RC10 B2 Review

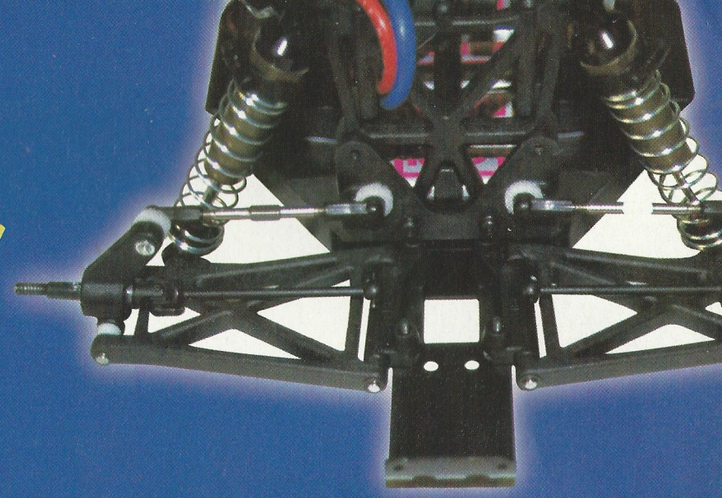
RCPS Mirage body looks superb

New moulded composite chassis,note the angled sides and smooth bottom

For over 10 year Associated's RC10 was the standard of which others followed in the 2wd off road World. In those 10 years four World Championships were won, numerous European Championships and countless National titles around the World, making the RC10 the most successful R/C car ever. Upon its release, Associated could never have dreamt that it would be so successful, and it is testament to their design team that even now the new car still uses some parts off the very original design; However 10 years is a long time within R/C racing, and the progress made by others has made the 2wd off road market probably the most competitive today. Huge strides have been made by other manufacturers to take Associateds crown, and in the last couple of years, Team Losi's Double-X buggy, despite having not won a World Championship, is without doubt the car of the moment, or maybe it was?

Many have said that the RC10 has been living on borrowed time, although it still kept winning major races, it was loosing popularity at club and domestic level. Many times in the past Associated has often indicated that they might release a new car, but until now they had felt that the prototypes were no better than the current model. The World Championships at Basildon, was probably when Associated decided that the RC10 needed a revamp - completely. It was at Basildon that the, then new Losi XX shone and dominated qualifying, and but for some unfortunate weather and superb driving by Brian Kinwald, would probably have won the event. Two years on from that event and Associated debut the all new RClOB2 at the 96 World Champs in Japan. Some would say that this car had been about 3-4 years in the making, as many an Associated racer around the world had told them that they needed a new car. Development is the key with every successful car and Associated know how to develop a car without letting anything out until it is absolutely ready, and I mean ready.!! The B2 in Japan dominated, far better than anyone expected, and I am sure even Associated were surprised how well it went.A TQ and win for Matt Francis and seven cars in the 'A' Final,was a pretty good career start. The B2's raced in Japan were the same design as the production ones, except that they had to use the original Stealth gearbox, a new Stealth would be ready for the kit release .

The Next Decade



Rear end with gearbox removed, checkout those new wishbones

What No Aluminium

The biggest surprise that I found upon seeing the new B2 was that fact that Associated had dispensed with their trademark their cars are always recognised by - the aluminium tub chassis. I had expected that having released the T2 truck with a new angled chassis, this would find it's way onto the B2. But no, Associated have decided that the B2 would be a complete change, and they have followed Losi's example by moulding a composite chassis, as is with the XX. When I first saw this, I thought that the car was very similar to the XX (after all the XX has performed quite well), but after closer inspection, there are many differences. The underside of the chassis has the sides angled up for extra ground clearance, especially under heavy cornering. This is a very neat design as there are no edges to the underside of the chassis, and everything is kept very smooth. Inside there is more than enough room to mount radio gear as there are very few strengthening ribs to get in the way. A separate rear bulkhead is no longer used, the bulkhead is moulded in the back of the chassis, with two pick up points being supplied for the rear upper link mounting.

Medium Arms ???

The rear suspension is completely new, and features longer suspension arms than the original RC10. The old complaint with the RClO was that it was often too unpredictable on rough tracks .The B2 answers this call by having medium length wishbones. I use the term medium, as these arms are actually shorter than those on the Losi XX. As an example of the length, the new wheels are identical in dimension as the old ones (the rears have a different axle diameter, although they can be used if you use the old driveshafts), yet the rear track is the same width, so the mounting points are further inboard than before.

