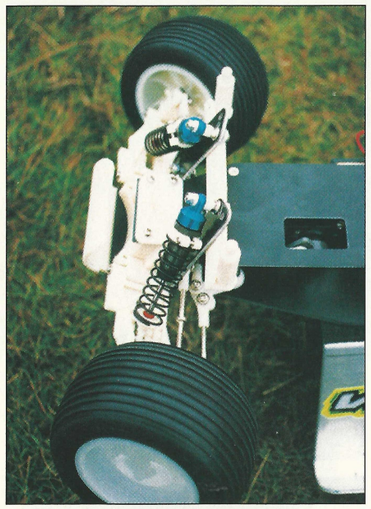
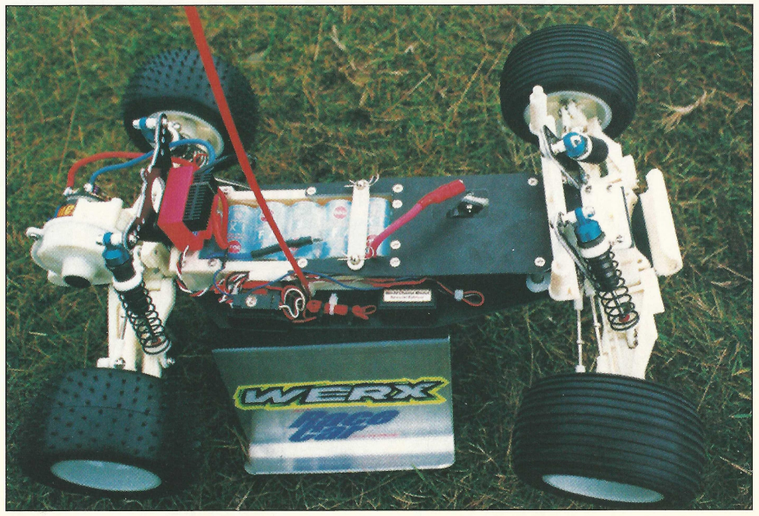
Traxxas LS-II

In the USA, Truck racing is really 'Big Fun', as more drivers from this side of the 'pond' are discovering! RRC reviews one of the most popular Trucks on the market, the Traxxas LS-11.



The front end features really strong suspension arms to withstand the knocks and pounding from the large jumps that Trucks are asked to take! The upper chassis plate is an integral part of the Zero Flex design, and neatly braces the front bulkhead.

The completed chassis 'ready to roll'. The Kimbrough servo saver can be seen through the rectangular hole in the top plate. The only item that the kit lacks is an undertray for use on wet and muddy British tracks.



Last November's Radio Race Car brought you the review of the scintillating Traxxas Nitro Hawk 1/10 I.C. Truck. Well, this month we have the mouth-watering, sensational new 1/10 electric racing Truck, the LS-11, finely honed and developed from the new 2wd Traxxas buggy which is due to hit the shores (and shops) of the U.K. very shortly.

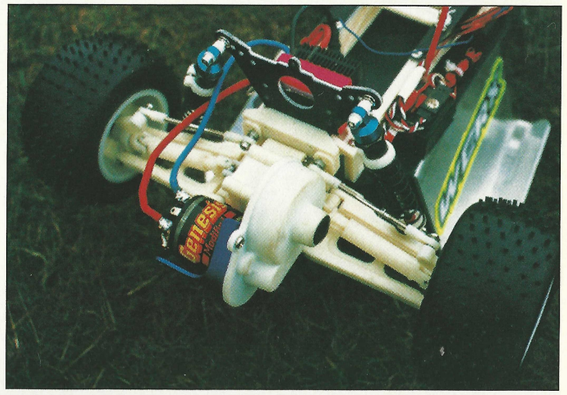
The truck comes in total kit form unlike its brother the I.C. version, but the box lid has emblazoned across it these all important words; "Competition Racing Truck" and the LS-11 most certainly is! Let's look at its features first, before delving deeper into the intricacies of its race pedigree. Firstly, it is fully ballraced with the exception of the steering set up, but a kit of ballraces is available from Traxxas that purpose. The suspension travel available at the front is 2.3 inches and at the rear, for surviving those awkward landings off the very biggest of jumps, a huge 2.5 inches!

A very important factor to take into account when choosing any racing machine, whether it be a Buggy or a Truck, is the rigidity of the chassis, because if the chassis flexes this becomes an uncontrollable variable while trying to tune the vehicle. Flexing has been totally overcome with the chassis design of the new Traxxas Truck. In true American style, they like to call it their new Zero-Flex Chassis, and believe you me, that is exactly what it is.

O.K. — that's whetted your appetites, you mad truck racers — so let's delve!

All of the components are neatly bagged and labelled with each stage from the construction having its own bag, with all of the smaller components individually bagged within. All of the screws are contained in a screw bag, again bagged in their individual sizes. Also at the bottom of each page of the instruction manual Traxxas have printed a ruler, a clever and ingenious little idea to ensure the use of the correct length of screws and track rods etc.

