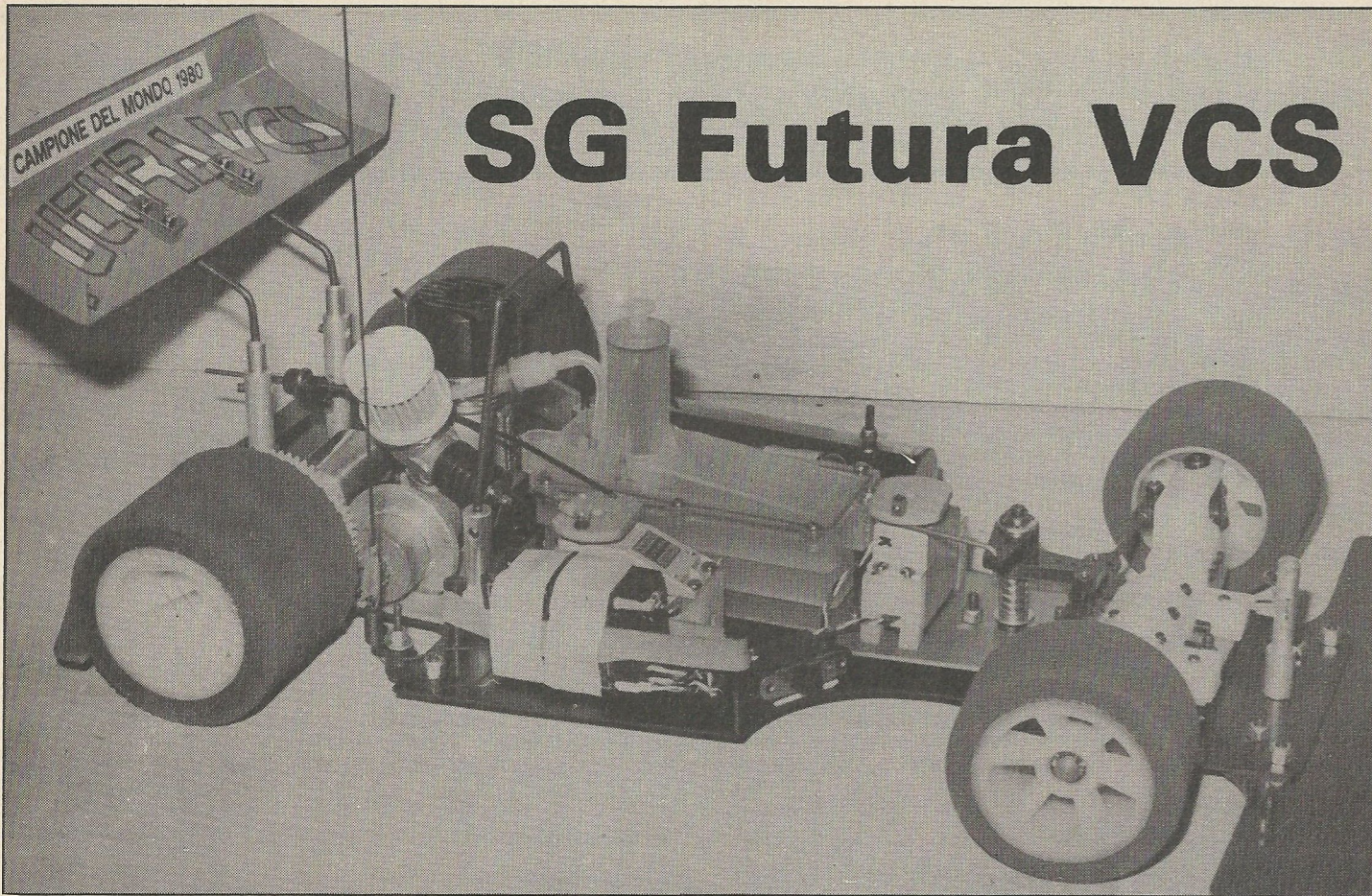


SG Futura VCS



JACK WILLIAMS of Model Rectifier UK Ltd has really done me proud with this review, Futura not only including the latest SG pipe silencer but also the prestigious Picco engine that is the ideal combination to make up a winning package.

