

# Track Test

By  
DAVE DAY



**TAMIYA**  
TAMIYA PLASTIC MODEL CO.



# TOYOTA

1/10 RADIO CONTROL 4WD OFF ROAD PICK-UP TRUCK

# 4x4 PICK UP





OFF-ROAD VEHICLES whether they be for racing or just fun, have become almost synonymous with the name *Tamiya*. Such a reputation takes some living up to, and it would be all too easy for them to rest on their laurels and wait for the opposition to catch them up. Not so in *Tamiya*'s case and they are constantly producing new vehicles in an attempt to further the state of the art.

Their latest model, the *Toyota* '4x4' pick-up, introduces a new idea in the shape of a 3 speed gearbox, with 4 wheel drive automatically being selected when in the lowest ratio. A third radio channel is required to change gear by means of a 'gate' which is attached to a normal dual axis stick. These are available in a variety of shapes to suit various popular makes of radio, while the importers, *Riko*, have available a special version of the *Acoms* 27MHz AM equipment specifically tailored for this vehicle. It is, however, possible to utilise 2 channel equipment and select gears manually should you so desire.

### Construction

As we now expect from kits of Japanese origin, everything is beautifully engineered and packed in bubble packs or polythene bags with labels describing the contents. Despite having only Japanese instructions in this early pre-production kit, they are so concise and well-drawn that no trouble was experienced in understanding each stage of the construction. Subsequent

purchasers can rest assured that their kits will contain the normal first class English language booklet usual in *Tamiya* kits.

The first item to be tackled is to waterproof the gearbox and speed controller by smearing all joints with the silicone rubber compound provided. Having disposed of that little chore, work can begin on the ladder frame chassis which has leaf springs at each corner, complete with shackles. Each screw, bolt or whatever is called up by diameter and length and is identified by referring to the label on the appropriate pack.

By far the most interesting part of the construction is the assembly of the two axles and the front wheel hubs. The axles are assembled from two case halves, axle, bevel gears and bronze bushes, remembering to oil everything first. A tube of threadlocking compound is included for locking up bolts and the need for this is indicated by a small symbol of a tube alongside the appropriate bolt in the assembly drawings. Having bolted up the axle cases, these are attached to the springs by means of U-bolts. Freewheels are incorporated into the front wheel hubs in the form of one-way roller bearings, and these incorporate a very simple and neat locking device.

Having reached this stage, I deviated from the instruction sequence to assemble the wheels. These have soft rubber tyres bearing the inscription 'Goodyear' (surely

'Bridgestone' would be more appropriate!) and perforated plastic liners to hold them in shape in lieu of air pressure. Stainless steel rims complete the assembly and produce a rolling chassis.

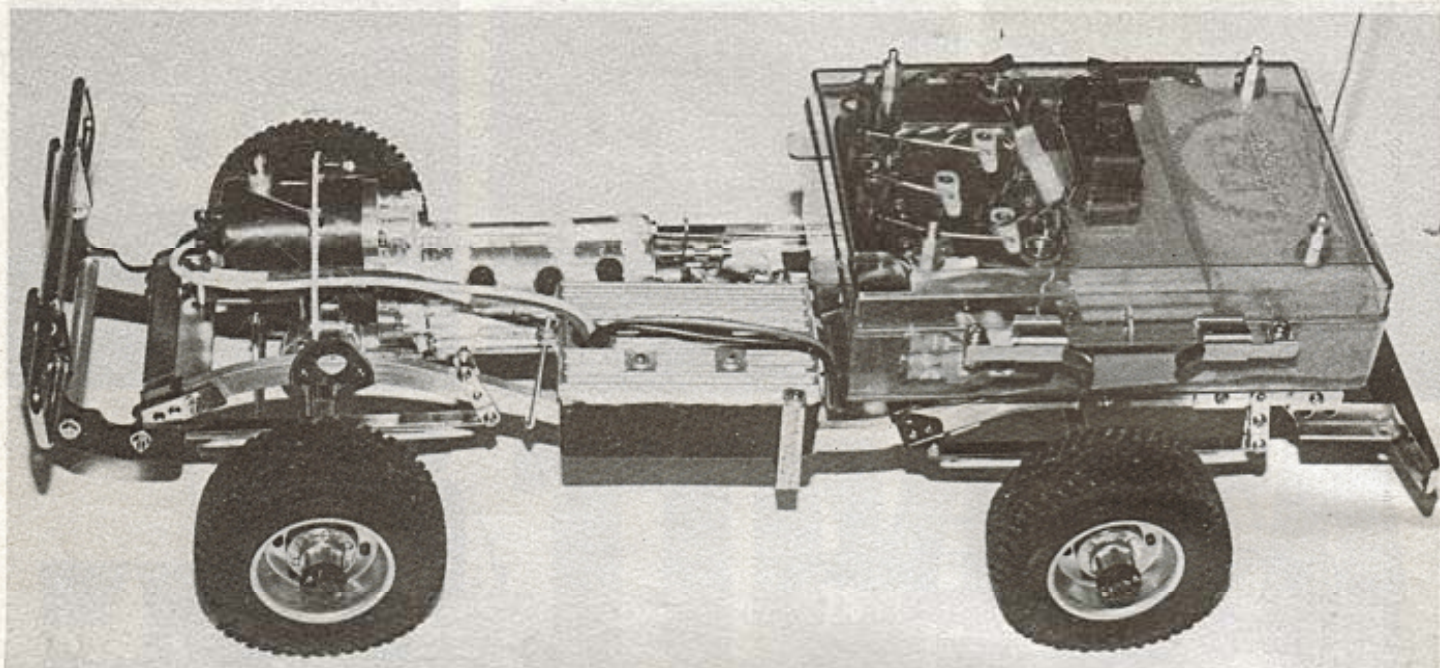
Returning to the instructions; the gearbox is added and the drive shafts connected up, followed by the addition of the speed controller, the motor wiring and the rubber boot to waterproof the motor.

