

The finished car in its simple livery and a few PB decals to decorate. The 10 is just to remind you! One luxury (not in kit which has a less opulent set) is the use of the PB special wing fixing knurled nuts.

# Breaking in The 'Colt'

# Part 2

# The Engine

I left quite a few things unsaid in the first part of this review. First of all I note that at least one model trader (Avicraft of Bromley) is offering to drill and tap engine mountings free of charge if PB kit is bought at his shop. Secondly, it is not a bad idea to get some small taps and dies for yourself in metric and UNC (the American favourite) sizes and have a go doing your own. You will be surprised how often they come in useful. If you use a Veco, you will need to fit washers on crankshaft to bring it up to mesh gears: it is not possible to drill fixing holes in engine mounts without fouling larger holes already there - hence adjustment by these washers.

Next — and very important — is the matter of filters. Unlike aircraft flying in nice clean air cars run close to the dirty ground and engines simply must be protected. This means that you need a filter in the fuel tube and another on the air intake. Without them, in next to no time your engine may well suffer internal scratching galore.

On choice of engine you will note that some makes come with their own heat sink or cool head — again this ground based engine partly enclosed gets hotter than when in the air — and needs this larger head to help dissipate the heat. Typical engines sold complete with head include Irvine, HB, OPS, OS21, Super Tigre X21. Additional heat sink heads needed for K & B and Veco. I have finally fitted up my Colt with an OPS. This is one of the 'in' engines

at the moment with an excellent contest record. You may comfort yourself with the thought that though it may be a bit too powerful at beginner's level, you need not open it out just yet and it will be there for you when you want it.

Silicon fuel tube used to be imported from the States, but recently PB have been manufacturing their own, which is well up to the standard of the US tube. It comes in two sizes, the more robust type is the sort to choose. Coloured bright blue it also adds to the colourful scene!

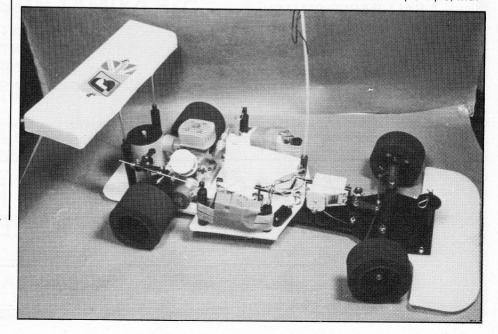
### **Radio Installation**

There is a whole range of suitable r/c equipment. Any of the 'brand' names can be safely fitted. Remember, however, that nearly every make has its own particular style of plug and socket connection so that

receiver and servos must normally be matching makes unless you want a lot of trouble refitting compatible fittings. I have used Futaba here, but on other equipment I have happily used MacGregor, Talisman, Digiace — it's up to you.

With 1/8th scale cars double sided servo tape is NOT used please. Screw your servos on the brackets provided in the kit. Remember a spot of Vaseline (petroleum jelly) is a good lubricant for self-tapping screws in plastics.

For quick simple fixing there is little better than the small brass locating collars which are secured to piano wire with Allen screws. Some more elaborate ball and socket types with screw adjustments will take more punishment and are the regular choice of experts at the steering end. Connection from servo to brake and throttle works on a see-saw principle, with



Bare chassis with radio installed and servos in place. Note on/off switch is operated from under radio plate. Air filter is the now popular concertina paper filter — this one by Delta. Engine is OPS with PB manifold. Silencer again is PB. A PB brake and throttle set of locking collars and springs has also been used.

# radio control

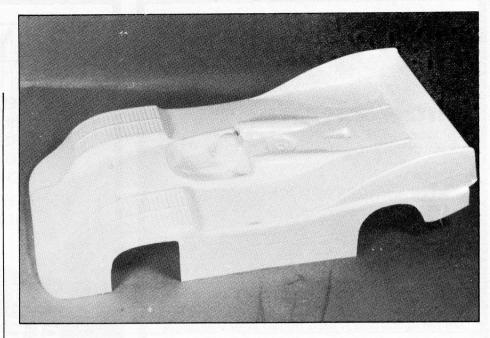
The ABS Porsche bodyshell supplied with kit. Waste edges have been trimmed off with scissors and wheels openings cut out.

a neutral moment in between, so that with no action at the Transmitter your car should just be idling without engaging the clutch. It may tend to 'creep' a little which is one reason that mechanics are needed to hold back cars at the start of a race. Be sure that there is no loose play in the connections, which should be spring loaded.