After a fantastic set of building instructions in pictures for the Futura III, designer/driver Franco Sabattini has reverted to the practice followed in his earlier "Expert" car of providing no instructions whatsoever! They say little Italians are born with a spanner in their hands in place of the silver spoon; so doubtless Franco thinks anyone incapable of putting his cars together doesn't really deserve to have it. To be fair, the car is presented in what appears to be ARTR state — or "Almost Ready To Run", but there is still quite a bit to do before taking to the track.

This is the car that Giulio Ghersi drove to victory in the 1980 World Cup event at Monte Carlo, and the week before the Sports/GT at Carnoux in France. Among other victories for the marque was, that aimable ex-boxer and darling of Italian fans, Giorgetti's win on the fast new circuit outside Vienna to be the scene of this year's Euro Champs. Other wins were listed in our 1980 summary an issue or two ago and clocked up seven in all.

Almost alone among the leading manufacturers SG have remained faithful to all metal chassis, though reinforcing the rear end with a

substantial power pod on top of the main chassis. The radio plate itself is really an extension of this chassis. As the kit comes in its very attractive box (save it: it has the only pictures on it to aid construction!) it has already been partly assembled. At the rear the double disc brakes, differential, and wheels are in place on neat nylon plunger blocks. At the front the elegant variable control steering unit (hence VCS) is attached to the independent swinging front section. Tyres are all glued and trued in place. I notice that front are considerably softer than those supplied with my original Futura III (I later substituted a pair of moulded by Associated). From a cosmetic point of view main chassis and front bumper plate are anodised black with power pod and swinger in a golden anodised finish. You won't see it under the bodyshell but it is one of those touches that appeal. Servo saver is in place, but steering arms have not been fitted. Radio plate has radio posts and recesses for gear; slotted holes have been cut out for servo mounts, also provided and ready drilled to take ST screws.

