



Ready to race — and win!

# RC10 GRAPHITE

## Worldbeater

The first car in history  
to become a double World Champ.

RRC looks at the latest generation of RC10.

First seen in public at the 1/12th World Championships in Herring, Denmark, it is now over four and a half years since Gene Hustings and Roger Curtis unveiled the latest Associated project: the RC10. Although everyone could see the car looked good, no one could possibly have foretold the effect it would have on the world of 1/10th off-road racing.

Since its release the car has had huge success in both national and international championships. The only R/C car to remain competitive

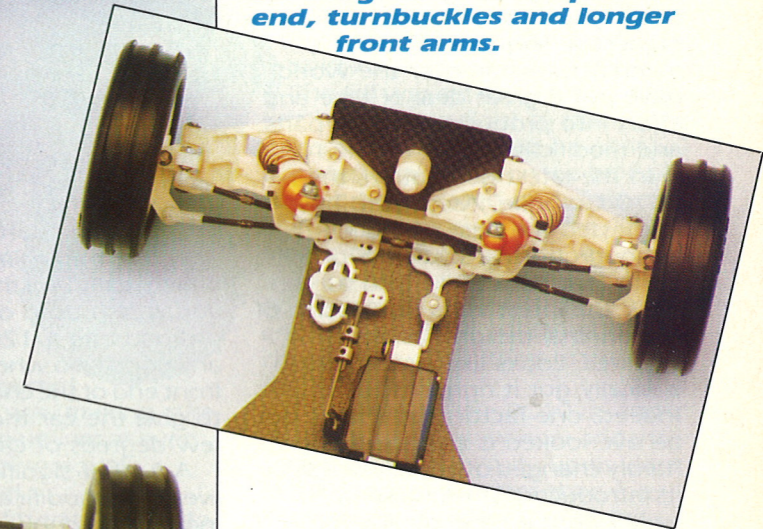
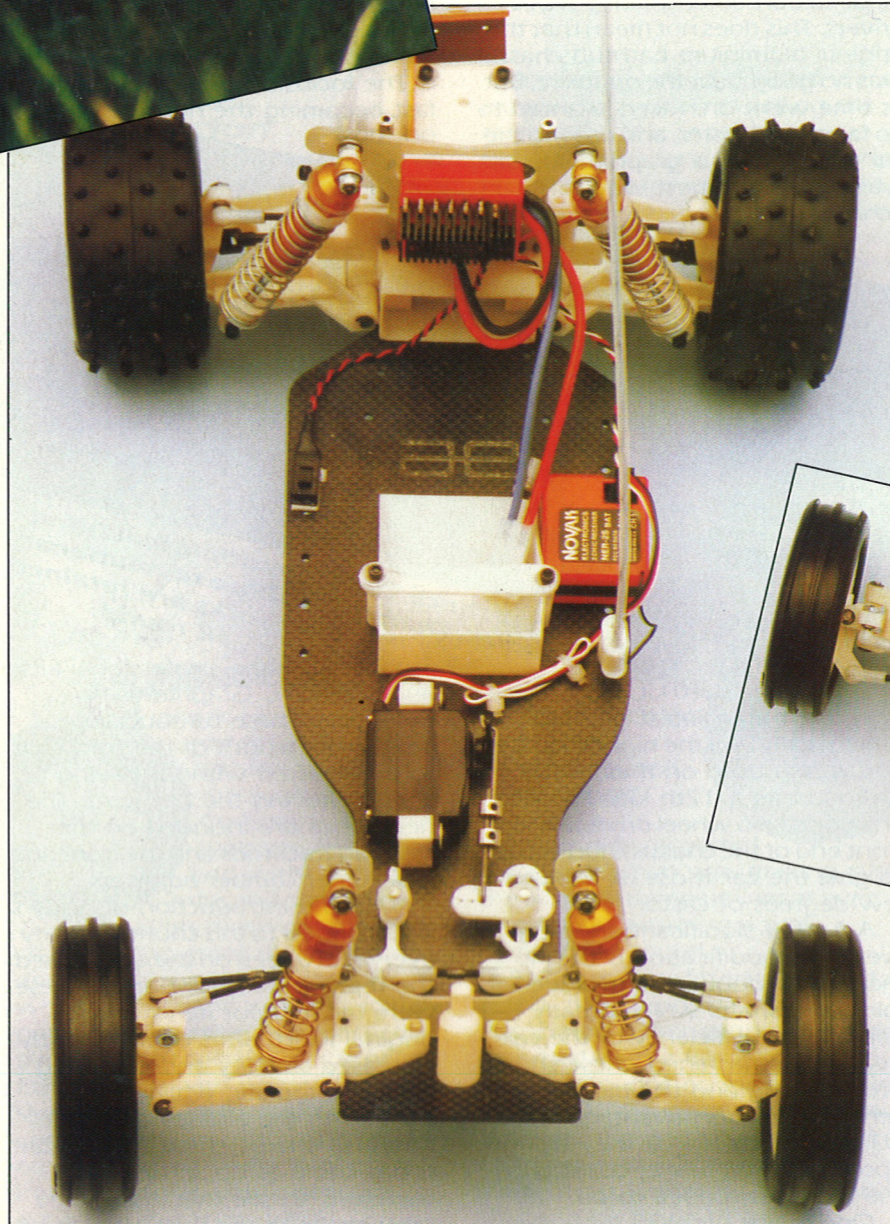


