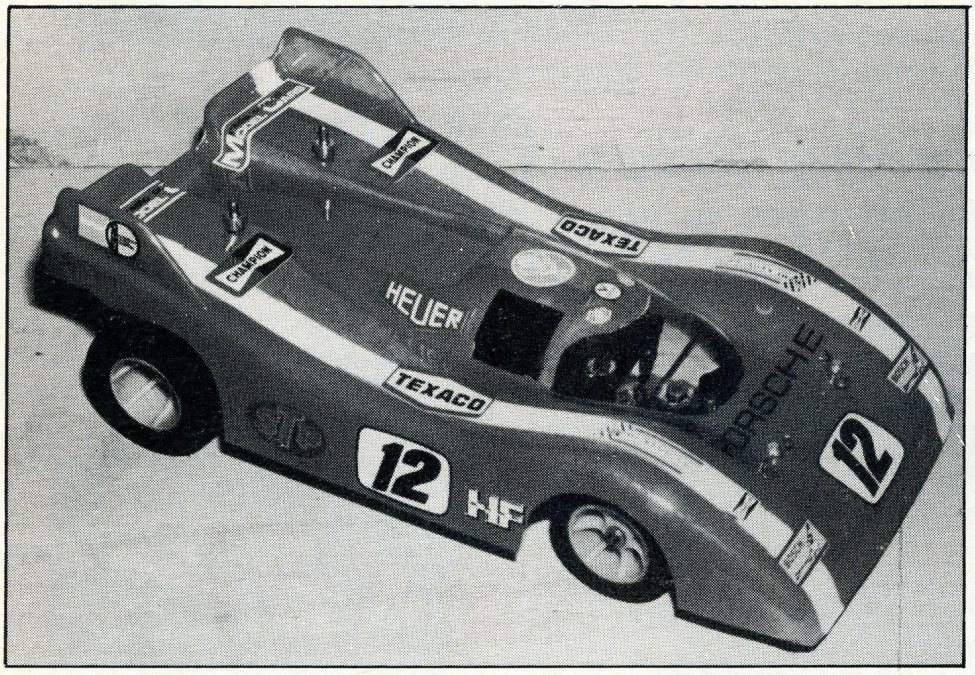
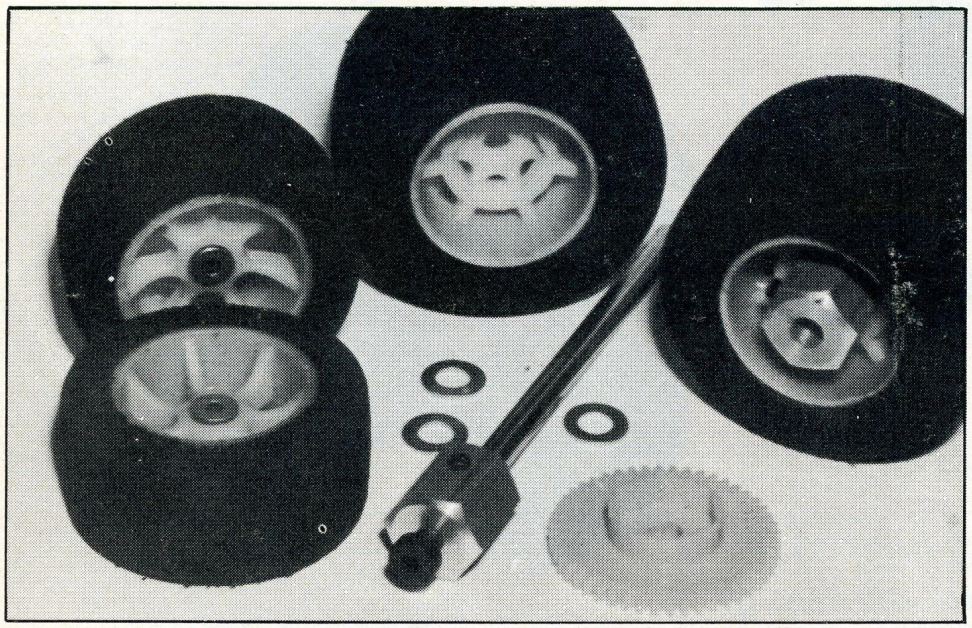
Minicars Porsche 917K completed and decorated Decals from various places (ie. the 'come in useful box')