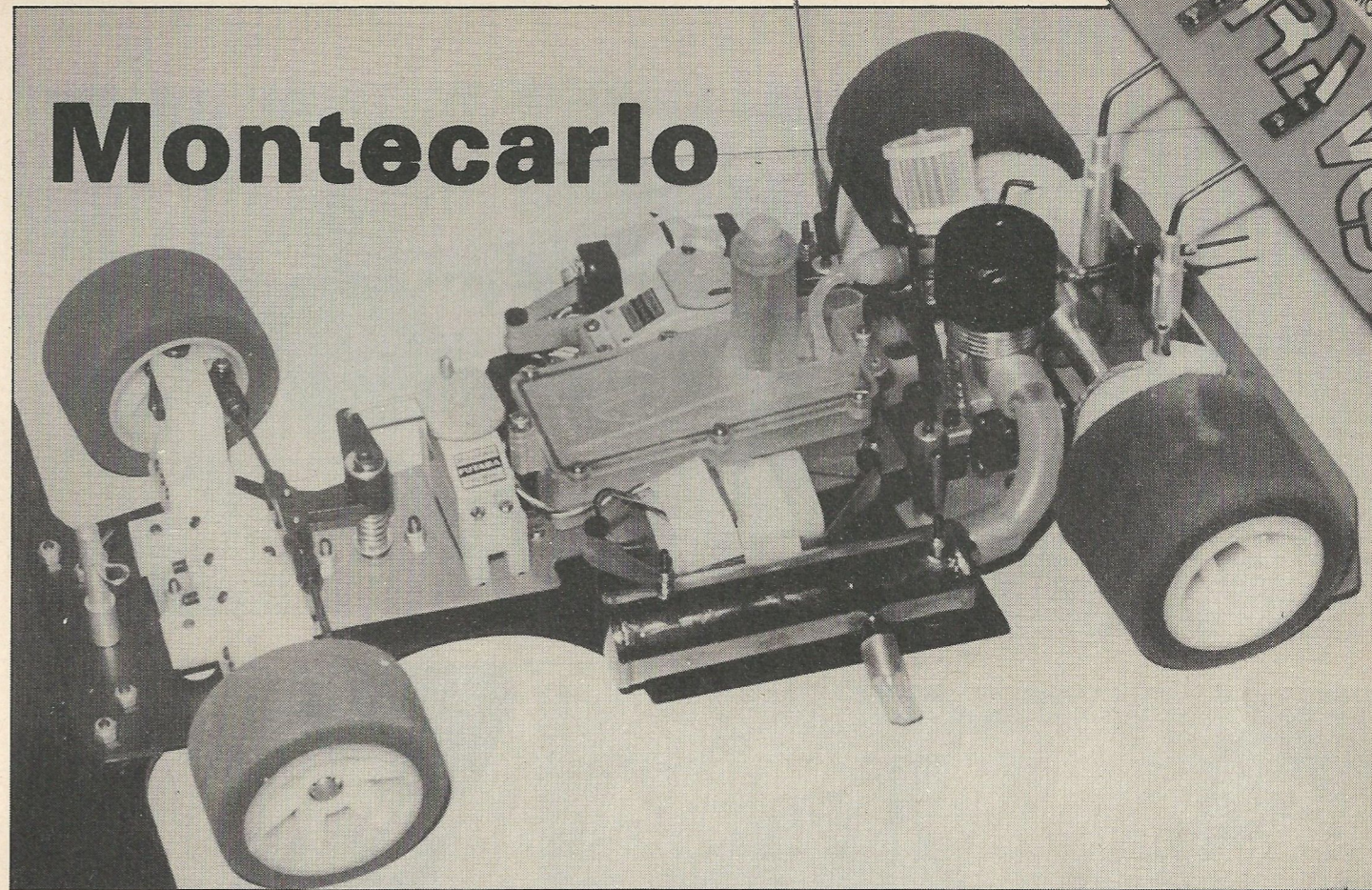
First task is to remove the swinging front end in order to get access to the servo fixing for front steering servo. This gives one an opportunity of studying exactly what this swinger does. It is balanced on the centreline and attached to the chassis by five bolts and nuts. The three forward bolts of which two come under the steering crossbeam and the other just behind

The complete car. Note on/off switch for Rx just by the steering servo, r/c aerial by rear wheel. Rx rests between the supporting posts.

the servosaver are stood off with rubber buffers. The two rearmost bolts are much longer and serve also to support the fuel tank which fits into a suitable cutout in the plate. They come up through short locating pillars which in turn rest in floating pivots thus enabling the whole plate to swing sideways. The degree of swing is dependent on the rubber buffers at the front. If these are loosened the swing is increased, tightened and reduced. Amount will be determined by the nature of the circuit on which car is running. A lesser degree of flex is also obtained for the rear wheels with the power pod located on the full length metal chassis.

Fuel tank is of nylon and requires to be assembled. It is exactly the same as supplied with the Futura III and has a springloaded filler cap, not, as shown on the box, a fliptop filler cap. Doubtless this can be obtained as an accessory if required. Its main parts consist of base and top which are screwed together with ST screws and made fuel-tight with a thin rubber ring. Inside an X-shaped baffle is fixed in

Montecarlo



Car from the silencer side. This rests on rubber buffers on main chassis, attached by bolts coming up through the pipe. A stout silicon tube connects with Picco engine. Armoured tubing or a purpose made metal pipe might be better.

place and a short length of tubing leads into a sump which ensures all fuel is used to the last drop. Filler cap is fixed to a spring fastened at the base of the tank. Two ears align with the swinger bolts and distance pieces to fix tank in place. The bolts will *not* go through the holes in the tank which must be drilled out to take them. Do not try to force them through: they will stick half way which is a nuisance!

A roll bar is provided and is attached via the two outer fixing holes securing power pod to chassis. These holes too have to be drilled out to take the larger bolt that screws into the roll bar securing pillars. Wing mounting posts are erected behind the rear axle and these have countersunk fixing screws, so that it is worthwhile to countersink holes for full security, though not essential since most of the other bolts have hex heads. I took the opportunity of altering the rear bumper from my Futura III to fit at this time, since a rear bumper is not provided.

