



THE NEXT GENERATION

Easy life. Reviewers of Schumacher cars. Get the kit, build it up, drives great. Write a few nice words, recommend everyone buy it and then wait for the next one to come along. Easssy lilife. (With apologies to the Steve Wright Show). Since 1985 its been the same, although things in those days were a bit more dangerous – if your fingers survived the assembly your reputation got a bit dented when the Northampton factory saw the words. Since then ten cars have passed across the bench and many thousands of words through word processor. Things have only ever got better and in every respect this is the best, car of all to have escaped from the biggest UK manufacturer of 10th-Off Road cars. But this time there is no easy life....

The Schumacher Cougar 2000 could be the best 2WD ever according to some experts... we take a close look at the factory's latest attempt.

• All change

The Cougar 2000 (C2000) has no main changes from their last 2WD contender, the Cougar 2 Team, we reviewed last year – this is an all new car. The spring/damper units and the wing mounts carry over otherwise it is all fresh from the CAD system. A geared gearbox radically departs from the belt drive unit first seen in the TopCat, and a GRP chassis replaces the alloy version of similar vintage.

Chassis rigidity is the key to good road holding and handling. So the C2000 goes belt and braces with a 3mm thick chassis, top deck and so much bracing it makes a prison cell look fragile. Attached to this Forth bridge are long lower wishbones with single, adjustable upper links. The new anodised-alloy dampers and 'designer' coloured springs keep the whole lot off the ground and control the wheels. Reinforcing the front and rear damper plates prevent flexing, with the gearbox nailed down and well protected from unwanted nerfers. Strength exudes from every detail of this new car.

All included

Standard equipment is in the 'fully loaded' bracket – ballraces all round, built-in servo saver, slipper clutch, servo horns, servo mounts, etc. Taken together with the full range of parts to adjust every conceivable aspect of the suspension geometry and you have more extras than Ben Hur. Anyone waiting for the tune-up goodies for C2000 will see Armageddon first. Equipment levels and quality are way ahead of the pack. RC10 owners still need a decent set steering bell cranks and a servo saver plus a change of tyres for the UK tracks, and the rest of the competition are either too far behind on the track, or short of slipper clutches and the like in the standard kit.

The really big changes to the car are the gearbox and driveshafts. A fully geared transmission has reduced the inertia acceleration, and the dog bone/UJ driveshafts are neat and light. These in turn allow smaller bearings in the rear hubs. Lower unsprung weight (for this is the aim these changes) is a feature at the front end too where smaller bearings are used in new wheels on a conventional axle. New rear wheels are used, and this finally sounds the death knell of those famous bolt-on wheels which were unique to Schumacher. The overall effect is to make the unsprung weight more Barry

McGuigan than Giant Haystacks with consequent performance improvements.

All the range of Schumacher tyres will fit the new wheels, although the fronts are 2" and the rears 2.2" It is a shame we have to buy new wheels, but no doubt there will soon be adaptors to take other makes both front and rear. Schumacher-philes who never touch the old-style sealed ballraces will now have some work to do.

Keep an eye on...

These new small bearings must be checked after every race, especially in wet or dusty conditions. Leaving it to chance is asking for a seizure and the subsequent expense of new items, but all the Kyosho, Associated, Tamiya and Losi drivers have managed it so far, so there is no excuse for any mistakes. The after market suppliers will no doubt have a field day with both the bearings and the new wheels, so prices should be kept very reasonable. Building the car is a piece of cake; the pre-assembled differential removes one of the more difficult items and the new gearbox is very easy compared to the old belt-drive type. All the suspension pivots went together easily providing an action as smooth as a polished table first time out. Quality is very good, with only a few items of

moulding flash in the front hubs to spoil an otherwise 100% record. With the usual warning that anyone under 14 years of age will need an adult to help due to the very nature of this type of kit, there should be no problem in completing the car in a couple of evenings – it took me just 6 hours excluding the receiver and speedo.

