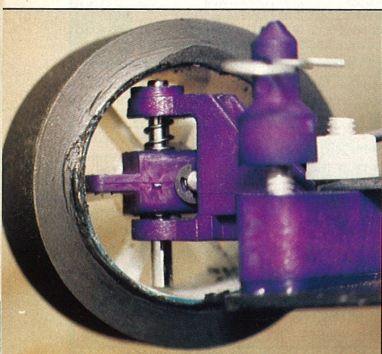


RC12LW

If model cars could be compared to dogs, then the new RC12LW from Associated would undoubtedly be a class winner at Crufts. There is no other car available with a 'pedigree' such as this, with its ancestors accounting for wins at every World Championship held since the inaugural meeting in 1982.

This car is the first major revision to the 12L in almost five years, and is identical to the car raced by the team drivers at last year's World Championships in Singapore. The end

Q New front springs are harder than those used in the old type 12L.



Q Alloy diff spacer can be seen behind the plastic nut. This replaces the old thrust race and makes the differential a lot smoother.

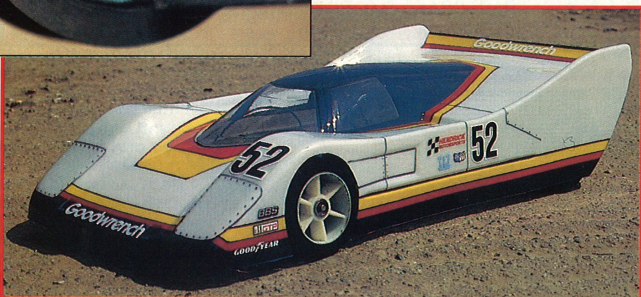


result was a convincing 1-2-3 for the new car and this may explain why the car is billed as the 12LW, with the 'W' standing for 'Worlds'.

For those of you less familiar with the Associated family tree, it all began with the 'Grand daddy', the RC12E, which was one of the very first 1/12 cars available; appearing in the mid '70s.

As the years progressed a super lightweight version, respindient with differential, upstaged the original and in 1981 was replaced by the RC12I, which went on to win the first World Championships in Anaheim, California. A revised version appeared in 1983 and in 1984 Tony Neisinger recorded his first World Championship win for the car in Denmark. In 1986 the RC12L, designed by Gill Losi Jnr, went on to dominate the Los Angeles World's with Tony again taking the honours. In 1988 the car remained the same but it was all change on the driver front, Masami Hirotsuka preventing Tony from getting his hat-trick. Singapore 1990 saw this new car take the title with Chris Doseck at the helm, and our own Phil Davies qualifying an amazing second fastest with the car.

To the casual onlooker the new car will appear to be identical to the original RC12L but there are numerous design improvements meaning that upgrading from the older RC12L will entail a

