



# 6x6

control these mechanisms and a six volt nicad is needed for motor power and radio gear. Finally the whole outfit is topped off with some moulded seating, a polycarbonate body and various bit of chrome finished trim.

I hope you can get the general picture now.

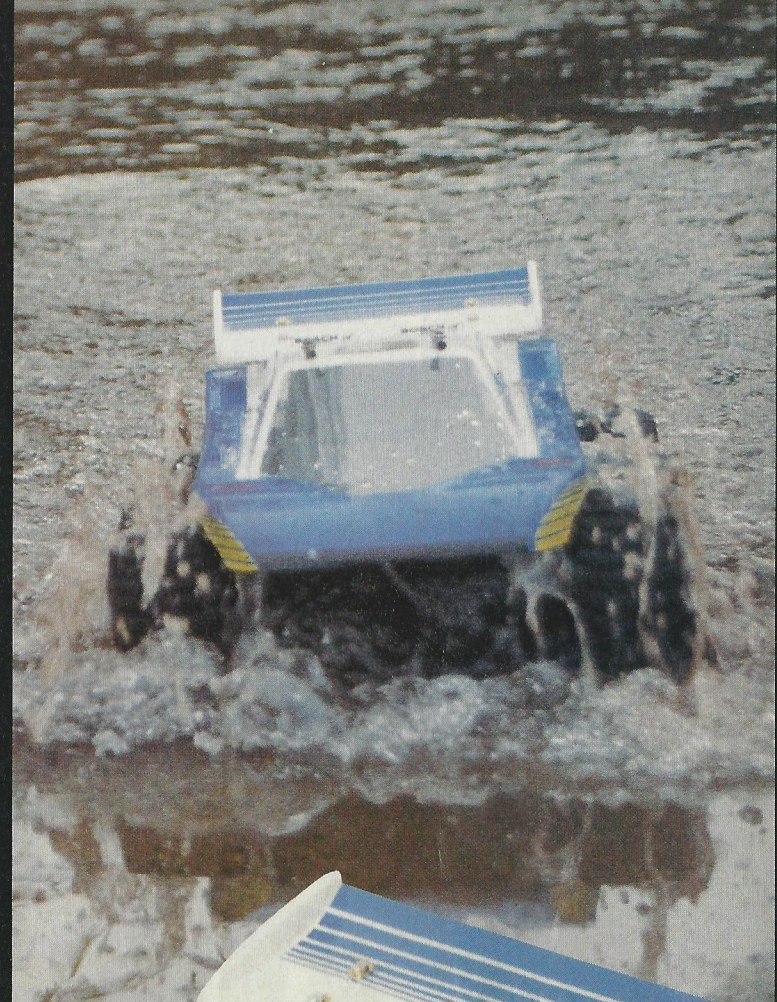
## Building

I have to say this kit is not for the faint hearted. If you, as an RC car enthusiast have been weaned on the completeness of Kyosho or Tamiya kits then this kit could be a bit of a culture shock.

Truthfully there is nothing beyond the capabilities of most enthusiastic RC maniacs, but it will require more effort than just slotting the bits

Well as odd perhaps as all this might sound the Robbe Rodeo 6x6 is in fact modelled on a real vehicle.

Rodeo seems to have the ability to go almost anywhere with 6 wheel drive.



The phone call went something like this. Ed. "You said you wouldn't mind something a bit different" Me. "Yes, anything" Ed. "How about big wheels" Me. "Ok" Ed. "Its over to you then, remember you said you didn't mind big wheels"

Well IT duly arrived. Sure enough it is something different, not your average on or off road racing buggy and yes he was right about the big wheels.

Let me run down the basic specs. and see if you can get the general flavour.

Six wheel drive, skid steering, two motors, toothed belt transmission, very large tyres with paddle like tread, probably amphibious.

Well as odd perhaps as all this might sound the Robbe Rodeo 6x6 is in fact modelled on a real vehicle. Well, it might not be a strictly scale model of an actual vehicle but the style and drive configuration does mirror a

number of real A.T.V.s.

All Terrain Vehicles as this style of vehicle is called, are some of the most mobile off cross country vehicles made. During my time of writing for a full size vehicle magazine I was fortunate to drive and travel in a couple of the real things, and that was some experience. It is interesting to note that the mechanics albeit model size and electric powered do have more than just a passing similarity to the real thing. The driving technique on the real vehicle was simple in theory, but did require a certain amount of practice to become proficient. Having built this kit I now expect to have similar difficulties with the model.

