

# RC10

## UPDATE

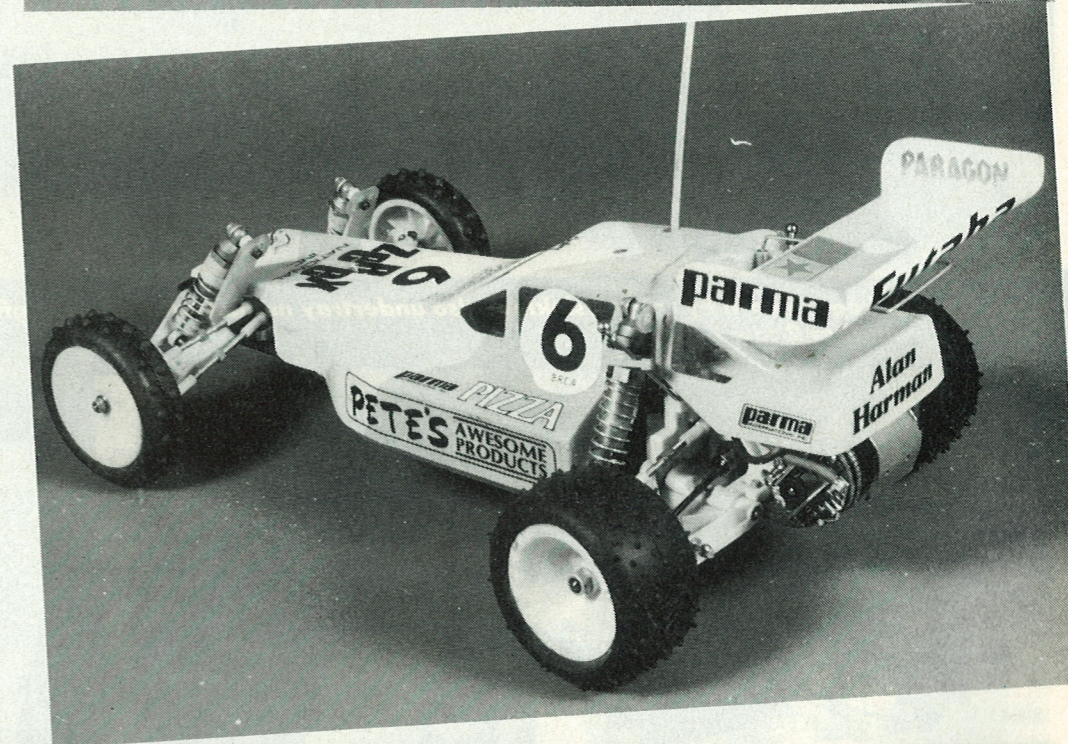
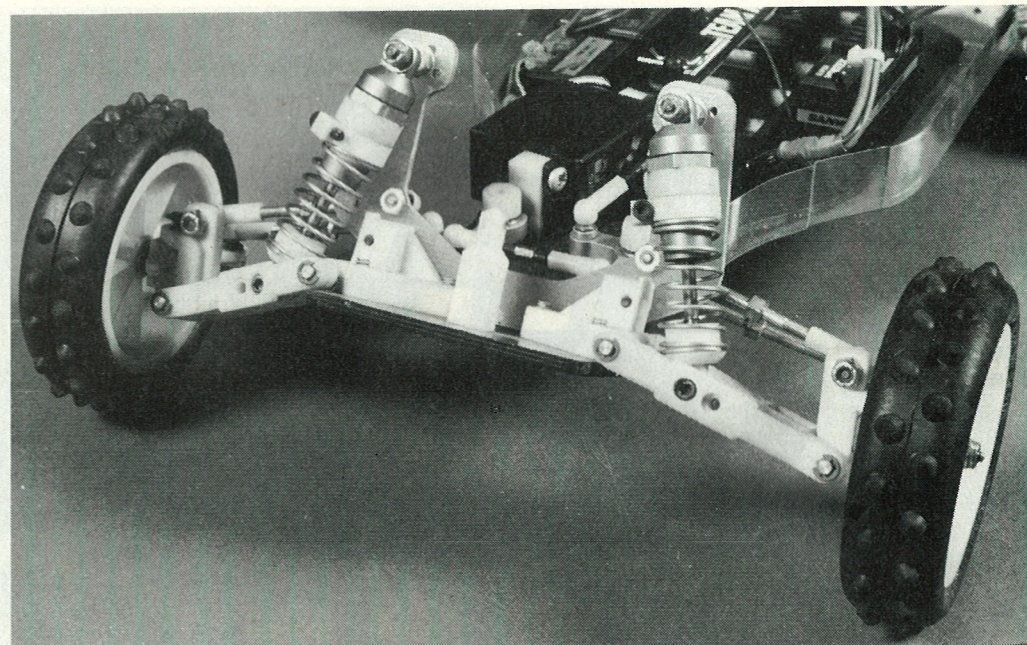
we shall now call the RC10G, for short.