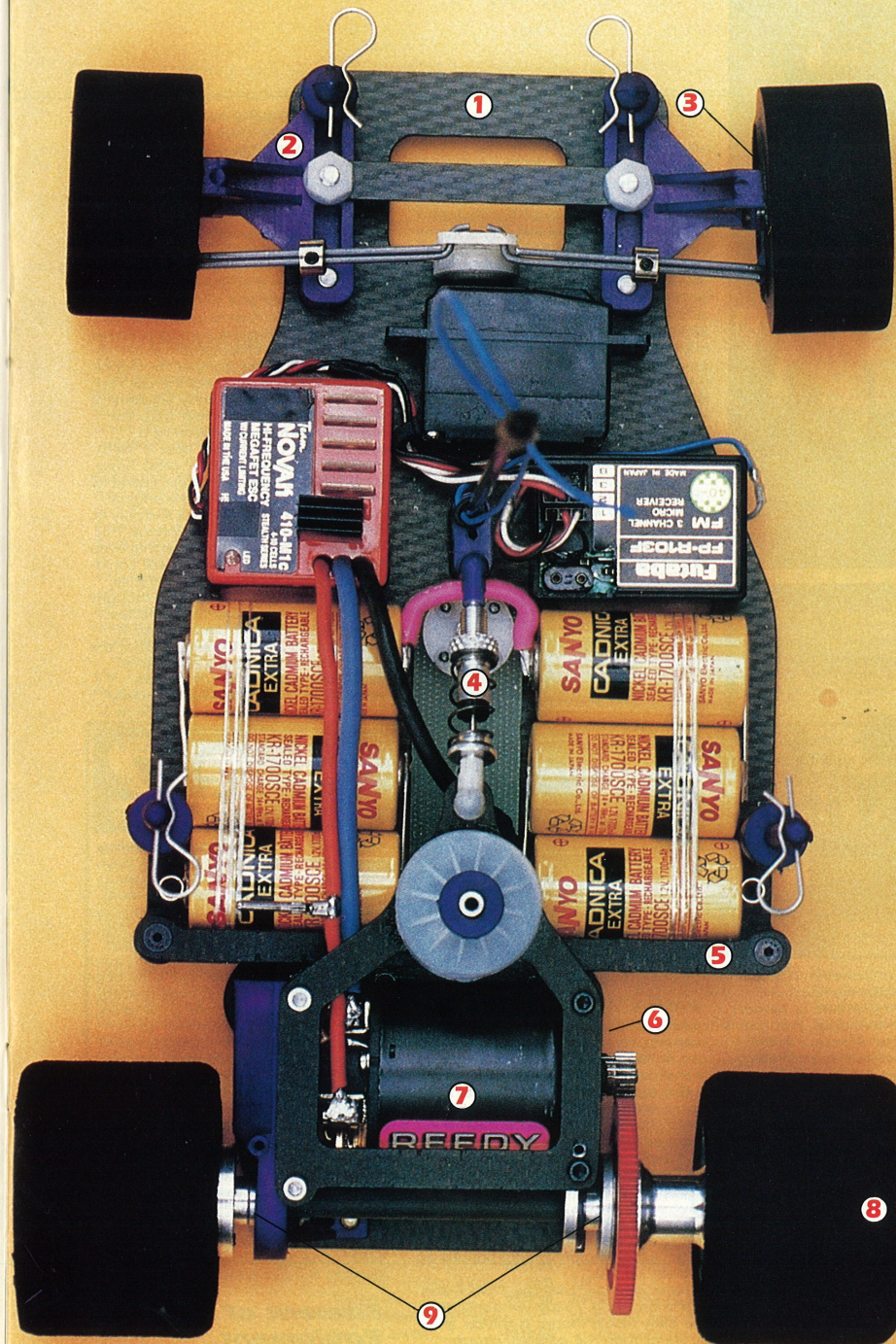
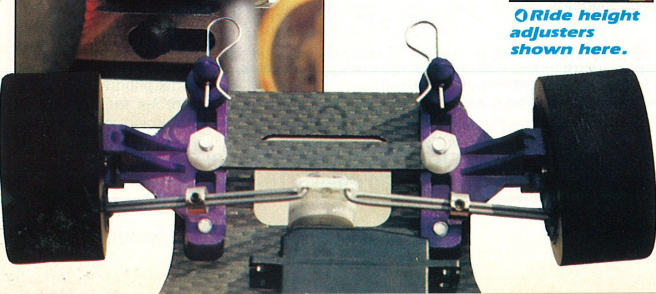
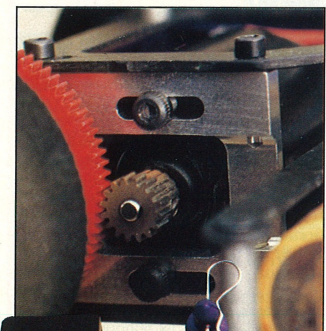


Q New thicker alloy motor mount.



Q Three hole front blocks and graphite brace can be seen here.

Q Ride height adjusters shown here.



① Graphite chassis.

② Three-hole front blocks.

③ New front suspension springs.

④ Mini oil-filled centre damper.

⑤ Damper post graphite cross-brace.