Watch out for the rods used as the top links and steering arms as in certain positions the threaded part is too long and bottoms out on the ball joint causing stiffness. These arms are not up to the standard of the rest of the kit, and cannot be used for some of the alternative mounting positions suggested in the instructions at all, much shorter items are needed!

Slight adjustments

Remove 3mm from each end of the threaded rods by cutting them off and filing away the burrs, this will improve the assembly. Where the rear suspension top links attach to the inner (slimline) plastic ball, at least 5mm must be removed to avoid this joint all but seizing up.

Schumacher's bodysell styling has gone downhill faster than a bobsleigh since the svelte Cat XLS, the TopCat being a notable nadir. C2000 starts the ascent to levels of higher appeal despite a snout truncated by the shock tower. Like

the XLS, this leaves precious little space for the electronics. Futaba 40 Mhz receivers and Tekin speedo's fit well, but less sophisticated units struggle for sardine-like space. Thankfully a tray is provided to strap on to the top deck moving the speedo up into space of more warehouse sized proportions. A bracket attached to the tray suspends the AMB transponder in the now vacant space – a neat touch.

Adjust away...

C2000 has so many adjustments for its suspension that Rubik's Cube looks a doddle. We can adjust castor (four positions plus bump steer adjustment to suit), camber, toe-in, and shock positions – and that's just at the front. Rear end tuning is wheelbase, toe-in, anti squat, roll centre, pivot pin height and shock position!!

It really is difficult to know where to start. Against the "tunable for all tracks" argument is the "get it right first time" reply. How I wish we had only one position for most of these variables leaving limited RC10-like adjustments which we could all handle. The RC10 is a build-and-forget car with few adjustments needed or available, and has been so right since it was introduced way back in 1984. Despite this lack of 'dialability' it remains the

winningest car in 10th-Off Road bar none.

Whinge ye not, for the answer is of course to set the C2000 to be as per the kit instructions and leave it alone – then we all have the equivalent of an RC10. Learning to drive and avoiding accidents will put more laps into your five minutes than hours spent fiddling with these myriad adjustments. Use the instructions to set the car for a particular track surface (low or high grip) and dial the springs/dampers into the track. Then fine tune the grip with the camber adjustments/tyres and leave well alone.

Good result?

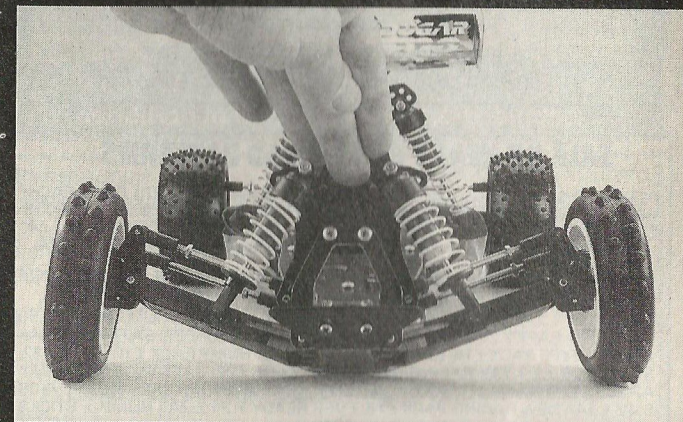
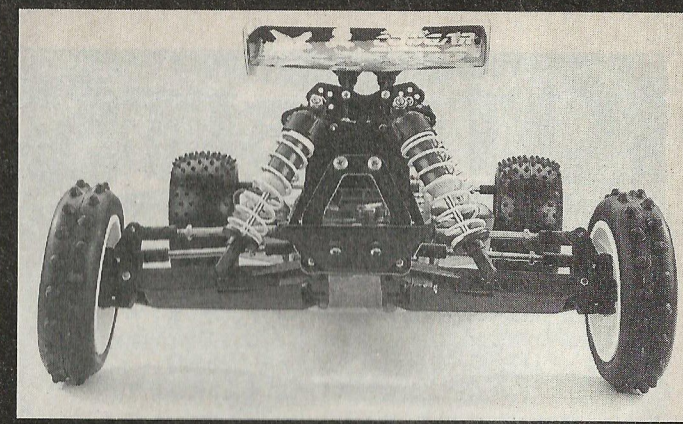
This litany of praise and surprise is thoroughly deserved since the C2000 is an excellent car already achieving promising results. But for all this it is difficult to whole heartedly recommend you all rush out and buy one because we have left out one tiny detail – it costs £225. This is a quite staggering amount of money for a 2WD car, though comparable with the aforementioned RC10 including extras (steering bellcranks, servo-

saver, and tyres suitable for UK tracks) to meet the C2000 specification.