This is not a traditional kit review, since the car went straight to the Editor, passing about as close to me as Haley's Comet. However, that will not stop us looking at the changes, nor indeed reporting on the various modifications which no RC10G owner should be without. The biggest change is the chassis, where the previous aluminium tub has given way to a graphite fibre reinforced resin plate.

The chassis runs the full length of the car, with a small kick-up at the front to give an action angle to the front wheels. The chassis is thick, very strong and neatly machined. The material - graphite gives the new car its name. All the major assemblies fit to the chassis and in essence the layout is identical to the old RC10. Rear-mounted gearbox attached to a plastic bulkhead which doubles as a location for the cells. Moving forward, the steering servo is mounted blocks and a glass fibre reinforced resin plate.

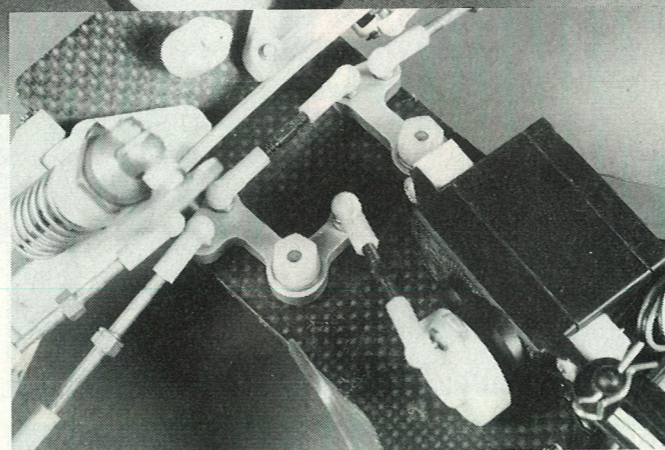
Most of the changes are hidden from view. A revised design for the gearbox internals feature better location for the gears and a beefed-up idler gear design; an old weak point. The result is a very free action in both the gearbox and the differential. Drive to the rear wheels is through new shafts which have dog couplings at the gearbox, and hook joints (universal joints) at the hub end near the wheel. The hub carrier has more toe-in built in to give greater stability. A modified bulkhead permits the upper suspension link to be mounted further inboard and provides a choice of mountings for the wishbone to vary the wheelbase.

The cells are now mounted up the middle of the car, the 'box' system will accept stick or saddlepack style cells. At the front a new shock tower gives a choice of mounting positions.

