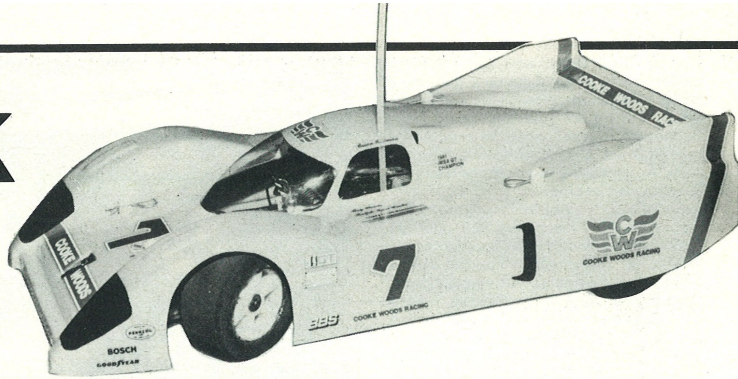


Track Test



BY BILL BURKINSHAW

TEAM ASSOCIATED RC12i THE EUROPEAN CHAMPS WINNER

IT IS QUITE SURPRISING just how many non-electric car orientated people around the *Model Cars* offices have questioned the presence of the letter 'i' following the RC12 designation of *Associated's* new car. Questioning spelling, grammar and punctuation becomes an obsession in publishing spheres and whilst MK.III or MKV might have gone without comment 'i' did not. To be fair, until reading the comprehensive manual supplied with the kit, I was slightly mystified as to how the 'i' had appeared, remembering the last RC12 kit I had handled was designated 'e' which I understood to designate 'electric'. The manual revealed all — not simply one step on from the 'e' but three more, the intermediate letters having already designated several steps in the progression towards a European Champs winner, plus a growing list of major US titles.

A superficial examination could easily lead to dismissal of this car as simply an updated RC12e, more careful examination of the parts during construction reveals

that apart from body posts, bumper and wheels this is a totally new car. The already familiar look is simply because the materials used, epoxy glass and white nylon injection mouldings, are the same as those used in previous kits.

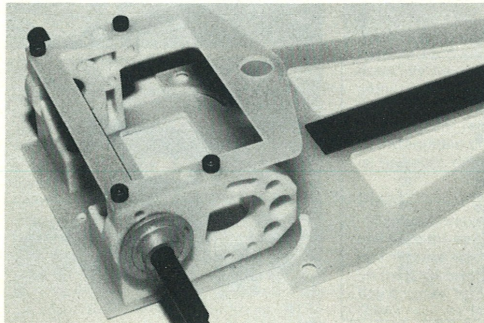
The heart of the car is in the clever use of slits in the epoxy glass chassis, which firstly allow what is effectively a trailing arm independent suspension action to the front end, and also allow the heaviest mass of the car, the battery pack, to move independently from the chassis. A degree of rear end suspension is also provided by new rear motor and axle blocks. In contrast with most GRP chassis cars, the 12i is very flexible, meaning that the wheels are able to follow minute variations and undulations in track surface more easily, thus keeping the tyres in contact with the track for a higher percentage of time — suspension!

Building the kit

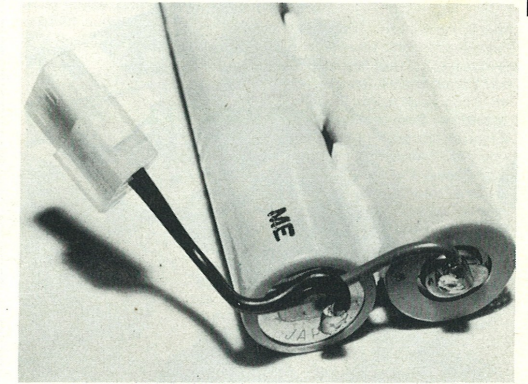
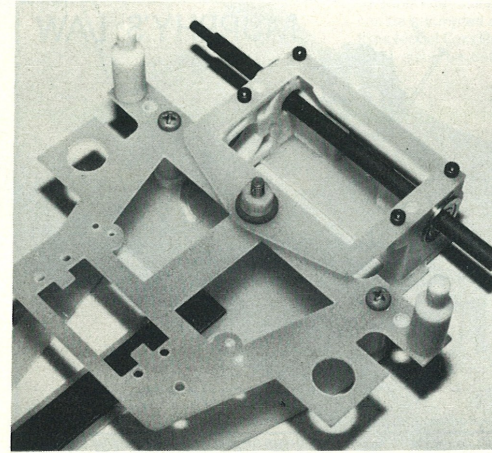
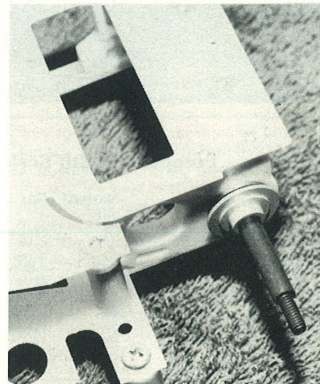
Associated's instructions are first class, the diagrams are clear, and although the

