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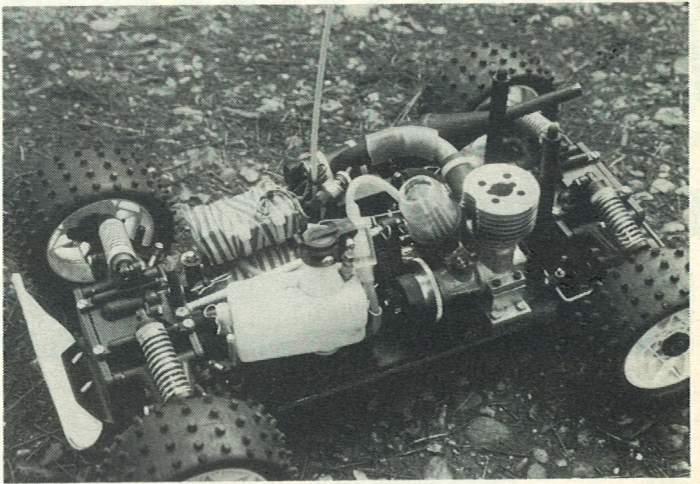
It isn't too often that the chance to try out new Rallycross cars comes along without all the hassle of actually putting them together. Some readers might think the time involvement a small price to pay, but the real problem is always availability of R/C gear. I have a limited number of servos, receivers and battery packs and these are usually fully committed to my own permanent racing machines. Therefore the chance to see the 1986 model *Yankees* being imported by Kent entrepreneur Tony Turner was accepted without demur.

Tony has put together the Euro/World champs winning '4x4' and the simpler, but no less interesting front-wheel drive machine. To add a final dash of spice to the occasion both cars were supplied with the *Yankee/Multiplex R/C* system and *Yankee/Cipolla* engines.

General impressions

As always one tends to prod the cars up and down a few times to see if the suspension does actually work before taking a close look. With childish impulses satisfied what are the cars really like?

Taking the '4x4' first, this is a direct development of the very first 4-wheel drive *Yankee's* that won three European Championships. A simple