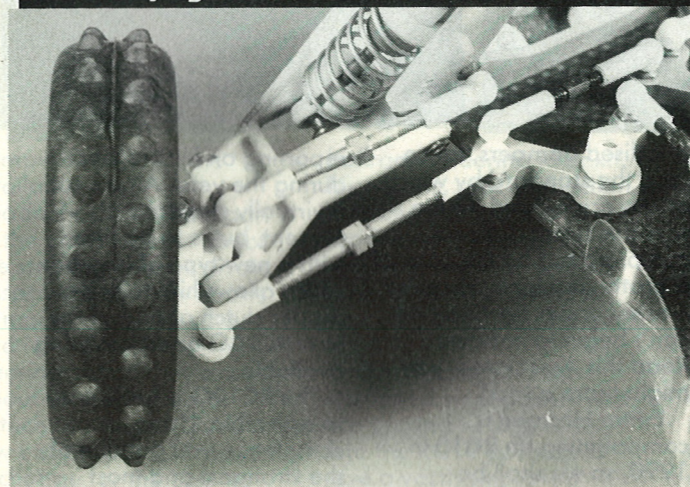


### RCMC goes further to complete the ultimate RC10

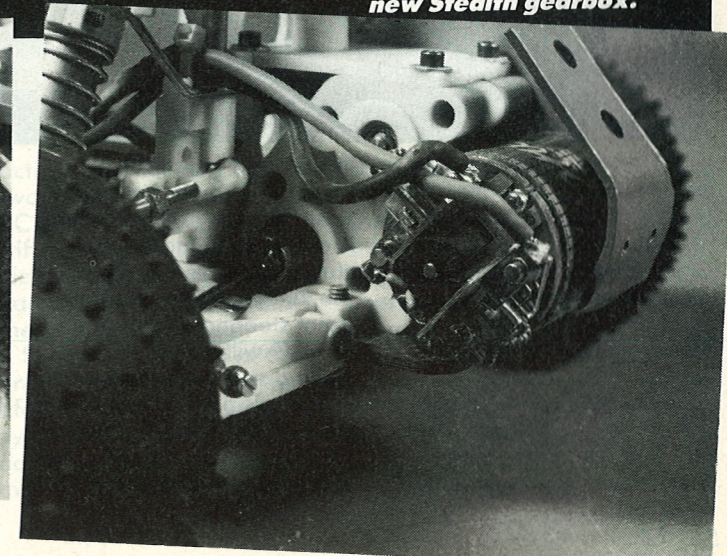
*Right: Losi alloy steering arms ballraced for the perfect set-up.*