An aluminium rear chassis plate is used to mount the rear suspension and gearbox, and this can be removed by taking out only six screws, making maintenance very easy. New suspension mounts are used to mount the wishbone to the rear chassis plate, and a 3° toe-in version is supplied in the kit. A 2° version is also available for use on high grip tracks. The outer end of the rear wishbones, mounts 0° hub carriers, one of the few links with the old car, providing 3^ each side in total. Optional rear hub carriers with 11/2° and 3° are also available, providing the user with a number of toe-in combinations both inboard and outboard. Although the old universal drive shafts will fit. Associated have used the same set up as in their T2 truck.

A new drive shaft is used that accepts the same bearing as those that are in the front wheels. This set up along with an internal aluminium spacer that goes inside the hub carrier, eliminates much of the slop that was evident with the old set up. Two wheelbase set ups are available, and by simply mounting a small spacer in front or behind the hub carrier, the wheelbase can be altered by 1/8".

The front suspension is mounted in similar fashion to the rear, with the use of a small aluminium nose plate (again similar to the RClO) that connects the front suspension to the chassis. A one piece bulkhead is used to mount the very thick front shock tower and wishbone, with an aluminium front brace going between the two inside pivot pins, to stop them pulling out under a heavy knock. The front hub carriers and steering blocks are the same as on the RClO, with 30° carriers being included in the kit. Optional 25° carriers are available for those looking for more aggressive steering. Certainly this is a change that many of the top Associated drivers make. Some very nice turnbuckles are included in the kit, and are an improvement on Associated's past efforts, the hex in the middle being less prone to rounding off! Personal preference meant that I built the kit with RCPS titanium turnbuckles, that were supplied along with the kit for review, although I would have no hesitation in using the kit versions as they are more than man enough for the job.

Bellcranks & Servo

The B2's steering arrangement is very neat. Two bellcranks, one incorporating the servo saver are mounted very close together in an effort to gain as much steering as possible through a corner. Two positions are provided for changing the ackerman characteristics of the steering, and it would appear that it is this section of they car Associated have spent some time developing.

Speaking, to Craig Drescher about the car, he said that he was surprised how much steering the car retained despite the use of longer front wishbones. This must be partly down to the steering design

The servo is screwed to the chassis via supplied servo blocks, and a selection of servo horns are supplied for different makes of equipment. A moulded top plate is all that is left to complete the front suspension, and this reminds me very much of the Losi XX, although this is a smaller version. This top plate clamps the steering assembly in place and also provides a very rigid front 'box' section. A nice touch is the way the front edge of the top plate lines up perfectly with the front bulkhead, giving the front of the B2 a streamlined and racy look. A small point, but it really does finish the front off

Gears And Things

Associated's Stealth gearbox set the standard back in 1989 when it was released, but it had become dated 6 years later. The 2.25:1 final ratio had become left behind by the technology of today's motors. A completely new design Stealth gearbox has been developed for the B2, with a new final drive ratio of 2.40:1. This ratio is more suited to the required gearing of today's motors and tracks. Although the internals of the differential are the same as before, the actually gears are obviously different. The diff gear and plates are much bigger necessitating fewer rebuilds, and allow the design to be mounted a little lower. The idler gear now runs on a separate shaft and is moulded, along with the diff gear, from a new lubricating material, for more efficiency and speed. The top shaft and slipper arrangement is the same as before, Associated feeling that this part of the gearbox cannot be improved upon. To keep the weight as low as possible, the base of the gearbox actually sits in a square cut out inside the aluminium rear chassis plate.With everything slotted together at the back, another rigid section is produced.

Spread The Load

The B2's chassis provides the user with three different battery positions by a simple yet effective arrangement of alternating some foam pads. Batteries can be placed right at the back or right at the front of the chassis, and by placing the supplied pads at either end, can be mounted in-between. A neat slim line battery strap holds the cells in place, and adds nicely to the overall racy look of the car.

Leader Of The PACK

The shock absorbers is another of the few similarities that the B2 has in common with other Associated models. The Teflon coated shocks have proved themselves on all of Associated's top cars, so why change now. The rear shocks are the same as on the RC10 worlds with 1.32" shock bodies being used ,and 1.02" shafts, while the fronts are slightly different, with new 0.89" shock bodies being used with 0.71" shafts. This new arrangement on the front has definitely improved the front suspension, as the shocks are now much smoother, due to the higher volume of oil.

