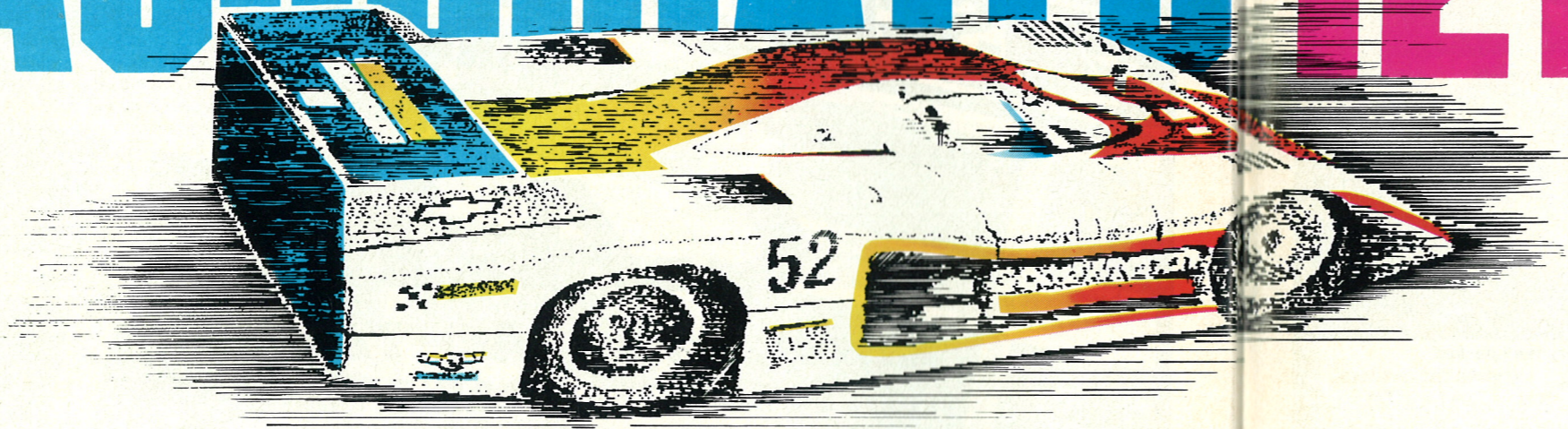


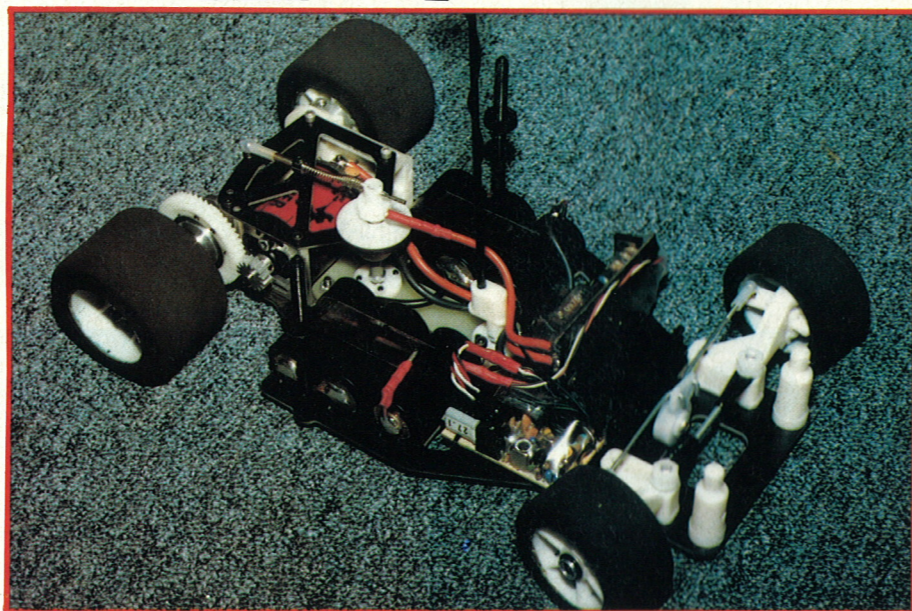
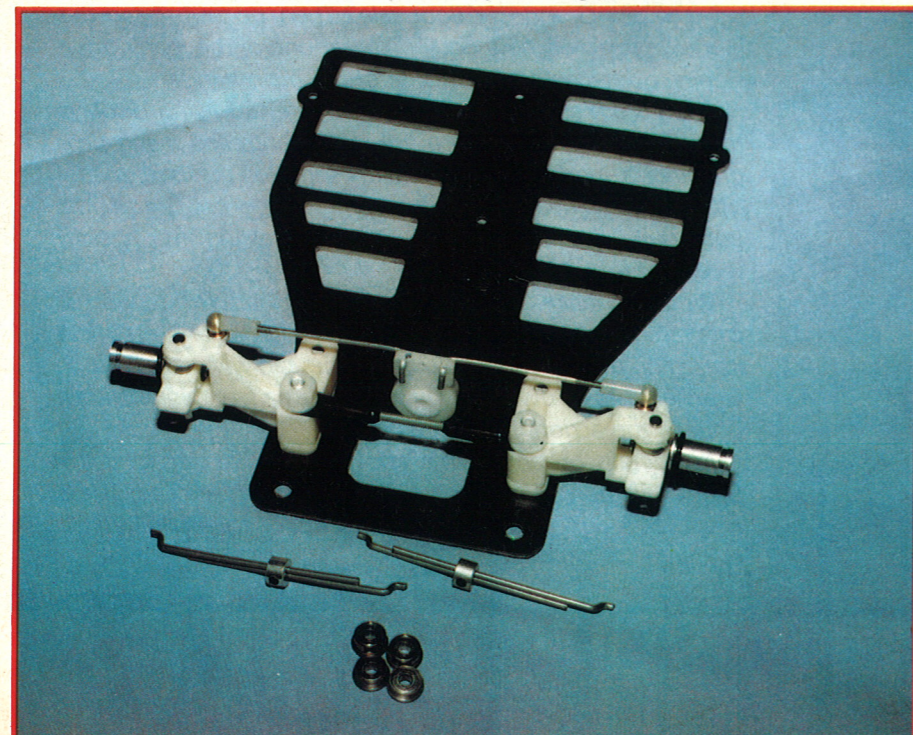
ASSOCIATED 12L



CHRIS EVANS reviews the new 1/12 circuit car from Associated.

The kit used for the review is the 'top of the range' graphite version which requires all radio gear, batteries, motor, speed controller and body to be added, the Americans have followed the trend of the Japanese manufacturers by presenting the kit in an extremely smart box and including little extra's like diff lube, servotape and Allen keys of