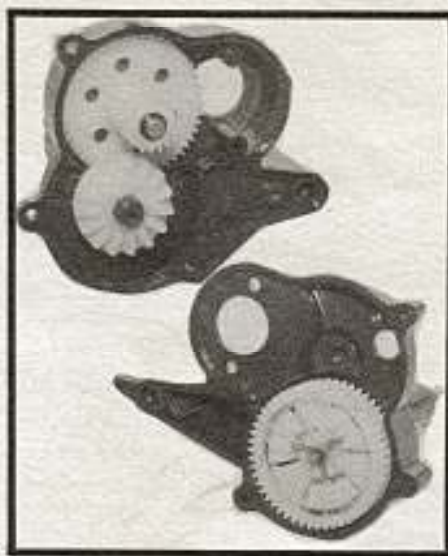


AFTER A QUICK glance at the box lid of the 'Hornet' kit you could be forgiven for thinking that this latest 1/10th electric buggy from Tamiya is a 'Grasshopper' with a different bodyshell on. However, you would be wrong.

Although the 'Hornet' incorporates most of the components of the 'Grasshopper' kit, subtle modifications have been carried out to improve on the original design. The majority of these changes are to the rear suspension system which theoretically improve the transmission of the power to the ground by reducing the tendency of the rear end to hop about.

Right: the two halves of the 'Hornet' gearbox revealing the hefty, plastic geared differential. Five Tamiya, non-flanged races are needed to fully ball-race the unit.



# Hornet!

Lewis Eckett gets stung into action with Tamiya's latest 1/10th electric Off-Roader.



Above: on fast smooth surfaces the 'Hornet' can really get wound up and provide a 'stinging' performance.



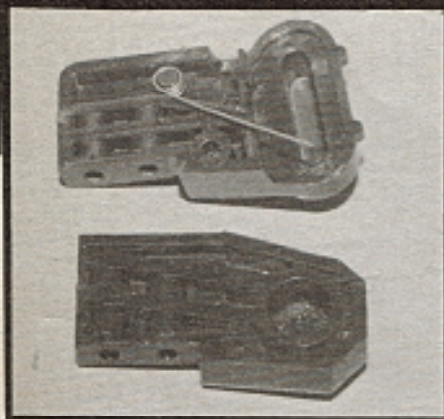
**TAMIYA**

Other obvious changes include a 540 size motor, speed controller to suit and clear polycarbonate bodyshell.

It's interesting to debate just what Tamiya's policy of kit production is, as the changes made to the 'Hornet' are so fundamental that it is difficult to see why they were not incorporated in the first place. Is it just a question of having two bites at the cherry? Keeping costs down? Or just plain lack of forethought? Whatever the reason, the speed of new kit production by Tamiya is quite amazing.

In any case these Tamiya products are still the ultimate in kit production combining quality, performance and ease of construction. And I mean that most sincerely folks!

Below: the 'Hornet' with its revised rear suspension is better equipped to handle rough ground and stunt manoeuvres.

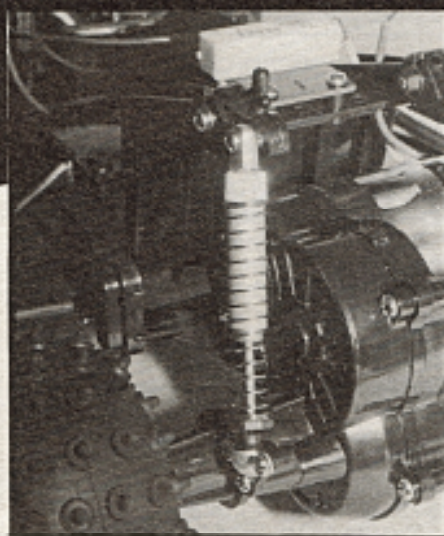


Above: the two types of axle stay. Top: the slotted 'Hornet' unit hairpin spring and bottom: the 'Grasshopper' item.

## Building up

Having already built a 'Grasshopper' the construction of the 'Hornet' presented no problems and the few surprises already mentioned above.

The assembly of the gearbox is identical to that of the 'Grasshopper.' However by clever use of some additional components the way in which the gearbox is mounted onto the chassis is changed. Before, the rear suspension could only move one way, up and down. Now side to side (or roll if you prefer) is allowed also.



The changes to the gearbox pivot point and the damper mountings are the reason for this.

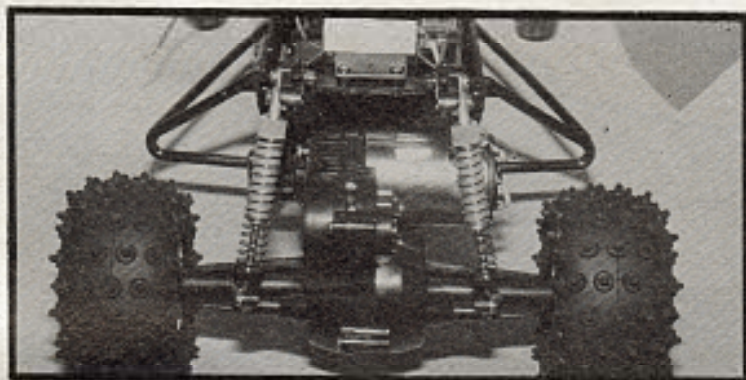
The two rear axle stays which plug into the chassis now feature vertical slots to allow the gearbox to move up and down and also twist from side to side. Two small hairpin springs fit inside the axle stays and loop over the gearbox pivot to provide a small amount of springing. (No doubt new springs of varying rates will be available from XYZ Models in the near future).

