

The

# ★ ★ GRASSHOPPER

TAMIYA

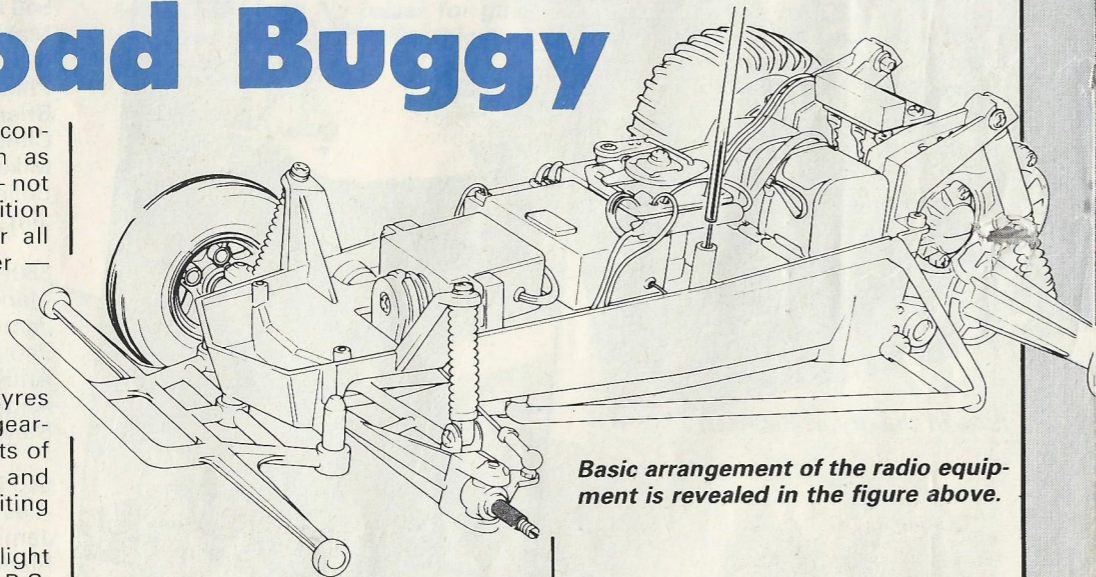
## 1/10th Electric Off-Road Buggy

Most manufacturers would consider four new models in as many months a sufficient effort — not so Tamiya. Maintaining their tradition of high quality products is their all new 380 model the Grasshopper — Aah So!

You've seen the wheels and tyres before and possibly some of the gearbox components. The rest consists of newly developed mouldings and metal parts to produce this exciting kit.

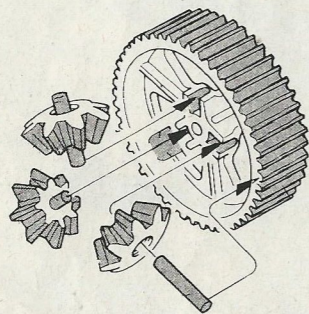
The Grasshopper features a light but tough bathtub frame of A.B.S. resin which, when coupled with the fully detailed injection moulded body, forms a monocoque construction that is exceptionally strong. Shades of Formula 1 practice here. . .

Suspension at the front is a swing axle system independently sprung with coil shocks. The rear suspension is a damped rigid axle by two large long stroke shock absorbing coils. (The race proven oil filled shocks SP5193 can be fitted — but be sure to use the springs in the kit — the racing ones are far too hard.)



Basic arrangement of the radio equipment is revealed in the figure above.

Three bevel geared differential is used, as in the Wild Willy.



Resin bushes are fitted throughout the kit but everyone of them can be replaced with a bearing including the small one in the counter gear (part no. B2 — we got ours from Howes Models, Oxford). Careful assembly of the gearbox will pay dividends later — be sure to loctite the bearings in for firm seating.

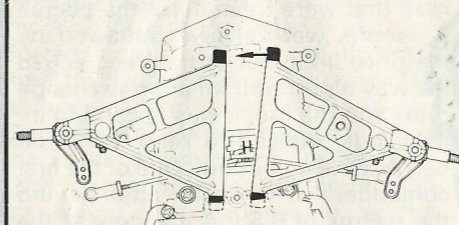
The differential spur gear is familiar from the Wild Willy, Opel and Audi gearboxes. Secure both sides of the gearbox and the transmission section is virtually complete.