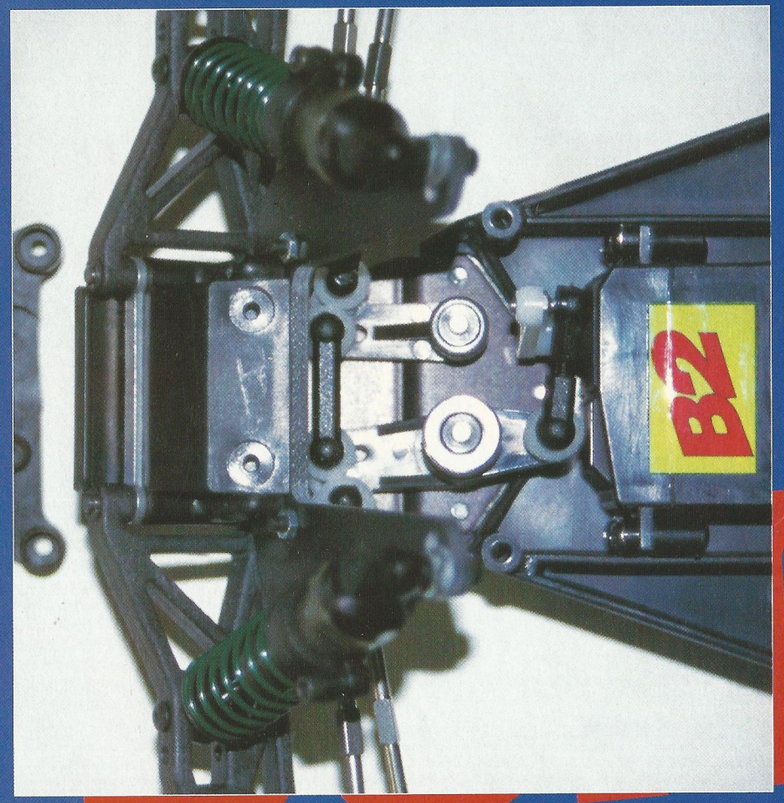
Worth The Wait?

I think that without doubt the B2 was worth the wait. Devout Associated followers will be impressed with the finish of the car, and one cannot but be excited with how the car looks sitting on the bench. If trophies were given out for looks then the B2 would surely take some beating.

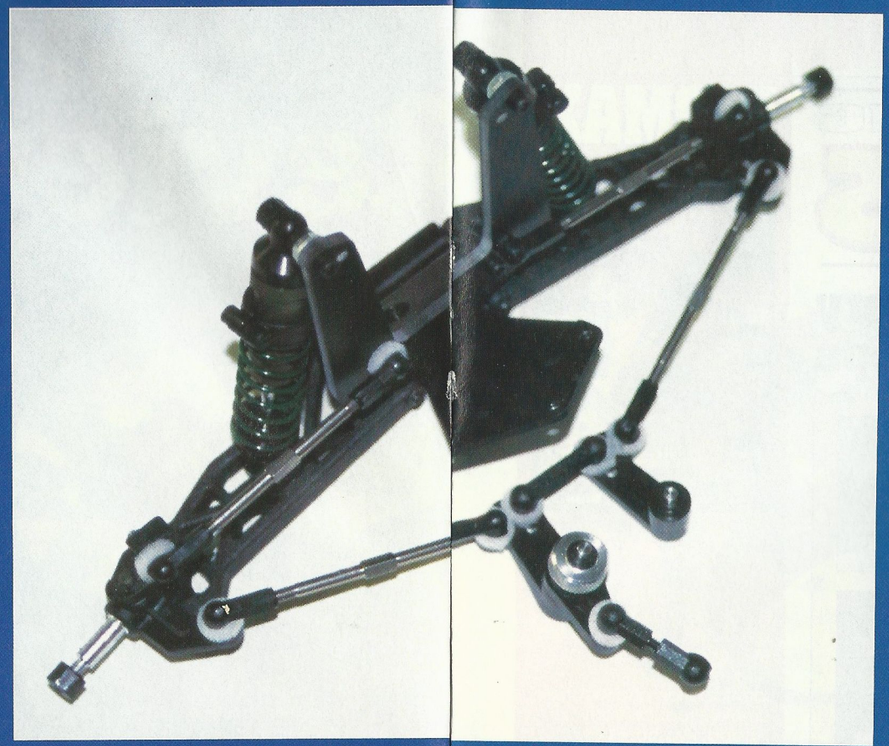
The new shell, a more streamlined, lowline version of the hugely popular RCPS Mirage, looks superb, and another nice touch, the pre-bent wing wire enables the wing to be mounted right first time.

Track Time

With the weather being somewhat 'dodgy' at the time of writing an in-depth track test will follow in later issues. However we did manage to take the car out on a couple of occasions at Kidderminster's all weather multi surface track (could do with some undersoil heating though!).