Excellent screw-in type steering connections with plastic end caps are

supplied. If these are screwed right in as far as they go they are just right for the amount of toe-in desired: more of course if you untwist them a turn or two. Unusually, they attached to servosaver and wheel connections with ST screws. These are screwed up from underneath to the servosaver and from on top to the other ends. It will be necessary to remove the wheels to screw them on.

This provides the occasion to see how neatly wheels are attached. A small allen screw is undone and the stub axle slides out complete with wheel. The axle goes through the kingpost and secures it in place. A suitable flat on the axle ensures a firm fit. Probably the quickest wheel change in the model car world!

Front wheels are double ballraced: races are unshielded and I would keep them well greased up to prevent dirt getting in. I tried my earlier Futura III wheels for fit and see that the later stub axles are much more robust so immediate compatibility is not possible. However, if the earlier ballraces are eased out and ones with a larger hole for the axle substituted you would have a spare pair right away. You can often get quite cheap ballraces from Ken Whiston at New Mills, Stockport. Send for his "Cat" as he describes it.

Engine installation is next task. Happily the engine blocks are already drilled out to take the Picco engine and suitable socket head screws and spring washers provided to fit it. Stout screws

with purpose designed washers attach the blocks to the power pod/chassis and allow some degree of adjustment. Flywheel, bellhousing and clutch follow a conventional pattern with PTFE clutch shoes already cut in two. These will require a little shaping so that they do not foul each other. Here comes a small matter for thought. The shoes are not grooved to take an O-ring, but two, what appear to be, rubber O-rings are supplied. In some cases these days the shoes are allowed to swing out free without any controlling springs. Alternatively, shoes are grooved and have O-rings which resist the centrifugal force pulling them into contact with the bellhousing. I have played safe and grooved my shoes by putting the whole clutch assembly less bellhousing in the 3-jaw chuck of the lathe and taking out a groove with a parting-off tool, holding the two halves of the shoes in place with a winding of Sellotape. By the way, as is usual, crankshaft must be shortened by several threads in order to screw clutch assembly firmly in place.

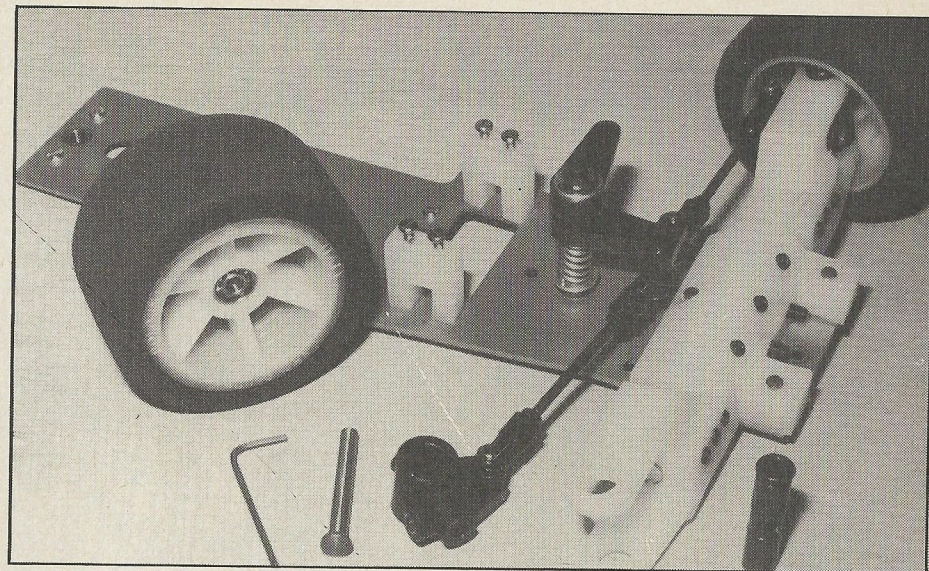
I have fitted a Delta concertina-type paper air filter but there is a specific SG filter if so desired. Do not neglect the fuel filter — again there is a wide choice available and your "favourite" filter can be used.

