Track Test

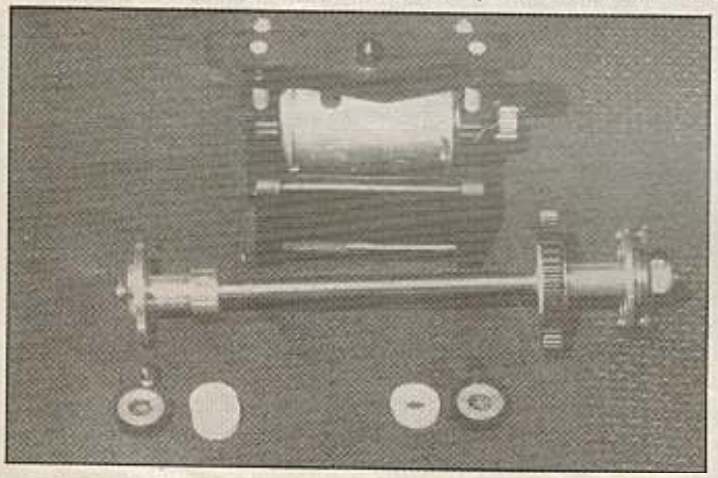
parma PANTHER

BY STEVE BOND

PARMA is well known and respected in the UK as a manufacturer of many of the ancillary items for 1/12 electric car racing, the *Parma* range of body shells and motors in particular being widely available. In common with several other 1/12 electric R/C car manufacturers, *Parma* have used a number of parts from other manufacturers' products in their 'Panther' car, notably plastic mouldings from the *Jomac* 'Lightning.' The kit supplied for this review is a rolling chassis and does not include the motor, Ni-Cads or body, but does include a ball type differential and the new short stroke *Parma* resistor. The kit does not have any written instructions but a very detailed, 'exploded' drawing.

Kit assembly

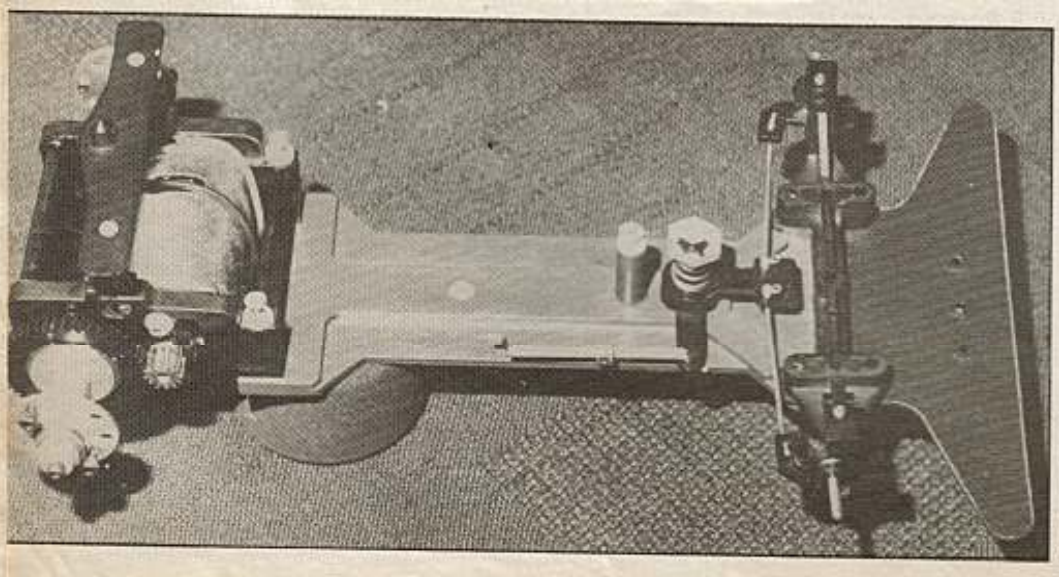
Assembly began with the motor/axle pod, this being made of two moulded nylon halves held together with three screws, to form a very rigid box. The motor is held in place with two socket cap screws, but before fitting the motor, a nylon cam ring is push-fitted over the motor boss. The rear axles run in two Oilite bushes which are likewise a push-fit into two adjusting cams.

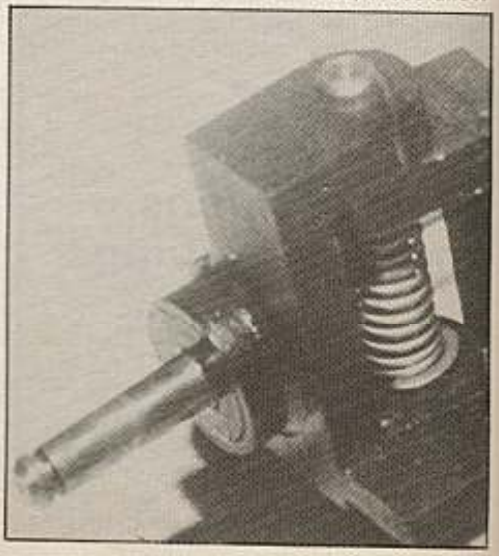


Above right: looking pleased with his new 1/12 scale racer is author Steve Bond. Left: motor pod and Associated diff. fitted with Parma's own lightweight aluminium adaptors. Below left: Panther chassis minus radio tray. Below right: front suspension arms.