*Yokomo ball joints (plastic) on Associated balls - a very tight fit.*

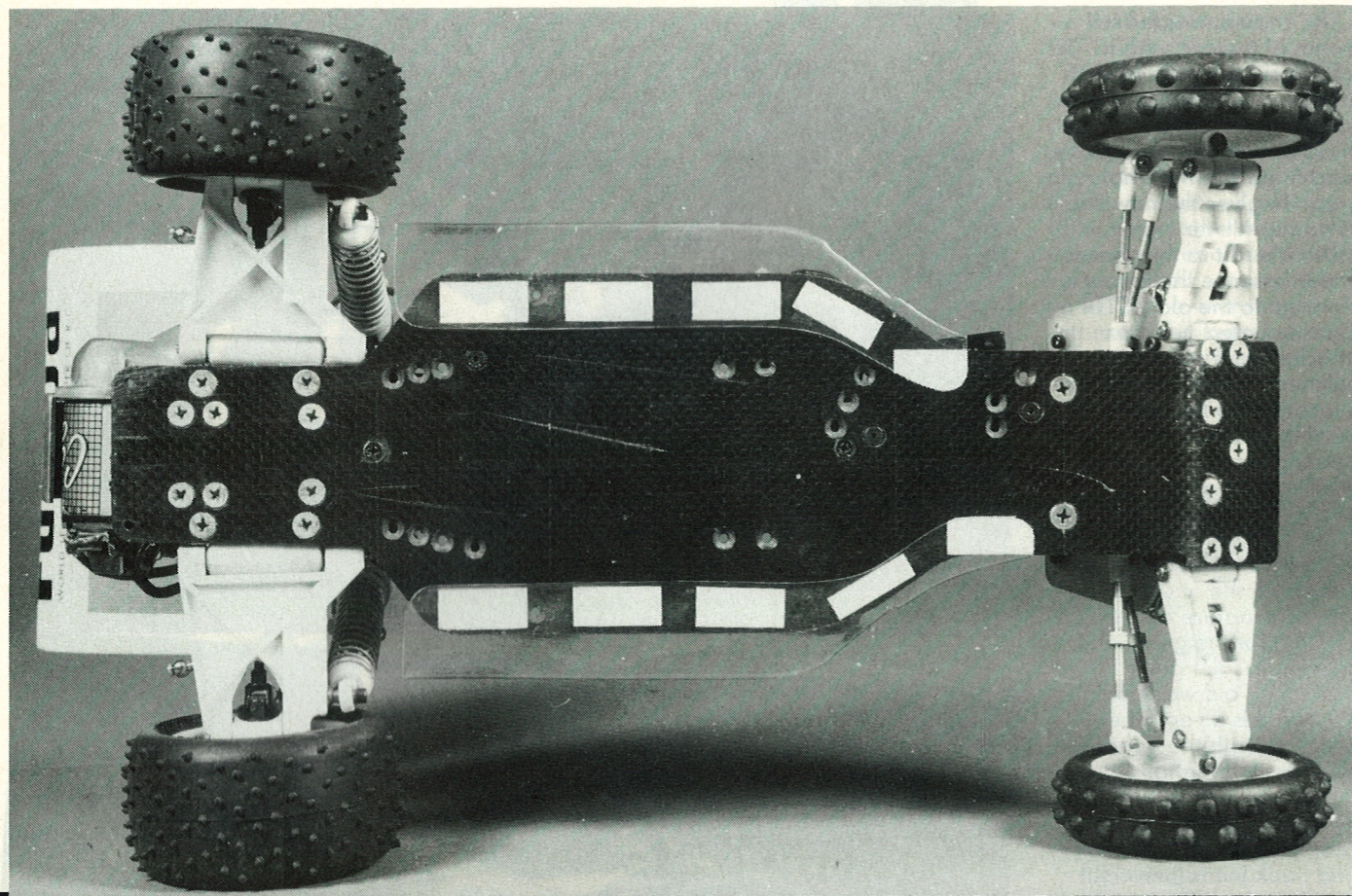


*Standard RC10 box - soon to be replaced by the all new Stealth gearbox.*

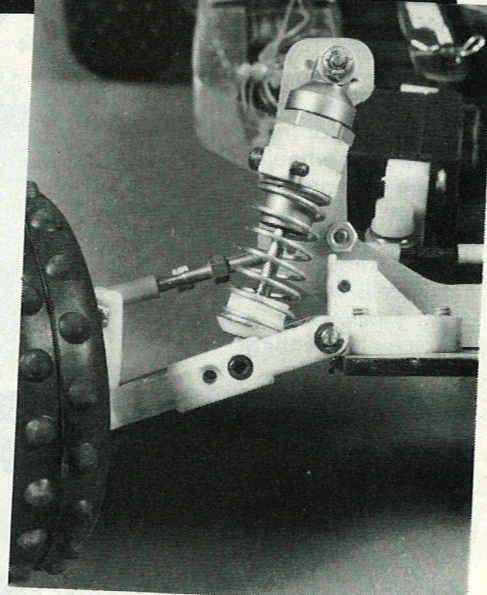
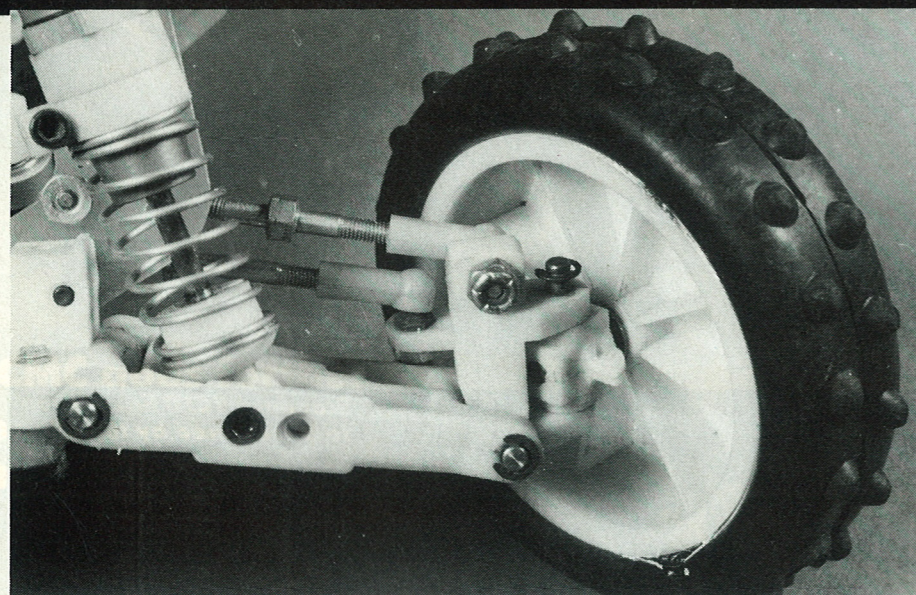


Anyone who can remember our last update on the RC10 can probably remember when the RC10 was first released. In the year it was first won a World Championship with Jay Halsey, Margaret

Thatcher was Prime Minister(!), Boris Becker won his first Wimbledon title. Although the new car is still called the RC10, the addition of the word graphite denotes quite a few changes to the kit. No longer should we regard the RC10 as the same car which won Jay that world title, so



**Under chassis kept smooth by countersinking, also undertray made from Parma Dogfighter unit. Below: Schumacher 2 row tyres.**



The lower wishbones are all new, giving a wider track (width) to the front and slightly altering the position of lower shock mounting. A new top link (longer) is positioned slightly differently on the shock-tower.

A visible (and welcome) difference is the new wheels which are now one-piece. This makes them stronger,

lighter and able to accept all common tyre types with ease. The steering geometry is changed to mount the stub axle in the middle of the kingpin to give centre point steering, although the RC10G will accept the old trailing stub axle design too.

