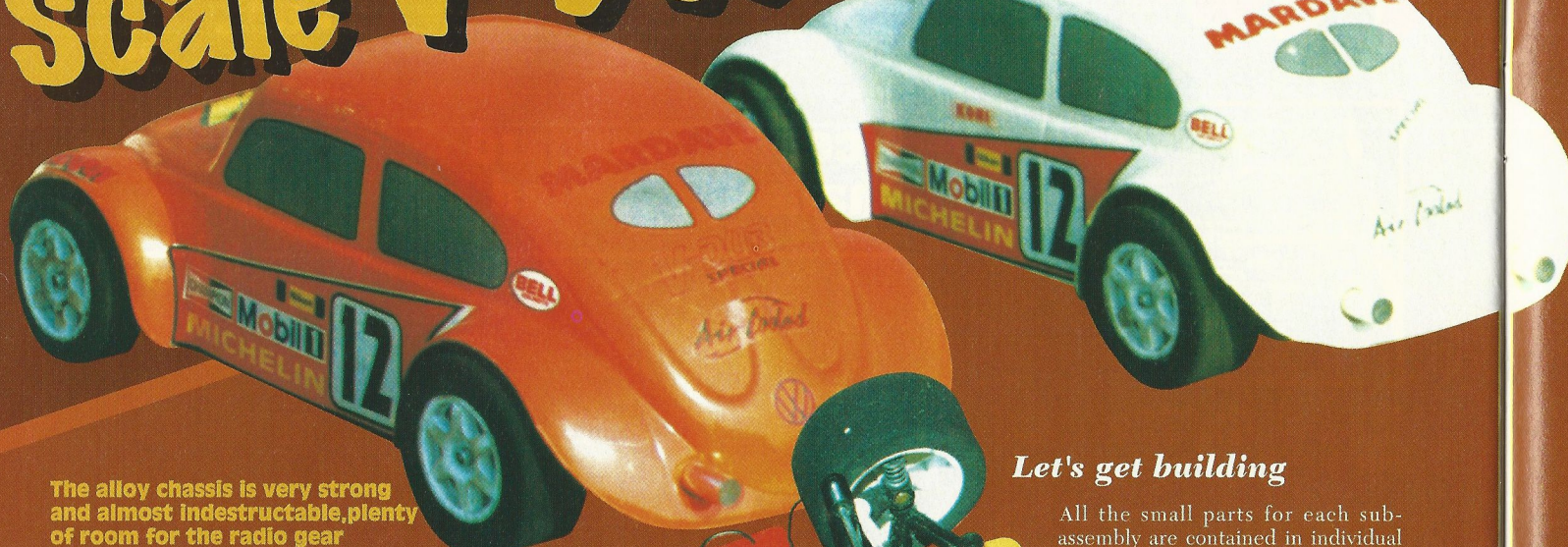


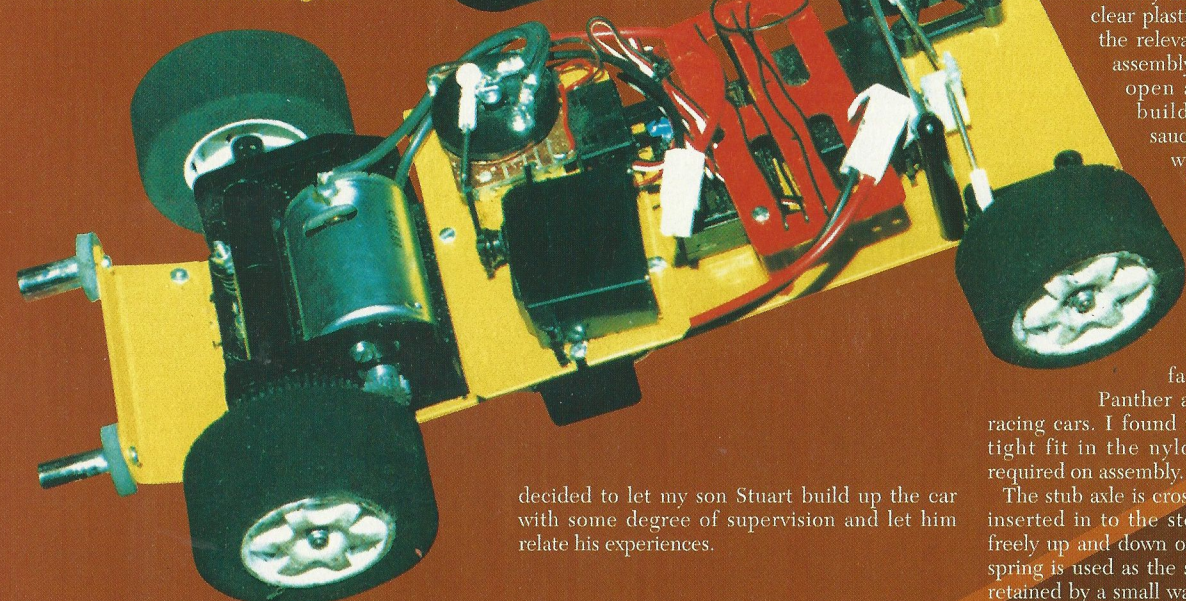
by Stuart Tennant

# The Mardave 1/12TH Scale V-DUB

These cars really look the "business" watch out Street Spec



The alloy chassis is very strong and almost indestructible, plenty of room for the radio gear



## Let's get building

All the small parts for each sub-assembly are contained in individual clear plastic bags which only contain the relevant parts for each separate assembly. It is a good idea only to open a bag when required to build an assembly. I used a saucer to hold the parts which were emptied from each bag, take care not to lose any small parts.

Construction begins with the front suspension. The "sprung" sliding kingpin front end is very similar to such famous cars as the Parma Panther and Demon MF83 carpet racing cars. I found the kingpins to be a very tight fit in the nylon wishbone, so care is required on assembly.

The stub axle is cross drilled so that when it is inserted in to the steering block, it can slide freely up and down on the kingpin, a small coil spring is used as the suspension medium and is retained by a small washer and E clip. Then the track rod end ball-joints are bolted to the steering blocks. A left and right handed pair of assemblies are required. Getting a smooth sliding action

was a bit of a problem, but deburring the sharp edges from the drilled hole in the stub axle allowed a free, smooth movement. When I was satisfied with the operation I fitted the wishbone assemblies to the top surface of the chassis with self tapping screws. Then the track rod ends are screwed onto the track rods. These also were a very tight fit, and difficult to keep square.

I clamped each track rod in a vice and holding the ball end in a pair of pliers carefully threaded the ball joints onto the track rods.

Fitting the steering servo, requires it to be servo taped to the alloy chassis pan. Taking care that after fitting the servo saver and track rods, that the servo saver is vertical on the servo

decided to let my son Stuart build up the car with some degree of supervision and let him relate his experiences.