The motor chosen for the test was a new Genesis 15 x 3. The white nylon components are easily dyeable to whatever colour suits the builder. The telescopic u/j driveshafts can be seen here, as can the adjustable suspension top link.



Assembly

We started with the ball differential; this is of a really beefy design and has 10 hardened diff balls

Reach for the sky!

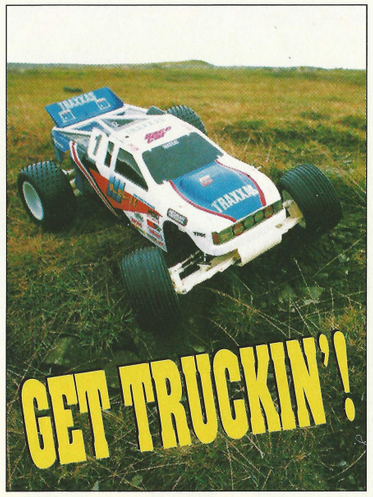
GET TRUCKIN'

to transmit the power and take all that you throw at it. Adjustment is very simple – no removing drive shafts to get to that awkward cap head screw — simply drop the thin bar provided in the kit through an access hole in the gearbox casing and through a hole in the diff housing. This locks the diff. All that you then need to do to either tighten or slacken the diff is to rotate the right hand wheel either clockwise or anti-clockwise. Once the gearbox is complete (a piece of cake!) the slipper clutch assembly can be fitted.

The next step is to attach the rear suspension to the car; the rear bulkhead is attached to the gearbox to which the rear shock tower is bolted. Also slung from the bulkhead are the top arms for the suspension. These are single rods that have right and left handed threads for fine tuning the geometry made easy. Included in the kit is a spanner that fits the hexagonal section of the rod, so adjustment couldn't be easier. The bottom wishbones are hung directly off the chassis, unlike some other makes of car where they are slung from the gearbox casings. Definitely a good idea. This also allows for a varying amount of castor or anti squat to be set on the rear suspension. How, you may well ask? Well, the two mounts that are screwed to the chassis have three degrees of castor built in, but with the addition of castor wedges that come in the kit, the amount can be varied from 0 degrees to 6 degrees. Decreasing the amount of rear castor will make the truck turn in to corners faster. However, the handling may appear to become a little loose with less castor and the LS-11 will require more skill to drive. With less castor the Truck will squat less during acceleration, thus decreasing the amount of weight transferred to the rear wheels. Increasing the rear castor will cause more weight to be transferred to the rear wheels and thus improve stability during acceleration and coming out of corners.

Moving on to the drive-shafts, these are of the telescopic design and have a 4 way steel spike to provide the U.J. action. These are of the best possible design and are guaranteed to continue to drive the wheels no matter what angle the suspension arms may be at.

The next step — the construction of the shock absorbers, everyone's pet hate! Traxxas shocks do not require explaining in any length, their brilliant record precedes them. Many, many drivers swooped on the Traxxas shock absorber when it first arrived in the U.K. a few years ago, claiming it was the best thing since sliced bread. Well, the high quality of the design has not changed one iota. The front shocks are of the long variety, whereas the rear ones are of the extra long type. The springs that come with the kit are of a medium strength, but available separately are other ratings to fine-tune the truck. The shock towers are made from black fibreglass and are approximately 3mm thick. The