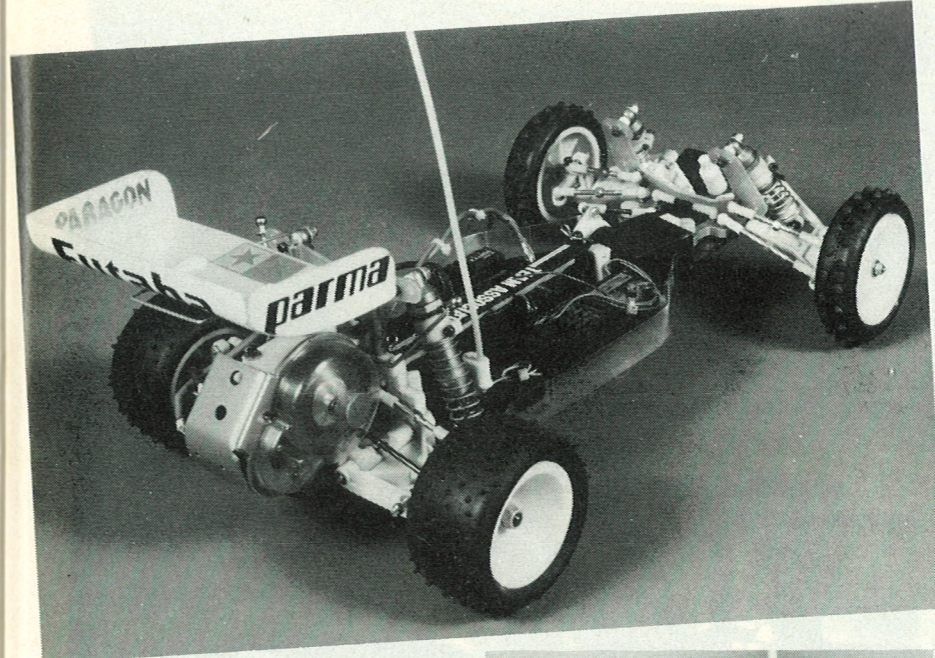
There is a new body for the car, but the old using wire design is retained. Also retained are those gold

anodised dampers, for so long the standard by which others are judged. Quite why this super design is compromised by the case of a grotty and leaky nylon washer under the cap one can't begin to imagine. Read this Associated, you might learn a trick!

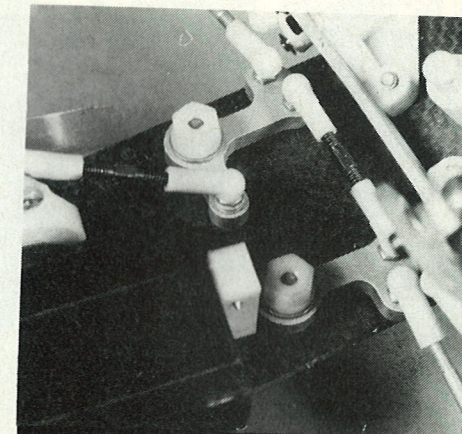
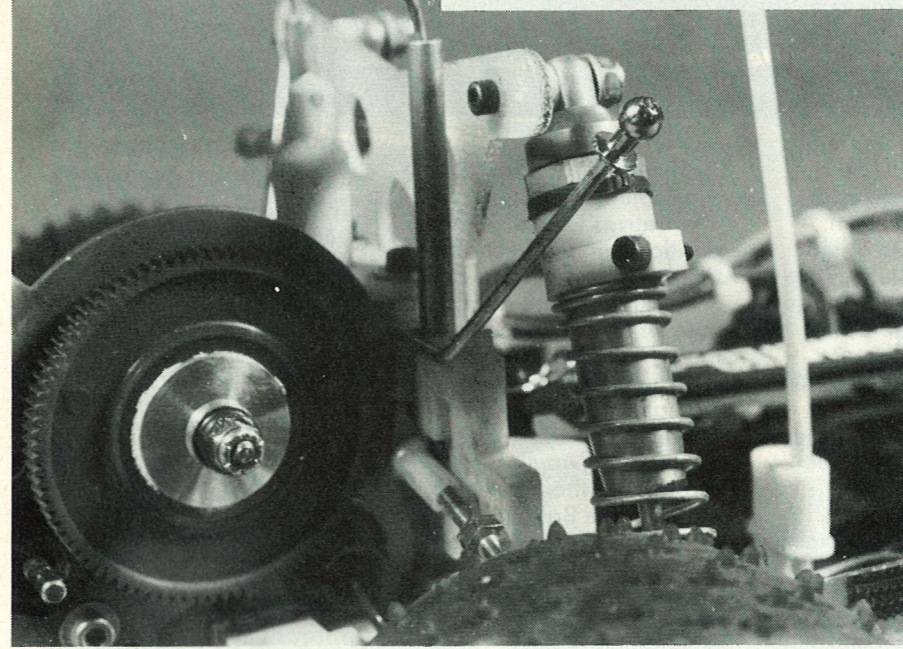
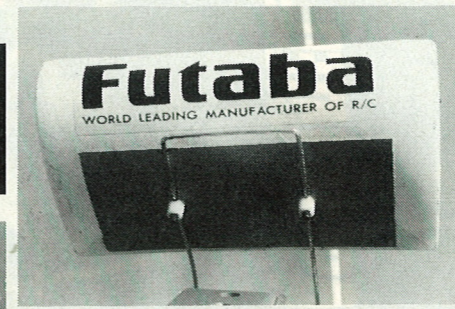
Editor Harman is campaigning an RC10 in 1990, so we shall be