RC10 — twice IFMAR World Champion!

for nearly half a decade, the RC10 has become the first car in history to achieve the status of double world champion. Indeed, the RC10 is now a world wide legend, with sales continuing to climb.

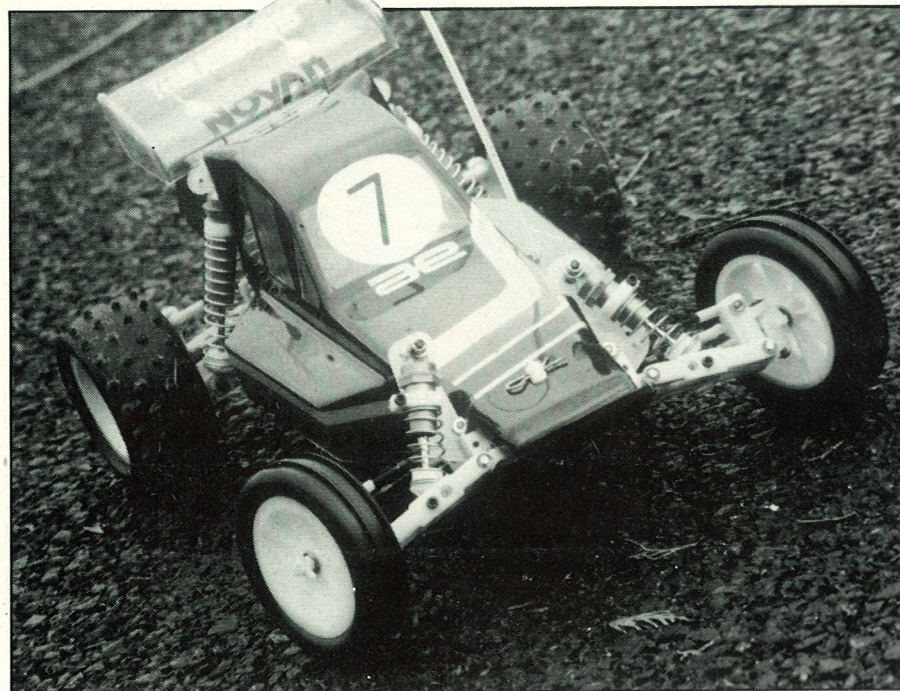
So what's the secret of such sweet success? Manufactured by Associated Electrics in California, it was the design and quality of engineering that originally made this car so superior to the others of its day. The RC10's shock absorbers and differential, in particular, set new standards by which other manufacturers would succeed or

The front end of the new RC10 Graphite, clearly showing the kicked up front end, turnbuckles and longer front arms.



Neat, simple, efficient. The RC10 Graphite has everything needed to win, no more. Notice how well the radio gear fits in, with plenty of space to spare.





fail. The car was fitted with a simple but very effective fully adjustable VariLock ball differential, quite unlike anything previously seen. The shock absorbers too were the best on the market and did not experience the problems of profuse leaking suffered by so many others available at the time.

The time and expense that went into developing and producing the original RC10 made it, quite simply, a winner straight from the box, renowned for its superb handling, reliability and low maintenance requirements.

So what could possibly be done to improve on such a performer, you ask? As you might expect when dealing with one of the world's highest selling cars in its class, manufacturers all over the world have put a great deal of time and effort into producing hot up parts and modifications for the RC10.

In the latest generation, the RC10 Graphite, Associated has harnessed the best of them, although having said that, one thing that does strike you as you build the latest kit is how much of the original design has been retained. Looks like Associated! basically got it right first time! Indeed, one factor that should not be overlooked is that the kit has hardly changed over the years since its introduction, making spare parts easy to obtain and avoiding the in-built obsolescence that is a problem with so many of its competitors.