## General

The basic configuration is a deep vacuum formed bathtub chassis/hull. In this tub are fitted the drive motors (2x550size) the reduction gearbox (1 for each side) are directly coupled to the motors and two toothed belts on each side of the chassis pick

up the drive and transfer it each of the six wheels. Very large drive shafts connect the drive from the drive belt pulleys and transfer the power through a plain bearing (inboard) and large ballrace (outboard) to the wheels. The bearings are held in outrigger assemblies that are bolted to the sides of the chassis tub.

Other components in the

tub include a resistor type speed control and another resistor controller which is used for the skid steering. The principle is to slow down one side of the Rodeo to travel faster than the other so turning it. A two channel radio is used to

## Geoff Driver builds the Robbe Rodeo 6x6

# RODEO



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together and running in a few self tapping screws.

Firstly remember that this is not intended to be an RC racer, it is more at the agricultural end of the hobby, so you are not looking to save the odd gram here or their. The odd pound or two might help, but grams are insignificant.

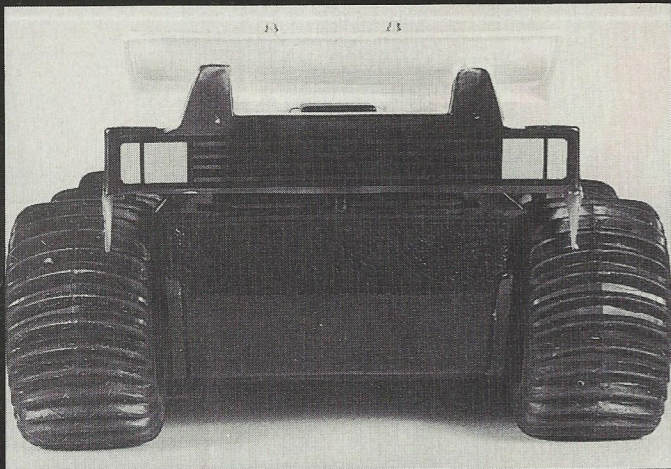
You WILL need some extra tools and materials not normally required for building a 1/10 buggy.

Virtually no tools are provided with the kit, so screwdrivers, spanners and pliers are necessary plus drill and drill bits not to mention some knives and in my case a small saw. In addition you will need silicon sealant, various glues (more of this later) plus oil and grease.

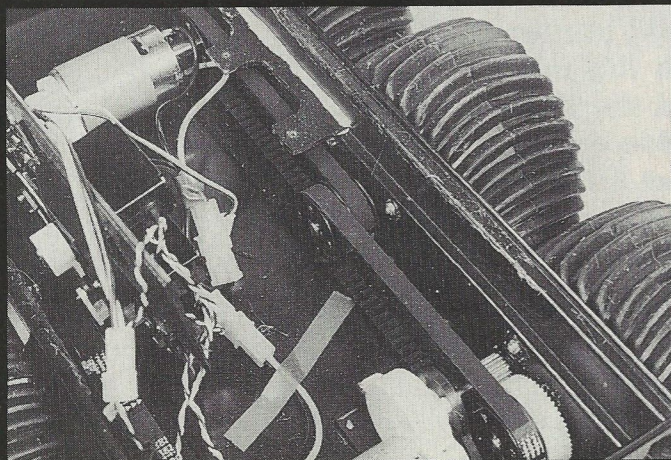
So in the strict sense of the word this kit is not totally complete. I can understand the non inclusion of some of the tools, but I would have thought it a good idea to include some glues, oils and greases.

Robbe is a German based company with an international market. So not surprisingly the instructions cater to a number of languages. Accompanying the written instructions are a list of components (spares listing) including some details of the materials used plus an illustration diagram which opens up to about A1 size (which is quite big). No problem understanding the written words even if the text was a bit crowded and small. The diagram although large and suitably detailed did on some occasions add more confusion than clarity. The need to keep the diagram "word free" and hence totally international probably did not help matters too much.

The outriggers that support the wheels and tyres were the first items to be fitted. These outriggers contain the bearings which will support the axles. With all bearings snapped into place, and I must say that they all fitted perfectly, no slop and nothing undersize, in fact a perfect fit.



**Rear view of the Rodeo shows just how wide and chunky the vehicle is.**



molten as the saw sliced through. This allowed the plastic sheet behind the blade to neatly join itself together again. So I carefully reconstructed a complete sheet.