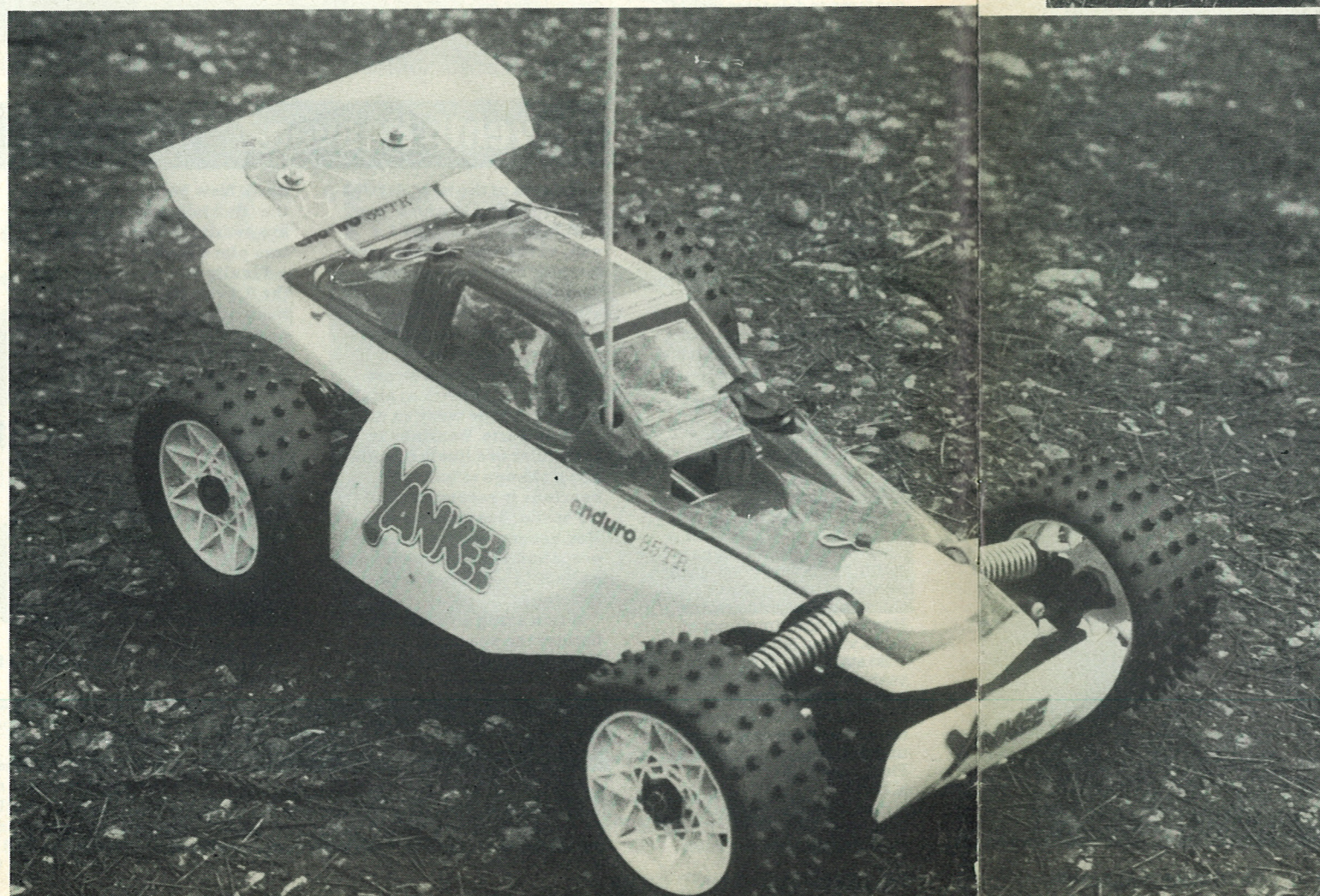
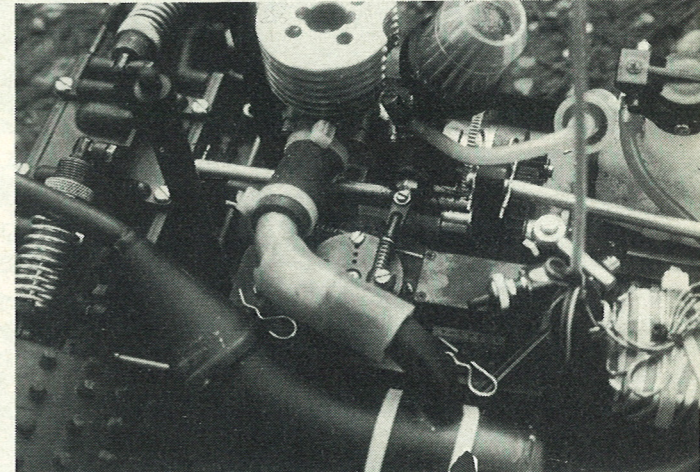
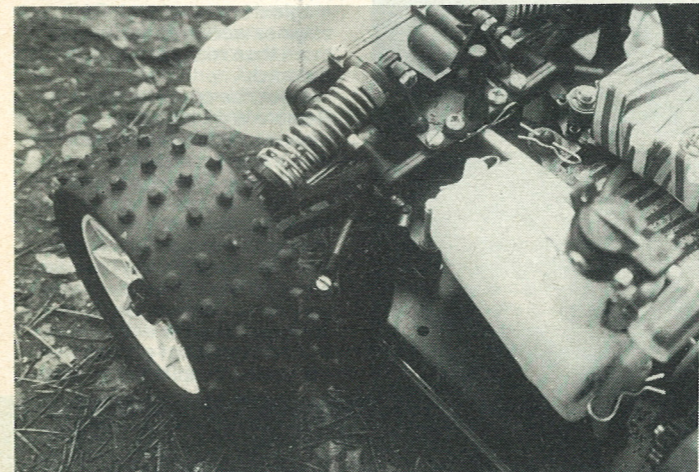
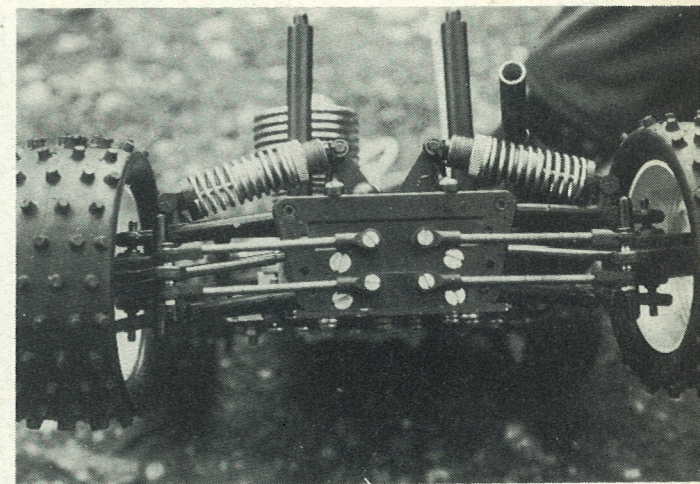
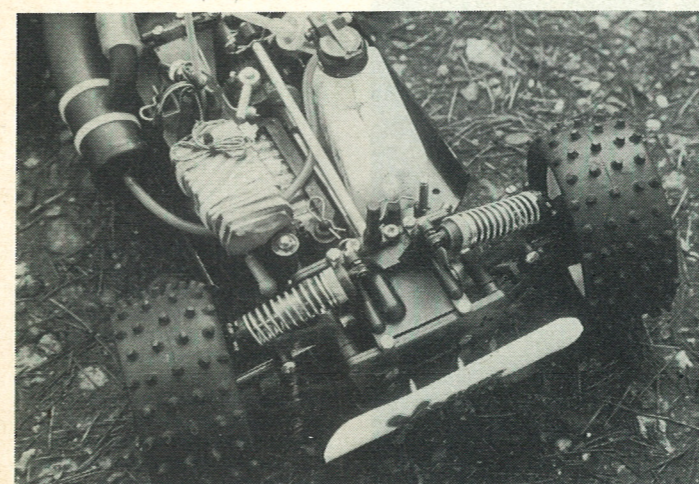
aluminium alloy chassis with the sides turned up for stiffening, forward facing engine, shaft drive to the front and rear gear boxes, a centre differential and double wish-bone suspension all round.

