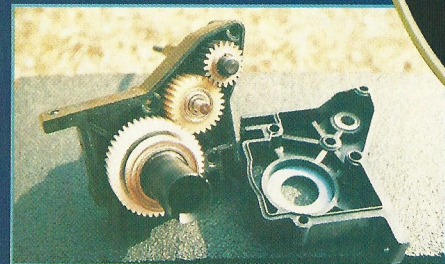
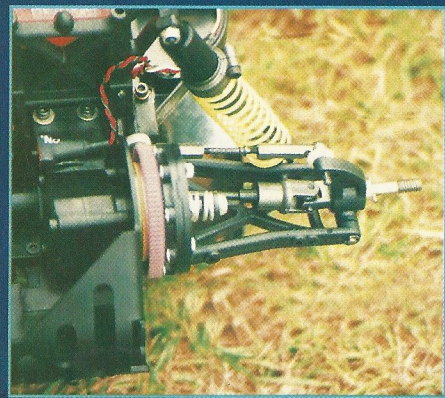


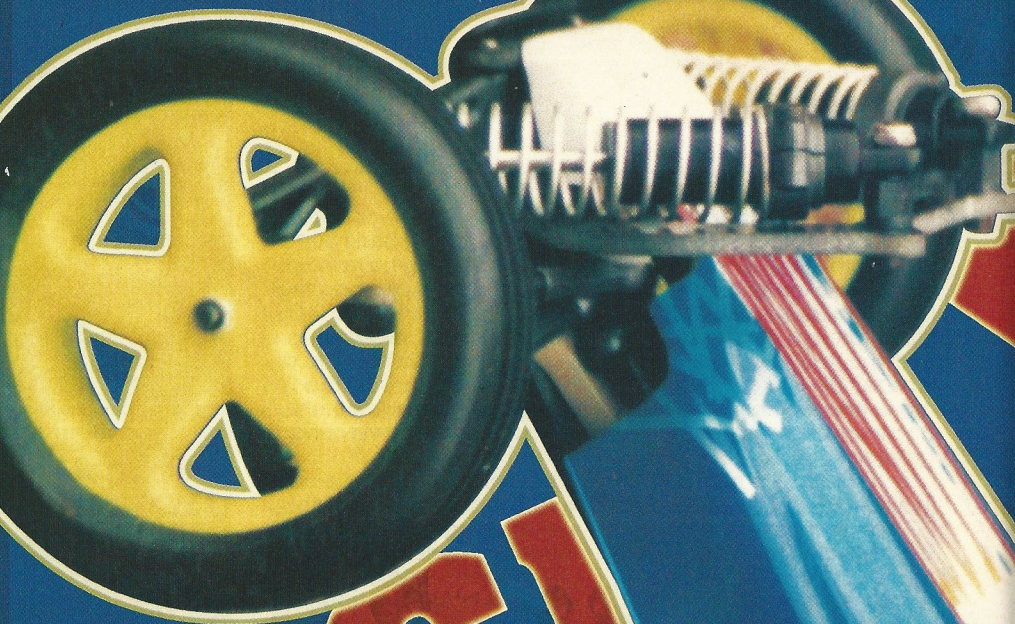
The front axles run in grade seven ball bearings with steel turnbuckles holding everything in place. You can just see the 'foam thing' which prevents dirt ingress between the ball joint and rod end.



The gearbox is now a legend in racing circles for durability and efficiency. The ratio of 2.19:1 was retained.



The rear suspension has 3° toe-in as standard, dictated inboard from the anti-squat plate rather than from the hub. This imparts much more stability to the rear end and helps considerably over bumps and round corners.



# LOSI

## THE SUCCESS STORY CONTINUES...

With the British 2WD Championship being one of the most hotly contested in the racing calendar any new car attracts interest, but when the new car comes from the current BRCA championship leader then hopes and expectations are high.