varying sizes. The kit includes two sets of building instructions which are used in conjunction with one another, one being a written description of assembly, the other being a set of photographs at different stages of construction. A smart move by Associated is to include a catalogue of all their other 1/12 scale accessories and an order form.

The Associated front end is neat, tidy and very well engineered.



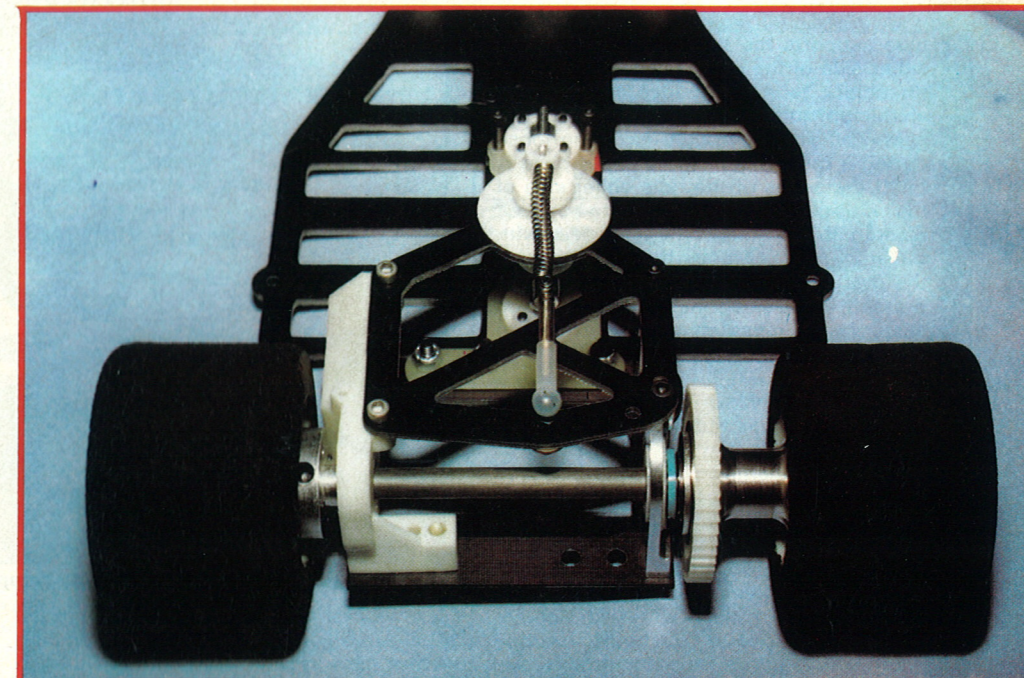
Above: Ready to go and everything fits in, space is at a premium so forward planning is a must.

