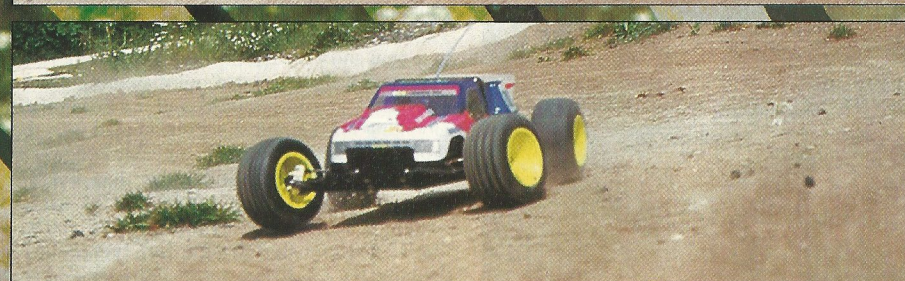


Associated's New RC10T2

Truck Technology Taken To The Limit!



Associated's RC10T2 Truck is the very latest evolution of a design that first hit the tracks back in 1984: The all-conquering 2wd RC10 Off Road car. The T2's pre-production prototype went out and took TQ at the '94 Truck Nationals in both the Stock and Modified Classes, also winning the Stock National title, then it won the NORRCA Electric Truck World Cup a few months later. The most amazing debut for the first production kits occurred at the WinterNats in Tampa, Florida, when Rick 'Mr Peak Performance' Hohwart TQ'd against the very best Off Road racers in the World. A dream come true? Not really, it's happened before...

To literally be immediately right on the pace, or should we say "Be the immediate pace-setter" in the harsh World of American Off Road racing, there must be something special about Associated's new design, so let's dissect it bit by bit to try and find out what makes it such a dynamic performer. A great deal of development work was carried out by former World Champion 'The Buggy Master' aka Cliff Lett, and Mark Pavidis, Team Associated's top driver, the prime directive being to make the new Truck capable of handling the awesome power now being produced by the very latest generation of motors and batteries, and to make the handling scalpel-sharp whilst retaining the original RC10T's good manners. To top off the list of requirements came a new battery retaining system, plus an improved servo saver and mounting to give better control and reliability. Quite a tall order really!