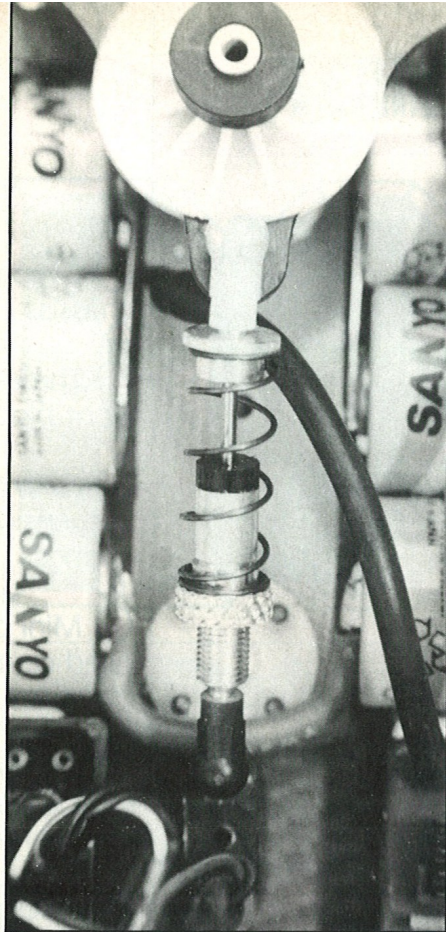
⑥ Thicker alloy motor mount.

⑦ Reedy Mr K 17x4 motor.

⑧ Coned alloy diff spacer (inside wheel).

⑨ Alloy axle spacers.

David 'Windy' Gale builds the new Associated 1/12 World Championship model.



◊ New shock absorber certainly looks good.

instructions, showing exactly how to assemble the car in a step-by-step fashion.

In total there are over 80 separate photos, each accompanied by a full description of the stage in question. Unfortunately I cannot vouch for the overall integrity of the instructions, relying instead on my traditional 'empty all bags, and assemble until nothing left approach' which, as to be expected, resulted in numerous bits left over, especially in the diff area. Referring to the instructions soon sorted out these little misgivings. Following the instructions may be a little time consuming but at least you can be sure that the end result bears a resemblance to how the car should be.

Assembly starts with the chassis and other graphite components. These have been roughly milled out and need finishing before assembly can begin. The best way to do this is to patiently sand all the edges with progressively finer

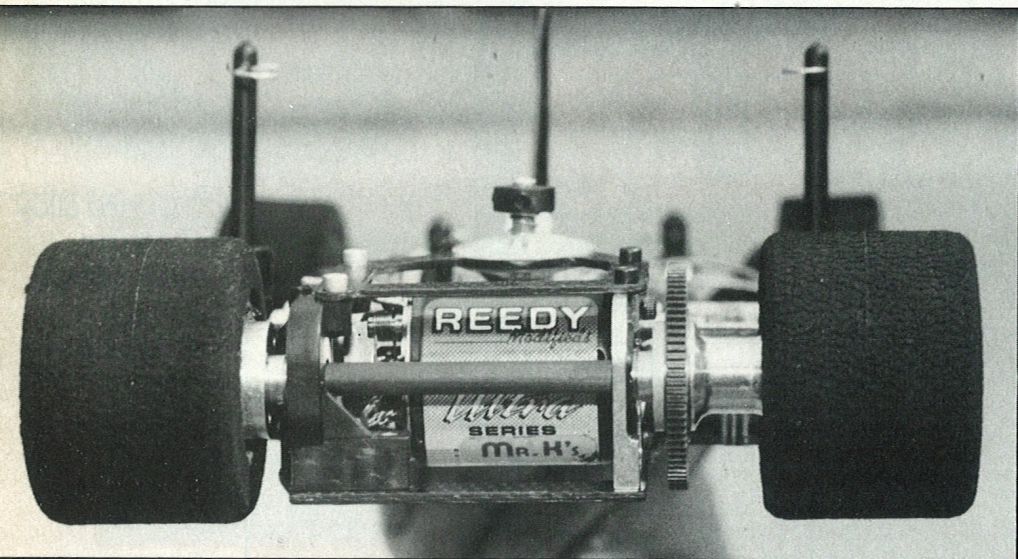
beyond the point of no return. In addition there is no need to file away parts of the carbonfibre bottom plate as this is now manufactured to fit the alloy motor mount, rather than the plastic one. Unlike many of the original cars the alignment of the chassis components was spot-on, especially in terms of the alignment between the T-piece and the rear pod.