## Building the V-DUB

Although, I have been racing model cars for many years this is the first radio controlled kit I have built. As well as the kit which is very complete, including motor, drive battery, speed controller and pre-trued tyres. Items required not included in the kit are: a set of two channel radio equipment, in our case we used a Futaba, Mega Tech Junior 27MHz steering wheel unit, a suitable 4 cell charger (Mardave, incidentally offer a new Delta Peak detection charger). Paint for body shell, which because the body is moulded from white pigmented ABS plastic, can be sprayed with normal cellulose paint. Some impact adhesive for gluing the tyres to the wheels. Also a small soldering iron and multi-core solder and a small selection of hand tools such as a screwdriver, pliers, a small round section needle file and a Tamiya "box" spanner.

## The Beginners Champion

This car is going to be as successful, or more so than the Mini-Stock car on which the V-Dub is a logical development. In all respects it is a better car than the Mini stock. Capable of being used on hard surfaces both indoors and out. However, Mardave are convinced that 1/12 is the ideal scale for indoor racing. This car is eminently suitable for all first timers, and great value for people wanting a car for some inexpensive racing. Do not scoff at the seemingly basic specification the car is fast enough in standard trim to provide hours of that rare ingredient FUN.

Here at Race Car we believe that beginners cars should be assembled by persons with little or no previous experience. In this case I have

output shaft when the radio is on and the trim levers on the tranny, central. Ideally the servo output shaft should be centralised on the chassis. The steering links should when fitted to the steering block ball studs, give a slight degree of "Toe In" that is the front tyres should be closer together at the front than the rear. This will make the car track easier in a straight line.

## Now for the rear

The rear suspension is tackled next, here the car is a vast improvement over the Mini-Stock car, the V Dub uses a floating pod arrangement. It uses a ball joint of which the ball stud is anchored in the chassis pan. The socket recess is moulded into the nylon pod which is in two halves, they are jointed by way of a central stem in each half with a long self tapper. The bottom of each pod half is tied together with the pivot plate which holds the pivot ball recess and rear spring guides and up stops. Suspension movement is controlled by compressing the two coil springs via the nyloc nuts.