Not included in the kit is the SG tuned pipe silencer which I have fitted thanks to the generous Model Rectifier UK parcel. A couple of holes must be drilled in the main chassis (they come at 87mm

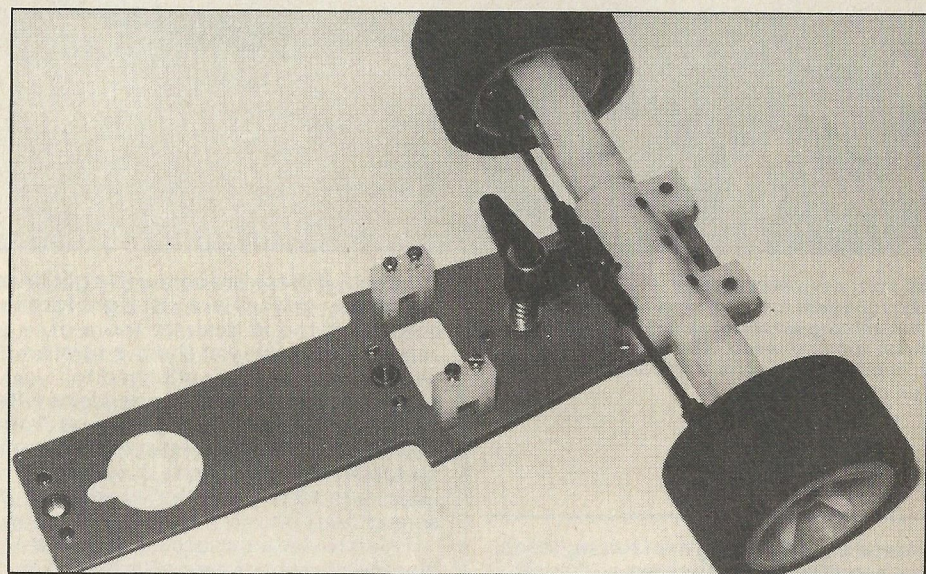
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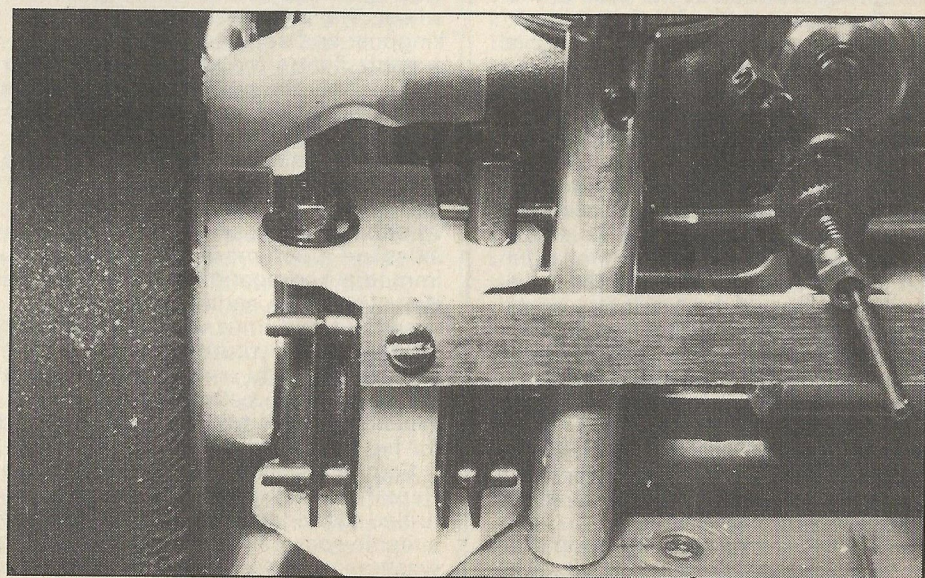
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Swinging section sub-chassis removed. Wheels are ball bearinged, the axle going through the kingpin to secure in place, which an allen screw locks on. "Quickest wheel change ever!"