Damper positions have been revised both front and rear with a low angle mounting now being adopted. Two Adjustable tie-rods link the rear suspension uprights to the gearbox end plate allowing adjustment of the rear toe-in.

A single central disc brake acts on the centre differential and provision for a single steering servo is made. The almost mandatory low-profile tyres are fitted on a new design.

Above: 4 x 4 Yankee has a pedigree second to none, Cipolla side exhaust engine is a special version produced for Yankee. Above right: rear suspension toe-in adjustment is by twin radius rods. Right: no overhang other than the bumper at the front, prevents the car from digging in if it starts to nose over.

Far right: Yankee silencer looks as though it has got rather warm and sagged in the middle - effective though! Right: heat tank filler needs careful attention if it is to seal properly.



FRENCH RESISTANCE

For power the *Yankee* specification *Cipolla 21* is used. This engine has been immensely successful in mainland Europe fitted to all makes of cars. *Cipolla's* own slide carburettor is used and a new *Yankee* silencer replaces the very noisy earlier types. When I first turned the engine over by hand it appeared to have very poor compression and I did at first doubt whether it would run well enough for any meaningful test to be made.

Truth to tell, I suspected that the importers lack of experience with Rallycross cars had led him to run the *Yankee* with inadequate air filters. How wrong I was soon became evident once the engine was fired up.