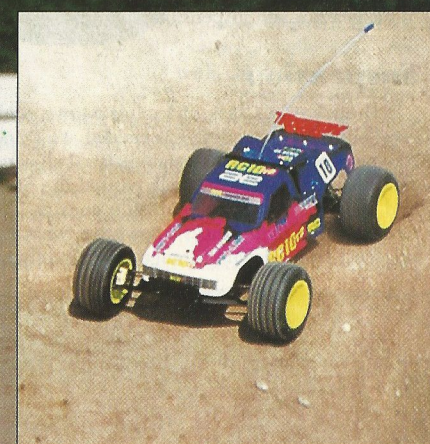
The Chassis

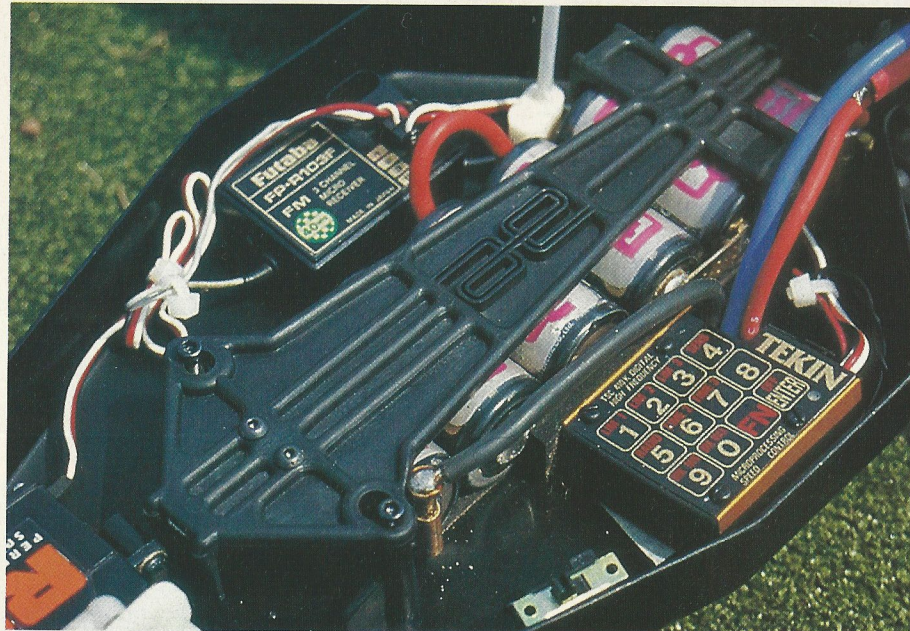
The all-important base upon which any car is built, the T2's chassis now features angled sides to its undersurface to give increased ground clearance in roll over rough ground (is there any other type on which to drive a Truck?!). The chassis is now produced in aircraft grade 2024 aluminium alloy, hard anodised to keep it looking smart. This time though, in comparison to the earlier design, the tub's vertical sides have been trimmed down to the absolute minimum required to maintain adequate rigidity, helping to add a little 'lightness', always a good thing with electric power. The use of aluminium for the chassis gives a pleasing 'quality' feel to the Truck, and it should retain its rigidity in even the hottest temperatures (not really something British racers usually have to worry about!).

New, 'Modular' Rear End

The T2's rear end is where a real difference will be seen for those familiar with Associated cars. The T2 uses Associated's new 'laydown' Stealth transmission, complete with the new 2.6:1 reduction and larger diameter differential originally used for the RC10GT Gas Truck's power train. Looking at the awesome power and torque now being put out by the latest Gas engines and handled reliably by this new transmission, it should be pretty well unburstable when using electric power.

'Laydown' has been something of a buzz word for a while now, so the latest gearbox's very low, squat appearance keeps the centre of gravity well down, the input shaft being very little higher than





The T2's moulded battery retainer permits the use of either 6 or 7 cells, made up in either stick or saddle pack style. The new design allows much easier use to be made of 'Corally' style connectors.

of the first things on the agenda when it comes to Truck suspension design, but achieving the correct geometry to give safe yet responsive handling is quite another matter. Associated used their new computer 'Cad-Cam' design system to come up with the suspension set-up used on the T2; totally flat, non-linked wishbones, produced in a new and very light composite material (less unsprung weight), centre point steering blocks (no trail) for good response, and a more upright mounting for the rear shocks combined with the shock's outer pick-up point now situated on a small bracket above the arm, rather than directly to it.

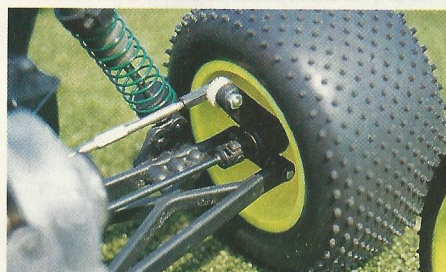
Nothing actually appears really radical about the T2's suspension design, but there's no doubting the fact that it works, and works well...



The new 'laydown' transmission uses the large diameter differential and 2.6:1 ratio from the RC10GT Gas Truck. It can handle really low turn motors, the low ratio allowing suitable gearing, yet should be unburstable!

the top of the motor. The familiar 'three gear' design features a steel input drive, plus Associated's famous ATC (Associated Torque Control) slipper clutch, first seen at the World's in Australia back in 1989 and much copied ever since!

The rear bulkhead, transmission and shock tower all combine to form an extremely rigid assembly, integral with the chassis, yet easily



The rear shocks now mount to small brackets, the pick-up point now being well above the suspension arm.

removable independent of each other in the case of the gearbox and suspension mounts.