reporting on his progress during the year. Alan's car is virtually standard at present, but is to be fitted with a new type of gearbox which allows him to use a slipper clutch ahead of the new RC10G gearbox being available.

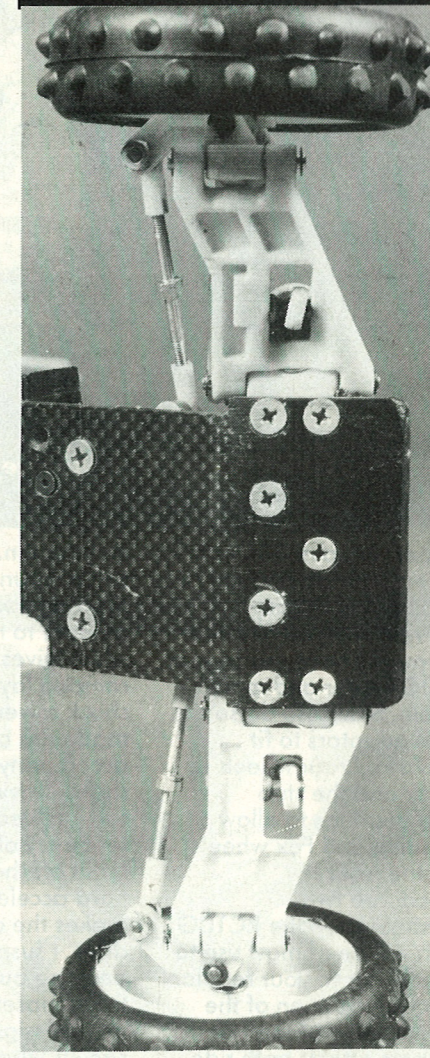
The RC10G is fairly easy to assemble. Upon completion you get one of the strongest and most



**Below: Rear anti-roll bar up and out of use - made from Schumacher components. Right: Rear wing fixing.**



**Below: Associated alloy screws neatly sunk into the chassis to give a smooth undercarriage.**



competitive 2WD cars available and a few headaches. The worst part of the car is without doubt the steering linkage pivots. Associated use tow screws to mount the servo saver and idler and for precision steering action they are about as much used as lettuce to a shark. Quite a few people put £25 down in exchange for the Losi

ballraced steering idler kit. Nice parts, precision action - wrong geometry. Alan modified his idler kit so much he might as well not have bothered buying it. You can save £20 and get it right.