The 2WD machine is really unusual, but it really does work. Roughly speaking it is the rear-end of the '4x4' turned round to face forward with a very abbreviated rear chassis just long enough to provide the mounting points for a pair of extended trailing arm suspension units. Wheels and tyres are 'original pattern' types,

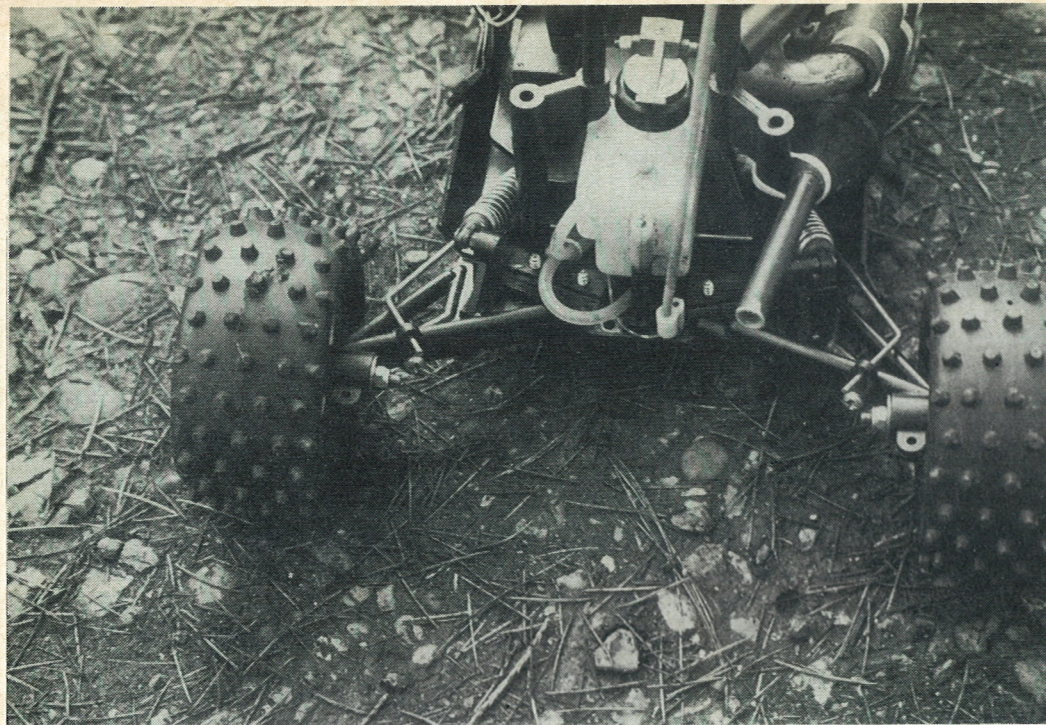
not the low profile jobs used on the '4x4'.

A differential is fitted and braking is once again provided by a single disc, mounted this time in the very small space between the main drive gear and the gearbox.

Front suspension struts are fitted at a very low angle giving very short damper travel. The fuel tank is mounted in the great big open space between the rear swinging arms.

The actual functional part of the car is very compact leading to an impression of there not being very much there. What has been achieved is the very necessary aim of getting most of the weight towards the front