Next in order is the assembly of the radio box and the fitting of the radio gear to the fully adjustable mountings. The radio linkages are taken out of the box via large servo savers pivoting in tubes moulded into the base of the box. Unfortunately, there is a considerable amount of play present at this point, which makes precise control rather difficult. The R/C switch is mounted in the top of the box and protected by a large rubber boot.

After oiling the gearbox and fitting the rubber covers to the oil holes, only the main drive battery has to be fitted to allow the chassis to be given a trial run.

This battery is a special 6 volt 4 amp/hour type which fits in the rear of the radio box. Standard 6 volt and 7.2 volt 1.2 amp/hour batteries can be used and were in fact used for this review as the special battery was not yet available.

First trials around the workshop floor showed that the lost motion in the radio linkages together with the rather 'sudden' action of the speed controller made it a



*Completed chassis minus body. Note all radio equipment and drive battery enclosed in waterproof box, and rubber boot protecting motor. Speed controller and gearbox sealed with silicone rubber compound.*

challenging task to drive the vehicle in such close confines. I was somewhat dismayed when a gentle reversal into a chairleg left me with a badly bent rear bumper. The rest of the vehicle is so solidly constructed that the rather frail nature of this bumper is somewhat surprising. A very stout 'roo bar protects the front of the truck from just about anything short of a nuclear attack!

### Body Shell

The body is made up of several substantial plastic mouldings and transparent windscreen and windows, which are designed to be screwed or bolted together. A driver figure is supplied with a

*Underside view of complete vehicle. Note universal joints in drive shafts and leaf springs at each corner. Plate in centre of chassis protects linkages to*

choice of heads (with or without helmet). This particular plastic can be painted and is supplied in white. Illustrations on the box lid show the truck painted red — my favourite colour. However, it was felt that most people would choose this colour since it makes a good combination with the vinyl trim supplied in the kit, so something else had to be found. The answer was *Humbrol* 'Baltic Blue', a medium metallic blue. When this was dry, the trim was applied with the results shown in the photos.