Minicar XII From Sweden



Wheels, rear axle and interesting hexagon drive blocks

ENTHUSIASTS in Scandinavia are just as keen on R/C car racing as everywhere else, and, perhaps because of the long dark winter nights have a special affection for the 1/12th electric mode which they can enjoy indoors. Again, slightly off the main stream of development, they have evolved their own style of layout. This has proved successful enough to interest American manufacturers, who supply a great deal of the hardware used there. These manufacturers, in their turn, imported a number of Swedish ideas and in at least one case have a Swedish design expert on their staff. So it is very interesting to have a typical kit from those parts to try out — the Minicar XII. The brand name will certainly be known to followers of the sport in 1/8th scale, since founder and ace drive Per Gustafsson is a former European champion. The kit is being imported by AMPS Ltd., of Hertford who have supplied the review kit.

Instructions are in English, as might be expected, and go into a mass of detail and have some useful diagrams. My general arrangement sheet was rather poorly printed which made me all the more careful in putting the parts together. As usual, I started with the sticky job of putting on the tyres. The yellow plastic wheels are most attractive being a modern spoked variety such as the latest Honda motorcycles are sporting these days. If you don't like the yellow you could always spray them with silver paint, or even get a friendly plastic factory to chrome them for you as Les Pile suggested recently in one of his meeting reports. Tyres provided seem, strange to say, very much outdoor type so that you may find a softer mix more suitable for indoor use. That's up to you.

In the best modern style the front steering unit is in two separate items. Follow the drawing carefully to get them facing the right way (I got it wrong at first go!). Parts are plastic mouldings and very nicely made. Instruction to insert kingpin into suspension arm using a rubber mallet need not be taken seriously. It can be pressed in happily in a machine vice, or if brute force proves essential use a light hammer, but protecting the pin with a small piece of scrap wood. You may need to ease steering blocks a little by pushing them back and forth a few times to ensure a free fit. Locking of parts and attachment of wheels is via circlips. Easy to lose on the floor so stick them on a length of sellotape for safety and work over a sheet of white paper.

Now to the rear end of the GRP chassis plate to attach the plummer blocks which should be rubbed on emery paper to remove any flash. Oilite bushes can be pressed into them to take the back axle in due course. At this stage I like to fit the motor (a standard 05 type) which presents no problem. Rear wheels have stout hexagon hubs which fit in the hex sockets on the plastic portions. A little firm pressure gets them bedded in tight. The larger gear wheel also has a hex socket to take up the drive. Since we are building the Porsche-bodied car, the wing tubes are

