

# KIT REVIEW

# THE 2WD CAR THAT MANY A DRIVER WOULD GIVE THEIR RIGHT ARM FOR...

The new Losi XX isn't a new brand of Australian Lager, but is actually the car that Gil Losi Sr. claims that even he could

## It's All New!

So, let's look at the car in more detail. It most-

certainly is not an update of the older model, the JRx Pro SE, for this car has been designed to be all new from the ground up, taking over two years to reach its present level of 'state of the art' sophistication, being developed with the use of sophisticated computer stress analysis programmes, to aid the testing of different material used and the shape of the wishbones and rear suspension parts.

Firstly let's tackle the main section. The chassis, to which both the front and rear sections are bolted, is made of a new material called Stiffizel (if that isn't a play on words I don't know what is! Ed) which is

a composite material that is very strong and as stiff as h.... The chassis has been designed with the centre section recessed to form a trough, and this has a twofold effect a) it allows for a lower centre of gravity, especially as this recessed section also holds the battery pack, and b) its very shape gives the chassis immense rigidity. Moving onto the other two main areas — firstly the rear transmission section. This is held onto the chassis by six screws, four from underneath and

t w o



The "live" stub axle can be seen here in the steering arm. The small sponge "washers" prevent dirt and grit entering the ball joints.

from the top. The heart of the rear section is the gearbox. This is again a totally new design, which Losi refer to as the 'laydown' transmission. It contains a super smooth ball differential, with carbide diff balls as standard running on hardened and polished diff rings, the complete unit being supported by Teflon sealed outdrive bearings. Also included in the XX kit is Losi's very own

# Team Losi

The '93 World's TQ was taken by the Losi XX in Joel Johnson's hands, and since then it has made a real impression for its ease of maintenance and outright speed.

win with! Losi believe that the car is faster and easier to tune to any track than any other top level 2wd car available on the market today. Well, the claim that it is faster than any other car available can be deemed as already substantiated, for at the IFMAR World Championships held in the UK last year, this was the car that took FTD and pole position for the main A Final. The XX might not have won that Final overall, but it was still the fastest car on the track.

## Is It The Easiest Car To Maintain?

Well, looking through the construction manual, it becomes obvious that the XX has certainly been designed to allow for ease of access to its working parts, whether at the front on the suspension or, more importantly, the transmission at the rear. Basically, the car has been built on a modular principle, with the main chassis in the centre and both the front and rear 'modules' easily removable for serious cleaning or servicing.

