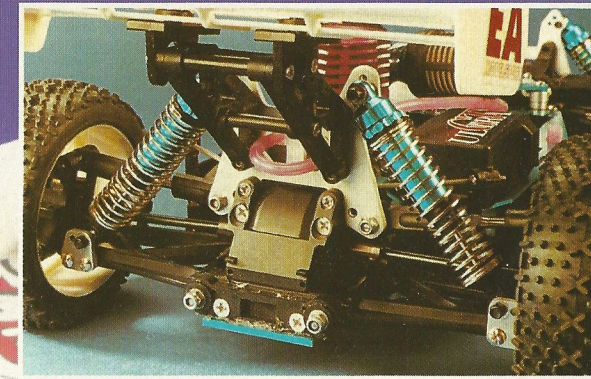
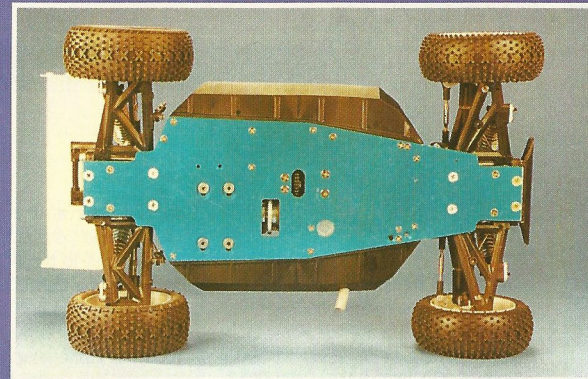
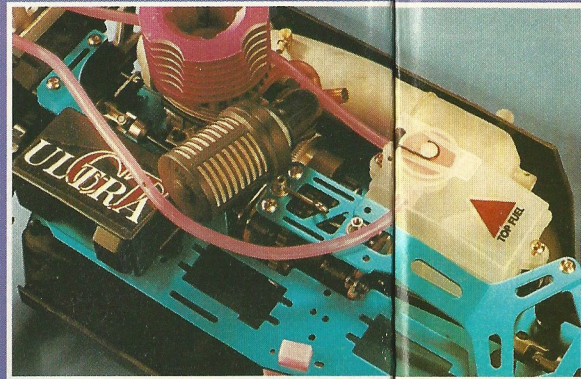