photographs are printed on duplicating type paper, plenty clear enough to allow the details to be worked out. Specific tools are recommended, Philips screwdriver, small spanner (or pliers) wire stripper and soldering iron are just about all that are necessary. I did, however, use a 2BA tap to cut partial threads into the nylon mouldings for the alloy screws which are used for the major part of the assembly. These screw heads are soft, and easily damaged. Thread cutting does make the task easier, although I did put a couple of screws in without, to satisfy myself that the task could be accomplished on a 'low technology' basis.

Cyanoacrylate glue is used to bond a plastic stiffener to the chassis, clean both surfaces with methylated spirits before gluing. Following on from the previously mentioned cunningly slit chassis, the steering blocks are a new design with centre point steering and larger steering



Left: motor pod assembled, note carbon fibre rear axle and cutaways on front of motor mount mouldings. Right: underside view of pod, battery suspension slits can be seen in main chassis.



Left: shaker plate added, note large central 'damper' bolt with fibre washer friction medium. Right: connectors have to be soldered on to battery sticks and whole taped together. Bottom left: fully assembled rolling chassis. Kydex stiffener can be seen down chassis centre. Bottom right: *Associated* ball differential assembled, tyres are good quality outdoor type already trued and glued to.

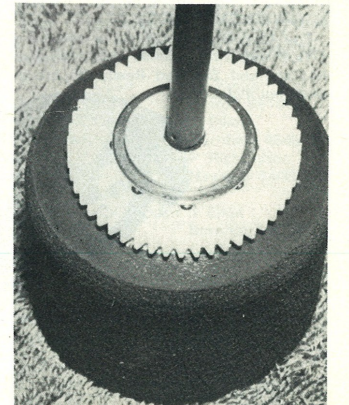
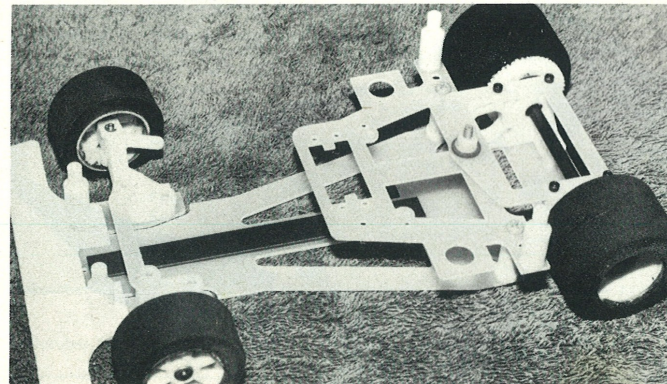
arms which combine with the new *Associated* servo saver to produce simple, positive steering. Two 3-cell *Sanyo* battery sticks are provided. These have to be assembled using a combination of foam sticky tape and strapping, (a reinforced type is advised), the complete pack retained with foam tape and tie wraps onto the floating glass-epoxy radio plate.

Fitting the resistor and speed control servo is simple, the instructions are very explicit and once these items are mounted, the ready prepared wiring harness can be quickly fitted with just three soldered joints. I added one item at this stage — an additional contact for the top end of the resistor to guarantee good wiper contact at full power.

The remaining R/C equipment fitting is very easy, double sided sticky tape (remember to de-grease things first) a plug on the harness for the receiver power, which is provided by dropping diodes already fitted, and the control system was

in full operational order. It only remained to fit the aerial tube supplied and tidy up the wiring. I shortened all the servo leads and coiled the aerial using cyanoacrylate to hold the coils, the resulting 'tube' fixed to the receiver with foam sticky tape.

