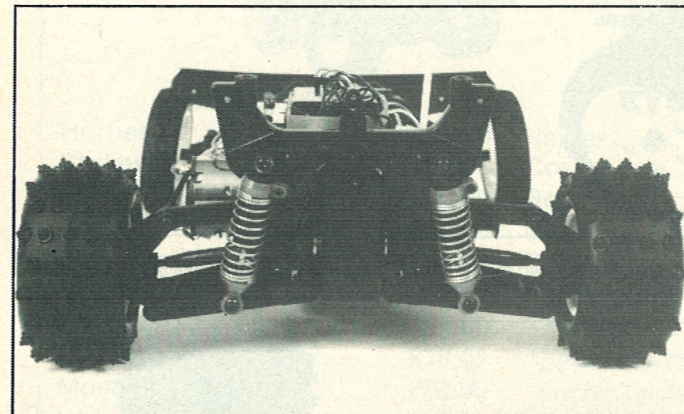
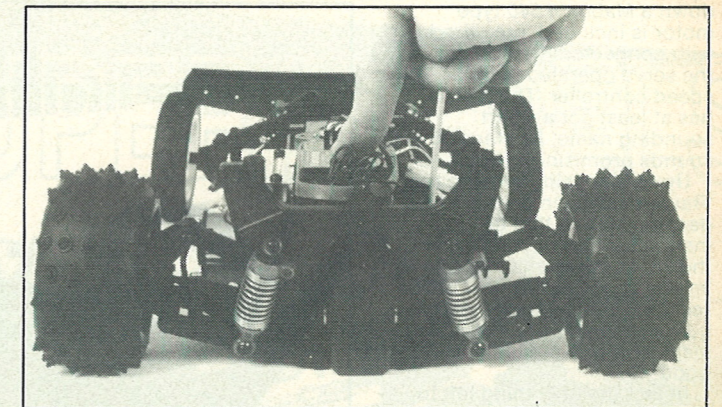
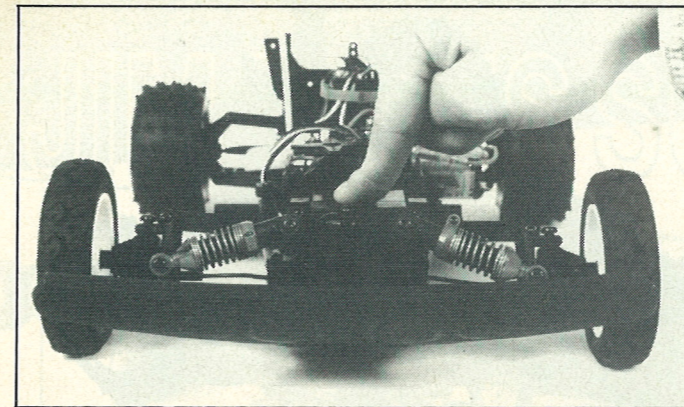
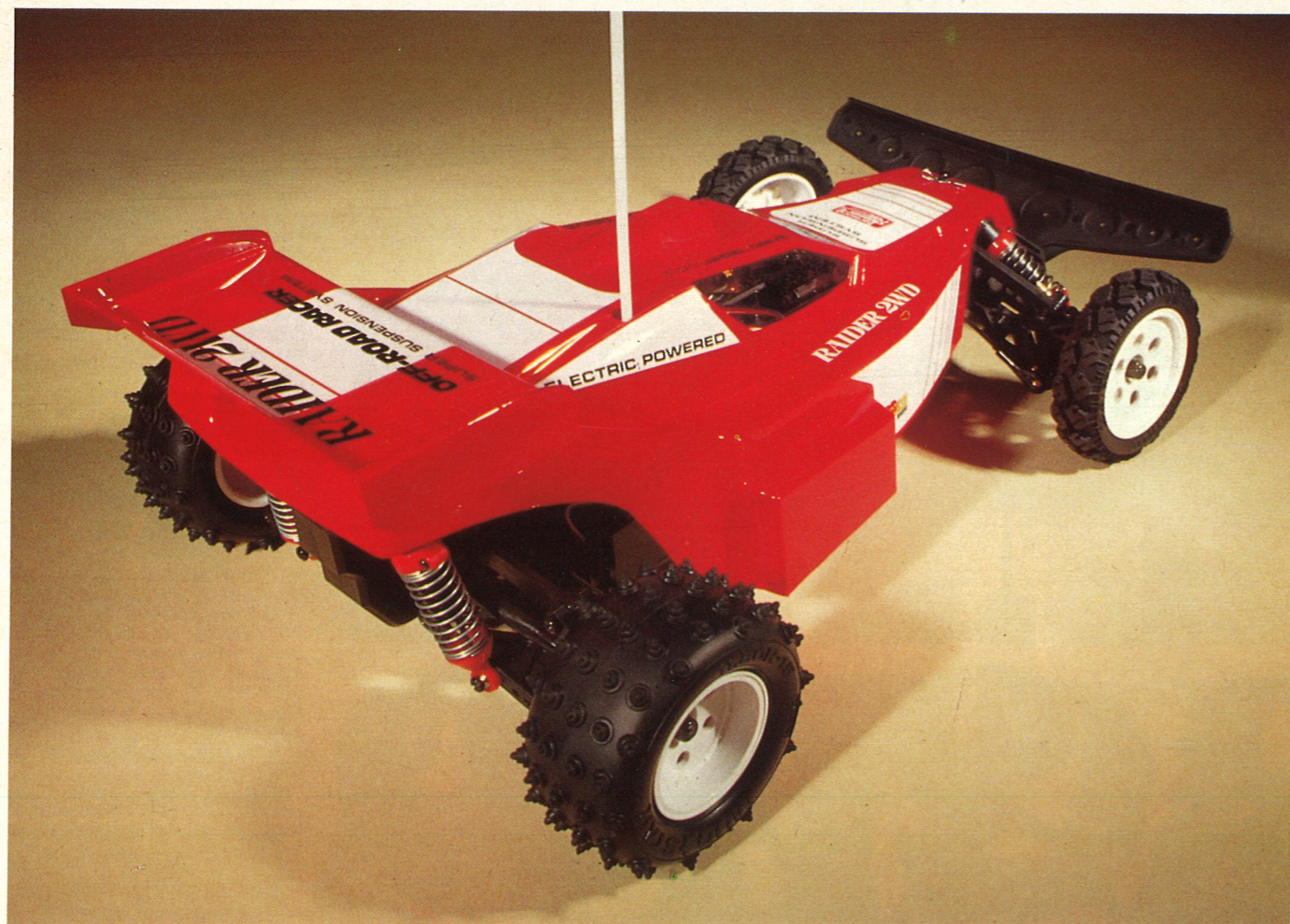