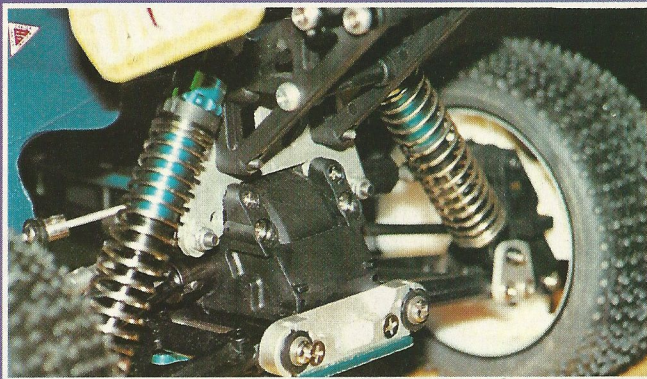
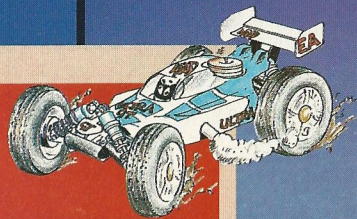
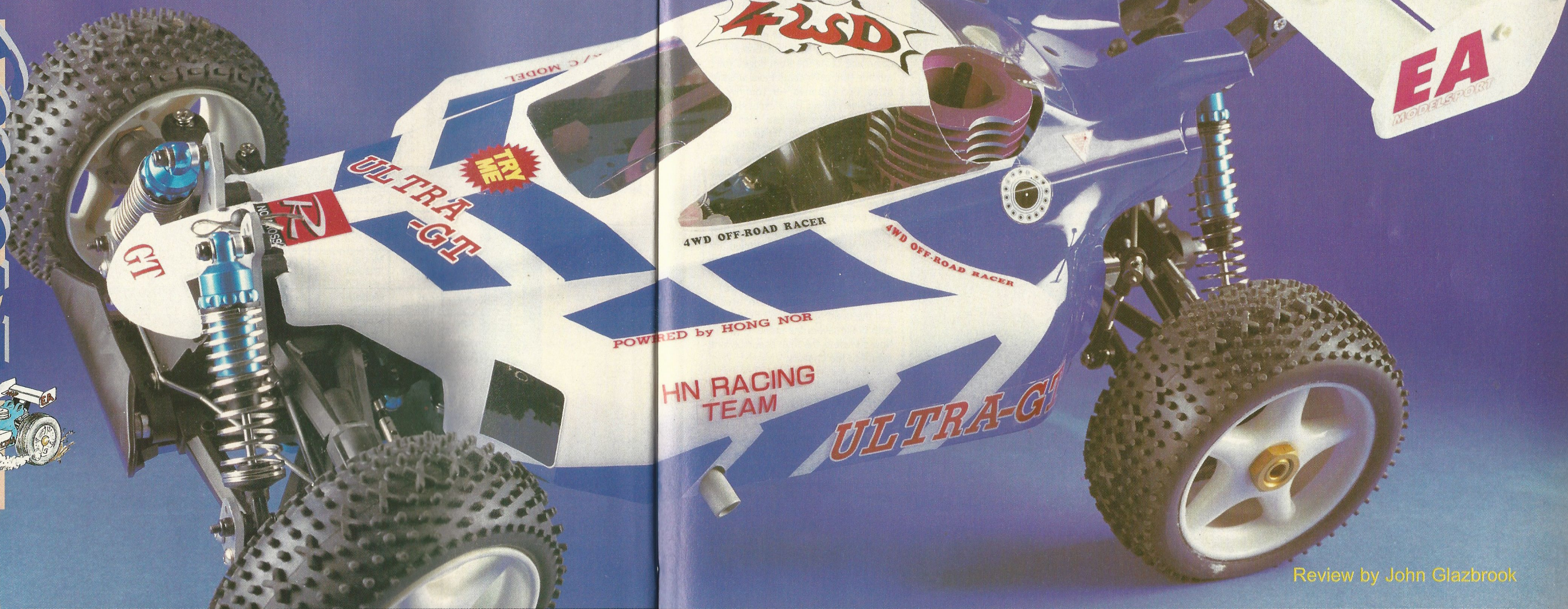