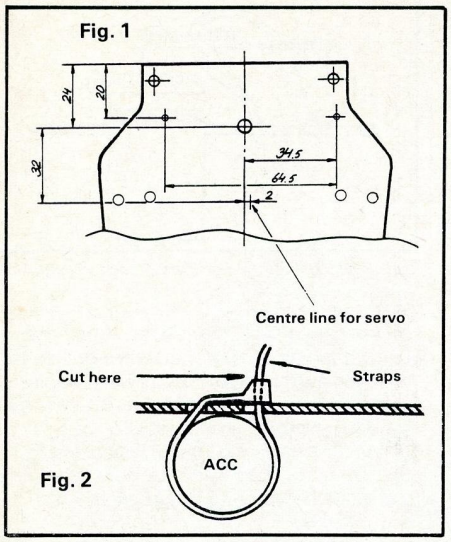


Fig. 1. Drilling radio plate. Check against equipment to be fitted

Fig. 2. Attaching nicads with cable ties

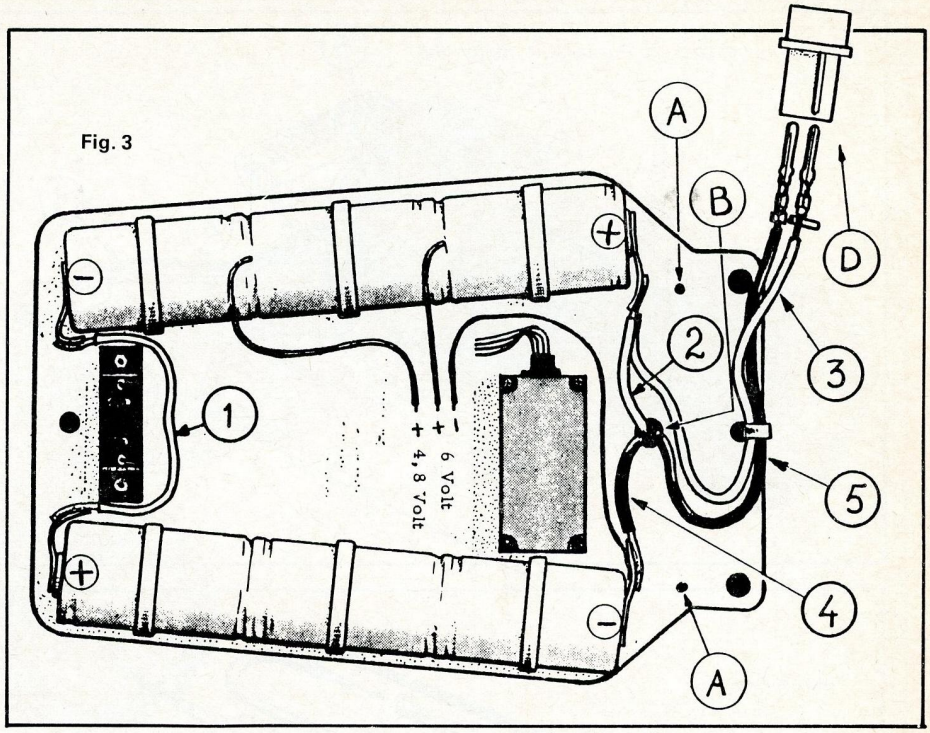


Fig. 3. Underside of radio plate showing where to tap in for Rx battery power

pressed into the front holes on the plummer blocks.

With front wheels fitted — hoping no circlips have gone astray on carpet, we can consider the steering gear. Here — like all good modellers — I move away from the instructions because I like a more ambitious servo saver than the style provided.

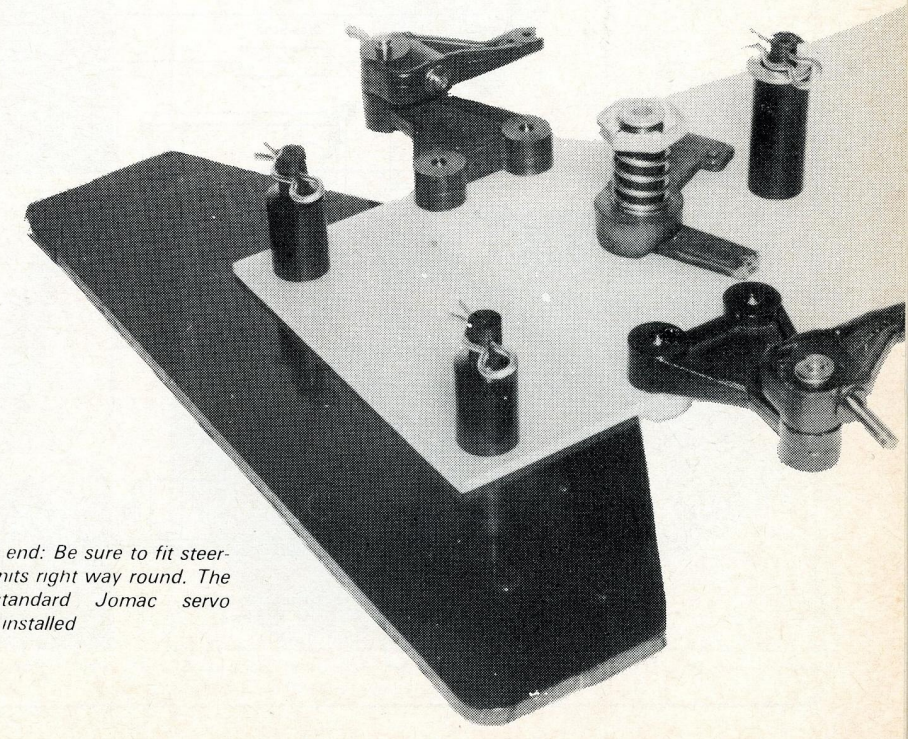
The 'official' assembly involves the simple light spring loaded connection direct to the servo. I have used a spring loaded servo saver of the usual Micro-Mold, Jerobee type. In my case a Jerobee which I happened to have handy from a parcel of goodies sent over rencently. It involves locating the servo between the front wheels. An alternative position is under the radio plate but this means putting the receiver on top of the plate and alters the whole 'Swedish style' of the layout.