Suspension

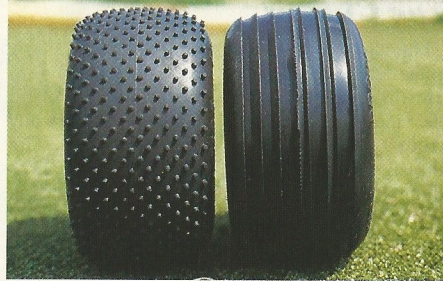
If there's one Class of racing where really excellent suspension design is needed, it's Trucks! Anyone who has seen Associated's latest all-action '94 video, or who has actually visited the States and seen just how our Stateside cousins 'take some air' with their Trucks, knows that 'what goes up, must come down!' Strength is definitely one



Improved Ancillaries

Keeping either a 6 or 7 cell battery pack nestling happily in its mounting cups is no easy matter, especially when it's also necessary to get them in and out easily (you know, the last minute mad panic before a Heat!). The incredible forces put upon Trucks like the T2 when landing off bad jumps mean that a substantial battery retaining strap is essential. The one supplied with the T2 is just that! Moulded with strengthening ribs down its length, and quickly fitted in the heat of the moment, it will probably find its way onto other cars in the future...

The T2's battery mounts cater for either 6 or 7 cells, in either stick or saddle fashion, and when 6 are used their positioning can be altered, either to the front or rear, to change the weight



The Pro Line XTR Compound 'Edge' front tyres (right) feature a really novel design to the ribs, whilst the XTR 'Mini Pin' rears are already well known in standard Buggy competition. Foam inserts are supplied for both front and rear.

distribution. Just another little 'tweak' to experiment with. European racers usually prefer to use battery connectors rather than 'hard wiring' (soldering the leads directly to the cells) as is common in the States, so the battery cups and retaining strap allow the use of connectors without any modifications.

The original RC10T's servo saver did allow a little 'blow back' and lost movement due to the extremely large loadings imposed by the huge Truck tyres. Lost movement obviously means a lack of precision, so to alleviate the problem Associated now supply moulded servo mountings to which the servo is bolted (servo tape won't do), whilst the new design of servo saver is similar to a Schumacher type in appearance, complete with the facility to adjust the spring's tension. The instructions go to some lengths to say that because of the servo saver's characteristics and the extreme loadings placed upon it, that the builder pump for a very powerful, metal geared servo, and I must say that I agree wholeheartedly! Airtronics servos are recommended (Sanwa in the UK), but any of the gutsier servos from Sanwa, Futaba, Hi-Tec or KO will be OK, the latter's PS1002 FET probably being the favourite choice for most Off Road fans.

Associated's well known hard anodised,

Go For It!

Having recently tested the RC10GT, which was a real ball on the local BMX track, I took the RC10T2 off to Kidderminster's super multi-surface track to give the T2 some stick.

Fitted with a Reedy Sonic 12 double and a Tekin 410K2 speedo, the T2 was so much sheer fun, it's hard to describe! Ok, I wasn't actually racing it against other Trucks, just blasting it around, but isn't that what it's all about anyway? Off the jumps it landed well, after flying for what seemed like ages, and despite taking quite a few tumbles after clipping track edgings, I got away without breaking anything.

The T2 was ultra responsive on the Astro Turf, and in fact could have

done with a change to the set-up, but on natural grass and hard packed earth the kit tyres actually work very well, as did the standard kit suspension set-up. I can

see why Truck racing is so popular in the States with cars like this to throw around!

Chatting to CML's Jason Varley (it's his car seen here), Jason suggests the long wheelbase setting in conjunction with 1.5 rear toe-in for grippy tracks, then the short setting with the stock 3° toe-in for tracks where traction is at a premium. Shock settings? No 1 pistons (2 holes) and 30

weight oil all round with the 30° castor block, the 25° version making the T2 a little too 'snappy' for most people...

Altogether, the T2 Truck is a nicely turned out, quality piece of kit that delivers the goods. Its pedigree can't be denied, but I dare say that the question that's been lurking in my mind is probably in yours too, and that is, will the next version of the RC10 be based around the T2? Is it the chicken and the egg, or the egg and then the chicken...?

The Associated RC10T2 Truck is imported and distributed to the trade by CML Distribution, P.O. Box 3563, Rednal, Birmingham. B45 9TF. Tel (0121) 457 7568 Fax (0121) 457 7759



The latest servo saver gives a greater degree of control, having less 'give' than before, whilst the moulded servo mounts prevent the servo itself from moving. Powerful, metal geared servos are advisable!