



second to

If I told you that I could do you a new two wheel drive kit, complete with ball differential, slipper clutch, ball races and alloy shock absorbers for under one hundred pounds, you would probably laugh at me and question the legality of its origins. If I then went on to tell you that the low initial cost could be fully backed up and supported by extremely cheap spares, then you would probably book me in to the nearest asylum for a week or two.

Funny?

Laugh at me if you will but I've just finished building a car that fills all the above criteria with ease - The new

Cobra from Mardave.

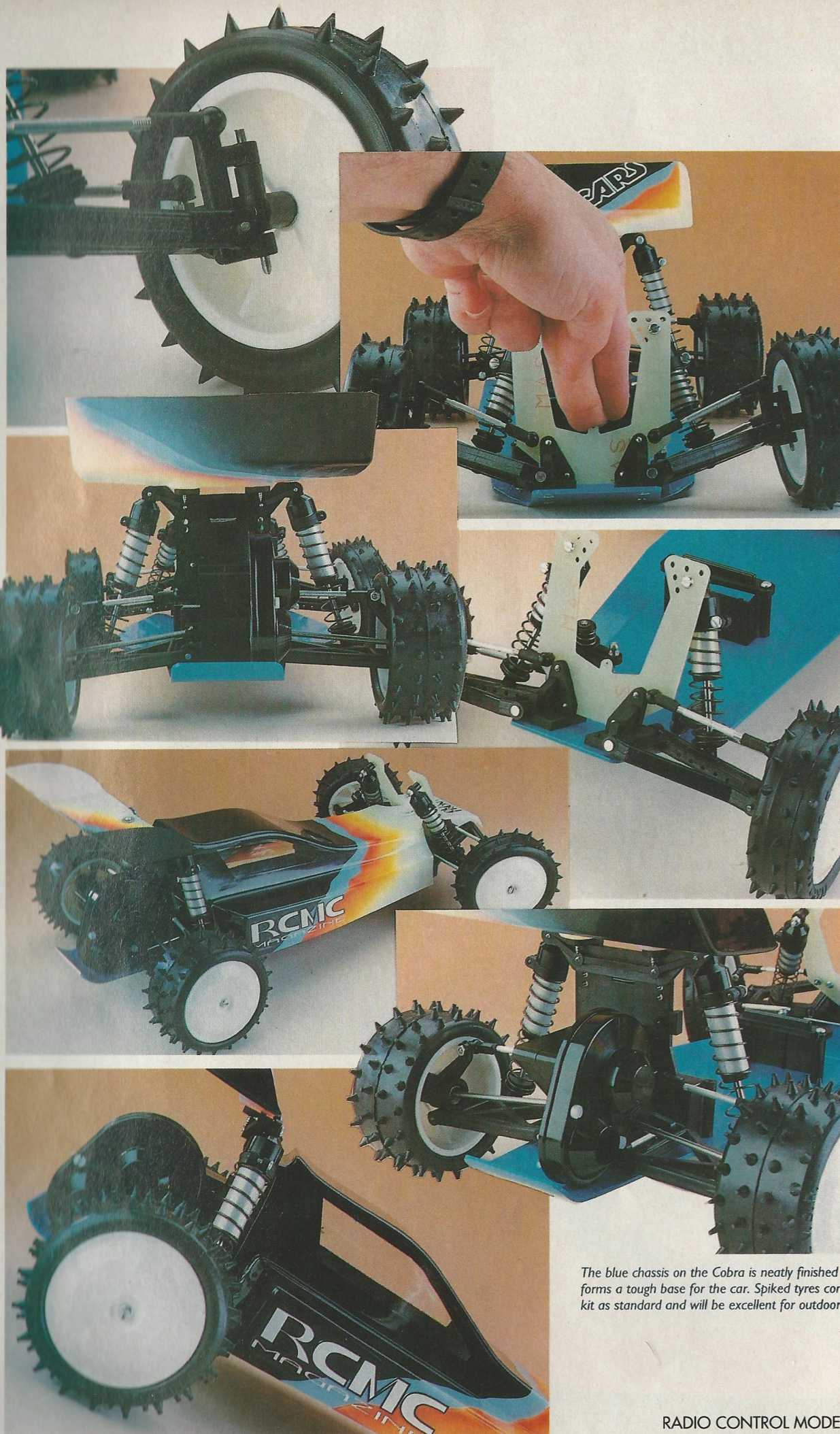
Most of you will know of one UK manufacturer of 1/10th off road buggies but, I suspect that not all of you know of the existence of another, well established manufacturer based here in the UK.

Mardave Motorsport are based in Leicester and have been established for over twenty years. They produce several kits ranging from the diminutive 1/12th Mini Stock through to the 1/8th Marauder and Stock Master IC engined kits.



none!

With the all new Cobra, Mardave have a car that will compete and still has a price tag that can hardly be believed...



The blue chassis on the Cobra is neatly finished and forms a tough base for the car. Spiked tyres come in the kit as standard and will be excellent for outdoor use.