Next we need to assemble the oil-filled damper and whilst this is a bit fiddly and messy it should pose no major problems in achieving a smooth action. Personally I am not too certain as to the effectiveness of the damper for indoor use but it certainly makes the car look impressive and allows easy adjustment of the pre-load on the rear pod. The standard damper arrangement is retained but the damper post is fixed firmly in place by the new cross brace which should make the whole assembly work much better than on the original, preventing uncontrolled flex and play in the damper post and its mountings. This could be so bad on the original that even by locking up the damper there could still be 3-4mm of (undesirable) play. Prior to this review I had always thought that the Corally diff was by far the best available in terms of smoothness of operation, but I can safely say that the diff action of the new 12LW car is absolutely superb. This is in stark contrast to the old diff which, in my opinion, was about as much use as a chocolate teapot! In principle, the diff is exactly the same as the original but the thrust washer/belville/thrust race assembly at the 'nut' end of the diff is replaced with a coned aluminium spacer. This is designed to act on the inner race of the ball bearing supporting the wheel, thereby making the ball bearing act as the thrust race. I am not entirely certain how long the bearing will cope with the additional side loads placed on it but even if it needs replacing every month it will be well worth it if it maintains the diff in its original state. Likewise, the thrust washers which used to be fitted to the axle have now been replaced with machined alloy spacers.

Supplied as standard are 32 DP gears, which you will probably end up throwing away. Interestingly, I found that the Corally 0.5 module spur gears, as used on my SP12, fitted perfectly, together with some 0.5 module SRM (RW Racing) short boss pinions. Obviously the Dumor/Trinity/Losi 64 DP gears would be the normal choice for this car. The only negative aspect of the differential is that the spur gear 'runs' on an alloy boss instead of a ball bearing. This means of course that it will wear with use and will need replacing, unless of course you have access to a lathe in which case modifying the axle to take a bearing is a five-minute job.

Fitment of Radio Equipment

Like its predecessor, and in common with most popular saddle pack 1/12 cars



◊ Rear end showing centrally mounted motor.

completely new car. However, I suspect that some of the improvements will slowly migrate to older cars as owners appreciate the modifications. Perhaps the most noticeable difference is the addition of an oil-filled damper, which gives the car the appearance of being a scaled down RC10L. In reality of course the RC10L is a scaled up version of the RC12L. Another visible difference is the cross brace used to prevent the damper post from moving when the damper is operated. The other major change is the location of the saddle pack batteries in as much as they have been moved in towards the centre line of the chassis reducing the polar moment and in theory allowing the car to change direction quicker.

Assembly

In common with most Associated products, the car is accompanied by a very detailed and informative set of

grades of sandpaper. A word of warning, however: carbonfibre splinters can be very painful, so take extra care, and if necessary wear gloves.

Once completed we can start to build up the front suspension, a superb design which has been imitated but never bettered in many other car designs. This is as per the original 12Ls but uses the three screw moulding from the RC10L and, unless my eyes deceive me, they have managed to acquire a bit more negative camber. The springs are also from the 10L and are perfect, being the same as the 'Demon' springs popular on virtually all 12Ls.

Next we start with the T-piece and rear motor pod. Firstly we notice that the alloy motor mount is thicker and stronger than the original version, which is a good thing because over the years I have seen several bent well

there is very little room on the chassis to mount radio equipment. A mini-receiver and mini-servo are essential and should pose no problems during installation. However, fitting a Corally speed controller proved to be an almost impossible task as there really isn't the space available. In the end I gave up and decided to fit a borrowed Novak unit instead. The Novak unit is obviously designed with the 12L in mind as it slotted in nicely between the servo and batteries.