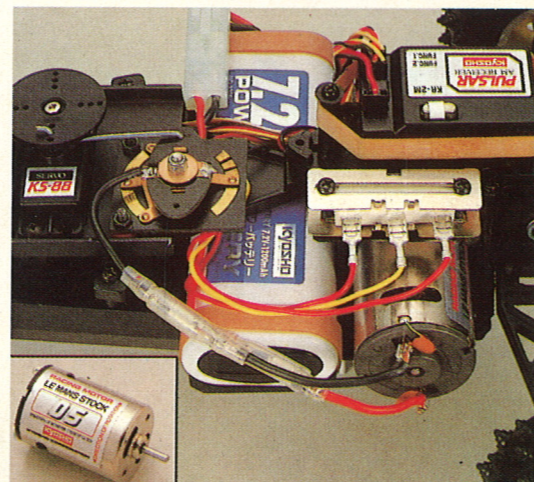
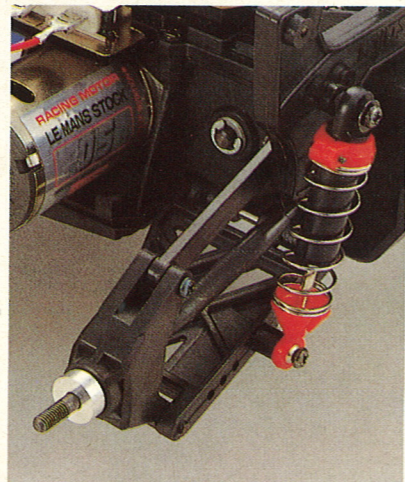
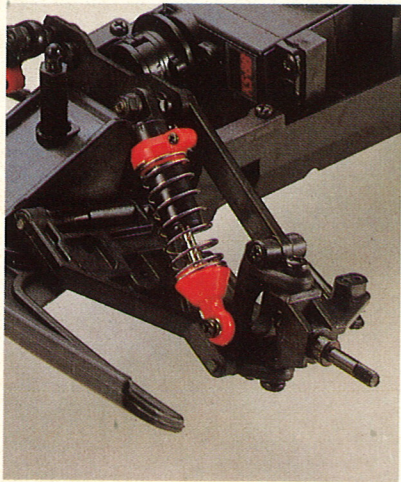
# RAIDER 2WD