### Modifications

The most obvious difference between this and the original car is, as its name suggests, the inclusion of a graphite chassis. This is, and

always has been, a favourite modification among many RC10 drivers. This does not mean that the original aluminium bathtub chassis was no good. Just the opposite. But as time went on, racers wanted to go faster and faster, and making the car lighter with a graphite chassis was one of the best ways of achieving this.



**Q New front shock tower, multiple mounting positions. Thankfully those revolutionary Gold shocks are retained all round.**

In this new RC10 kit, Associated have used their latest graphite, which really is of the highest quality and is also used on their 1/10th on-road and 1/12th kits. As with any good two wheel drive cars, the front end of the chassis is kicked up to give the car those all important few degrees of castor.

A further significant and very welcome modification is the inclusion of dogbone and universal joint driveshafts which greatly improve the efficiency of the car. Beautifully machined, these should provide long and trouble-free service. A further advantage of the UJ driveshafts is that they will not "pop out" after a hefty collision, as the old ones tended to do.

One major problem with the

original RC10 design was the idler gears, which could break up all too easily when a hot motor was put in, or when encountering particularly rough ground. The only answer to this was continual replacement (not expensive, but a nuisance), or to invest in some rather costly tufnol replacements. This has now been rectified, however, with the new gears, included with the kit as standard. They appear to be made from a much tougher material and should withstand quite a lot of abuse.

The rear hub carriers have also undergone a slight redesigning. Although this did not appear to be a particular point of weakness on the old car, Associated felt otherwise and have once again improved on the original. The new items are slightly smaller and more rigid, preventing the "slop" in the bearing holes and creating less vibration and more speed.

The inclusion of turnbuckles is fast becoming the norm on most

top of the range, professional kits and the RC10 Graphite is no exception. These turnbuckles enable the length of the trackrods to be adjusted without having to keep removing the ball joint. The new items are included on the steering trackrods and the front and rear upper camber adjusters.

With the introduction of Andy's R/C Products to this country, nearly every RC10 seen on the circuit used the replacement front arms. These were far superior items to the original RC10 arms offering vastly increased stability and cornering ability to the car, while further enhancing the already excellent handling characteristics of the car. It has come as no surprise, therefore, to see that Associated now include their own version of

### Q The new UJ/Dogbone driveshafts can clearly be seen here, as can the rear hub carriers.

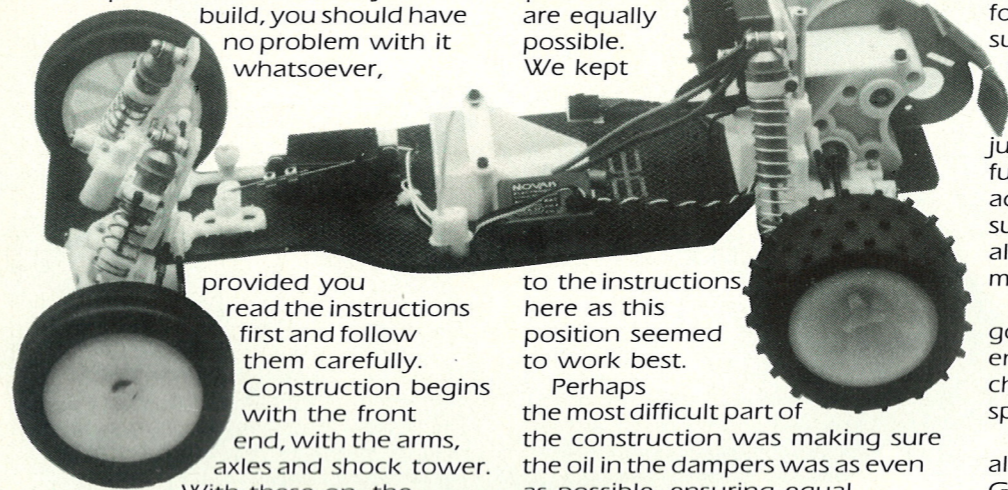
the longer front arms in this new kit. The RC10 Graphite may well now become one of the best handling cars around, straight out of the box.

Other new features to be found in the RC10 Graphite kit include a front shock tower, with four different mounting positions, making the car easy to dial into most circuits.

The only other change from the original car is more cosmetic than anything else. Some rather nice dish wheels have been included that will, unlike the old wheels, now accept most of the main types of tyre that are currently being used. The rear tyres are also new, and should prove useful on very slippery tracks, especially those made from hard compact dirt.