The 380 motor on its adaptor plate is supplied in the kit. The motor pinion comes fitted so there's no chance of bending the motor shaft belting it on with a 3lb hammer (remember the Subaru and the Lancia?).

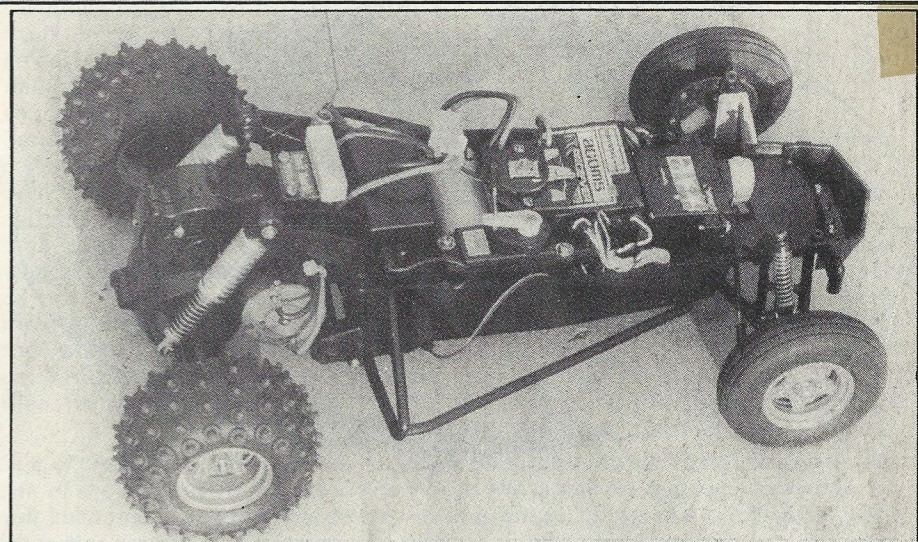
Choose either 380 or 540 motor options then bolt the completed gearbox to the bathtub chassis. The assembly is free to move up and down about 15mm which doesn't seem enough travel. However, it appears adequate as our track test shows.

The Grasshopper runs on ribbed front tyres (Sandscorcher, Superchamp type etc.) and the paddle type Sandscorcher rears. Ensure you mount the rears on the wheel hubs the right way round.

The chassis serves to house the radio equipment in its top half — transverse steering servo with directly operating servo saver with five alternative servo output discs (like the Frog). The servo is rigidly secured on mounting posts and the wire tie rods (we've fitted the 3mm versions) have the usual snap over ball joints.



The front wishbones are aligned to eliminate wheel deviation as the suspension works. Body fixing is positive with four securing points.



Speed controller is a new version of the three position wiper type. A single resistor is fitted complete with 'Do not touch' decal — it does get hot.

Conventional receiver battery and switch harness fit in neatly and can easily be replaced with a proprietary electronic speed controller (our Quaser from Star Electronics dropped straight in).

The battery is located under a sliding plate in the base of the chassis. Either five cell or the shaped six cell battery will fit. Routine maintenance is

**Super Champ spikers, racing shocks and a 540 class motor can be fitted to give the Grasshopper a blistering performance.**

necessary from the top of the chassis so the body has to be removed (4 self tapping screws hold it in place).

Body is the usual detailed injection moulding this time in white. A driver figure, spot lamps etc. and the excellent mylar decal sheet completes the effect.

Side 'nerf' bars are functional and attractive.

### Track Test

All of the preceding was accomplished in double quick time as we wanted to put the car through its paces.

Armed with a couple of sets of fully charged batteries it was off to the Worlds End Circuit.

After the recent Team Enduro the track was quite cut up — in fact it was impossible to get out of the 'banked turn' with the front bumper in position.

This was duly removed (remember our Frogs don't use them either) and some reasonable lap times were achieved. Comparable to most existing choices in the 380 class its light weight and relatively simple construction will appeal. A little more lively over the bumps but that is to be expected with its lighter mass. Very positive steering ensured good turning ability and the differential enabled the available power to be put down evenly.

Upgrade the Grasshopper with racing shocks, 540 motor and bearings throughout and you have a very fast machine.

Perhaps a shade difficult to handle positively compared with a Frog it nevertheless shows plenty of potential.

Yet another winner from Tamiya, available from most good stockists.

I wonder what the next one could possibly be called — the Ant eater perhaps? □