A straight lead from servo arm goes to the brake. If you are using a Perry type carb a short length of wire connects up to the toggle at very nearly right angles to the brake action. Direction of servo movement must be such that throttle is closed when brake is on and vice versa. With a slide carb where movement is up and down and not across connection is to the opposite arm of the L-shaped brake lever. You can trim off the slide arm bit if you are not likely to be having that sort of a carb or leave it on in hopes.

Receiver and battery are hooked up on each side of radio plate between the posts with rubber bands to reduce rough shaking. Sellotape or similar binding secures them between the bands. To save weight the experts are now using lightweight nicad cells in place of the stouter plastic cased power pack such as the Futaba NR-4C. At this stage in the tyro's driving life this is not really necessary.

A good on-off switch should be fitted, preferably on the front of the radio plate, where it is easily accessible for a marshall to switch off if need be in emergency. In this location a hand can be slipped quickly under the body shell to reach it. Mark on with a splodge of red paint! Aerial mounting can be made on the opposite side of the radio plate, using a plastic tube through which the aerial (unshortened) is threaded. Being on a non-conducting surface no insulation is required.



## The Bodyshell

The ABS bodyshell which comes with the kit must be trimmed round its edges as indicated by light indentations. A pair of scissors will do the trick. Wheel arches must also be cut out — a pair of curved nail scissors helps here. Next step is to place shell on the chassis to mark where body posts come through. A recess indicates where front post should come and two at the rear where wing wires should be. But check just to make sure yours are in the right place. You will also have to cut away the shell to give room for the engine head and to reach the carb needle for fine adjustment on the bench.

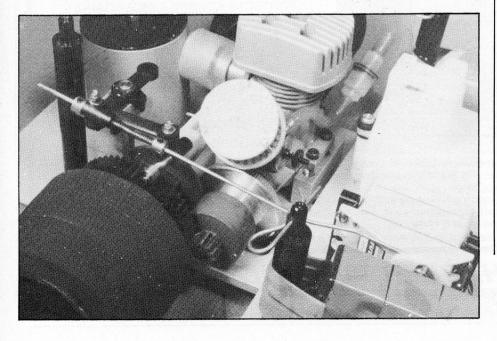
This done the body can be thoroughly cleaned with a detergent to remove any grease which might spoil the paint adhesion, and you are ready for the paint job. ABS shells can be painted with any of the car touchup spray paints in aerosol cans. These paints are not fuel proof and

will require fuel proofer in addition.

A number of paints ar now available which are fuel proof and do not require after treatment, notably from GB, Greeno and Hi-Teck. They come in tins and will require to be diluted about half and half with thinners for spraying. There is a wide range of suitable spraying equipment at all prices. I still use the cheapest which is a Humbrol aerosol with small screw on paint jar to hold the paint. If you are going in for elaborate colour schemes then a more sophisticated tool will be your aim.

Before painting a suitable colour scheme must be evolved. Object other than sporting a kindly sponsor's name etc. is to be able to see and distinguish your car from other people's, and equally for it to stand out against grass, mud or other object and quickly catch a marshall's eye if you are unlucky enough to leave the track. So do not choose everybody's colours which seem to be red and white! By all means leave a bit of white on the car (its natural shade needing no paint) but have something else as well. I like yellow as a base with a splash of black. It is the most distinctive colour contrast. Nearly as good is blue and yellow. For a start be simple. I have merely arranged two long triangles of black along the sides. Mask off the bits you do not want to paint with masking tape pressed firmly down with a finger nail and the rest covered with newspaper or similar. Mask off the driver in his cockpit - this will be brush painted last of all. Two or three thin coats are better than one thick coat. They can be applied at very short intervals - say one hour between coats.

When you are satisfied with the first colour strip off the masking tape and newspaper and do the same again for the bits you have not yet painted and then



Detail of brake and throttle connections. Had a slide carb been used the spare lever on brake arm would have been used. Note fuel filter between tank and engine.