The Bare Bones

On opening the instructions I liked being congratulated that I now have the best 1/12 scale car in the world; "who said the Americans are modest", although going on the past results of their cars, they're probably right.

All the parts are in numbered bags which should be opened only when a particular part is required to reduce the risk of loss.

The front suspension units are assembled, which are similar to those used on the Rc 12IS, but now the suspension arms have zero caster and the old 12E steering blocks are used to hold the front axle behind the kingpin. To start with you are told to try 2° of caster on the suspension arms, done by inserting tapered shims. Increasing the castor will decrease the amount of 'turn in' but will turn more on exit. Two sets of springs are supplied with the kit and it is suggested that you use the soft springs on carpet and the firmer



Rear end complete minus motor, sound design keeps it all neat and tidy.

chrome springs on asphalt, but initial tests show the chrome ones work best, the soft springs allow too much chassis roll. The kit comes with two ballraces for each front wheel but these were immediately replaced by Schumacher Live Axles.

I have in the past experienced problems with wheels locking up when bearings are knocked slightly out of the recess during a race.

Before the front end is attached to the chassis you have to file the upper edges of each slot for the batteries so they sit flush with the bottom of the chassis.

T. Bar Assembly

The next stage is the assembly of the 'T' bar and pivot ball system, the two pivot balls are clamped between two nylon mouldings which are then attached to the 'T' bar. It is critical that these pivot balls

move freely but are not loose, so I used a small amount of silicone grease to ease any friction between the new parts. If any binding does occur the ball can be held by a nut and bolt, spun in an electric drill and polished up with some fine emery cloth. Two 'T' bars are supplied, one thin and one thick, but both seem to give very similar performance but again like the front suspension, the thin bar seems to give too much chassis roll, allowing the edge of the chassis to sometimes catch the carpet under heavy cornering.

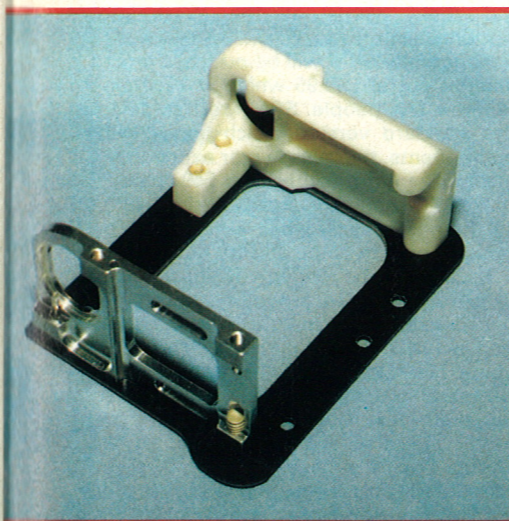
The 'T' bar is bolted to the chassis via the pivot balls, a pencil is then used to mark where the tweak adjustment screws will touch the chassis. The 'T' bar is removed and two small pieces of tin plate (not supplied) have to be glued to the chassis to stop the tweak adjustment screws from eating into the graphite. One point of misunderstanding is that the written instructions tell you to glue these tin pieces to the chassis with a contact adhesive, not ZAP, yet the corresponding picture shows the chassis with the tin plates in place with a bottle of ZAP next to them. Fortunately I know people who have used both and no problems have been experienced so far.

The 'T' bar is now bolted in place and the two tweak adjustment screws, screwed into the 'T' bar by exactly the same amount and should just touch the plates. Caution overtightening can pop the balls out of the sockets.