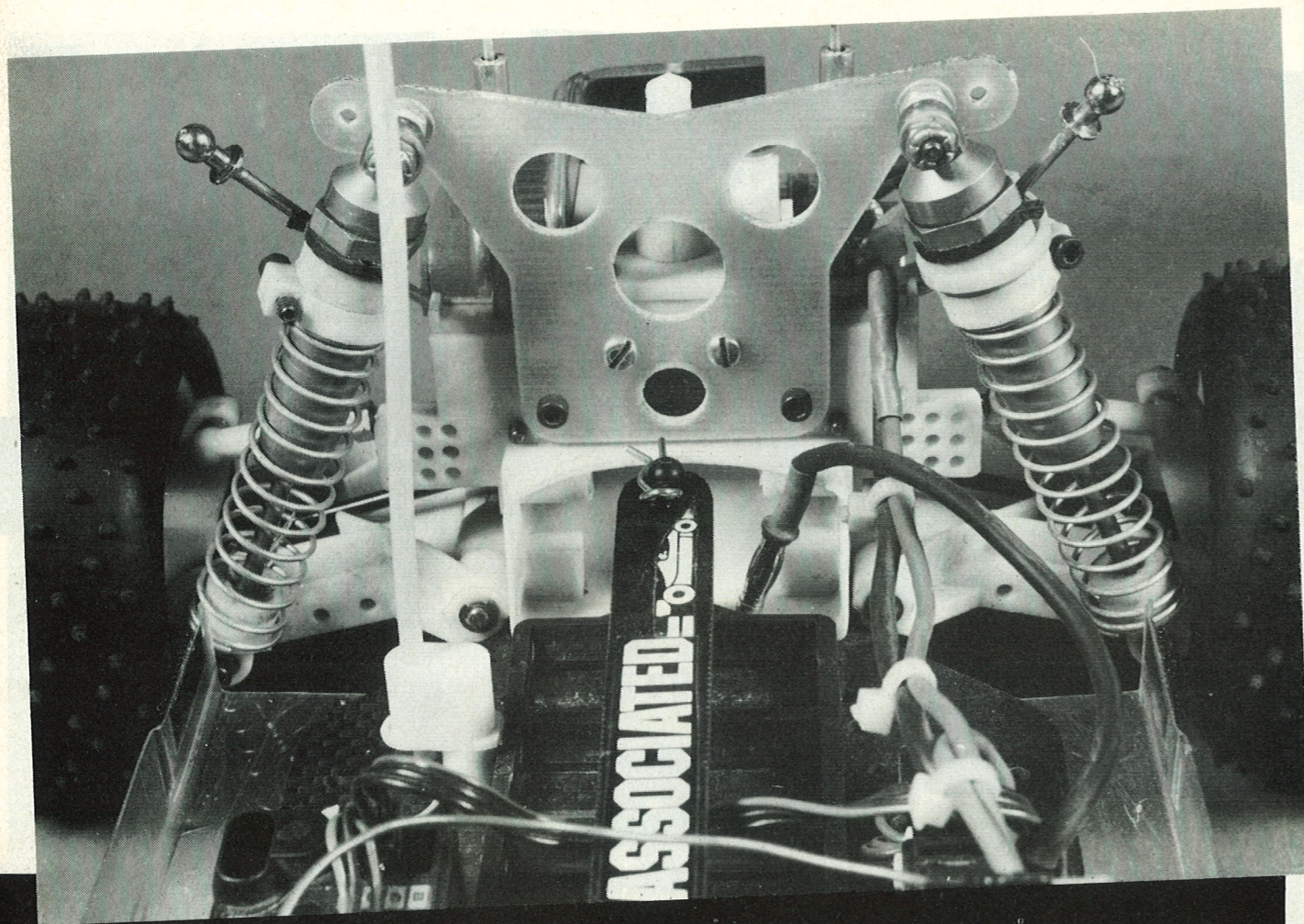
SRM Racing sell two hardened steel posts which are ground to fit precisely into the RC10 parts and give a vastly improved

action. You will also need two O rings to fit over the RC10G servo saver which stiffens it up and results in a nice smooth, precise system. Part numbers and prices at the end, fit and forget.

SRM also sell a set of O rings to replace the aforementioned 'grotty nylon washer' on the dampers. The O ring slips over the thread on the top

of the piston body and sits neatly in the undercut next to the hexagon. The cap screws down on to the O ring and only hand tight pressure on the cap ensures a proper, leak free, seal.

This is the best £1.25 you will ever spend on your RC10G. Both Alan and Steve have fitted these O rings to ensure their carefully assembled



Batteries up the middle held in place by Corally battery trays and a simple fibre brace.

dampers keep oil where it is needed – inside the body.

Whilst SRM Racing will have relieved you of about £9, you will have made your RC10G better and more reliable. SRM also do some wheel adaptors to fit Tamiya Fox rear wheels to the car and the stub axles/bearings to allow Dynamite and Fox wheels to fit the front.

There are two adjustments on the RC10G which will be of most use to tune the car to your regular track. The position of the top mounting of the front dampers affects both ride height and roll stiffness. Use the highest holes nearest the wheels to increase the roll stiffness on higher grip tracks. Associated works drivers Rory Cull and Craig Drescher tell me that this is an important part of timing the car.