These cams have a peg moulded onto them, the idea being that when a drive gear is changed to another size, the axle retaining cams are used for coarse adjustment of the gear mesh and the motor cam for final adjustment. The wing tubes are also fitted into the motor axle/pod and are adjustable for height, being locked into place by two collets.

The differential supplied is a *Parma* version of the *Associated* unit. Items that I did like were the wheel hubs, these allow



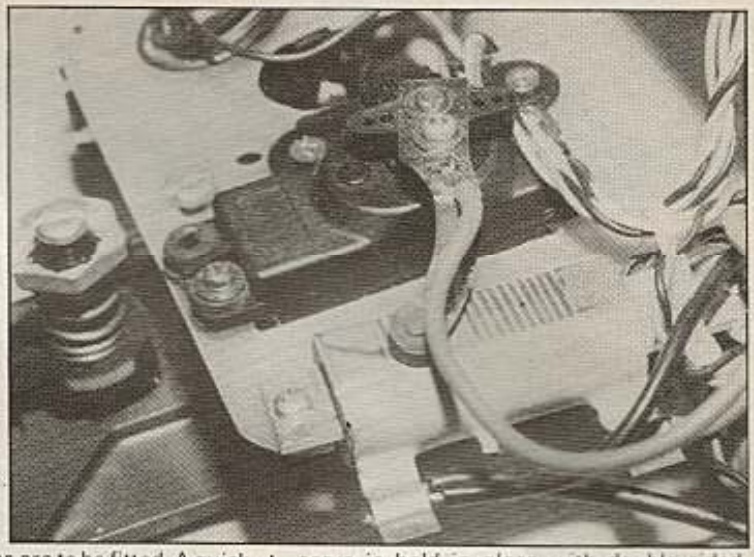


the rear wheels to be removed without upsetting the differential setting. The wheels are held in place with two socket cap screws and are a special *Parma* pattern.

The front axle beam was assembled next, this being a one piece moulded nylon beam with the sprung axle stubs. This was the most fiddly part of the assembly as it is necessary to hold the spring up and then fit an E clip to the king pin. The front wheels are held in place with E clips and push-fitted Oilite bushes.

The axle beam is held to the chassis with four countersunk alloy screws, the front bumper plate being clamped between the axle and the chassis. The motor/axle pod is fixed to the chassis with two countersunk alloy screws.

The chassis is moulded from polycarbonate plastic with the servo saver post and shaker plate moulded in. All the steering rods are pre-formed and no adjustment is provided for toe-in.

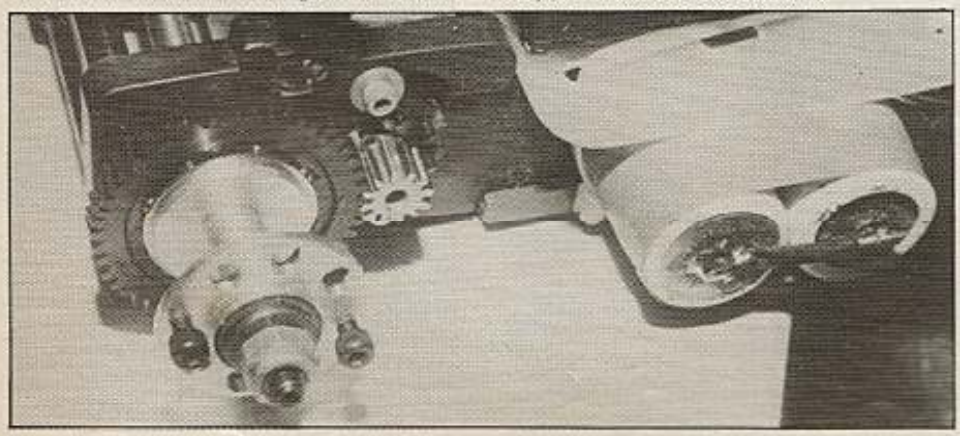


Right: Parma short stroke resistor controller supplied with the kit. Below: completed Panther ready for the racetrack. Bottom left: differential of the Panther uses Associated gears.

R/C installation

My biggest mistake was to try and use the 'standard' size servos. This kit is designed for 'micro' servos, the whole layout of the R/C equipment would need to be changed, even to the extent of making a new shaker plate if larger servos are to be fitted. A quick 'phone call to *Powermax* resulted in the purchase of a pair of 'Skyranger' mini servos which fill the bill perfectly, credit cards do have their uses! The steering servo is held in place with double-sided tape and a tie wrap. The one job I hate having to do is setting up the resistor wiper arm, but with the new short stroke *Parma* resistor this seemed less of a problem to set up than with the longer types.

Parma products are available from many retail model shops. Parma and Jomac spares are available from Ted Longshaw Model Cars, 80 Pepys Road, London SE14 and I&D Electronics, 24 The Square, Vicarage Road, Peterborough. Parma Panther is priced at around £40 (rolling chassis) or £57 complete with motor and batteries.



Finishing touches

The last job was to silicone the tyres. I had doubts as to whether the kit tyres would be any good at our indoor venue as the rear tyres were hard. The normal indoor set-up is soft rears and medium hard fronts. When tyres are supplied 'trued and glued,' it seems a pity to tear them off the wheels, so I thought I would try them out just the once until I was able to obtain a further supply of wheels. With fully charged Ni-Cads and with my fingers twitching on the sticks the 'Panther' was put down on the floor and then she was away. In spite of the less than ideal tyre compound the car handled very well running round as though on rails.