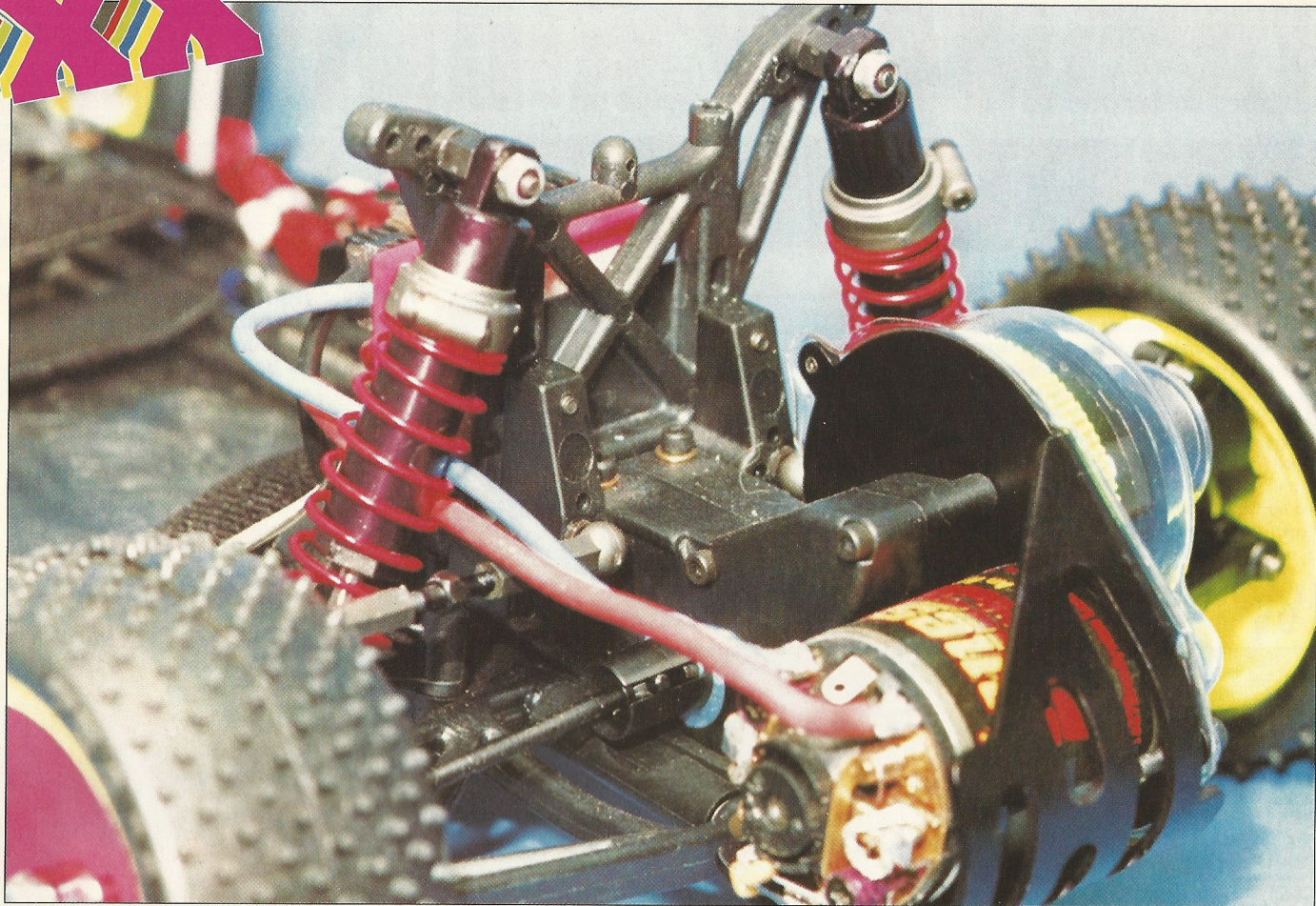


Joel 'Magic' Johnson after setting TQ at the World's with his XX.





**XX**



The rear end and the low line "laydown" gearbox. The "Stiffizel" moulded shock tower also serves as the wing mounting, and is very light and strong.

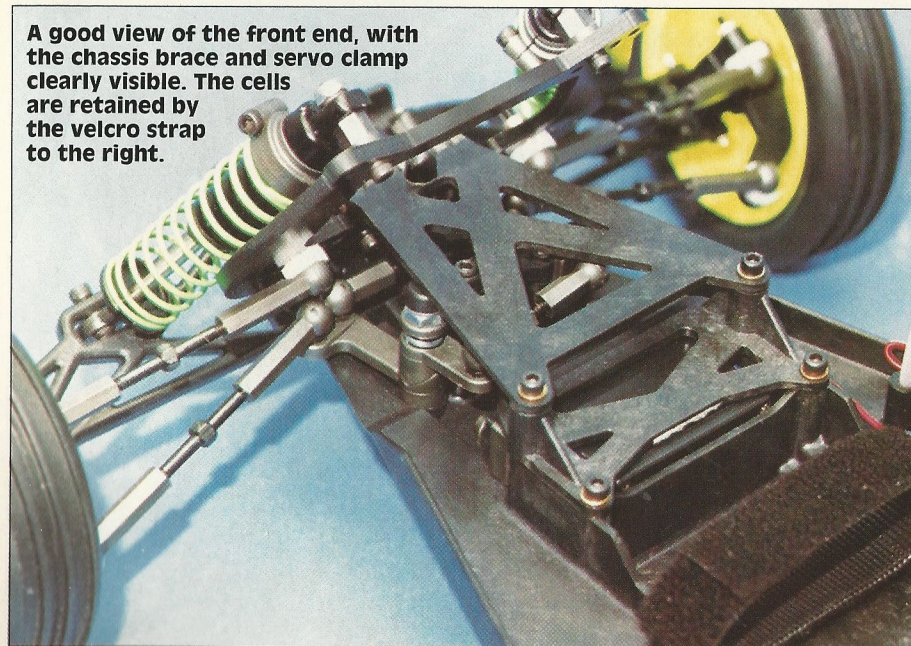
patented 'Hydradrive' system. Team Losi state that this provides the ultimate in power handling and traction control, and indeed this really seems to be the case, as a number of other cars on the market can be seen sporting an adaptor shaft to allow the fitting of Losi's Hydradrive. Many cars at the World's, both 2 and 4wd, ran Hydradrive

units to improve their drivability on the slippery and bumpy track. The gearbox's spur gear is of the popular 48 D.P. type with the kit supplied item being an 88 tooth unit. Also available are 84, 86 and 90 tooth spur gears to allow a wide range

of gear ratios to be obtained. The overall internal ratio of the gearbox is 2.19:1.