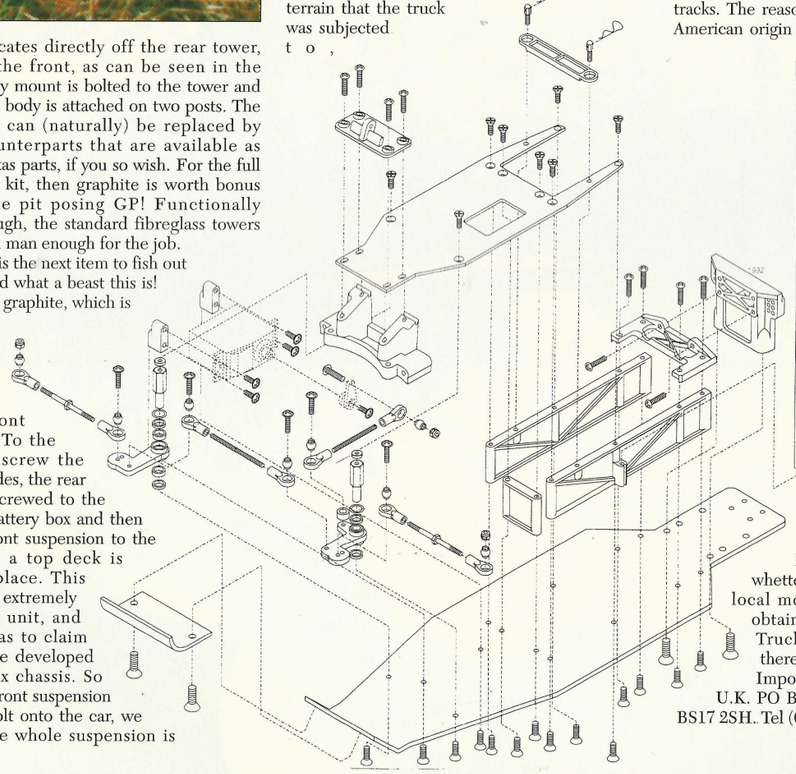


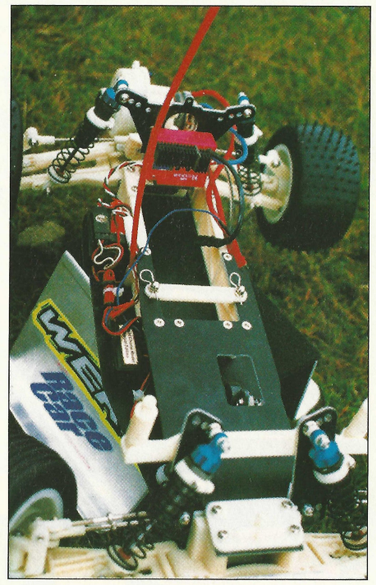
bodyshell locates directly off the rear tower, whereas at the front, as can be seen in the photos, a body mount is bolted to the tower and from this, the body is attached on two posts. The GRP towers can (naturally) be replaced by graphite counterparts that are available as genuine Traxxas parts, if you so wish. For the full 'Street Cred' kit, then graphite is worth bonus points in the pit posing GP! Functionally speaking though, the standard fibreglass towers are more than man enough for the job.

The chassis is the next item to fish out of the box, and what a beast this is! 4mm of sheer graphite, which is itself quite rigid, complete with built in kick-up for the front suspension. To the chassis you screw the battery box sides, the rear bulkhead is screwed to the back of the battery box and then to join the front suspension to the battery box, a top deck is screwed in place. This makes for an extremely rigid 'boxed' unit, and allows Traxxas to claim that they have developed the Zero-Flex chassis. So with just the front suspension left now to bolt onto the car, we move on. The whole suspension is hung from the front bulkhead, and again as per the rear, we find the design principle pretty similar, with the top link being of the adjustable rod type. This completed unit is simply bolted to the chassis with 4mm countersunk screws; the two front ones also attach the front bumper so the construction of the car is now basically finished: We have a rolling chassis!

All that remains to be done is to install the radio gear, speedo and motor. Absolutely any make of radio equipment will fit the LS-11 as there is plenty of room. As there isn't a built in servo saver incorporated in the steering bellcrank assembly an aftermarket unit is a real necessity, as those big front wheels and the likely rough terrain on which the LS-11 is to be used, will transmit a severe shock back to the servo if there is nothing in the way to absorb it, which could be an expensive mistake. For this purpose we chose the Kimbrough unit. Speedo? Well, again, any unit will fit, but the Nosram Dominator was readily available and a known quantity, so was quickly mounted onto the chassis to provide the power source for the all important part of the machine, the motor. A new Genesis 15 x 3 motor was my choice for the job.

With all the goodies in place, the truck was now ready. Oh no! The body shell. It's still without its paintjob, we can't try the truck out without a shell. Well — a mere six hours later, the shell was complete. At last a chance to go and actually put the LS-11 through its paces! What can one say? The Truck was taken to a disused quarry for its track test. It handled the very rough surface wonderfully. The ground was extremely rough and the shocks were put to the utmost test. The result — brilliant. The shocks were built with single hole pistons and, rather than use the oil supplied in the kit, which was of an unknown weight, it was decided to use a 30wt silicon oil in all four shocks. This proved to be spot on for the type of terrain that the truck was subjected to,





A general view along the chassis. The cells drop through the upper plate and are retained by the nylon cross bar and a lip under the speed controller.The moulded 'gates' that make up the box chassis design can be seen through the cell aperture.

although a certain amount of understeer was encountered on the grass surface. This can be put down to the front tyres supplied in the kit being of the ribbed variety rather than the spiked variety seen in use at the majority of British grass tracks. The reason for this is that the truck is of American origin and the majority of their tracks are clay based, so the ribbed type of tyre is obviously better suited to that surface compared to the British spiked pattern.

The slipper clutch needed to be readjusted periodically during the early running of the car as the unit bedded itself in. Once the slipper has been run in properly no further adjustment is required, except to compensate for the normal wear.

That's about it for the review of the Traxxas LS-11 Truck. This machine is aimed primarily at top level competition, and is certainly no toy. It is definitely of high quality in all areas and can be counted on to perform very well against any other truck that it is likely to meet in the 'Stadium'!

If this review has sufficiently whetted your appetite, a trip to your local model shop will enable you to obtain your Traxxas LS-11 Stadium Truck. If you don't have any luck there, then I suggest you contact the Importers and Distributors, Traxxas U.K. PO Box 1128, Winterbourne, Bristol. BS17 2SH. Tel (0454) 250441.