Running the car

Due to the time scales involved at RRC I never actually got round to running the car before the 1/12 scale summer break. However, all was not lost, as a short discussion with Phil Davies soon yielded some answers.

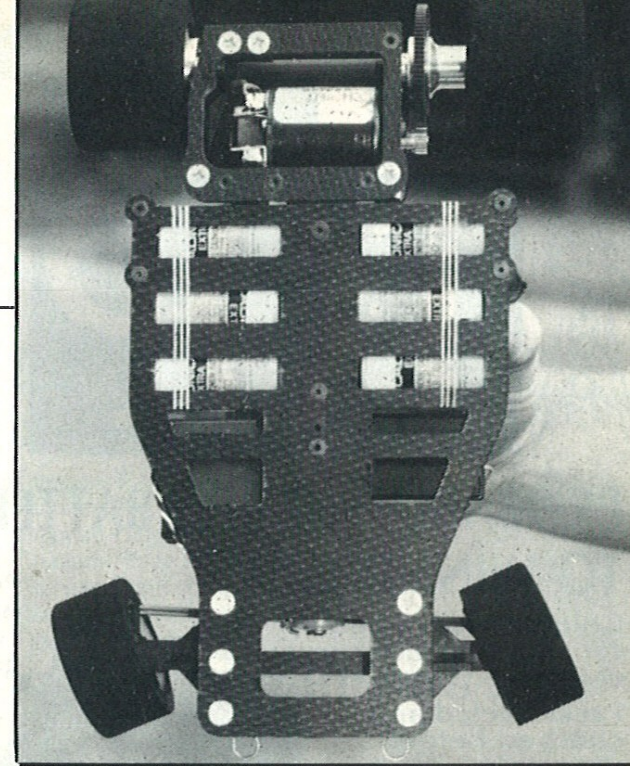
Phil has been running the car since Singapore and since that time has managed to win two BRCA nationals and finished second at the Euros. Perhaps we could have expected more from him but a faulty 'soft' chassis led to some poor (by Phil's standards) mid-season races. This, coupled with the added competition this year in the form of David Spashett and David Hall, may have made the car look less competitive than his old Schumacher SPC car.

However, Phil's opinions were that the 12LW was overall the best 1/12 car he has driven as the handling remains

consistently good even if the grip reaches the ultimate heights experienced at the Worlds. In his words, there is no other car which is neutral enough to cope with such a large variation in track grip and still remain competitive throughout. Of course Phil would be the first person to admit that for his driving style a very neutral car is not always the best as one of the reasons he can be very fast is that his car control is so good. He could set up his SPC car with masses of oversteer, which was very good on small lowish grip tracks but as the grip came up, was about as relaxing as a fight with a chainsaw.

At the Worlds in Singapore Phil felt that his car was so good it felt 'painted' to the racing line, which perhaps explains his exceptional results.

Phil's only reservation was the lack of a suitable 'tweak' to simply dial the car to the track, pointing out that on his SPC car it was possible to 'dial in' the amount of front end to suit the track by simply adjusting the amount of camber and spring rates. However, he also felt that this meant that the car was simpler as a result and being easier to set up would be better for most people. The only other point worth mentioning is that Phil has reduced the amount of negative camber by placing shims on the inside of the steering blocks as he felt the tyres were coning excessively.



Conclusions

Following the RC12L, perhaps the World's most successful model car, apart from the RC10, was always going to be a hard task to achieve. Associated, as usual, have drawn on their expertise and produced a competent replacement for the RC12L which looks set to maintain their winning ways for the foreseeable future. A lot of the 'rough' edges found on the RC12L have been removed and anything which makes an already good car better must be well worth consideration.

Personally I have always felt that the RC12L was a very good car and am itching to give it a test run and perhaps with the Ed's permission my findings can be included in a future article.

Once you have sold the wife and kids I am certain that Ted Longshaw would be more than happy to relieve your wallet of any excess funds. ●