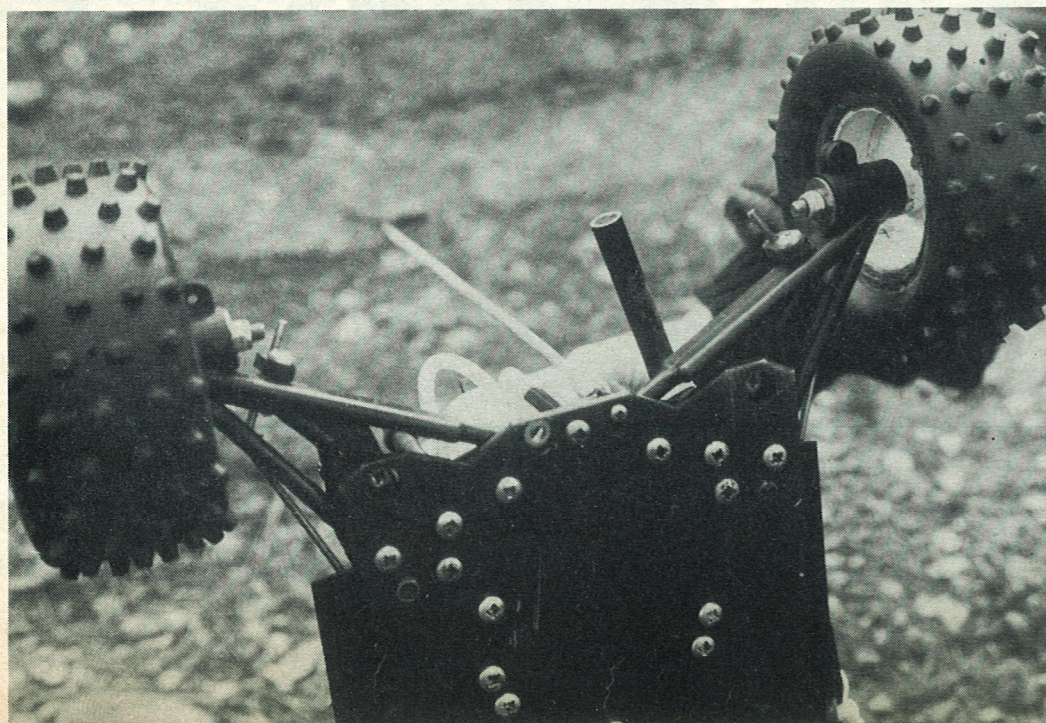
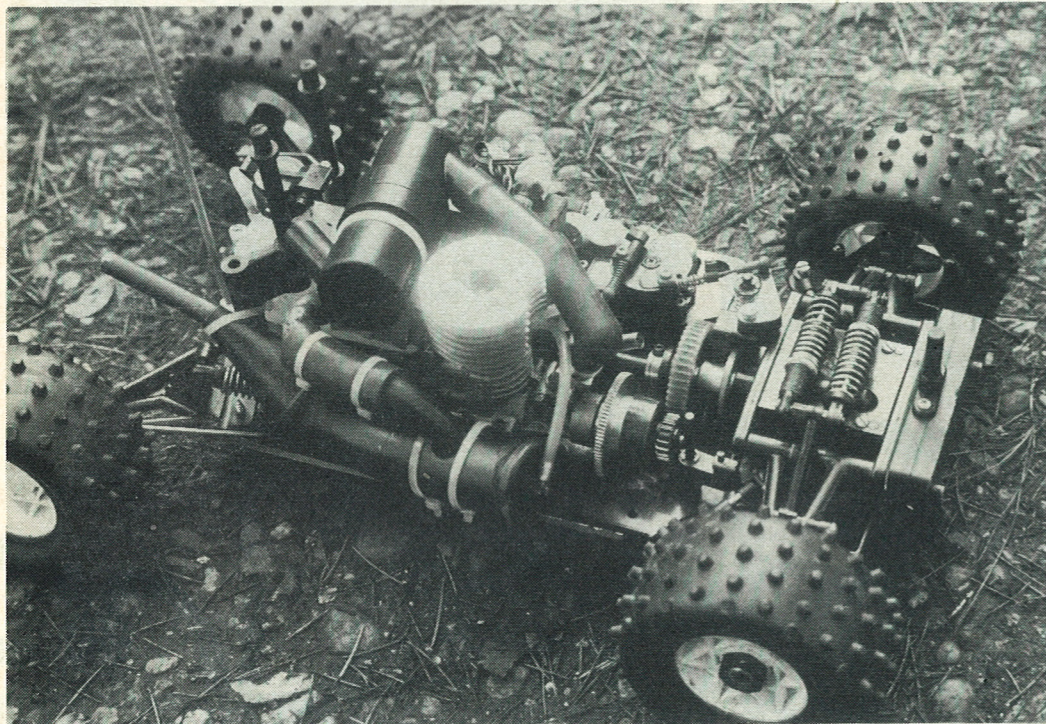
Bill Burkinshaw describes the latest foray into the UK Rallycross scene by Yankee cars of France. **Pete Winton** continues the 'Coralley' saga and **Colin Leake** assesses some handy new items from MRP



to help produce some traction from the front-wheel drive.