Very neat bellcranks and extra ridged top plate



Above:
Easy removable front end

Having briefly played with an RC10 last year, I was able to make some light comparisons, and was immediately impressed with the B2's speed and acceleration. The new gearbox appeared to be a vast improvement over the old design, as the B2 was more responsive under acceleration and top speed that the older model. The B2's does weigh in very light, and is only about 11/2 to 2 oz overweight depending on your choice of radio gear), but never the less using a Reedy Ultra-Sonic S 12 double and new Tekin G12 speed control supplied for the review, the B2 was without doubt quick, almost to quick for my cold thumbs, 'oh god there goes the paint job.

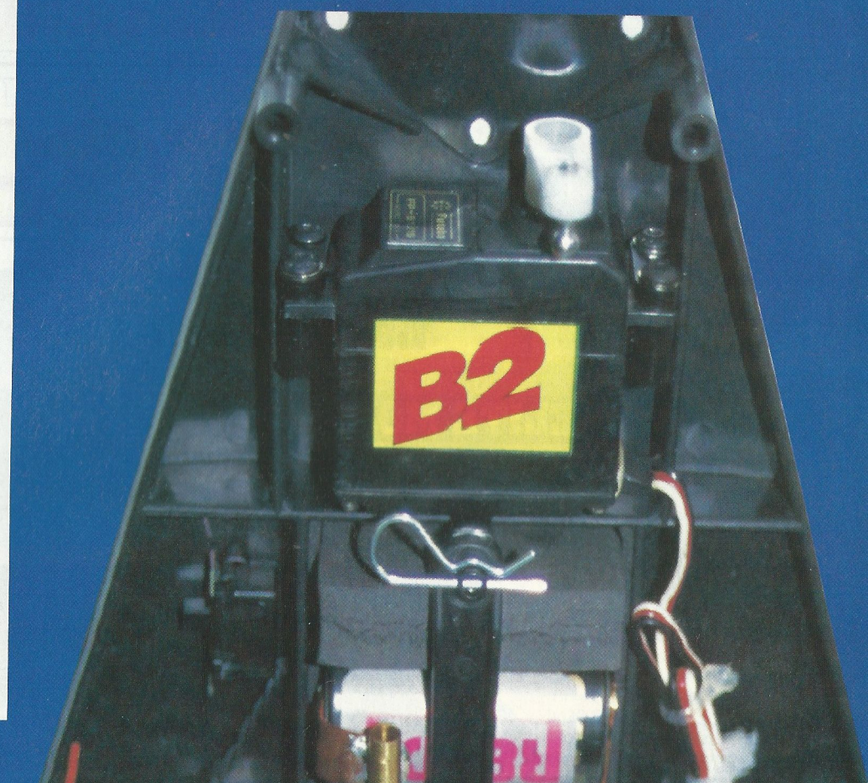
Kidderminster's track is a little bumpy, so the No. 2 pistons in the front were changed to No. 1 and 30wt oil. This change definitely helped the car over the more choppy sections, as it bounced around less, and I was able to put some good laps together. First reactions are how much steering the car had. On slow bends the car turned superbly, and the steering was consistent through the bend. Due to the new suspension the car appeared to change direction well and maintained a degree of stability that the old car never had. With the old RClO you had to be on your toes for 5 minutes on this type of track. A little power understeer was improved a little by the introduction of some 25° front carriers, although the car was not quite as safe as before, it was probably quicker round the track (this is something that the individual driver might want to experiment with, and find what's suits him or her best).The suspension soaked up the rough ground nicely and always landed well off any larger jumps, generally the car felt easy to drive compared to the old car, which after the length of time in development you would expect.

Right: Cells can be repositioned very simply by the foam pads at the end.

So.....

How it will compare to the other makes remains to be seen. The Losi XX is a tough act to follow, but in the B2 Associated have definitely bridged the gap that was created before its release. The design of the car is much simpler than before, with only the most significant adjustments being catered for, making it easier for novice and expect alike. The results that it has already gained have proven the potential of the car, although it is to early to say what the car is capable in this country.

My own opinion is that the B2' design will certainly suit 90% of the tracks here, as it has the steering and stability to suit almost any size track. The fact that the car is so light may be a disadvantage on some bumpy or low grip tracks, but this is only a minor problem. In reflection, the RClOB2 carries on Associated's tradition of designing and manufacturing some of the best model cars around. No detail has been ignored on the B2, and the thoroughness and development that has gone into its design, will surely bear fruit over the coming months. Whether it will be as successful as its predecessor, we will have to wait 10 years to find out, but for now it should spice up 2wd racing to a new and highly competitive level.



STOP PRESS

Watch out for the May edition of your favourite mag, when Craig Drescher tells all on the B2