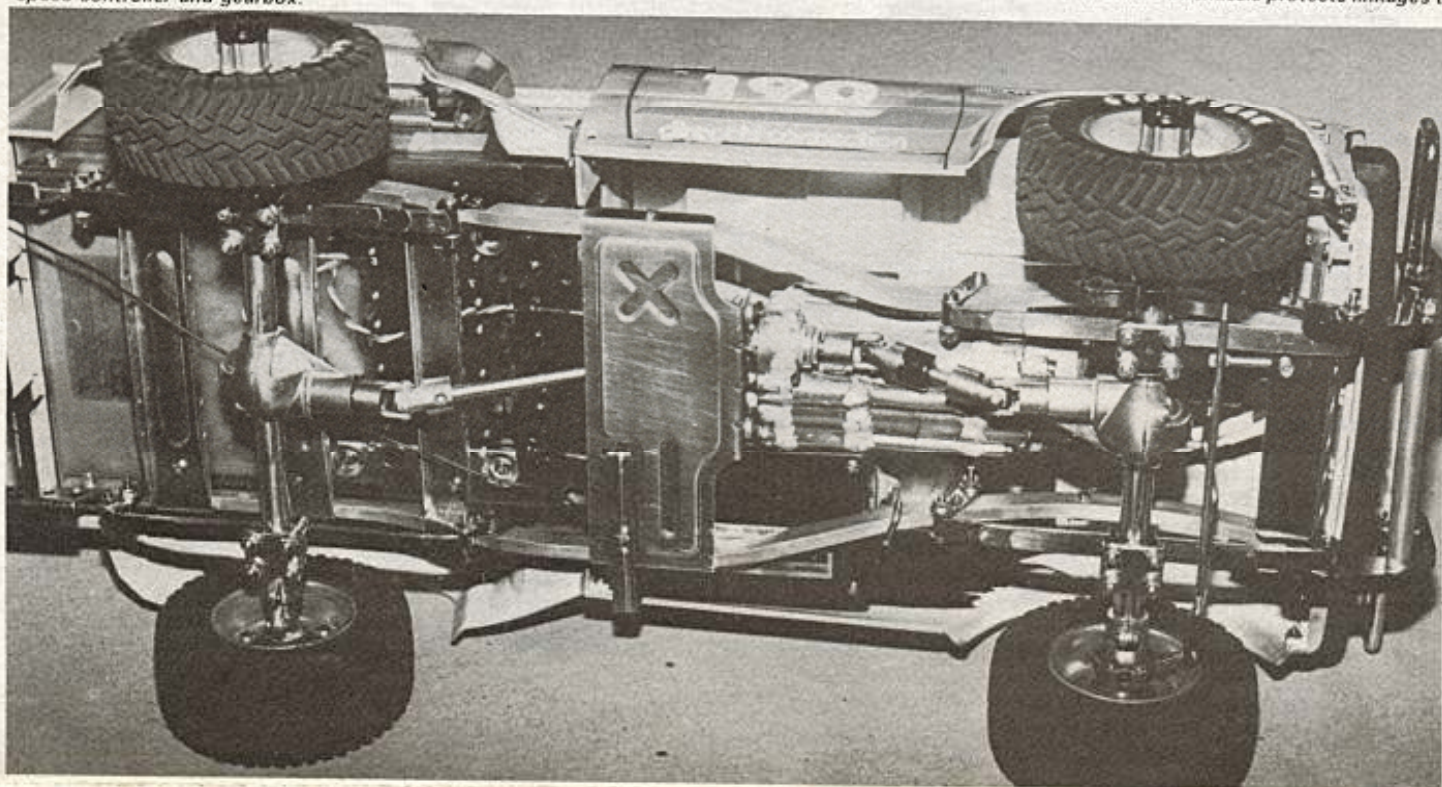
In its finished form, the body is in two parts. The front half comprises the bonnet and cab and is retained by one spring pin in the middle of the bonnet and slots in the cab

rear which engage with mouldings on the front of the radio box cover. Covering the radio box is the rear of the body which is retained by no less than four (4) spring pins.

### Performance

Prompted by my aeromodelling background, the first move was to weigh the complete machine. With the lightest battery (6 volt 1.2 amp/hour) it weighed exactly nine pounds!

Having found a suitable piece of rough ground, the performance was quite surprising. With plenty of space, the previously mentioned problem of fine control disappeared. In the highest ratio the





speed is quite high though acceleration is fairly tardy. The mid-speed gives reasonable acceleration but disappointing top speed.

However, it is in the lowest ratio with four wheel drive that the vehicle impresses most. It will proceed quite happily across a ploughed and harrowed field with a crop of cabbages just appearing! A 45° grass covered slope does not deter it in the least, nor does an inch or so of soft mud.

In practice, it is best to use the 4 wheel drive only when actually stuck and unable to move in the middle speed. On smooth ground, the mid-speed can be used to get the truck moving followed by a change into the high speed. On anything other than really smooth ground, there are usually at least two wheels in the air at any given time which is exhilarating and probably helps battery life. The shock absorbers from a 'Rough Rider' can be fitted as an option and this would probably prolong the spring life quite considerably as those on the review model have already acquired a 'set' in the opposite direction to that supplied.

The setting up of the gear linkage is quite critical and if incorrectly set it is fairly easy to end up with a box full of neutrals! Our review gearbox has become very noisy as a result of this treatment and is probably due for a service.

### Conclusions

An enjoyable off-road vehicle of solid robust construction and with a surprising performance which would probably benefit from the fitting of the optional shock absorbers.

Approximate building time, not including painting, 7 hours.

Distributed by Richard Kohnstam Ltd. Price £129.00. 6v, 4 amp/hour battery £39.99.