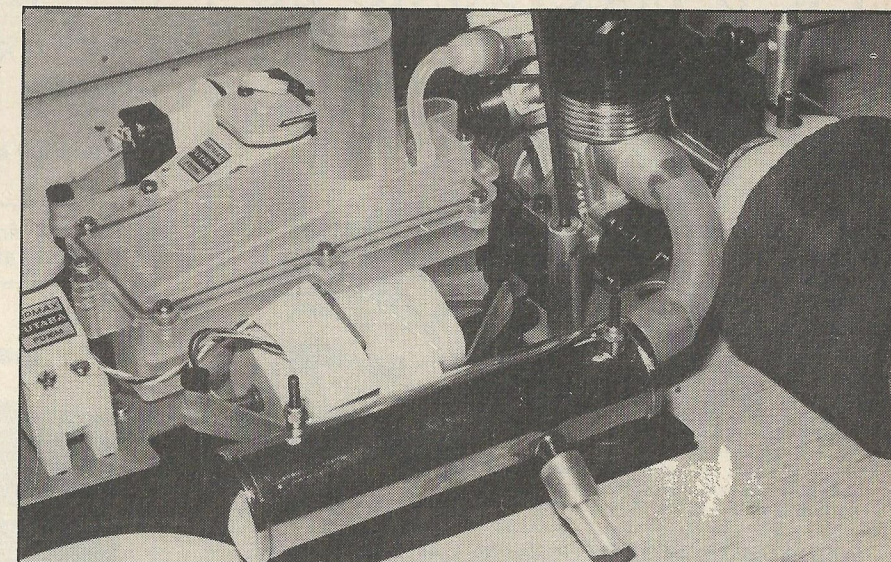


Sub chassis with adjustable steering crossbeam angle of which can be altered via the allen screws at the front. Hole at rear takes fuel tank sump. The two larger holes in line hold the bolts on which this section is allowed to swing.

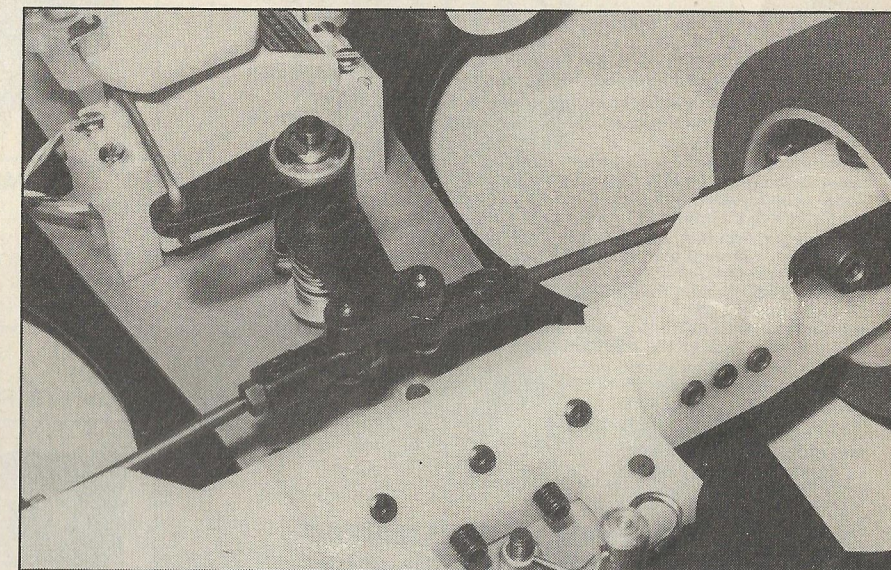


The double disc brakes, one fairly soft the other of metal reinforced material which provide a controlled and even braking facility.