Losi's new XX CR comes three years after they took the world by storm at the 1993 World Championships with the original XX, taking TQ and only just missing the exclusive win. Success came very quickly for Losi within Europe with Helger Racings sales network and the XX quickly became the most popular 2WD car in the UK and has been dominant at national and club racing until recently where Associated's world conquering RC10 B2 has been gaining popularity particularly at club level.

Never a company to stand still Losi were quick to respond with the XX CR (C release). Based on exactly the same successful design principal as the earlier XX, the innovative 'stiffizel' (stiff as h\*!l) chassis now supports newly designed suspension, with drive transmitted through the legendary lay down gearbox and hydra drive system, with smart new five spoke wheels and new XXL body finishing off this pure racing machine.

I was intrigued with the

box which underneath its external shrink wrap contained a credit card size 'damn Yankee's' club membership certificate which comes with all official Losi imports. Once authorised through Helger Racing (the only official importer), this card gives free membership to the Losi/Trinity racers club with newsletters and race tips from the US stars and news of new products. This is an excellent idea and the closest you can get to 'after sales service', well done: a nice touch.

The 41 page manual is more than an instruction book and should be read thoroughly before starting, providing a foolproof method of construction if followed correctly, with all screws and nuts shown to scale to help in assembly.

As is customary with all electric kits you start at either the front or the rear and with the Losi it's the front which is logical if nothing else. A black fibre glass shocktower is screwed to the front bulkhead, with the chassis stiffener located to the bulkhead via a 1/8th hardened steel pin, fixed in place with the American's favourite E clips. I recommend fixing the E clips using a pair of decent thin nose pliers, as it makes the job so much easier and the novelty soon wears off from pulling E clips from underneath your finger nails!!

The front bulkhead assembly is pinned to the chassis using a tight fitting pin, a small pin hammer is ideal for this operation as a few gentle taps is much better than one large wallop!! (this ensures that the pin goes in square)

The front axles run in grade seven ball bearings, which are supported in the racers favourite 25 degree caster axle carriers, with long front suspension arms



by Andy Benson

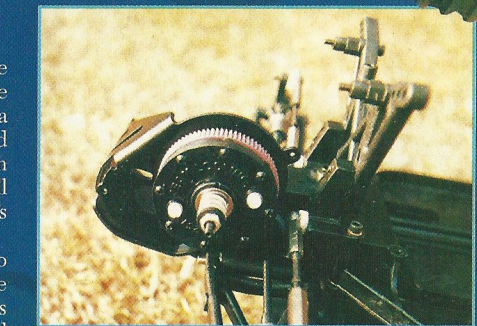
# Review

providing ample suspension travel. All the plastic mouldings are excellent quality but do take the time to remove any moulding flash with a small modelling knife. Steel turnbuckles hold everything in place, with Losi's famous 'foam things' preventing dirt ingress in between the ball joint and rod end. With bag A now complete it's time for bag B, the servo saver assembly.

Adjustable tension is provided on the servo saver by adjusting the spring locating nut, but the recommended setting seems ideal and provides crash protection for the transversely mounted servo. A huge selection of servos are catered for, with servo arms and posts for virtually any combination you can think of. I chose to fit a KO1004 FET servo, which I found to be very effective in my Losi XXT truck, until I was fortunate enough to be able to fit a KO1002 to the XXT, so my spare KO1004 has found a new home. Always try to fit the fastest servo you can afford,

**With a little thought given to tyre selection, Losi's XX CR is a potential competition winner in local, national and international racing....straight out of the box!**

The shocks on front and rear have remained unchanged from the XX - deservedly since they are so good anyway. If it ain't broke, don't mend it!



The Hydradrive unit in position on the chassis.

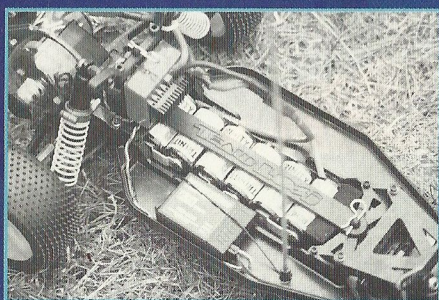
as quick steering leads to better cornering when racing, but if you cannot afford a FET servo then try a Futaba 9301 or if you are on a tighter budget the Hi-Tec HS 605BB is an excellent choice.