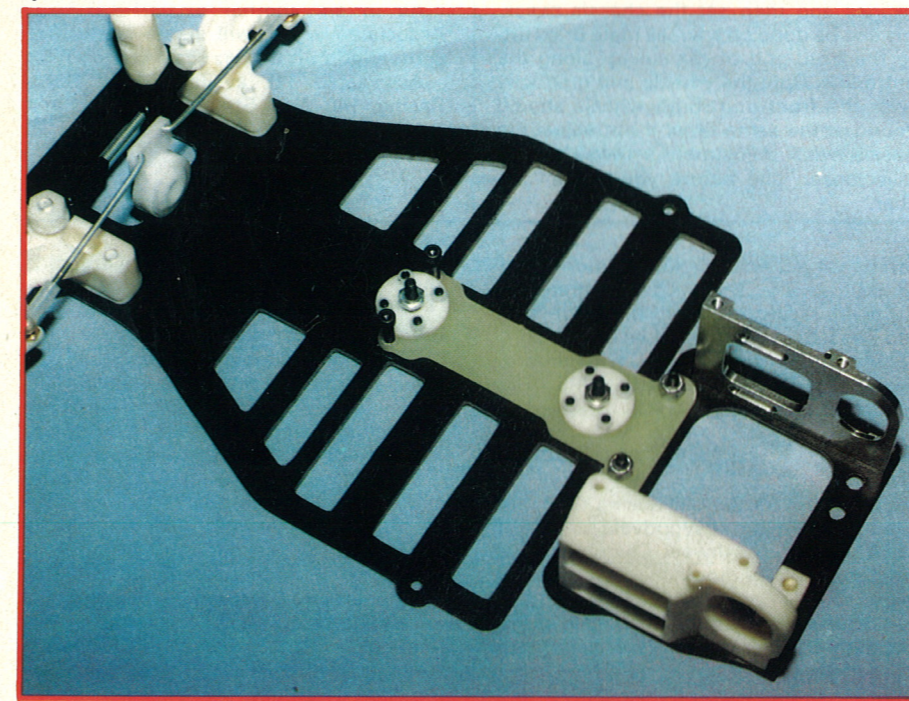
Motor Pod

The motor pod can then be assembled, the 'pro' version uses an alloy bulkhead. When using the aluminium screws to hold the alloy bulkhead it is worthwhile to use a drop of oil on the screw before installing it.

The motor pod can then be bolted to the 'T' bar remembering to use two washers between the pod and the 'T' bar so both the chassis and the motor pod are level. The rear end damper arrangement can then be completed. An aluminium tube is attached



The professional motor pod employs graphite, alloy and nylon in its final built up form.



Chassis nearly complete with T bar attached to the pod.

to the rear 'T' bar mounting screw and this tube supports the large damper washers either side of the damper plate. A drop of threadlock is a good idea to hold the aluminium tube in place, as we have experienced problems with it coming loose during a race. Before the damper plate is fitted the edges of the hole either side of the damper washers should be filed smooth. Best results so far have been with the springs which push the washers onto the damper plate being only slightly compressed, and a smear of silicone grease on each washer gives an extremely smooth damping action.

Anti Sag Device

When assembling the 'anti-sag' device it was found that when the motor pod was forced into a certain position, i.e. moved downwards in relation to the chassis, the piece of piano wire which holds the spring and passes through the plastic collar on top of the damper can get jammed in the collar. The problem is removed by replacing this piece of piano wire with another piece of similar gauge of another few millimetres in length to stop it getting stuck.

The axle cams can then have the ballraces inserted and can then be fitted into the rear blocks. As in the Schumacher C car, three positional settings are available to maximise tyre life.

Differential

The differential is similar to that used on the 12IS, but a larger hub carrier is employed as the RC 12L has the motor positioned in line with the centre line of the car. The hub carrier and also the diff wheel both carry a ballrace and when the large drive washers either side of the spur gear have been superglued to their mounts, an extremely smooth differential can be achieved.

Batteries

The batteries are then strapped into place and for this job the best stuff is Scotch reinforced tape or similar. On the subject of batteries, many of you will have to split up your 'stick' cells to make them into saddle packs. Although the current trend is to solder directly to your cells, excessive heating of a cell will damage it. I have found that instead of using a Weller gun or similar, a good old fashioned iron with a copper tip that requires heating in a gas flame will make a perfect connection instantly and drastically reduce the time of contact between the cell and the heat source.