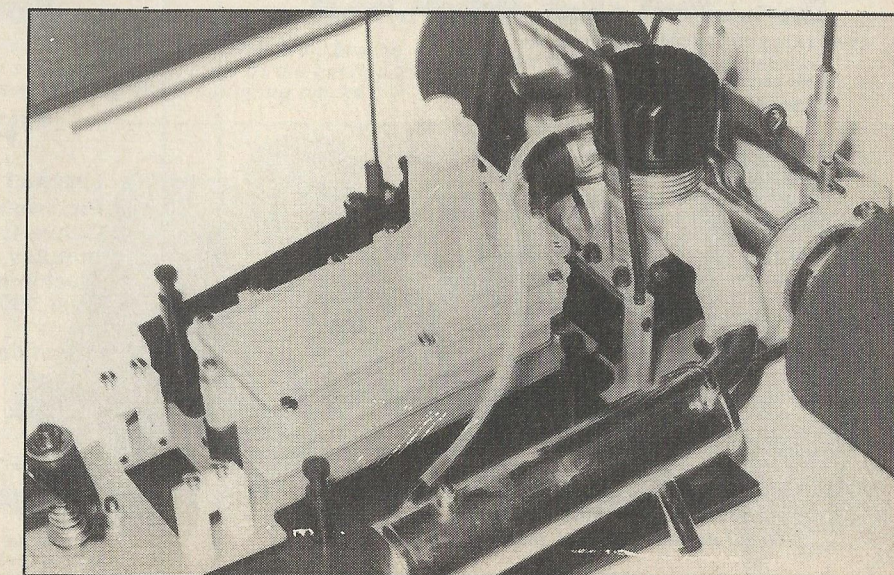
radio control



Detail of silencer attachment. Holes are drilled through the chassis to take the attachment bolts.



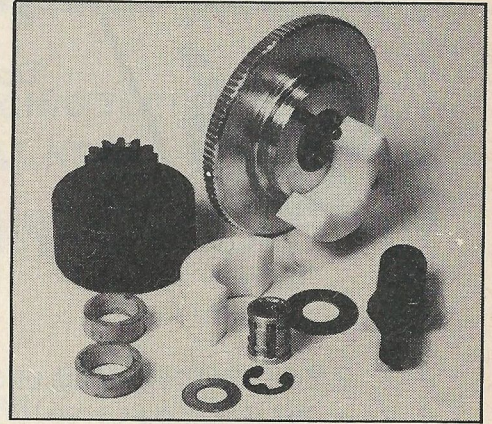
Detail of the adjustable steering crossbeam. Inclination can be exchanged to suit conditions at the circuit. Note also secure attachment of ball jointed steering arms with long ST screws.



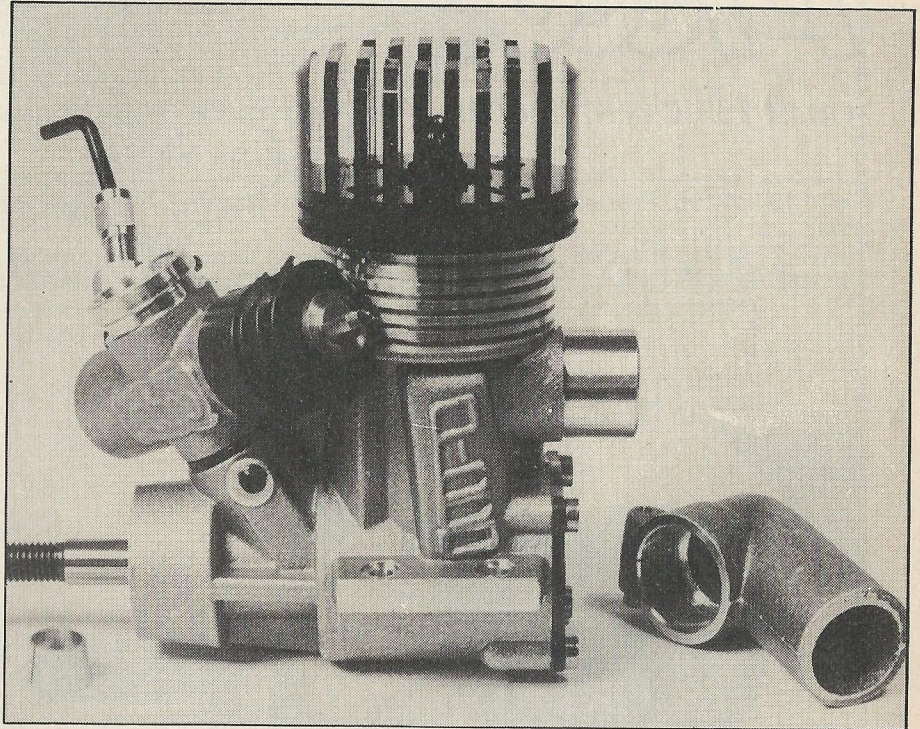
Alternative silencer pipe with built in bend to meet straight tube to manifold (Robbe). This set-up has also been pressurised to tank.