If you go to a 1/8th Stock car meeting, you will find a proliferation of Mardave cars equivalent to the amount of Sanyo cell users at an electric meeting – i.e. Extremely popular. Mardave also enjoy a dominance/monopoly over the 1/12th electric stock class – Mini Stox. However, their representatives within the off road scenes – both 1/8th and 1/10th are far from prolific. It is fair to say, however, that the Marauder does enjoy a good popularity within the entry level sector of its respective market. The Meteor however, never really made the grade. Whether this is due to the quality of the Mardave car or the intensity of the competition is unknown but, Wes Raynor (Mr. Mardave) has been hard at work in producing the Meteor's successor – The Cobra. Prototypes of the Cobra have been intensively tested and raced over the past year with drivers such as Mike Penfold taking up the challenge successfully. Whilst no national success has been forthcoming, I believe that I am right in saying the car has been successful at most levels of competition beneath the national championship.

### The Rundown

The Cobra comes in a colourful box which, once opened reveals a mass of tissue packing paper and plastic bags of components. The fanciful Japanese style of packing is cast aside in favour of a cheaper, more functional approach characterised by the earlier Schumacher cars and the Associated range of kits. The instructions are, to say the least, sparse and the most useful part of them is the separate exploded diagram which doubles up as a parts list. One useful addition to the kit is a price list which can be used in conjunction with the exploded diagram to ensure that both you and your local model shop are communicating correctly when ordering or asking for spares.

The kit does not include a motor or speed controller and it is advisable to fit an electronic style of speedo as opposed to a mechanical type. The kit is aimed toward the more experienced racer who has had previous experience in assembling model cars. With a little forethought and concentration, the Cobra could be made by someone with no prior assembly experience although it is not as straightforward as some of the Japanese kits.

### Up front

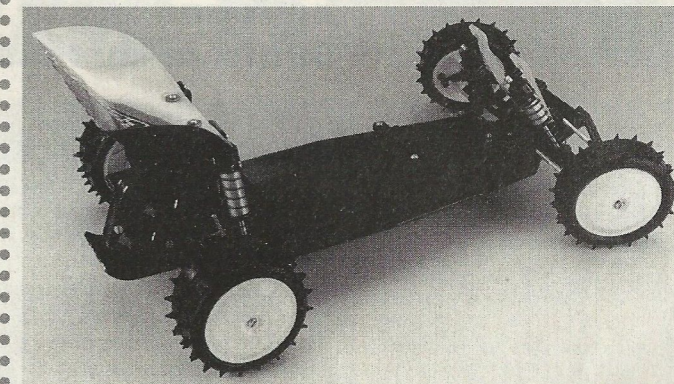
First up on the menu is the front suspension. This is a conventional single wishbone with an adjustable

The shock bracket on the Cobra sits in front of the shocks – the world champs winning RC10 Stealth had a similar set-up...

upper link to vary the camber angle. Damping is controlled by two intermediate length shock absorbers which, curiously, are mounted behind the shock mount. This shouldn't affect their performance in any way and will, in the event of a frontal collision, offer more protection to the damper units than if they were mounted more conventionally in front of the shock mount. Aluminium turnbuckles provide the upper adjustment and steel ball joint ensure that the

linkage will be long lasting. The wishbones are located by steel pins which need to be hammered gently into position. In my opinion, this is a little 'Heath-Robinson-ish' and is out of place in any model car kit manufactured today. It would be nice if these pins, if they were to be used at all, were made slightly longer and bent at a right angle at one end so that they could be removed at a later date for maintenance or replacement.

The front suspension assembly



mounts to the chassis which is made from aluminium and is pre-bent for the front rake. The sides of the chassis are bent upwards to provide a certain amount of rigidity and it is finished in an electric blue stove enamel finish which will protect it. The holes appear to be properly drilled and countersunk rather than just punched which ensures that the countersunk screws fit the chassis perfectly.

After the front assembly is together, along with the steering bellcranks, the instructions shift their attention to the gearbox. This is a geared gearbox which a slipper clutch which looks quite good. The differential is a ball type one which is adjusted before despatch from the factory. I did actually check our one and it didn't slip at all. It was during this stage of the assembly that I came across what could be potentially a serious problem. The differential fits into the gearbox mouldings which are designed to give enough clearance at the base so as not to foul the gear. This wasn't quite the case with our kit and the gear seemed to be slightly wider than the clearance in the gearbox moulding would allow for. This meant that as the gearbox halves were assembled together, the differential binded with the mouldings. This was overcome by removing some of the plastic from the base of the gearbox where it does actually seem to be unnecessary. Once this had been done, the gearbox was smooth, if a little noisy, and should prove to be quite efficient in operation. The internal ratio of the gearbox is very low – 2.88 to 1. Most of the other gearboxes are between 2.2 and 2.4 to 1 reductions. On the Mardave car, this is compensated for by the use of a much smaller spur gear in order to achieve similar overall ratios.

The slipper clutch seems to work well enough although I would prefer to see the spur gear holder (termed 'the boss') made from aluminium rather than plastic. Disc washers are used rather than a spring in order to tension the slipper clutch which other manufacturers are all