Black plastic radio plate is already drilled to take the nicads, which are underslung and fixed with cable ties supplied, which are then cut short. Holes for front and rear attachment are also drilled. A diagram gives location of remaining holes for fixing of resistor. Location of servo for same is also indicated. Check that your bits do fit where holes shown (mine didn't — as a stray hole on plate indicates!) It remains to cut out hole for servo, tightest fit recommended — drill holes for fixing screws; and hole for on/off switch close to front attachment hole. My nicads were joined by a very long lead which I shortened and re-soldered to allow just enough spare to go round radio plate attachment hole.

A clear diagram is provided for attaching leads to nicads and motor plus lead-outs to receiver. You can tap the nicads directly for Rx power checking whether your receiver is operative on 5v or 6v. However, I was lucky enough to pick up a couple of suitable diodes (man never had them in stock before) and used them to block off current with a straightforward lead from the 7.2v end. In making these connections note that there is also a diagram showing microswitch and resistor to enable car to be reversed. This microswitch did not figure in my kit though the resistor did — only the sketch. There are no kit instruction references to this so I can only assume it comes in a deluxe kit version. Since this it quite an advanced kit I include a photo of the right micro-switch. I know that Micro-Mold carry it, so does Ted Longshaw (it is a Bo-Link spare) and comes with installation instructions.

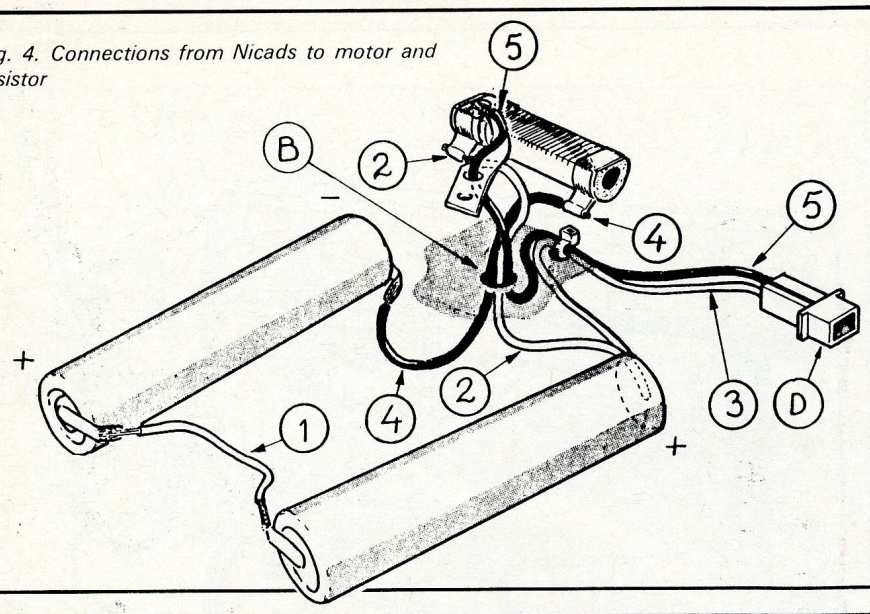
I have used my little MacGregor outfit for this car and Rx fits best Swedish style (just) between the nicad banks, though the sundry leads require a bit of tucking in. If you want to put your steering servo under here then Rx can sit on top, on a piece of double sided servo tape. This is certainly easier to get at than underneath for changing crystals etc., but not so effective in keeping weight as low as possible. I wonder how much it matters really?

Body provided was a Lexan Bo-Link Porsche 917-K, perhaps the most popular



Front end: Be sure to fit steering units right way round. The non-standard Jomac servo saver installed