3

Rallycross



The Ultra from Hodr has been updated and improved...



Review by John Glazbrook

The Ultra car has been developed with the aid of Tom Chung, the car has been used at the World Champs and Euros and has already been successful here in the UK.

On the latest version of the car the shock absorbers, radio plate and chassis are all anodised blue. Also new for this kit is a set of stone guards, a silencer (not a tuned pipe) and a manifold.

The shock absorbers in the kit are what Hong Nor call active. I will

just mention at this stage that the shock pistons supplied in the kit are useless for competition racing but Euro and Asia models will supply the purchaser of the kit with the correct pistons FOC.

Assemble the shocks as per the instructions but do not fill with oil yet. When fitting the dust pusher that fits on the bottom of the shock bodies, use super glue or silicon sealer to retain them. If you don't they will get pulled off by the springs.

We have found that for best all round performance 30 grade silicone oil is our preferred grade. Anyway, this is a good starting point - push the piston nearly to the top of its stroke and slowly fill with oil. As you are filling, gradually pull the shaft down until the shocks are filled to within about 1mm from the top. If you use this method of filling you will find that you don't get that bubble of air trapped beneath the pistons. Do all four docks and leave them to stand

for ten minutes. This is to allow any air in the bodies to rise to the top.

Diffs

The diffs in the kit are the strong four planet, two sun type diffs. They are supported in two ball races, fitted behind the two drive cups. Inspect the diff housings for any signs of metal swarf. Now lay out all three diff casings. You will notice

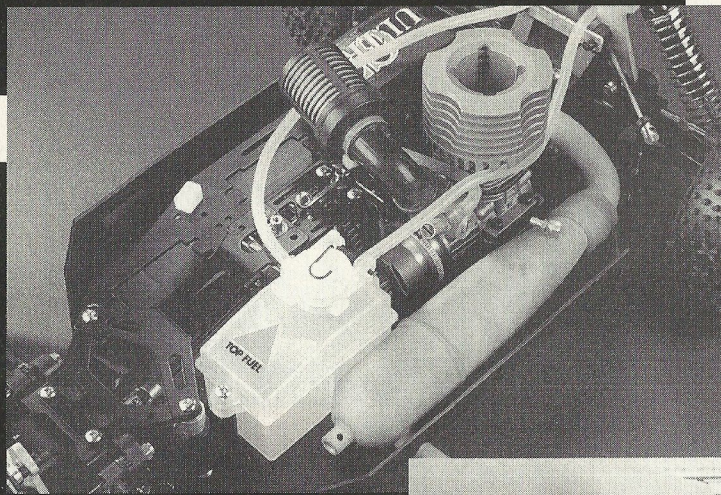
that two of the diff cases with the flanges have plain round holes, and the other one has tapered holes. This is for the centre diff only. Please make sure that you don't get this casing wrong, otherwise you will never get your centre gear to run true. Assemble the diffs with your preferred grade of grease. A tip here is to run some silicone sealer around the stepped flange of the centre diff casing before joining the two halves. This will seal the casing

and stop grease leaking from the joint. The kit is supplied with a plastic centre gear.

Diff housings

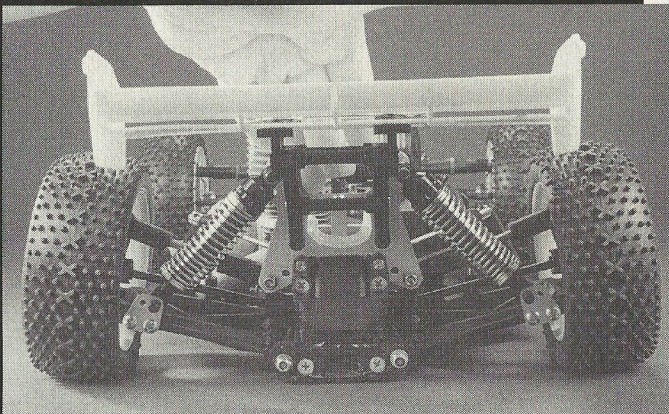
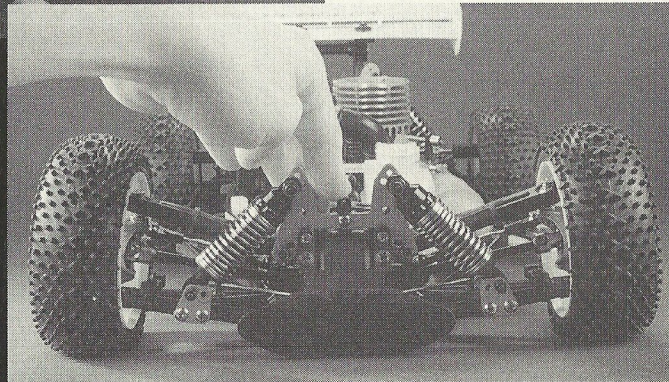
Assemble all of the suspension parts onto the diff housings before fitting to the chassis. A point to mention here is that the manufacturer gives you the choice of pivot holes for the top

wishbones on the front and rear. If you decide that you want to use the inner hole you will have to relieve some of the plastic from the diff housings at the front and rear or you could trim down the suspension arms to clear the housings. If you don't do this you will find that once assembled your suspension arms will bind to such an extent that it will be difficult to move them up and down. I prefer to use the outer holes on the front and rear.