All this assumes that the basic car is good enough in the first place. Happily I can conform that the 'Raider' is perfectly up to the job although in the 2-wheel drive field the 'Raider' is pitched in with some stiff opposition. Only *Mardave's* 'Meteor' kit is available at the same sort of price whilst the established *Associated* 'RC10' and the World Championship winning 'Ultima' are appreciably more expensive. Much of the 'Raider' has a familiar ring to it which is not surprising since many of its

components are taken from the 'Rocky'. The front and rear wishbones, gearbox and differential are all 'Rocky' components. The chassis however is brand new and follows the Japanese tradition of an injection-moulded channel - or bath tub if you prefer. Moulded into the chassis are the *Ni-Cad* battery mounts which will accept seven cell racing packs if you prefer. The front suspension has chunky lower wishbones and a non-adjustable upper link. The link could be changed for the

Left: At speed! The Raider handles the bumps very well. Below left: The front shocks are angled at 50 degrees. The rear end is also sprung by the same dampers as the front. Below: The Kyosho standard 'Le Mans Stock OS' motor is included in the kit.



adjustable version if a change in camber angle was required. The front shocks supplied in the kit are simple plastic coil-over friction dampers. Their short throw limits suspension movement at the front but not to an unacceptable degree.

Shocks are key area for change with the Raider with a choice of different types in *Kyosho's* range available. The alloy red-anodised units supplied with the 'Ultima' will fit perfectly and these can be obtained separately. Otherwise the excellent 'Option House' type can be substituted instead, although an alternative front mounting plate may need to be made to take the larger shocks. The rear suspension is once again a 'Rocky' system similar to the front. The rear shock mount curiously has the provision for fitting larger shocks along with a choice of four placement holes in the

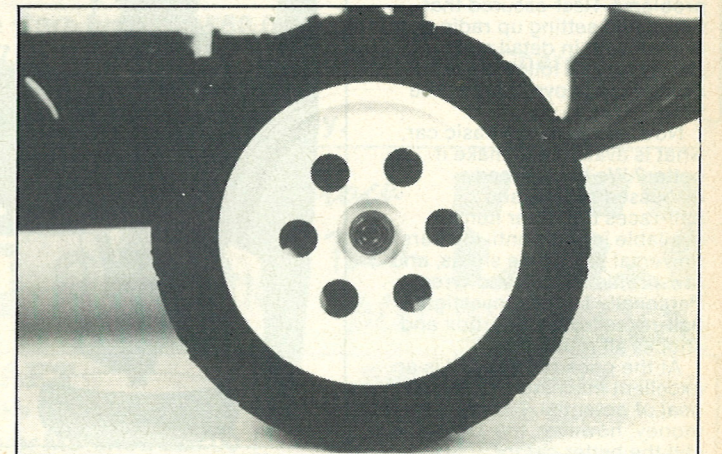
lower wishbone. For the life of me I cannot see why *Kyosho* didn't provide for the same on the front end.

More 'Rocky' components feature in the drive system - in fact the whole gearbox is from that car right down to the geared differential. No ball-races are supplied although the metal oilite bushes supplied are an adequate replacement. If you are contemplating ball-races then start installing them here. The differential incidentally comes pre-assembled which is nice if this is the first time you have encountered just such a device.