With the front end now in place it is time to move to bag C and the rear suspension. This is where the biggest change is visible from the original XX. 3 degree toe in is now standard, but it is now inboard toe-in from the anti-squat plate rather than from the hub itself. This induces much more stability to the rear end of the car, with a zero degree anti-squat plate helping in putting the power down. This combination helps the car power over bumps and ruts better without the rear end kicking around, and provides much improved low speed turn in. A moulded rear shock tower is screwed into the rear bulkhead using cap head screws with all tooling such as Allen keys supplied in the kit.

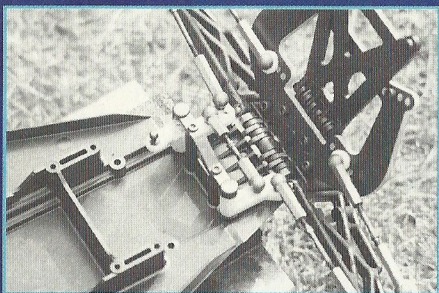
Rear hubs are a loose fit in the handed suspension arms, with spacers either side of the hub giving the ability to change wheelbase if required. Axles are again supported in grade seven ball bearings with power transmitted from the gearbox through two piece dog bone driveshafts. The instructions recommend the use of threadlock when assembling the dog bones (threadlock not supplied), which I do agree



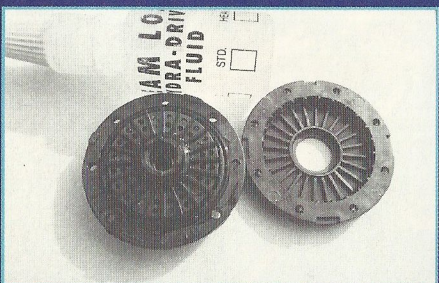
**The XX CR ready to go - and does it ever go!**



**The battery pack is retained with a moulded strip running the length of the chassis - smarter than the old Velcro system.**



**The steering assembly gives very positive and predictable tracking. Shown here before the servo was fitted, the kit provides for adjustable tension on the servo via the spring adjustment nut.**



**The Hydradrive system is unique to Losi and delivers the power from the motor to the wheels so smoothly that wheelspin is very controllable and wheelies can be tamed with ease.**

with, as a loose dog bone not only messes up your race but it also can make quite a mess of the universal joint if it fails when under power.

With rear suspension now in place it is time for the rear gearbox which is now legendary in RC racing for its durability and efficiency. The original 2.19:1 ratio has been maintained, with a metal slipper shaft gear driving a plastic idler gear through to a plastic differential gear. The ball differential should present no problems in assembly, if approached with patience, but do pay close attention to the bearing sizes as some are very similar in size and look the same at a glance. Before assembling the gearbox apply a small amount of the hydra drive fluid to the gears as this provides a silicone coating, hence reducing friction. The ball differential runs in large 1/2 by 3/4 bearings protected on the outer face by foam shields, which can be tricky to fit but once in place do a good job. The gearbox itself locates onto the motor plate with three cap head screws. Snug these up first before fully tightening to ensure no distortion, which could cause friction in the gearbox.

The next item is unique to Losi and in fact is patented in America, the hydradrive system. Most electric competition cars now have a slipper clutch fitted but Losi have taken it to the next dimension with the hydradrive unit. The hydradrive unit is effectively an oil filled turbine, with the motor driving the outside of the turbine, and the inner vanes driving the gearbox, with a very viscous (thick) silicone oil in between the vanes. The result is very smooth acceleration with no wasted power in wheelspin and the ability to tame wheelies with simple adjustment. Assembly of the hydradrive system should present no difficulties, but do ensure that all the air is removed from the hydradrive when filling with oil. It takes about 20 minutes to do this properly and it is messy, so have some cloths handy. Once filled the hydradrive should be cleaned (I use meths) and fitted to the spur gear. An 84 tooth gear is supplied in the kit. The slipper clutch provided is conventional in design with adjustment provided by adjusting the spring tension. The completed motor plate and gearbox assembly can then be fitted to the chassis, requiring only four screws so that trackside strip down time is kept to a minimum. Always just snug up all the screws first prior to fully tightening to avoid distortion.