Unlike my own *OPS* and *Irvine* motors, the *Cipolla* was not an instant starter needing to be spun up for quite some time before it caught. On tickover the new *Yankee* silencer is deceptively quiet, not that it is any longer a noisy silencer at full chat, the lengthened outlet pipe seems to have achieved a magical improvement. Both engines were well set up and more than ready for an outing to the track.

I took the opportunity of the Remote World Invitation meeting for the Track Test, their new track is situated at Stoke Poges near Slough and partially shaded by large conifers which have over the years produced a deep soft loam on which the track is based. By the time we arrived, the surface was already very soft, but because the loose surface was quite deep it was still giving a lot of grip on the corners — despite the bumps.



I fired up the '4x4' first only to see it come to a dead halt out on the track. Attempts at re-starting proved fruitless until I noticed that a lot of fuel was dripping from the chassis. Investigation revealed that the idle mixture screw had dropped out of the carburettor. The only thing to do was to borrow the one from the other engine which was set 5 turns out. Accordingly this was screwed into the other carb. 5 turns and the engine fired up instantly and ticked over smoothly. A tribute to the ease of adjustment of the engine and the consistency of manufacture of the *Cipolla* carbs.

With both 2- and 4-wheel drive *Yankees* to try out serious racing was going to be difficult, so I resolved to concentrate on what was for me the more interesting '2x2'.

Immediate reaction was 'wowiee!' The straight line acceleration — always providing you open the throttle

on a firm bit of track, is amazing. It's so light, but if the surface is loose then although it pulls away in a straight line, the major feature is the twin plumes of dirt flying up from the front wheels.

Cornering is a different matter, front-wheel drive does always produce a car that understeers and this *Yankee* is no exception. To be fair the complete set-up of the car was in strict accordance with the kit instructions, and I felt that on a hot, hard and dusty French track it would have been able to turn far better. A touch of brakes into the corner tightened things up a lot and this became the technique to use.

Suspension was I felt far too hard for UK tracks in general and if there are softer spring alternatives available the importer would be well advised to include them in the kit for the car bounces alarmingly and will turn over too easily for my liking. That is not to say that it

isn't fast, it is the fastest 2WD car I have ever driven, but with fine tuning the potential is even greater. Brakes are very good, but the fuel tank leaks around the neck.

So much for high tech 2WD, what of the 4WD?

Earlier *Yankees* were not notable for their reliability so I was a little apprehensive about this one. In all, three drivers drove the car through four rounds of heats and a final without a single engine cut or mechanical problem. If it hadn't been for the fact that we were really trying to hurl the car round the track hard that might not seem so remarkable, but after a number of very hard tumbles the car was still in one piece at the end of the day.

All the comments applying to the 2WD car apply to the 4WD. Steering needs improving by suspension tuning to suit UK tracks but bearing in mind that only a single 'ordinary' servo was fitted to the steering, not

one of the *Futaba* 'bricks' or the twin set-up frequently used it wasn't too bad.

Servo-saver springs could have been a lot stronger, I feel that a lot of the understeer was due to the wheels not actually pointing where they were supposed to!

Softer springs with better damping is definitely needed, the bouncy nature of the hard suspension making the car easy to turn over by over enthusiastic driving on bumpy sections of the track.

But the car is very nice to drive plenty of get up and go from the *Cipolla* engine and rugged and reliable too.

Although quite expensive, the 2WD is still cheaper than the 4WD and will provide a very drivable machine with really good potential for determined drivers. Certainly B-final material in the right hands, but I don't think it could normally be expected to compete on winning terms with the 4WD machines.

At the right price the '4x4' must be interesting to UK drivers, it has a fantastic pedigree and the manufacturer seems to have got many of the weaknesses of the earlier kits engineered out. It will be surprising if a few don't get into really skilled hands where they will add a little more welcome variety to the racing scene.

Imported by: J. & P. Turner, Radio Control Cars. Tel. (0689) 32082. Prices: 2WD £149.50; 4WD £349.50.

Reviewed by Bill Burkinshaw.



Across top left: 2x2 Yankee has a very abbreviated chassis, rear suspension swinging arms are pivoted to give considerable camber change on compression. Below left: machinery space is very compact, well forward to improve traction. Bottom left: underside view of rear suspension arms.