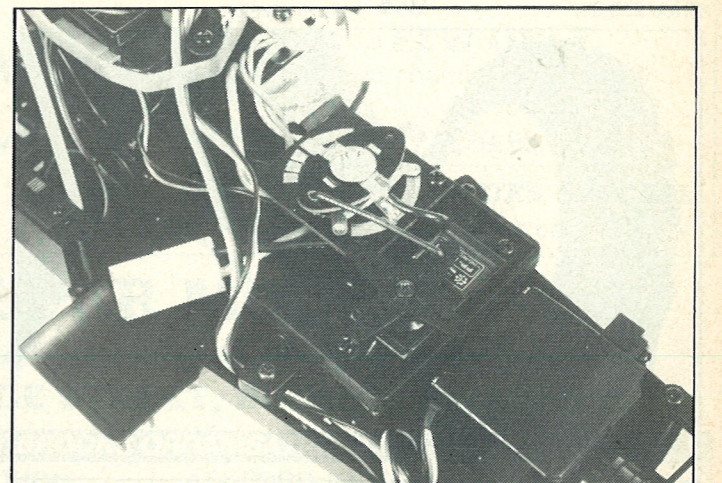
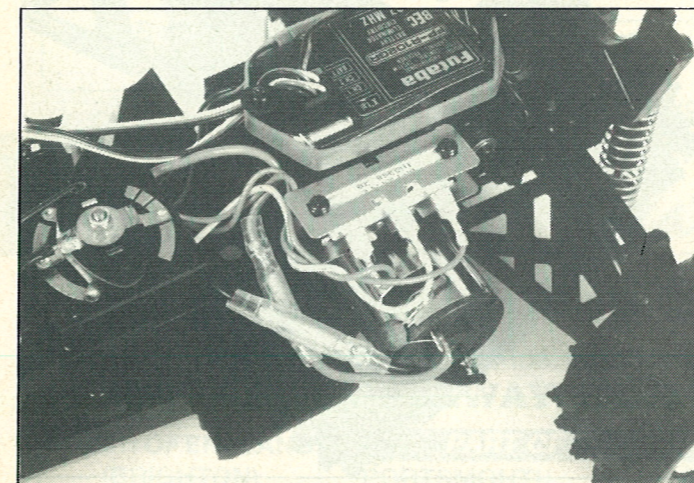
Much has been made of designs lately which have the motor mounted in front of the rear axle (i.e. mid-engines). Alone of all the 2WD cars so far available the 'Raider' is the only car with this feature.

Again as a method of keeping the overall kit cost

Top left: The front end has limited movement with standard shocks but 'Option House' units would put this right. Top right: The rear end would also profit from 'Option House' shocks. Left: The rear end has a very wide track. Right: The movement of the suspension should soak up most bumps.



Below: Standard 3-piece controller is used of course with reverse. Left: The resistor and receiver mount above the motor but are out of harm's way.



down a Mabuchi 540 type motor is included, pre-wired with connectors to plug into the servo operated resistor speed controller. The motor has at least got a smart sounding name, *Le Mans 05* – sounds promising enough.

Up to this point building the 'Raider' has been problem free despite the fact that no instructions were included with the kit. I understand that this 'minor' problem has now been rectified. Still without factory guidance the 'Raider' was at least together and looking good.

In fact the only thing left to accomplish was fitting the tyres to the wheels. With one-piece hubs the tyres are pulled over and seat firmly into grooves moulded around the outside of the hub. My attention was instantly drawn to the front tyres which feature a very useful-looking S-shaped block pattern. These look good for 2-wheel drive where a bit more strength is required.

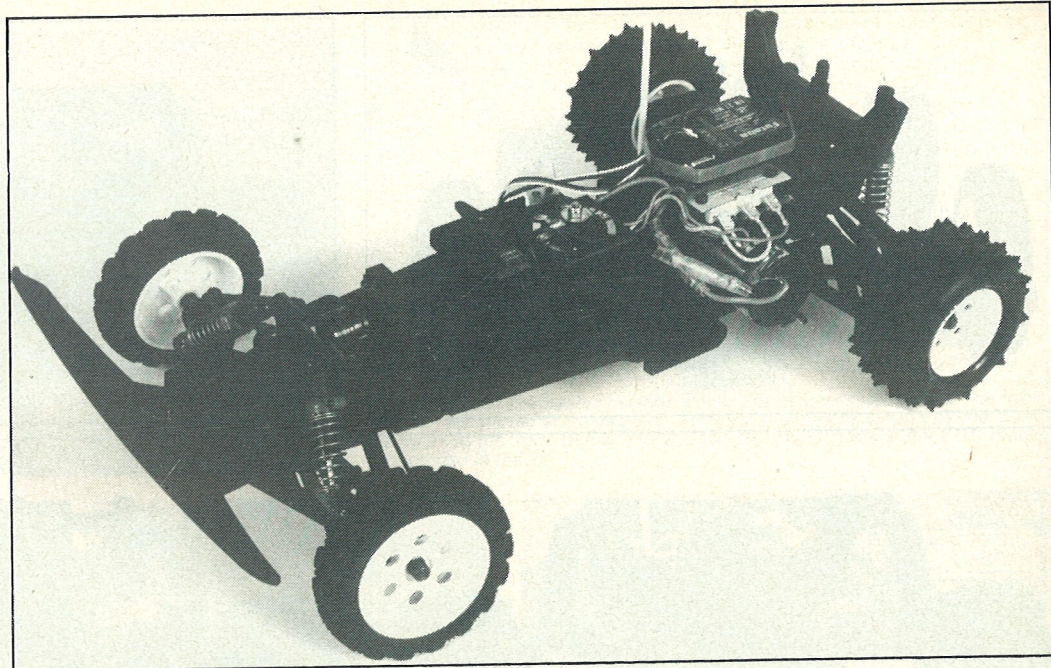
Lastly the clear Lexan bodyshell was cut out with my customary care and attention then given a good coating of paint in a likewise manner. The details hid the bad bits.