Once the gearbox has been bolted to the rear of the car it becomes quite evident that Losi, with the design of the laydown type gearbox, have managed to keep the centre of gravity (at the heavy end) very low in the car. The drive is taken to the wheels via universal joint type driveshafts. The rear hubs of the XX have been designed to incorporate rear toe-in. At present this is set to 3.5 degrees of toe-in per side — a total of seven degrees. Losi are, however, looking at making available different hubs incorporating varying amounts of toe-in to enable you to adjust the set up as you wish. However, Losi find that the kit set up seems to work well under all conditions. The degree of anti-squat in the rear suspension is built into the rear pivot support, which is set at four degrees. Again Losi have an alternative available, namely a two degree block, and although the use of this will help the car accelerate, it will cause the car to lose rear end grip.

The wishbones are made from the same material as the chassis, whilst the top of the shock absorbers are hung from a moulded shock tower that looks as if it is made from the same material again, chosen in favour of a graphite or fibreglass unit as it is lighter and actually stronger. The rear wing is also located into the shock tower. A word of advice here; the majority of racers mount their transponder through the wing, and the last thing



A good view of the front end, with the chassis brace and servo clamp clearly visible. The cells are retained by the velcro strap to the right.

## THE 2WD CAR THAT MANY A DRIVER WOULD GIVE THEIR RIGHT ARM FOR...



Joel's pre production XX after setting TQ at the World's. Note the rear anti roll bar

you would want to lose during a race would be the wing (and transponder), so before pushing the wing into the shock tower, make a small kink towards the base of the wing wire to make it a tight fit. This should be sufficient to prevent the wing from being pulled out in the event of a crash. That about completes the rear of the car so now let's move up to the front.

replacement case is not always that easy. The steering pivots aren't ballraced in the kit, but an optional ballrace kit is available as an aftermarket upgrade, although I don't think it is really necessary. The front shocks are mounted at the top to a conventional, but thick (4mm) fibreglass mount that is bridged across the top for added strength.

Other equipment used in the completion of the Losi XX was a

As I said earlier, this car is all new from the ground up, and the front is no exception for it is held onto the chassis by two pivot pins; the top brace being locked onto the chassis by two caphead screws. The reasoning behind this pivot type of mounting at the front was that initially Team Losi had thought of making the front kick-up angle adjustable but, after exhaustive testing, a 30 degree kick-up angle proved to be the best under all conditions, so the adjustable design was dropped. The wishbones are again made of the same material as the rears, namely Stiffizel (love that name!). They are mega-wide, and to do this Losi have narrowed the front bulkhead. The use of wide arms means a smoother suspension movement and better handling of the car over rough surfaces. At the other end of the arm, the wheels are mounted on a stub axle that in turn is supported on inboard bearings to give a 'live' axle. The reason for this is to allow the centre of the wheel to be over the centre of the king pin - the ideal position. The steering set up on the XX is of the twin bellerank design that incorporates a servo saver in the right hand side bellerank looking from the front. The steering servo is bolted into the centre recess of the chassis, again keeping the centre of gravity low, but to do this means you have to chop off the lower pair of mounting lugs from your servo. Personally, I feel that this is a bad point, as until one can acquire a replacement case for the servo, you cannot use this servo in another car, and finding a

The complete rear end is easily removable by simply unscrewing four screws from underneath and two from above.

Futaba 27 mhz receiver, a KO703 fet servo, Nosram Dominator HF Speedo and a Genesis 15 x 3 motor. The fitting of the radio gear into the car gave no problems whatsoever. The raised sides of the chassis eliminate the need for the undertray that is so often needed in the U.K. The speed controller can be mounted either flat onto the chassis or up against the rear

The moulded "Stiffizel" chassis, showing the trough in which the battery pack sits.

bulkhead. I chose the latter, as this position keeps the wires short — always a plus point.

All that remains now is to try the car out. The correct adjustment of the diff and slipper/hydradrive unit is most important, so to make this all important part of the initial set-up easier, a most comprehensive set-up guide is provided at the rear of the instruction manual to help you make the necessary adjustments. Follow these to the letter and you will have a car that is certainly capable of taking you to the top.

Not having had suitable weather prior to this magazine's copy date to actually go out and test the XX out for the first time, I am champing at the bit to get to grips with it, but am well aware that drivers racing XX's have already been going very well, even matching 4wd race times in Steve Harris's case (!), so this is yet another reason for giving the XX a close look. Its performance over rough tracks is already the talk of many a pit area, as it was at the Basildon World Champs....

Well, that completes the XX; its availability in the U.K. is Nationwide with its distributor being Helger Racing, better known as Parma European Sales (0279) 641097.

The car should be available from any model shop — if it's not then ask why? They don't know what they are missing!