The review kit was supplied with *Associated's* own adjustable ball-differential with lightweight carbon fibre axle. Once again, a diagram and full instructions ensured easy assembly. Various shims are provided to allow correct clearances to be achieved. The motor in my kit was a Reedy Modified 'Blue Spot' type already fitted with a suitable plug to match the harness (Reedy selected O5 supplied in standard kit). Two motor pinions were supplied and also three differential gears (only one ratio in standard kit), allowing a wide range of ratios to be obtained, the necessary adjustment for varying gear sizes being provided by *Associated* standard cam adjustment system on the motor mount.



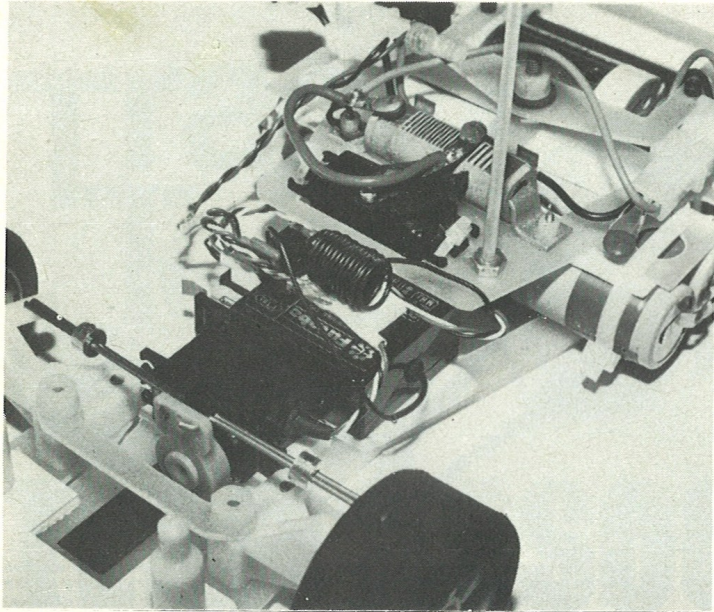
Finishing touches

The usual 'true and glue' operation on the tyres was dispensed with — tyres are already bonded to the wheels and ground true. *Associated* thoughtfully provided a ready painted version of their *Lola* T600 GTP Lexan body, so it was a very simple job to duplicate the smart box top illustration of the 'Cooke Woods' racing prototype. Full instructions are included for finishing body shells.

Nothing is left to the imagination when it comes to using the fast charge Ni-Cads, I gave the pack an overnight charge at 100 milliamps then with a feeling of pleasurable anticipation went out to the neighbourhood test track — a flat roof outside the 'Model Cars' office for a try-out.

In Use

It seems presumptuous of me to attempt to comment on the handling qualities of a



MURPHY'S LAW

**"WHEN ALL ELSE FAILS,
READ THE INSTRUCTIONS."**

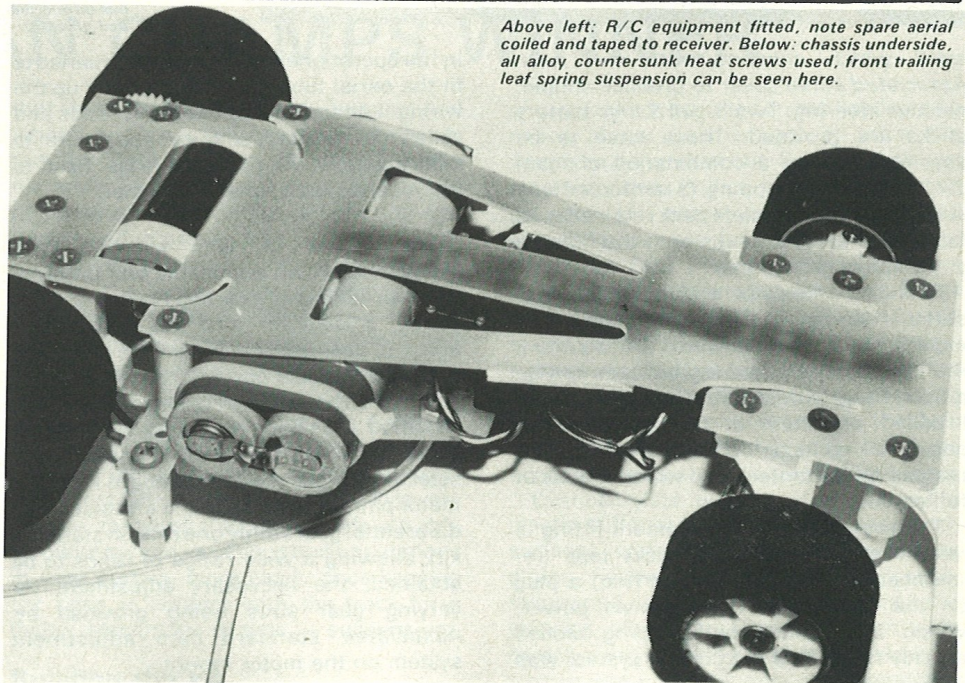
Reproduced from Associated Handbook.