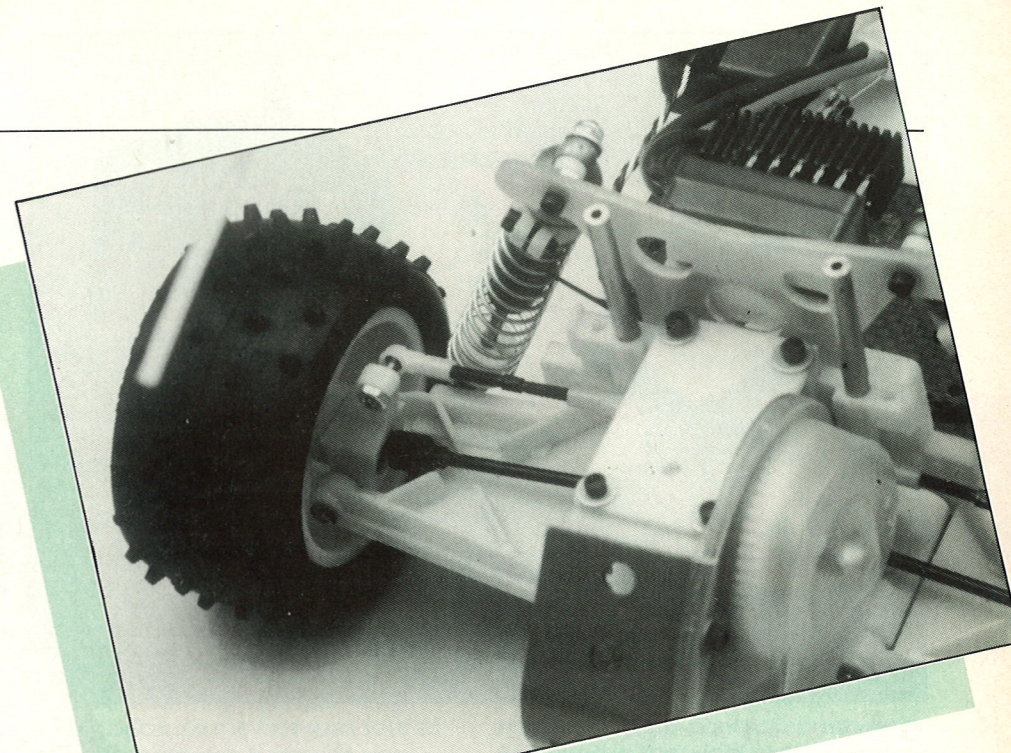
### Construction

Having outlined the alterations that have been made to the new RC10 kit, the next step is building it. Thankfully, one thing that has not changed is the quality of the instructions that accompany it. These consist of very simple, uncomplicated photos and clear text, making construction of the car almost foolproof. Even if the RC10 Graphite is the first model you ever build, you should have no problem with it whatsoever,



provided you read the instructions first and follow them carefully. Construction begins with the front end, with the arms, axles and shock tower.

With these on, the next step is to install the track rods and servo savers. No problems were experienced with this initial part of construction. The car seems almost to fall together, all the parts fitting easily with no binding or slop. Provided time is taken over construction, you should have a race winner ready for the installation of the radio gear after a couple of evenings' work.



### Racing

With the shell sprayed and trimmed and a set of nicads charged up, all that is left is to find a meeting to go to. We tested our car at a couple of meetings to gain a full impression of how it behaved.

To anyone who has driven an RC10 before, this new car's excellent handling will come as no surprise. The oil that was provided with the kit for the shockers worked well and should be OK on many different types of circuit. With the new arms, the Graphite was even more stable than its forerunner and the car turned in superbly, both on long sweeping turns and through the tight twisty infield.

The diff was set up so that it was just slightly too tight to slip under full acceleration. It can be easily adjusted depending on the type of surface being raced on by simply altering the tension on the diff by means of a single nut.

The rear tyres proved to be very good on grass, although more front end bite could be achieved by changing the front tyres to the pin spike type.

To conclude, the RC10 is, and always has been, a winner and the Graphite, with its fully up to date modifications, is better than ever. For anyone looking to race this season, this car should be given serious consideration. There is no doubt the car will be popular with both the club racer and top national drivers, and will produce results wherever it is raced.

The RC10 Graphite is now available from all Associated stockists. ●

Again, no difficulties were experienced when installing the radio gear. We chose to use a Futaba 132H servo with a micro receiver and forward only speed control. This was fitted on the rear shock mount plate for convenience, but there is enough room to fit most popular types of radio gear to suit your preference. The nicads sit down the length of the chassis, although again other positions are equally possible. We kept

to the instructions here as this position seemed to work best.

Perhaps the most difficult part of the construction was making sure the oil in the dampers was as even as possible, ensuring equal damping all round.

Ballraces were fitted to this kit to test it. It is surprising that Associated didn't supply these as standard with a kit of such high quality. Anyone considering racing their RC10 Graphite competitively certainly shouldn't hesitate to fit ballraces as this is perhaps the single most important modification that can be made to any car.