micro racing cross racer

by Colin Spinner

SOME months ago at Sandown Model Symposium, an I.C. buggy caught my eye on the Ripmax stand. Clive Coote was extolling the virtues of this kit and was very enthusiastic about its performance.

I collected this Swiss made buggy some few weeks back from Enfield and have not been able to put it down since! I was fortunate in that an

uprated version was supplied for test, but more on

What's it really like you ask? Well to be perfectly honest, i.c. engined machines have never proved very successful with me compared with electric powered versions. As you will read elsewhere, either the engine does not run properly or the chassis is difficult to tune. The micro has put me on the right trail in both aspects.

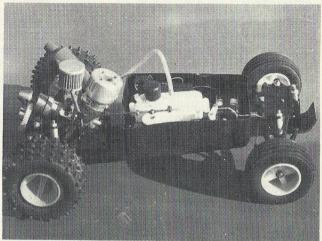
On opening the glossy box, one finds a ready assembled chassis, front suspension, etc. It's really worth checking all the nuts and bolts, rather than accepting that the person who put it together at the factory is as keen as you that it stays together! A number of nyloc type nuts were not tightened sufficiently to grip. Also, taking it to pieces will enable you to appreciate the obvious thought that has gone into the kit's design.

# **ENGINE AND TRANSMISSION**

An inline 31/2 cc engine with direct cone start is an unusual departure. Various drive options are available; our version featured a metal geared differential unit which was robust and simple. Ball and needle races are used extensively in the drive components (see diagram) so reducing wear on vital components. Independent wishbone suspension is fitted to the rear end with coil springs fitted as standard. Our car had the optional oil filled dampers already fitted and these units are very nicely made. They can be refilled with oil without dismantling. I understand that a trailing arm rear suspension is to be made available at a later date and can be fitted to existing chassis. Needle roller bearings support the Kardan drive shafts which sport rubber boots to seal the knuckle joints (reminiscent of BL Mini style).

The clutch unit again uses a needle roller bearing and two sizes of crankshaft spigot are available as I was to discover, but more on that later. A simple disc brake operating off the throttle servo completes the back end.





Light and durable but without the radio box cover.

## CHASSIS

The lightweight aluminium chassis is some 3mm thick. It is extremely narrow compared with other buggies and is attractively gold anodised. Our special sample came in red just to be different! The engine 'channel' featured clamps for securing the motor—ours uses the new Enya 21 car special. Bolted to the chassis is the front suspension and the plastic radio box. The latter is a simple affair and encloses the radio equipment and the bottom feed fuel tank. A pressure take off is moulded into the top of the tank but needs drilling through. The tank assembly slots into a rigid servo tray which needed some enlarging to accept my servos. Locators are provided for receiver and nicad pack but I was unable to fit the radio on/off switch in its designated position due to the larger servos. It was a simple matter to cut a slot in the side of the box for it. No top cover is provided for the box but if protection over and above that afforded by the bodyshell is required, then it would be a simple matter to stretch a piece of inner tube over the whole thing.

#### FRONT SUSPENSION

The front suspension also sported the optional oil filled dampers—standard fitting are the coil springs. Heavy duty track rods and ball joints leave me impressed with the quality of components. The stub axles have rather nice, albeit cosmetic, air scoops! The front wheels are retained by circlips and the ribbed rubber tyres need to be glued on in your favourite manner (rather like telling a chef how to cook rice—if you know what I mean).

The rear spiked tyres similarly need to be glued on the hub—with care as they are an extremely tight fit. The bodyshell (lexan in our kit, ABS as standard) is the well accepted single seat Baja style. A robust steel rollbar is a welcome addition and should increase the life of the shell. A rear airfoil and wing wire are supplied although its use is debatable. A set of mylar decals completes the package and enables the builder to decorate as required.

#### SUMMARY

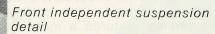
Competitively priced at £59.95 for the standard kit and £89.95 for the uprated 'International' version. Other goodies are available as extras including differential, silicon silencer and alternative foam sand tyres. For the serious competitor a steel drive gear set is available. The nicety of this kit is that all future planned 'tune up' parts will fit the basic chassis so you can start at the bottom and add on as you improve.

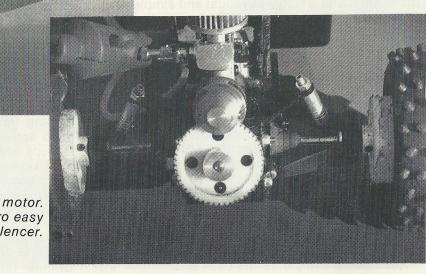
### TRACK TEST

As can be seen from the photographs this a

realistic looking kit and it would be interesting to see if it performed in the same manner. The car had been reassembled as descibed with the necessary additional work, of fitting servo linkages, fuel tubing, air filter etc. As time was a little short it was decided to leave the disc brake disconnected as the Enya 21 was brand new and needed running in.

The next mistake was finding that the 6mm spigot supplied was in fact 1/4" so despite appearing to clamp the flywheel securely it was not really doing so. This problem came to light when the first start up was tried. The positive cone-start whizzed around when the spigot loosened. It came off centre and promptly removed most of the teeth from the nylon drive gear. Panic stations, but a quick phone call to Clive down at Enfield saw a replacement gear and spigot arrive the next day. Well, it proved the spares availability! Double checking its security this time (Once bitten . . . twice they'll never believe me and all that), I set off again with the micro racer. I decided to give it a shakedown run at the local park before setting off to test it over more arduous terrain. The silicon 'super' silencer proved a little raucous but unpeturbed I carried on. The buggy pulled away with little throttle and I was soon quite confident. The handling was extremely positive and the rate switch on my steerwheel type transmitter proved more than useful on some imaginary fast turns. After about five minutes use I brought it back in to lubricate that drive gear just in case. Having checked the security of the motor clamps, tyres, etc, it was off to the local gravel pit for some exhaustive (sorry) testing.





Simple gear train from motor. Note: starting cone fro easy starting and rubber (?) silencer.