The movement of the pod is damped by a "O" ring which is trapped in a nylon moulded clamp holder. In typical Mardave style, the rear axle is located in pair of nylon bushes. We did use the bushes but for the low cost involved, a pair of mini stock ballraces could be fitted, which would result in a freer running rear axle. Mardave have incorporated a pair of flats ground into the axle and a cleverly designed pair of mouldings locate the drive gear and rear wheel hubs which are finally retained by 3mm nyloc nuts. Compared with the mini-stocker this is a de-lux arrangement. The motor is attached to the inside of the pod with a pair of M3 screws and flat washers. Before fitting the motor the leads from the speed controller rotor are soldered to the motor tags with the longer of the two leads going onto the top lug of the motor. A drop of suitable oil can be applied to each bearing at this stage. I understand that MOBIL 1 oil is the best oil for the job. The pinion is slipped onto the motor shaft and the grub screws tightened. Care must be taken when fitting the pinion grub screws, to insure that one is engaged on to the flat of the motor shaft. On our sample I had to get my dad to shorten the grub screw which went into the opposite side of the motor shaft or it could catch on the spur gear causing damage.

There must be some end play on the motor shaft so the pinion can not touch the motor bearing. The mesh between pinion and spur should be such that the action is free and smooth without being too tight which will simply kill the speed or strip out the teeth of the spur gear.

I used contact adhesive to retain the tyres on the hubs, after roughing the hubs with coarse emery tape to obtain a good key for the glue.

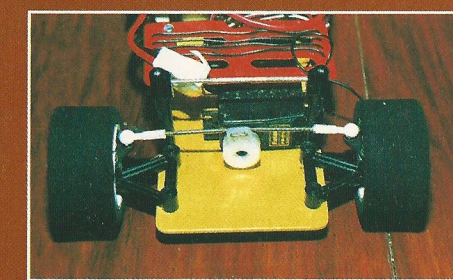
The speed controller is a simple three step forward and reverse unit which is a very robust unit which functions very well indeed. All the parts are replaceable at modest cost. The speed controller is actuated by a servo which is simply fixed to the speed control mounting plate by servo tape. A special link with a reduced diameter Z end fits into the hole in a servo arm and the other end fits the speed control rotor ball joint stud. Make sure the servo arm is vertical with the rotor in the neutral position.

## How does the body fit ???

One aspect of construction which is always a niggle, is the body mounting arrangements. The V Dub shows inspired design thinking. Just like on the "real" V Dub, two scale like exhaust pipes

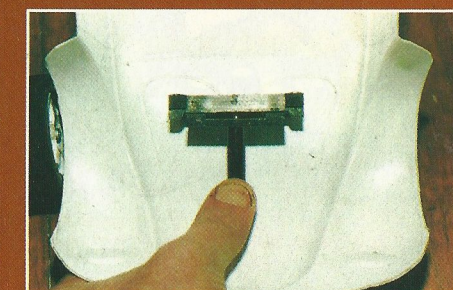


Somewhat battered after some frantic action, the car on the left has been painted, the other car is left in it's natural finish. Look good don't they?



Ultra simple front suspension featuring, sprung steering blocks and direct acting servo saver. Welcome to 90's Mardave.

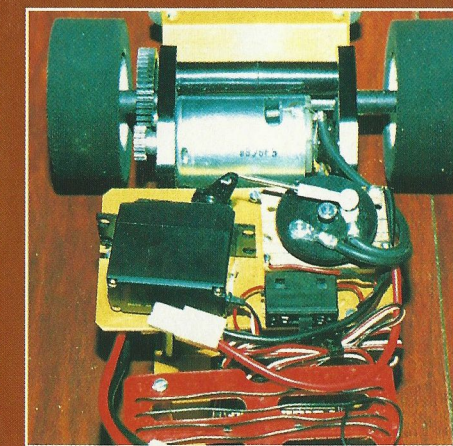
"No more body clips" The quick release front body mount.



## Running the V-Dub

One would not expect a standard 540 motor and four cells to give a earth shattering turn of speed but both my Dad and myself were pleasantly surprised by the speed. We tried the cars around the Bedworth outdoor tarmac circuit and were delighted with the handling and speed. Later trials at the Notts and Derby Stock car oval when my car had a 14 teeth pinion fitted further improved the speed and all in all the car performed very well indeed. What came as a major surprise was even with a soaking track surface the standard tyres gave remarkable grip and the car could still be driven flat out without spinning out in the corners. The cars seem to be able to absorb driving errors with little or no damage, obviously the new suspension really works. Mardave have come up with a little gem with the V-Dub and you will not be disappointed with one.

Available from most model shops



Mechanical speed controller and concealed "comb" type radio aerial. Standard 540 motor installed in the NEW floating rear pod. A quantum leap for Mardave flat pan cars.