The next item is the only real thing I feel



What you get for your money is fairly comprehensive and very well packed.

lets the car down, the rear body posts. These are just sections of nylon tubing which have very little strength resulting in heavy cornering exposing half an inch of a rear tyre as the body rocks about. The best replacements to date are the old Phantom or Schumacher posts used on their lexan cars.

Radio Gear

Finally the radio gear and the speed controller needs to be installed, this can be difficult as space is at a premium. Whatever radio gear and speed control combination you use, Associated advise you to put everything in front of the nicads on the chassis to keep the weight forward. With this in mind the receiver was located to the side of the servo and the speed controller mounted on its side, taped to the chassis and the back of the servo and so far this arrangement works well.

No roll over mast is supplied in the kit, only an aerial tube, this was discarded and a Schumacher glass fibre mast was inserted into the aerial tube mount.

Final adjustments were made putting a very slight amount of 'toe in' on the setting linkages and then set the chassis tweak. This can be done on a tweak plate or by lifting the front end of the car up along the centre line. Spin the wheels and gradually lower the front end. Both wheels should ground at the same time, if not adjust the chassis tweak adjustment screws. N.B. always loosen one before you tighten the other.

Conclusion

Initial running of the car shows excellent handling with more than a few people eating their words at the Washington National.

Apparently SRM will be putting the 'Pro' version out at £89.95 which will certainly tempt a few people. SRM are also selling the standard version which has all GRP components, two plastic rear axle mounts, steel diff and no ballraces at £49.95 which makes it virtually the cheapest competition kit there is, exactly what is needed to get more people to come and try our hobby.

Because of the longer wheelbase the car likes to be driven smoothly, keeping its speed up rather than to 'dive in' at corners and 'scrub off power' although it is hard to sping hte rear end due to the extremely soft rear end arrangement. The kit tyres supplied were Greens which work excellently but also Associated Yellows and Grand Prix 'C's have been used, giving identical performance. At present the older 12IS suspension arms are being tried with 5° castor which tends to reduce the power-on understeer on some very tight hairpins and also some harder front springs.

All in all, another excellent kit from Associated which will create some more competition on the 1/12 scale scene.

Associated 12L available from S.R.M. Racing, 140 West Street, Fareham, Hants. Price approx £90.00.

UK Modelex July 4, 5

The weekend of July 4 and 5 there is an extravaganza for all interested in model cars. UK Modelex, held at RAF Cosford is to include, on Saturday 4 a Tamiya challenge meeting. On Sunday 5 Radio Race Car series round five is to be held. All this, RAF Cosford museum and the biggest model show in the Midlands. Don't miss it!

For further details contact: The Show Director, UK Modelex '87, Masfield House, Wells Road, Malvern, Worcs. Tel. 06845-60561.

Worcester 1/10 Model Car Club

The Worcester Model Car Club invite new members to visit the facilities they have an offer. These include indoor racing from mid October to March. From the end of

March racing is held on Sunday morning at a grass track site. The club concentrates on 1/10 scale racing and welcomes novices who are schooled as much as they wish.

For further details contact David Ranford, 12a Hillery Road, Worcester WR5 1RE. Telephone Worcester 353142.

Liverpool Model Car Racing Club

The Liverpool Model Car Racing Club, are holding a meeting at Woodvale as part of the Whitbread Northwest Championships and the B.R.C.A. modified class national points round. Entry fee is £4.00 per day, this includes entry to the Woodvale show, including trackside parking, covered pits and supplied tables and chairs. For further details contact Derek McLarney, 46

Cobham Avenue, Orrell Park, Liverpool L9 3BP.

Rushden Buggy Club

The Rushden Buggy Club are holding a series of open meetings throughout this coming season. Two classes are being run, production: standard class, and super-drive; modified. Meetings are open to any make of 1/10 car. All meetings are pre-entry and cost £4.00, dates are as follows: June 14, July 19, August 16, August 30, September 13, October 18, October 25, November 15 and November 29.

Trophies are awarded at each meeting and points are awarded towards a grand final held on November 29. For further details contact D. Smith, 65 Ashridge Close, Rushden, Northants.