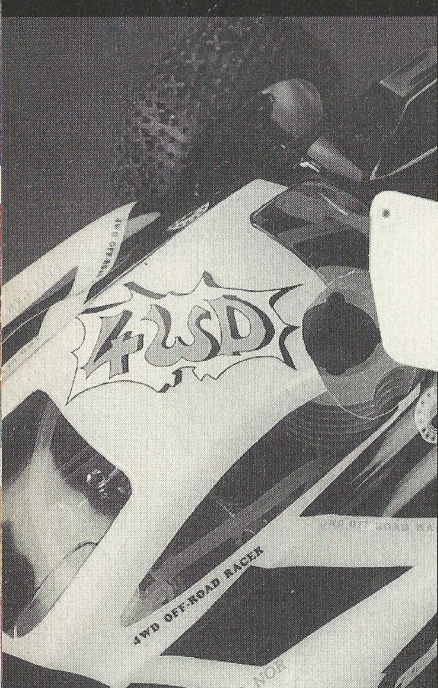


Steering components

Assemble the servo saver and idler arm and fix to the chassis. Make sure you Loctite the screws that go into the servo saver supports. The link rod that connects



Latest Hodr Ultra has improved layout inside the bodyshell for neater radio installation. Bodyshell on the Ultra follows familiar lines and is protective to the internals.



Above; alloy hub carriers make for a tough front end along with steel driveshafts. Right; ready to take the title? in Tom Chung's hands anything is possible.

the servo saver and idler arm must be adjusted so that both arms are at 90 degrees to the link rod. This is shown in the instructions. Make up both track rods and fit to the servo saver and idler arms. Make both rods the same length.

Brakes

Front and rear discs are fitted on this car and are very powerful when used but some work is required to make them smoother in operation. There is nothing worse than having brakes that snatch on or grab suddenly. Firstly take both brake came and bevel the front edges you will see that both cams have square sides. Don't go mad with your file, otherwise you will have excessive brake lever travel. Do one, then copy onto the second cam. Try to file them both to the same profile. Now assemble the cams into the two diff support housings and make see they pivot freely. If not put a small dab of oil on the pivots. When fitting the front brake cam lever, the instructions show a total lever length of 1.7mm. If you haven't modified the centre gear mounting screws you will never achieve this length because you need to have a 1mm clearance between the eye of the brake lever and the head of the nut. Aim to have both brake levers the same length. Now complete the final assembly and mount to the chassis.

Final assembly

Mount front and rear suspension assemblies to the chassis. Now fully assemble the car following the instructions. Now mount servos and make up brake steering and throttle linkages. The receiver box supplied in the kit is big enough to take most

receivers but my J.R. receiver is too big to fit. Another thing to mention here is that the radio plate plastic mounting posts are 2mm too long. These need to be cut down by this amount to allow the radio plate to sit on top of the front centre diff support mounting lug.

The clutch assembly supplied with this kit is of the three shoe competition type and works very well, but will need the springs bent to about 90 degrees. This will stop the clutch engaging too early. Also trim the clutch shoes (round them off) by the pivot hole. A tip here is to trim them and then put all three shoes on a tight fitting rod and finally shape all three shoes with a sanding block. Mount flywheel to engine, fit clutch shoes and springs. Fit clutch bell. This is a fourteen teeth ball raced unit supplied. Fit engine on mounting blocks. Fit to chassis and mesh correctly. Starting at the rear of the car there are several different settings that can be used. Firstly rear wheel tow in. You have the choice of 1 degree or 2 degrees tow in. To adjust this tow in you simply take out the plastic concentric, lower pivot bush and refit half a turn. There is an arrow on this bush, ie, arrow facing out is 1 degree tow in, arrow in 2 degrees tow in. If you want a more stable car, use 2 degrees tow in. If you want more steering through twisty tracks use 1 degree tow in. The second adjustment on the rear is wheel base. You can change from short to longer wheel base by simply moving the plastic spacers from the front of the rear upright to the rear. The other rear end adjustment available is shock absorber mountings.