Fig. 4. Connections from Nicads to motor and resistor



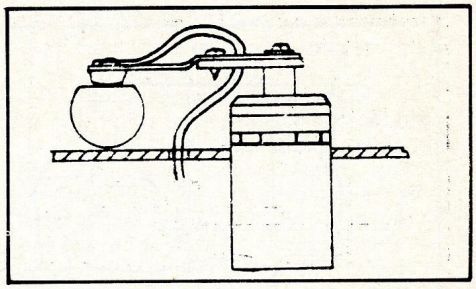


Fig. 5. How resistor and servo 'button' should be fitted

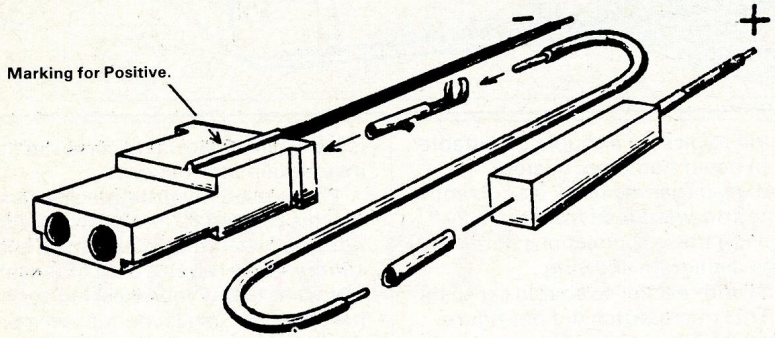


Fig. 6. Plug & Socket assembly: Positive is marked & cannot short if fitted thus.

Figs. 7, 8, & 9. Circuit and details for micro switch recersing facility

Fig. 7

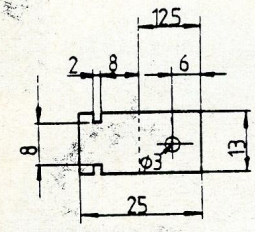


Fig. 8

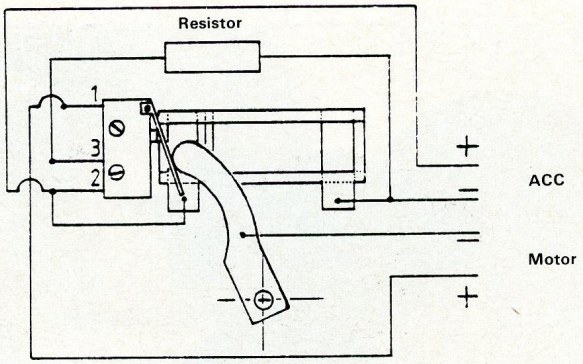
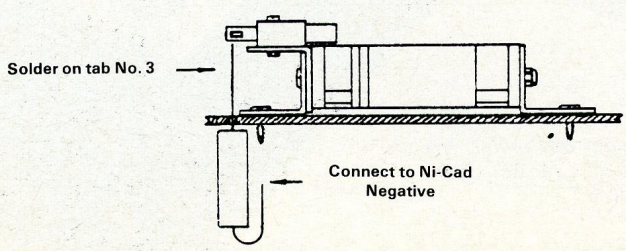