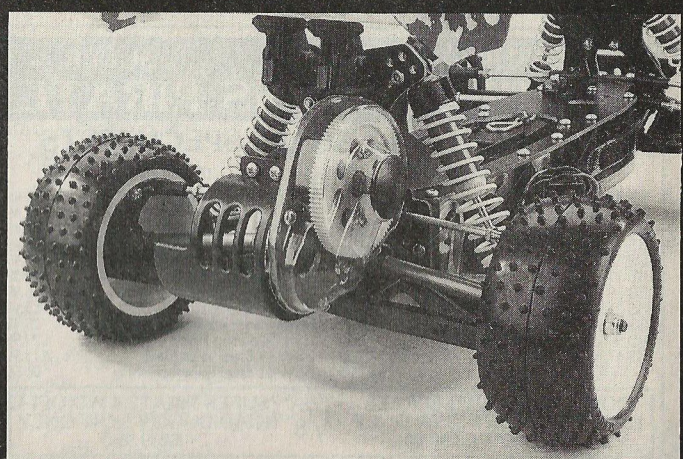
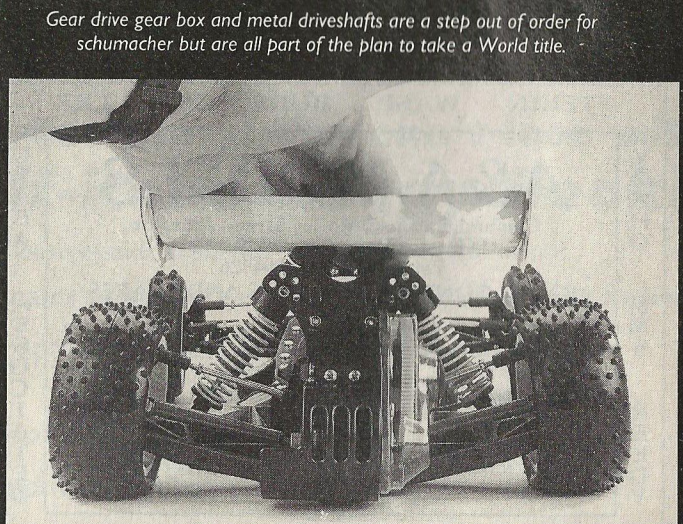
The rising stars of R/C electrics are the on-road formula which are providing exciting and fun racing for a fraction of the cost. If you are hell-bent on 2WD off-road this is a fine car, but this review is made very difficult not by the car, but by the thought that we used to recommend 2WD Off-Road as a cheap formula, tailor made for these recessionary times. £225 is a great deal of money, and for this outlay anyone has to consider that the Tamiya Cup Competitions for F1's and Saloons are packing them in for an outlay of less than half this amount.

Compare C2000 to the Kyosho Triumph (around £170) or the old Cougar 2 Team (same) and the question must be asked "is it worth the money?". For the average club racer a Cougar 2 is still unbeatable value, but the serious regional racer and upwards must consider the C2000. Above all else it needs no other extras to be a winning car, and you can't say that about any of its competitors at this level. It might be in the wrong place at the wrong time (of recession), but the Cougar 2000 is so much the right car for the job.

Easy life....?



Cougar 2000's suspension arms need to be seen to be believed – they are enormous! Giving the car large ground clearance and almost ideal geometry according to designers.



Gear drive gear box and metal driveshafts are a step out of order for schumacher but are all part of the plan to take a World title.