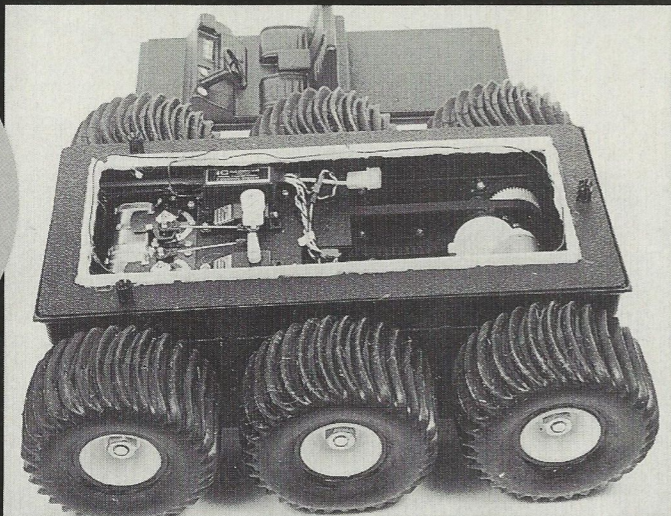
Well, the second day started Ok and I managed to cut out all the decking pieces from the single sheet. By this time the cuts were looking a bit untidy. Well, Ok they looked a mess. So another hour was spent tidying things up. Once again the Patron Saint of RC modellers (St. Tamkyaassoclos) was looking the other way and I managed to crack one of the pieces of decking into two. I cannot blame anyone other than myself for this little oops. However I do think that the material is a bit on the brittle side. Anyway a small problem considering what other excitement lay in store for me.

Assembly of drive shafts

**It is slow enough to make it easy for the slowest of drivers, yet you can take it where the most agile of buggies would fail.**

Ten holes must now be drilled through the tub chassis on each side to fix the bearing outriggers. Before fitting the outrigger to the chassis, the face of the outrigger where it touches the chassis is coated in silicon sealant, a messy business. Nothing too difficult here, just messy. Then tighten up the nuts and screws

To support various components within the hull a number of decks need to be fixed. These decks will be used to support radio gear and speed controllers as well as the body interiors and the body itself. The decking comes as a single sheet of ABS plastic about 3mm thick. The sheet is die stamped into the various cut out shapes required. All that is needed is



**Internals are packed in but if installed neatly the layout works well.**

to flex the sheet a little to snap out the required part. That is the theory. Whether my sheet was not die stamped deep enough or maybe it is a Robbe's way of telling me that I am inferior I don't know, but I found it impossible to simply snap the pieces off. After about an hour and numerous bleeding fingers and a foul temper I resorted to using an electrical fret saw. This was not much fun either. As I cut my way along the die lines, unknown to me the plastic had become

and gearboxes was relatively uneventful and in true Robbe style everything fitted perfectly. The motor/gearbox units are fixed with some self tapping screws to the base of the hull/chassis unit. I decided to use some silicon sealant around the screw heads in an attempt to prevent water sneaking in over the motors.

Now the instruction say stick in the deck unit that will eventually support the speed controllers. The instructions advise using a cyano-acrylate

instant adhesive. I must say that I did not much fancy that the glue would be very good holding the plastic plate to the plastic hull, so I decided to use a hot melt adhesive from a glue gun. Not the prettiest of jobs but it seemed to keep the parts together.

The electrics go in next. They are all assembled on a sub plate and screwed to the plate previously glued in place. No problem except for the mass of wires that I noticed coming out of the various controllers and motors looked as though they were about to get tangled up with the drive belts. I am not sure if I have the best solution to this problem but as an interim measure I am taping the wires into a single bundle to the floor of the chassis well out of harms way. A more permanent solution needs to be found.

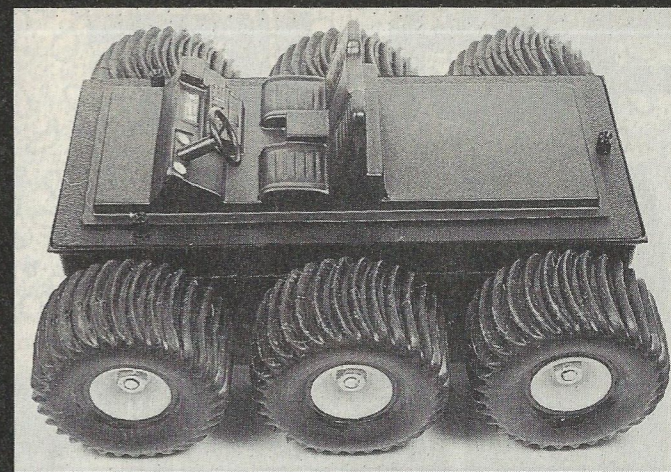
## Deck Out

This takes us to the final deck, the one that supports the internal mouldings (seats etc.) and the body. Once again instant glue is recommended. Well I thought may be I did get it wrong and I should have used the cyano-acrylate adhesive. So after cutting some narrow strips of plastic that were to form the location flange of the body internals I used the recommended adhesive to fix them in place.