Rory and Craig have both moved the batteries one inch further forward to improve the weight

distribution. The steering servo mounts must be moved forward a similar amount to make room, which gives rise to a fairly ramped layout behind the shock tower. Alan has also made this change as the accompanying photos show. Moving the weight forward reduces the tendency of the front wheels to lift off the track under hard acceleration and makes the car easier to drive. I suspect this is mostly because our higher grip tracks upset the balance of a car designed for dirt forward reduces the tendency of the front wheels to lift off the track under hard acceleration and makes the car easier to drive.

The rear wishbone inner mounting has four holes. Two are used to attach the mounting block to the chassis. Using the two holes furthest forward in the mounting block extends the wheelbase which is more suitable to high-grip tracks. The other two holes give a shorter wheelbase and these are the positions

advised in the kit instructions. You should experiment with these alternatives to find which position suits your usual track and your driving style.

The kit tyres are not the best for the UK, once again the Schumacher range provides a wide choice. A look at the top RC10G runners will be your best guide, but it would be surprising if their rubber was not from the British manufacturer's catalogue. Don't forget that the new (but pricey) Yokomo rubber and wheels, are now available in the UK. These wheels will fit an RC10G using Yokomo adapters, but won't fit a CAT.

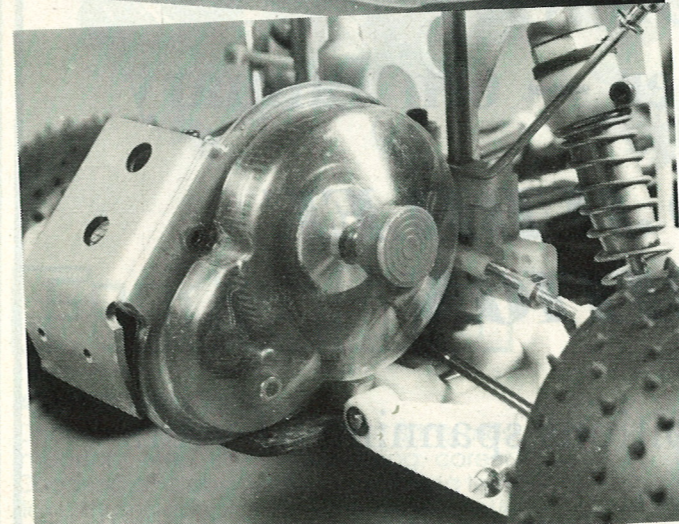
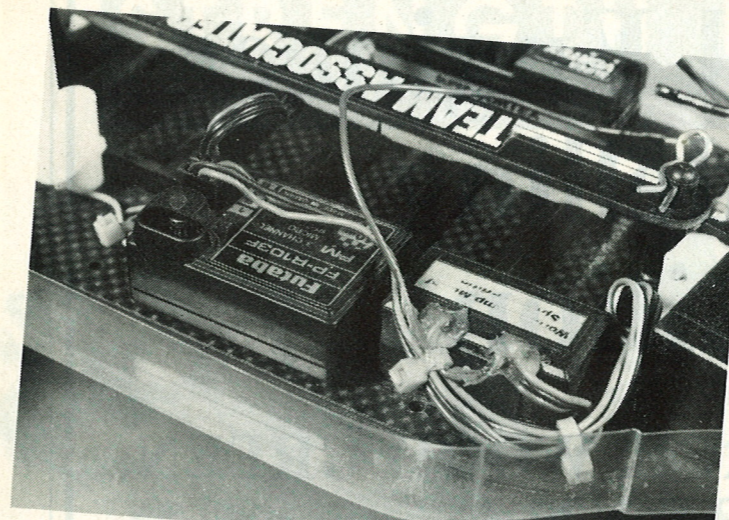
These tyres are available in three grades of which the medium soft look the better set. Their track (ouch!) record is impressive, they may be the RG10G's most effective weapon.

Alan has now fitted the chain drive gearbox to his RC10G. This is primarily so

that he can use a slipper clutch.

That's it for now, except to remind all 2WD racers that it is driving skill which counts more than equipment in gaining results. The RC10G is a good car, improved by our cheap mods from SRM Racing. Experiment with the adjustments the car provides, but remember that there are only three things which will make you better; practice, practice, practice. What should you practice? Slow in, fast out. Approach corners slowly, pick the right line and get on the power early to be fast out. No amount of equipment, money, or theory will replace a considered and consistent approach to driving.

As Alan and Steve progress through the season we will bring further reports. Oh, the year Jay won his title was – 1985; makes you feel old doesn't it!



Above: Parma gear cover. Right: Masami Hirose's example – world champion! Below right: 48 dp Parma gears.

