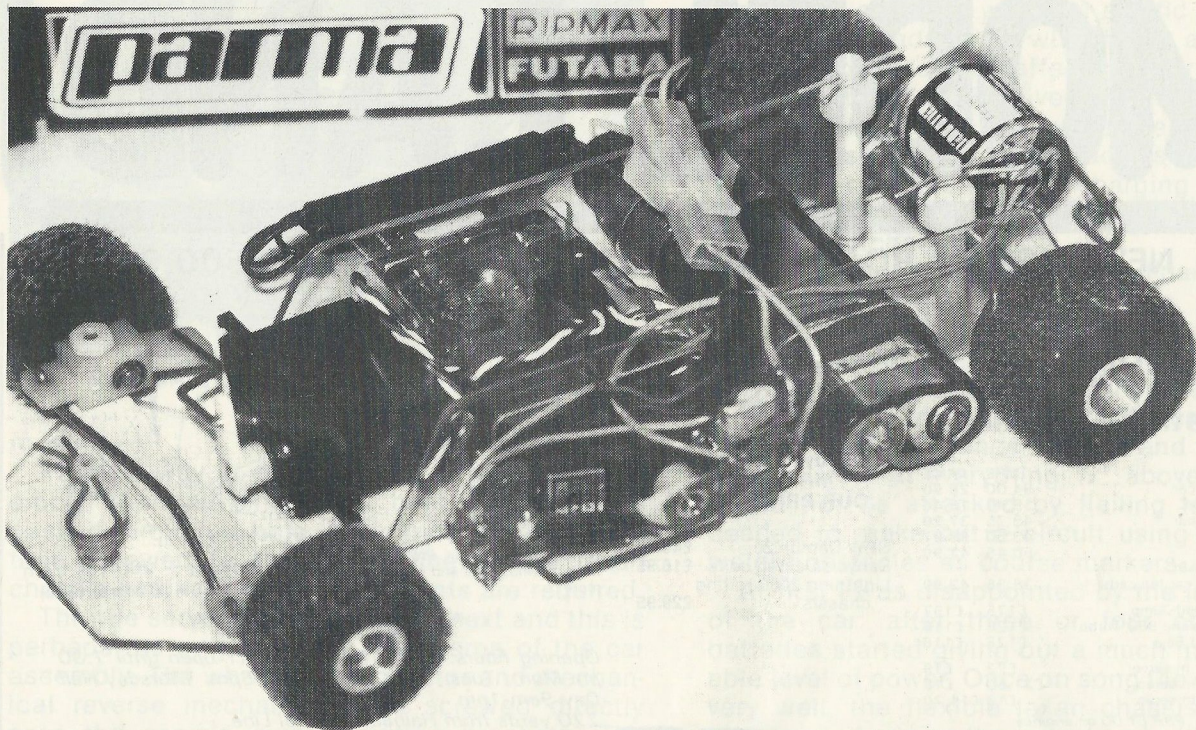


Parma 1/18th Cheetah

Radio Race Car Kit Review



General view showing speed controller and radio installation.

What's new in electric car racing, one may ask each month? Very little the honest answer could be, because, I suppose, most kit manufacturers and scratch builders have tried it out already. What does help to make this such an interesting pastime are the variations on a theme that we are constantly offered.

Most 1/12 enthusiasts are fully aware of the benefits lexan chassis offer the UK racer and now we have a 1/18 scale electric car marketed by Parma, utilising a similar design.

Because of its size and the need for lightness the design could not be simpler.

The kit comes with easy-to-read instructions and a well drawn exploded view of the whole car, with inset drawings of the wiring harness and reverse switch.

We start our build, with the folded lexan chassis, into which the torque tube is installed. This is made up in two parts, the tube from thin wall brass is pre-soldered to the tube.

The installation of the axle bushings, is also intended to hold the torque tube between the side walls of the chassis. The gear and both rear wheels are fitted onto the axle and held in place with 4-40 unc socket set screws. Remember to leave at least 0.010" to 0.015" end float between the wheels and axle bushings.

We move on to the front of the car next, where the nylon axle beam is placed across the front of the chassis and held in place when the king pins are screwed through from the underside.

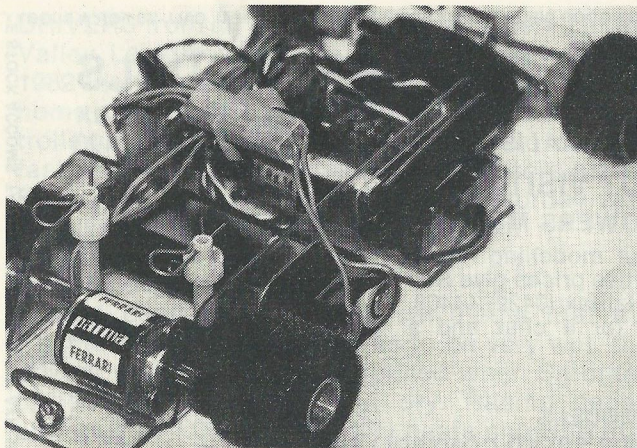
Steering blocks are joined together with the wire rod and placed over the king pins then held in place with nylon nuts, leaving enough clearance to allow each block to move freely. For fine adjustment to the steering, the tie rod is merely bent in its centre to give whatever toe-in the driver requires.