Built up the 'Raider' does look good and for the first time you notice the very wide rear track.

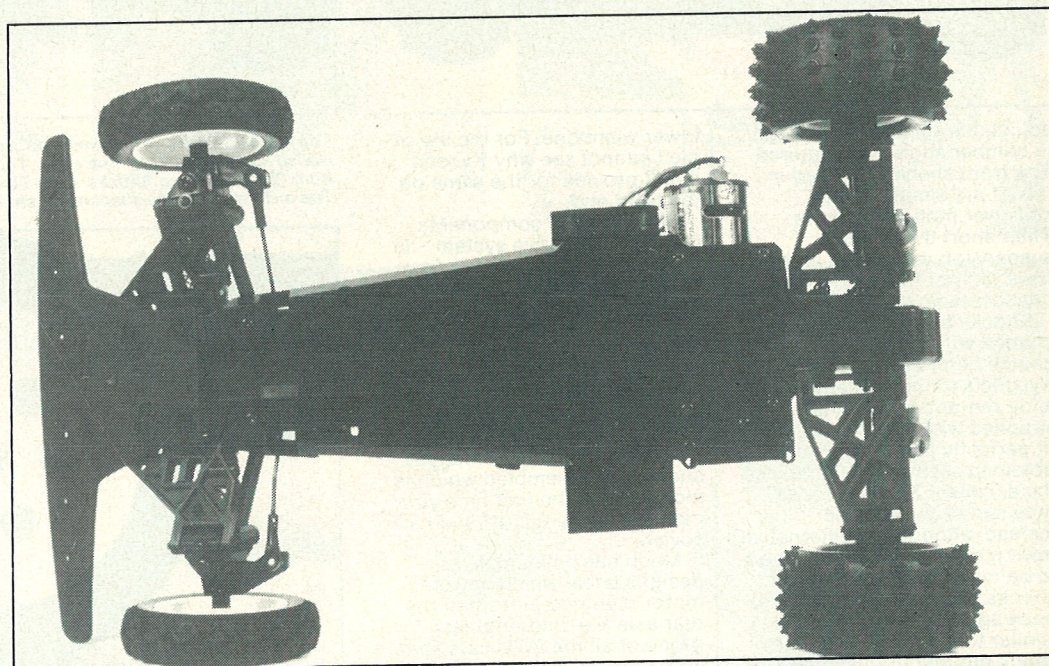
Constructionally speaking (aside from having no instructions) there were no problems. Rest-assured that fitting and setting up radio gear is dealt with in detail and providing you follow *Knosho's* advice, will prove trouble free to fit.

Now you have the basic car, what is available to make it better? We have already discussed shocks and ball-races but other items available include anti-roll bars, universal joint drive shafts, and low-profile wheels and tyres. Personally I would investigate ball-races for the gearbox and shocks all round first.

At the price the 'Raider' is an excellent machine with a great deal of potential. For my money, however, the 'Ultima' is still the better car for competition 2WD racing. Available from *Ripmax Stockists*. Price £59.95.



Above: The completed chassis, less body – being mid-engined the car should have excellent turning ability. Below: A smooth undercarriage is another advantage incorporated into the 'Raider'.



Below: The front tyres are of 'tractor tread' pattern – and should work on most surfaces. Right: The rear tyres are 5 x 4 studded and are made from a soft plastic.