Our machine is now taking shape so it is on to bag F, the shock absorbers. No change here from the original XX, and there is no reason to change the design of these units. The Losi shocks are one of the best in the business, with super smooth damping and leak free performance if treated correctly. Spacers are only used in the rear shocks, which are easily identifiable being longer than the fronts. Black pistons are provided for the front shocks, with red pistons in the rear, with 30wt oil providing the damping. Ensure that no air is in the damper when filling with oil by allowing the oil to come over the top of the unit when inserting the piston, prior to fitting the silver springs to the front shocks and yellow springs to the rear shocks.

That's it, we nearly have a rolling chassis, just those gorgeous five spoke wheels to go. Silver

step pin rear tyres are supplied, with gold compound ribs providing the grip up front. The tyres are a good fit on the rims but they do require a few drops of super glue to hold the tyres in place. I prefer to use the thin variety of glue as it flows around better, but some racers prefer the thick variety which does make tyre removal easier when worn.

One more bag to go and another break from normal Losi tradition. Gone are the velcro battery retaining straps, being replaced with a smart moulded strap running along the length of the chassis. The old Velcro's worked fine but they did look bulky, this new strap looks so much neater and makes the XXCR look much leaner.

With the new XXL bodyshell painted and trimmed to fit it was time to fit the electrics. My beloved JR475X system is not known for having the world's smallest receiver, but there was ample room on the chassis. Two mounting locations are provided for the speed controller, on the chassis opposite the receiver or on the rear bulkhead. As my spare Novak 410M1c was wired for bulkhead location this seemed the obvious choice. Although not in the same league as the LRP ICS fitted to my truck the Novak has provided years of faithful service and is quite at home controlling the Trinity 11 x 3 I chose to fit for the test runs. A gear ratio chart is provided in the manual but no pinion is included in the kit, so I meshed up a ratio of 18:84 and headed off to the test track.

I charged up some old practice packs first before trying out my race cells (Trinity Race Techs 292 sees at 25 amps for the number anoraks out there). I had the slipper too tight as the front wheels were lifting, but a few adjustments and changing to race cells and we were in business. It was awesome, rocket ship acceleration, and phenomenal top speed, but it was rolling on high speed corners. A few words of advice from Darren Boyle of DMS Racing resulted in the ride height being lowered, and we had a stable racing machine. I wanted more steering and a quick look through the tech charts confirmed what I thought. For grass circuits I needed pin front tyres and larger pin rear tyres, these were immediately offered at a reasonable price from Darren, so out came the super glue again and on went another set of cells.

This was much better and the XXCR was immediately putting in quick laps. I was racing trucks at this meeting, but during the practice sessions I manually counted lap times using the stopwatch on my JR transmitter, and was consistently recording 24 to 24.5 second laps with the XXCR, with TQ for the 2WD class eventually being recorded at an average of 24.8 seconds. Maybe I should have left the truck at home and run the XXCR first time out!!!!

## Overall Impressions???

Excellent: this kit is capable of winning British, European and World events straight out of the box, with the correct tyre choice. The supplied tyres are more suited to American style tracks so they are not wasted!! All the right bits are included in the kit with the inboard toe-in and zero degree anti-squat providing a very stable and positive drive. The question to be asked 'is it better than the XX?' Well it is not suddenly going to take you from F3 to F1 status, but at top level where tenths of a second count, then yes, the power goes down better and turn in is improved.

I am certain that this car will feature strongly in many A finals but probably more importantly will find friends at club level. If built properly it will be 100% reliable, strong and all parts are available from all good model shops, with World Championship ability built in for free!!!!