Fig. 9



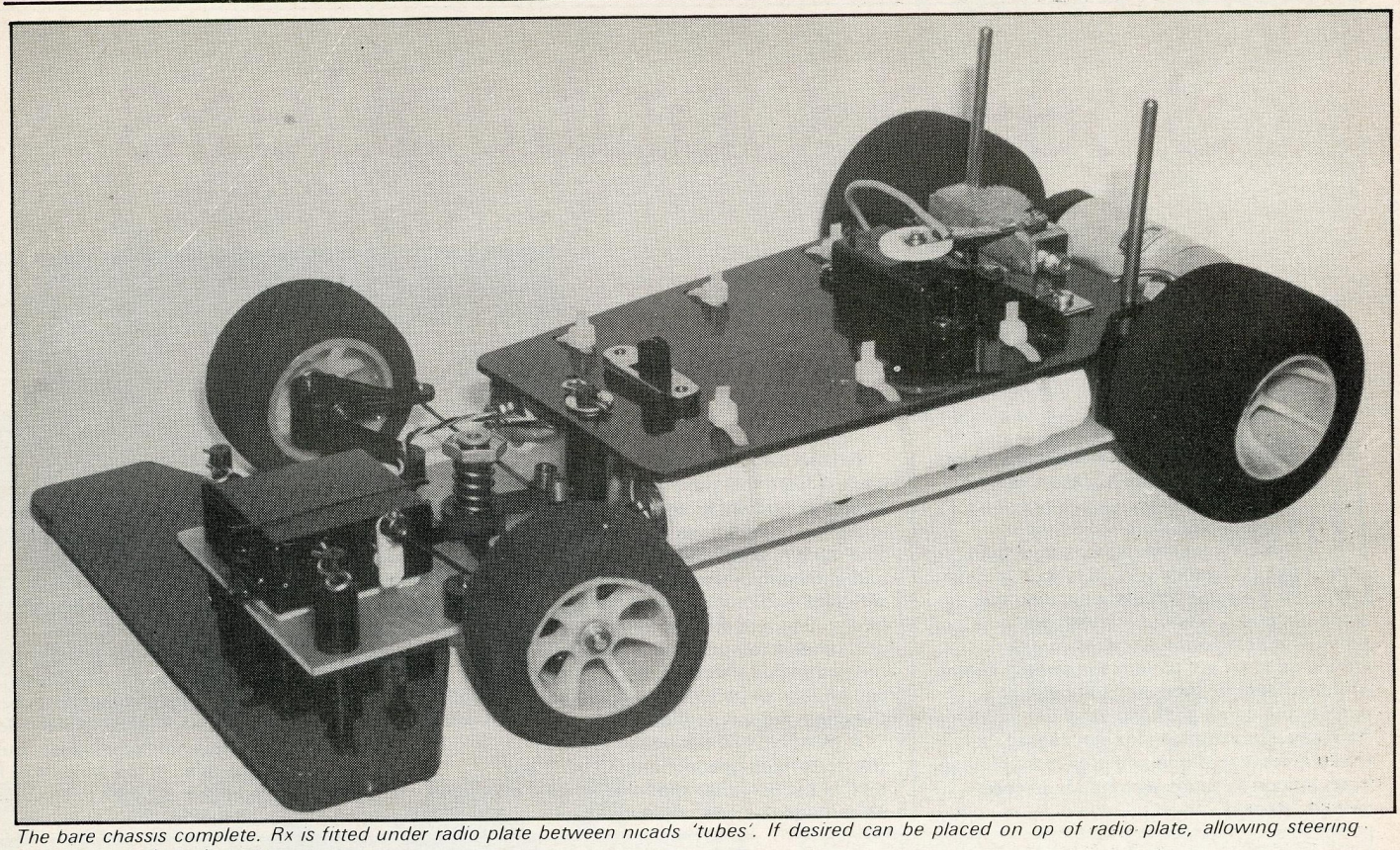
and practical bodyshell ever. Alas, the front body posts supplied were not quite high enough to clear my forward based servo — nor would they have fitted without it being there — so I found a couple of spares from that so useful workshop item, the junk box, and used them instead. They were cut-down adjustable ones from another kit.

Determined just for once to follow the instructions exactly I left the body untrimmed and started the painting job. Windscreen and side windows were masked off with Frisk. This, as you may know, is a thin clear self adhesive film used by graphic artists to mask off or protect their work. It peels off without leaving a trace. I use it a lot in magazine work but it is ideal for this secondary purpose. A big roll costs only a few pence. Two strips of sellotape lengthwise, well pressed down masked off the decoration. Inside of the Lexan shell had already been wiped over with a little washing up liquid suitably diluted using the washing-up J-cloth. Then with a fill-up of orange from the Greeno Supa Car range suitably diluted in its turn and the old Humbrol spray and a bottle of air I managed three thin coats in the morning and another after lunch. I left it overnight and then stripped off my decoration sellotape which worked a treat.

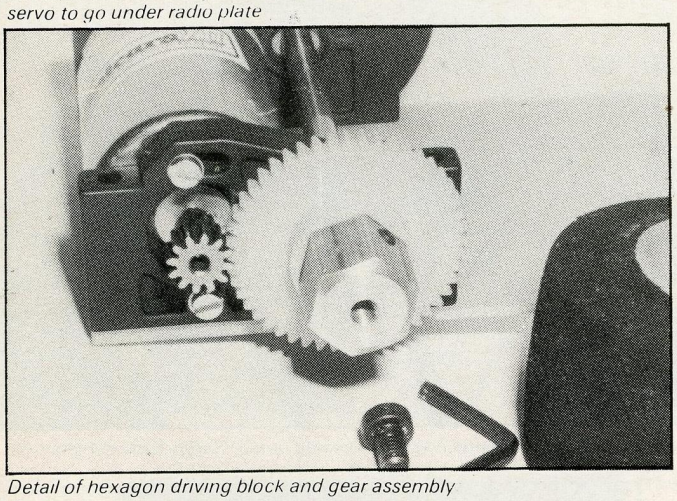
The white paint to follow was harder as I had to clean the glass container (and myself) but that after rather too thin coats began to give the orange a decent background build-up with No. 4 coat; one more for luck and the windscreen and side windows were stripped of their Frisk. Just a little run on screen to disfigure it. A small paintbrush dipped in thinners loosened the run which could be wiped off with a tissue. Another light dip of thinners and the pane was clear. If runs are not too extensive (usually our own fault!) they can always be cleaned up with care.