SG Futura VCS Montecarlo . . .

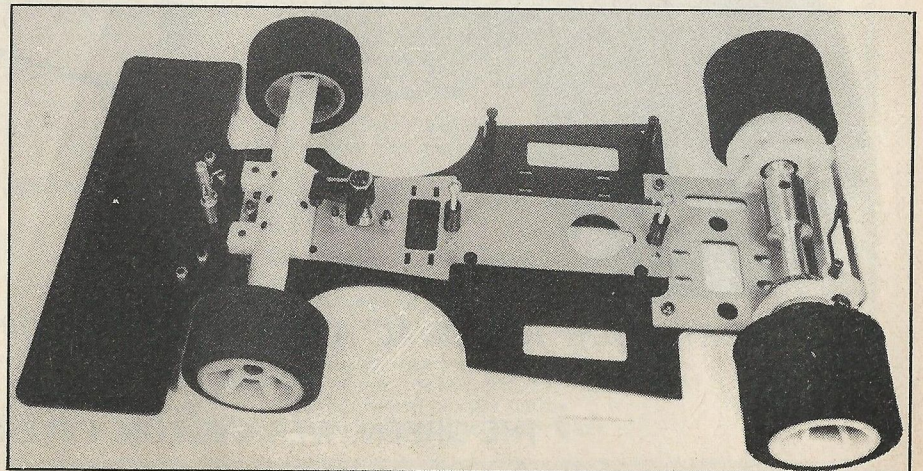
Clutch/bellhousing parts. Needle bearings neatly enclosed in cage; flywheel lightened.



The very attractive Picco engine with slide carb. Crankshaft will have to be shortened to take the clutch parts. Manifold shown is suitable for rear positioned "dustbin" type silencers.



How the kit comes. Convenient for boxing but swinging section must be dismantled to attach steering servo mounting blocks.



centres) to fix this in place with long screws that go right through the tube. The pipe rests on little rubber bumpers and fits very firmly and snugly. If you wish to pressurise the fuel you must drill for a nipple connection. Make it tapping size for your nipple and ST in place with Loctite to secure it. A suitable connection duly marked will be found on the fuel tank. If this is not to be used it can be blanked off.

Attaching the silencer to the engine is not so easy. Picco provide a manifold but it is so angled that it is impossible to connect to a forward placed pipe silencer. However, the engine has a useful round extension to take silicon tubing directly. Good stout tubing is essential as the sharp turn required makes it prone to kinking. After a struggle I have got mine to work, but, on looking at the SG 1980 Catalogue I see an armoured silencer connection is listed (Art. 0846) specifically for the Picco or SuperTigre X21 RE, although the silencer itself shown is different from the one I have.

No trouble should be had installing servos and radio equipment. In spite of the silencer there is ample room to sling the battery beside it and it goes happily on the other side. On/off switch I have placed just in front of the slung Rx. SG provide an excellent whip aerial and a suitable fixing bracket which can be fitted just behind the Rx. Steering servo is the smaller size which beds down well on the shorter fixing posts, and has a very short convenient run to servosaver. Throttle is also a short pull to the slide carb; only the brake rod is any length at all and just goes through between engine and carb.

A lexan wing is included with suitable fixing wire. Attachments are the same as provided for adjusting brake rod length and should be slid up the wires before bending them to the angle desired. Small metal plates and rubber washers provide adequate seating for the attachment screws.

Attractive SG decals complete the job after painting to suit the body. A body is not included. However, I would venture to say that Italian cars always seem to me to look their best in the international Italian racing colours of bright red.