Ho hum, I was right. At the first flexing of the top deck and crack, off come my pieces of plastic. Back to the glue gun.

The top deck is also to be glued in place on the hull/chassis. I have avoided doing this, as once it is in place it will make it quite difficult to get my rather podgy hands into the hull to fix mechanical breakdowns. I shall be making up some small brackets to hold the deck in place these will allow me to remove the deck should the need arise.

The final step is painting the vac formed body shell and gluing on some pieces of trim. The body is clipped to the hull unit by snap on connectors. I really thought these would be something of a disaster, and I expected to see the body pop off at the first bump, but no, the body stayed securely in place, even



**Less the top the interior detail, this could be painted up to give a more scale appearance.**

after I did an unscheduled and unexpected 360 degree roll.

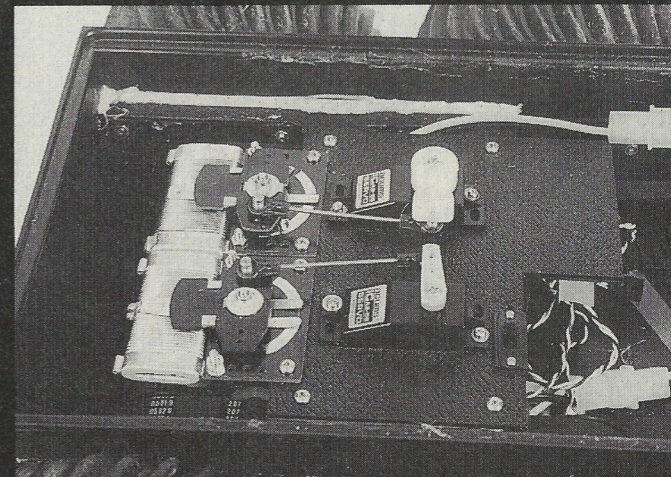
Overall. From the previous words you can see that assembly of this kit has not been without its moments. It is not all gloom and doom. The mechanical components, i.e. drive train are of the finest quality are excellent fits, no criticisms here at all. The chassis/unit is fine and fit for purpose.

The major criticism is the lack of thought in the ways of fitting the plastic parts together and the very bad die stamping of the major decking plates. I think the choice of a Cyano-acrylate adhesive is frankly wrong. It requires a much more flexible adhesive.

I am used to getting oils and greases supplied with the kit, although not a very serious omission it does mean another hunt around for bits to finish the job.

This kit does need a more effort from the constructor. In itself this is not a bad thing. I

**Twin servos lined-up both connected to the two speed controllers.**



think a continuous diet of just bolt together kits tends to stifle the imagination a little. I feel this kit fits somewhere between the almost ready to run Kyosho/Tamiya style and scratch building. If the designers of this kit have laid the seeds of self design and building from scratch then I believe this is a good step forward.

Driving the Rodeo is quite novel. The vehicle is very heavy so care must be taken not to run over the family Hampster, otherwise it will almost certainly be an "ex" Hampster. Cross country performance is outstanding, the vehicle can climb almost 45 degree slopes, the limitation being traction. Although across hill mobility is a bit restricted as the tyres offer virtually no side grip and the whole vehicle can easily slide unceremoniously to the bottom of a slope.

Steering works quite well, but the loading on motors and tyres is substantial and you can hear the transmission straining, but it all works

perfectly and as yet nothing has broken.

I had second thoughts about taking to the water, I am sure that everything would be Ok splashing along in the surf, but a total commitment to the water I was not prepared to risk. There are no seals on the drive shafts and I reckon that water would soon permeate the inside of the vehicle, and that would be that.

I must say that I had a good deal of fun driving the Rodeo. It is slow enough to make it easy for the slowest of drivers, yet you can take it where the most agile of buggies would fail.

With two 550 style motors and a lot of transmission loading the drain on batteries will be quite high. I opted for a pack of 6 volt 4000 MA hour cells that were once used in the Tamiya Hi-Lux. That gave me enough time to really have a good go with the Rodeo, 20 minutes or so. Using a conventional 1200 or similar pack, time might be a bit brief. It is not worth using high performance batteries for the Rodeo, it is not a competition vehicle, you would be wasting your money.

## Sum Up

So in conclusion, the extra effort in building the Rodeo was well worth it. It will give hours of civilised fun.

Well I reckon that my battery should be recharged now, so I'm off for another go around the garden.

6x6