Final touches included a good sprinkling of decals. Nowadays they are mostly the self adhesive transparent backing kind which take no time at all to put on. Mine are a mixed bag from unfinished sheets including PB Graupner Jerobee and Mardave — never throw things away!

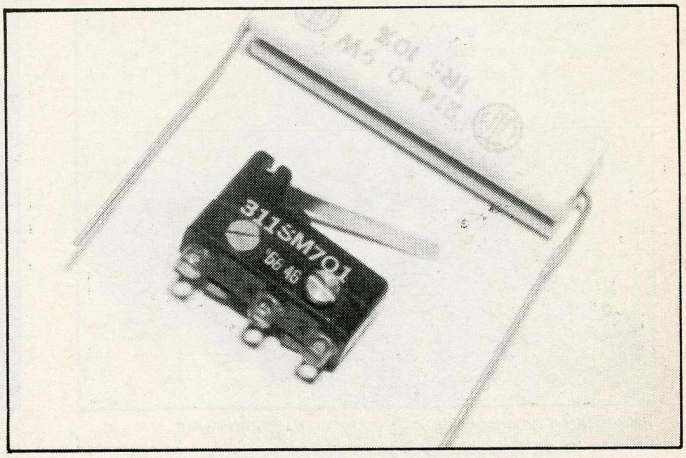
I enjoyed putting this Swedish kit together. It has a lot of good features and I would recommend it to anyone who has already made a kit or two and run them with average success. This may prove the breakthrough and get you amongst the winners; it has the potential but the driver has got to get it out as always. Thanks Minicars and AMPS for the fun of building another car.



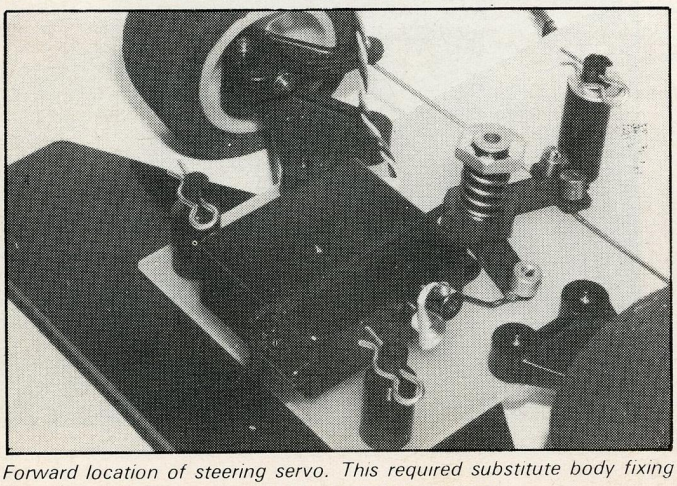
The bare chassis complete. Rx is fitted under radio plate between nicads 'tubes'. If desired can be placed on op of radio plate, allowing steering servo to go under radio plate



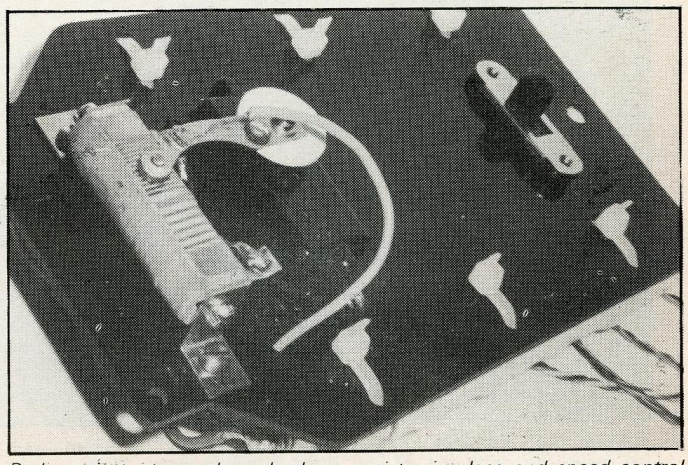
Detail of hexagon driving block and gear assembly



Micro switch & resistor if reverse desired



Forward location of steering servo. This required substitute body fixing posts to be fitted, though probably needed in any event



Radio plate with nicads underslung, resistor in place and speed control servo fitted. On/Off switch on front