Stub axles are not bred with American kit manufacturers' tradition. They are simple steel axles held in place by circlip and also retaining each wheel by a similar method.

To complete the front end assembly we now have to merely install the steering servo. Here I did not exactly follow the instructions in that they show the servo operating from below its centre line, which means that in order to clear the chassis in its movement, the short servo arm has to be trimmed to a very short length, thus reducing the steering 'throw' greatly.

The car shown in the photo is using a steering link connected to the standard Futaba servo arm above the servo centre line allowing full movement of the steering geometry, very useful for tight turns, when driving the car in your lounge (Note: it is not necessary for any servo saver to be fitted).

With the front end completed we move to the rear again to complete that section. This is done by offering up the motor, in this case a lovely little version of the Parma Ferrari, to the motor mount and holding it in place with two MZ pozidriv screws. Allow sufficient end float for correct gear



Rear end showing torque tube fixing.

mesh.

Parma's way of retaining the torque tube assembly is simple enough. A bent wire spring is passed through a hole in the motor bracket and then screwed to the centre line of the lexan chassis and no further adjustments are required.

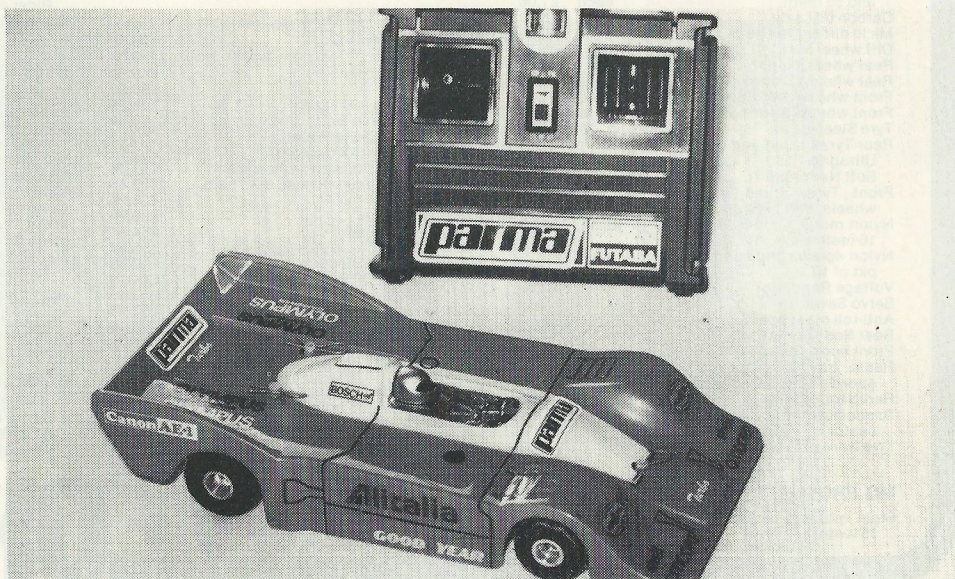
Throttle servo assembly comes next and this is perhaps the only remotely tricky area of the car assembly. The whole of the resistor and mechanical reverse mechanisms are screwed directly onto the servo's own mounting brackets. The reverse switch which works the same as any conventional micro switch we have all used for reverse on 1/12 cars, except that this is as simple as space and weight will allow.

Care must be taken on the initial assembly of the reverse switch components, especially the nylon spacers, which allow two out of the three contacts to be touching at one time. If all three come into contact then a short will occur.

Operation of the switch is done by trimming one end of the servo arm to act as a cam on the switch arms, to make and break contact for forward and reverse motion.

Throttle servo assembly is held in place on the chassis with double sided tape.

Small and attractive; the transmitter giving some impression of its size.



Finally mount your receiver on the space provided behind the throttle servo, insert batteries into pre-cut holes into the chassis and hold in place with either tie wraps or elastic bands.

Charging leads come with the kit and instructions are provided for effective charging of the batteries. Don't be deceived by the size of these cells into thinking that they are cheaply replaced. They are as expensive to replace as those used in 1/12. Take care, therefore, in charging and I advise they are always monitored with a voltmeter to prevent overcharge.

Bodies come ready trimmed and painted, with a choice of two, Lancia or Sorbello. A few well chosen decals and you have a very presentable little racing car.

Without any choice of tyre, other than what was supplied with the kit, I tried the car firstly on carpet. With the lounge cleared and assurances to the wife that everything 1/2" above the carpet would not be attacked by flailing lexan, I proceeded to make out a circuit using fairly lightweight obstacles as course markers.

At first I was disappointed by the initial speed of the car: after three or four charges, the batteries started giving out a much more acceptable level of power. Once on song the car handled very well, the flexible lexan chassis offering a high level of grip on the carpet and with full use of the steering geometry, it turned through a very small circle, even with a solid axle at the rear.

The maximum speed offered by the car is fast enough to be competitively raced in large lounges or small halls. The speed is, I am glad to say, relative of the size of the car and if you yearn for higher speeds then stick to 1/12, but this scale of racing will bring back the fun into the sport.

With the self same tyres siliconed, the car was given a run at the local club, on a wooden floor. Without any special setting up, it ran trouble free and with a remarkably good grip (experiments with tyre compounds can easily improve rear end traction).

The only thing missing was more competition.