car such as the RC12i, for with an already established contest success record, the handling on the track has just got to be good. The tyres supplied in the kit are outdoor types and provide excellent grip on a range of surfaces from tarmac to concrete and of course alternative grades are available. Steering response is very sharp compared to my older RC12E and the car is lighter, although 2oz. over the 'legal' bottom limit, there is scope for reduction.

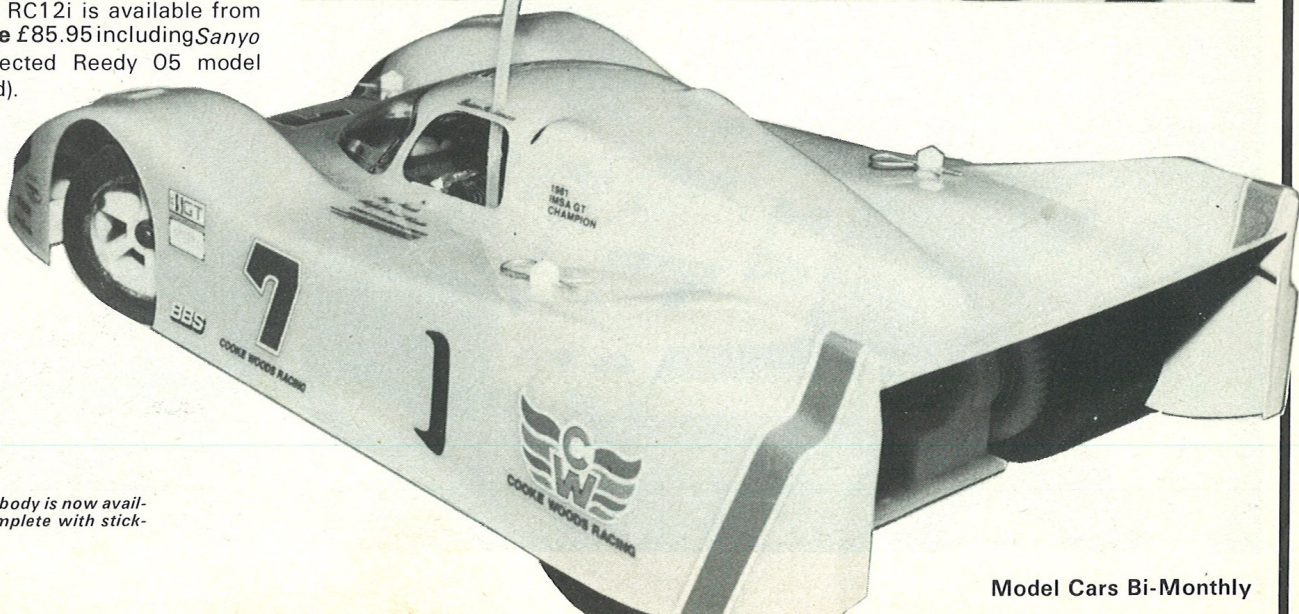
Adjustment of toe-in is simple, as is differential setting. Set-up for various track surfaces is helped by the provision of an adjustable damper between motor pod and R/C tray.

Associated have produced a winner, no doubt of that, and an overall assembly time of a mere 4½ hours, for what is quite a complex car by 1/12th standards, is a tribute to the fit of the parts and the clarity of the instructions. One final note — how nice it was to finish with a little box of small parts, you know the sort of thing I mean, 'E' clips and 'C' clips, shims, etc., just the sort of item that goes missing.

The Associated RC12i is available from *Elite Models*. **Price** £85.95 including Sanyo Ni-Cads and Selected Reedy O5 model (body not included).



Above left: R/C equipment fitted, note spare aerial coiled and taped to receiver. Below: chassis underside, all alloy countersunk heat screws used, front trailing leaf spring suspension can be seen here.



Cook-Woods Lola T600 body is now available, ready-painted, complete with stick-on plastic decals.