The front end adjustments are basically carried out in the same manner as the rear, but on my car I use the outer hole on the top wishbone pivot block. This gives more camber change, I then set the camber to 3 degrees pos This I have

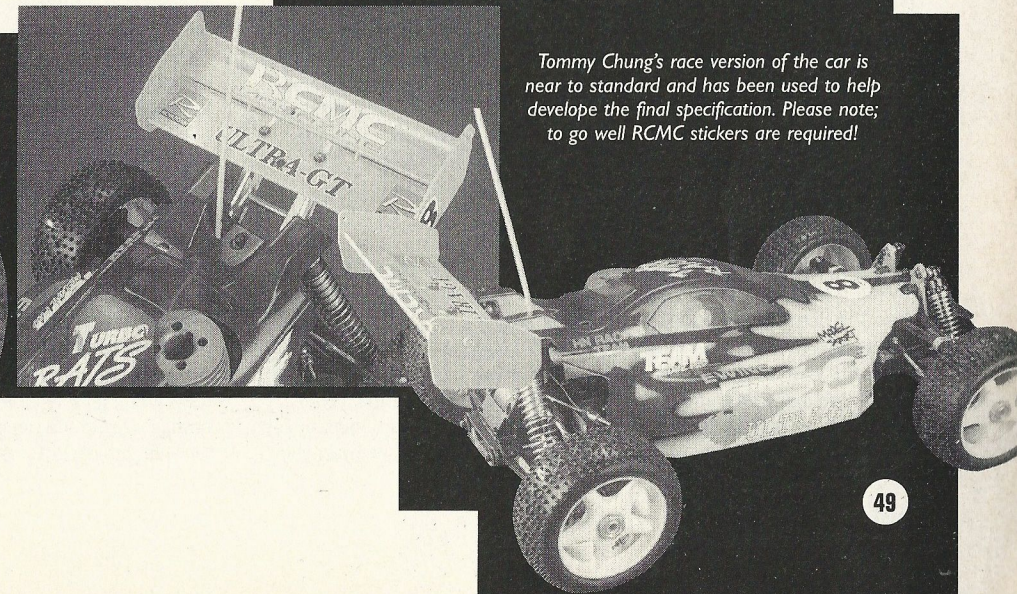
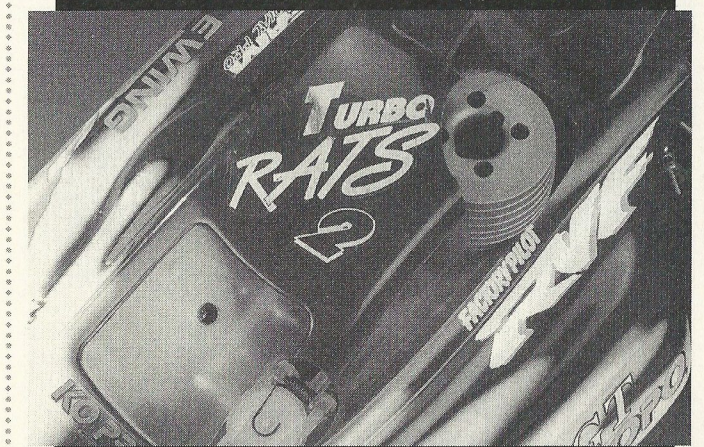
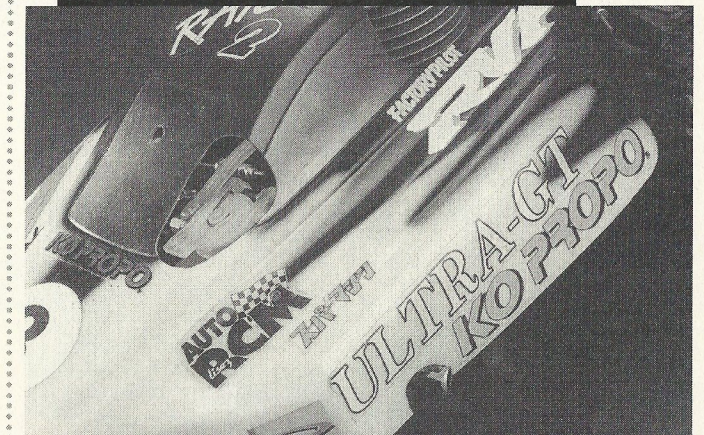
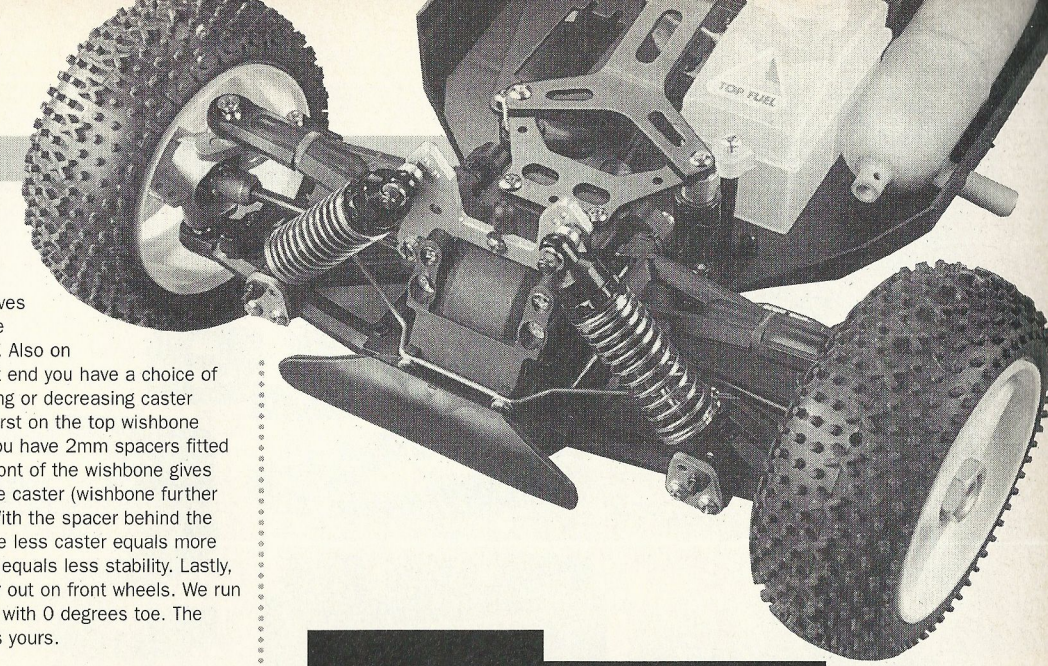
found gives me more steering. Also on the front end you have a choice of increasing or decreasing caster angle. First on the top wishbone pivots you have 2mm spacers fitted to the front of the wishbone gives you more caster (wishbone further back). With the spacer behind the wishbone less caster equals more steering equals less stability. Lastly, tow in or out on front wheels. We run our cars with 0 degrees toe. The choice is yours.

Track testing

I can tell you that this car over the very bumpy Slough track was in my opinion ballistic. The steering was also much improved over my old Hodr. This car really does flatten out the bumps and the power from the engine, brilliant. On the second run I rolled the car on a grippy corner. When the marshal put the car back on its wheels I had no steering, on investigation, I found that the steering servo gears had stripped.

Conclusion

The kit represents very good value for money at £339.95. The kit reviewed here is the car I will be racing at all the forthcoming B.R.C.A. meetings this year and has some of the upgrades fitted that are available from Euro and Asia models. If you don't want to or can't afford the new car, a conversion kit is now available to convert your old Hodr into the Ultra C.T. This upgrade kit consists of the new chassis, radio plate and mounting post, and stone guards for a price of £50.00 which represents good value for money. Phone 01628 770433 for more details. 



Tommy Chung's race version of the car is near to standard and has been used to help develop the final specification. Please note; to go well RCMC stickers are required!