The dampers included in this kit are proper oil-filled units similar to those produced by Tamiya for the 'Frog.' Quite explicit instructions detail exactly how to prepare these units and it is worthwhile following them and taking your time. The dampers are fitted at the bottom with a moulded plastic ball which locates into a moulded 'cup' which is attached to the side of the gearbox. This ball-joint allows the dampers to follow the gearbox as it twists instead of restraining the unit. Where the damper is fixed to the chassis is also different and again new components alter the way in which the suspension works. All these changes actually lengthen the wheelbase of the 'Hornet' by a few millimetres compared to the 'Grasshopper.'

Top centre: the damper mountings allow the gearbox unit to 'float' and thus give greater suspension flexibility. Left: close up of the gearbox pivot locating into the slotted axle stays.

# Track Test

Right: the completed rear suspension and gearbox system. The shock absorbers are proper oil filled damper units which, coupled with the semi pneumatic tyres give controlled suspension.



production art and anyone fortunate to acquire one will have an ideal introduction into the joys and excitement of radio control car racing.

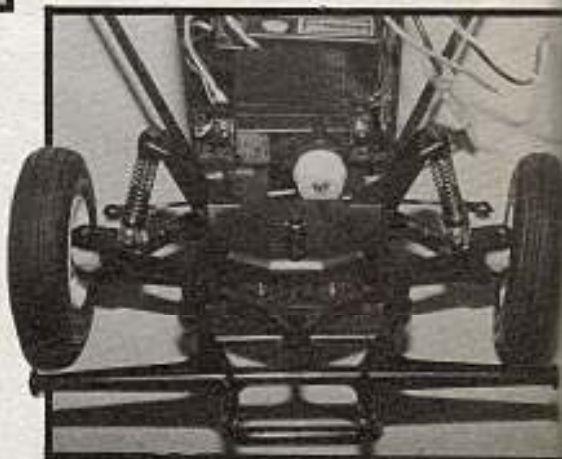
**UK Importer:** Richard Kohnstam Ltd., 13-15a High Street, Hemel Hempstead, Herts.

**Price:** Approximately £50.00.

Contact your local model shop for details of availability.



Left: the gearbox and solid axle is now able to swing from side to side as well as upwards and downwards.



Above: the single wishbone front suspension fitted with the coil spring dampers. The kit includes a servo-saver suitable for most types of radio gear.

With these changes the 'Hornet' rear suspension now has greater flexibility to cope with rougher ground and Off-Road circuits.

The front suspension is by and large unchanged except for the coil-spring dampers. Rubber O-rings are now included in the kit to slide over the damper shaft to damp the suspension movement as the shaft moves up and down. Two types of moulded cup are provided to retain the O-rings, to take single or double rings in order to alter the amount of damping.

Very few other changes are apparent; 'Superchamp' type rear tyres are included and as mentioned earlier a speed controller to suit the 540 motor now standard in the 'Hornet' kit.

Lastly and the most obvious of the changes is of course the clear polycarbonate bodyshell produced in the usual flamboyant Tamiya style and the stickers supplied in the kit will give you hours of pleasure in applying them to the shell. It's interesting to note the 'Hornet' catch phrase, previous cars have proclaimed "Go for it!" "No guts - no glory!" now we have "Anytime baby!"

Whatever next?

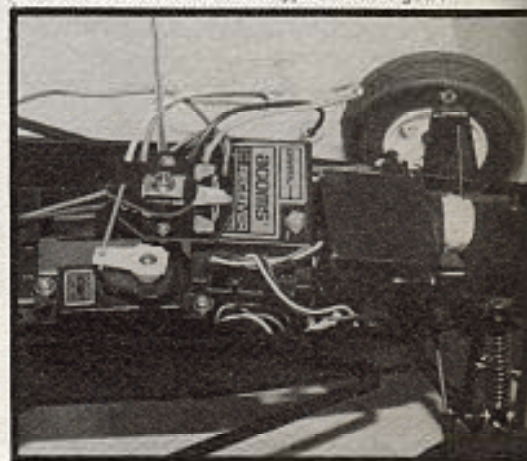
## On the track

The 'Hornet' is one of the lightest out-of-the-box Off-Road racers that I have come across and as such is very quick off the line with bags of Ni-Cad

power available to keep it moving for an above average time. The revised rear suspension system does help tremendously to keep the power flowing through the rear wheels to the track but is by no means perfect, particularly on rough ground. With the 'Grasshopper' it did sound fast mainly because the motor was revving like mad every time the rear wheels left the ground. The 'Hornet' also sounds fast and to be honest, probably is — in a straight line, but around the corners it loses out to the conventional, full suspension racing competition. However, I must stress that it is the driver, the man twiddling the sticks that determines ultimately how well a particular car will perform.

Racing apart: the 'Hornet' is another classic example of the Tamiya kit

Right: the completed car shown from underneath to reveal the Ni-Cad battery pack bay set into the bottom of the chassis.



Above: the R/C equipment sits within the 'bathtub' type chassis. Large rubber balloons are supplied to protect the speed controller.

