

PARMA PANTHER

Reviewed by JOHN CUNDELL

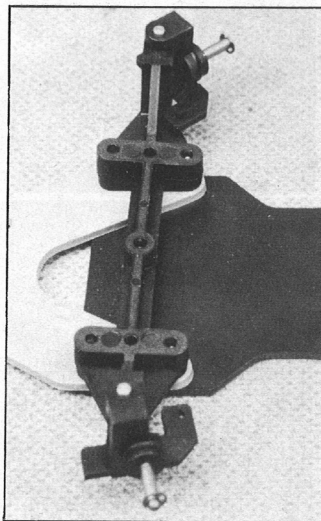
THE NAME OF *PARMA*, an American company based in the lakeside town of North Royalton, Ohio, is well-known to electric slot car enthusiasts in the UK as well as the United States. The company has also gained a reputation in recent years for their resistor type speed controllers and polycarbonate bodies in the world of R/C car racing. Their latest release, the 1/12th Suspension 'Panther' car, is a determined attempt to make strong inroads into the R/C electric car scene.

The kit is supplied in a strong cardboard box and is available as the basic frame or it can be purchased with motor and computer-matched Sanyo cells. Apart from the major chassis plates, all other components are packaged in plastic numbered bags, i.e., front end kit, rear end kit, wing tube kit, servo saver kit, accessory pack, *Parma/Associated* steel differential, wheel hub kit and resistor. The other items are chassis plate, flexplate and throttle servo plate in glass fibre, front and rear tyres and bumper. The kit which includes the electrics featured a *Parma* 'Renault' motor, six 1.2volt, 1.2Ah Sanyo computer selected Ni-Cads, connectors, wire and roll over antenna. Finally, there is a comprehensive

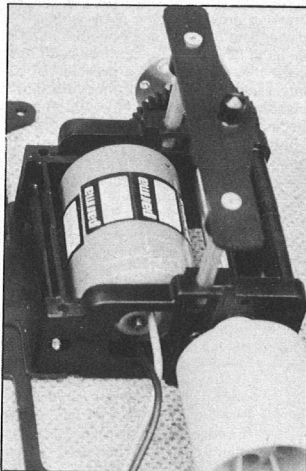
instruction package which includes exploded diagrams and photo illustrations plus a separate sheet on the differential, and a help sheet of eleven hints and tips on setting up the car for maximum performance by American racer and World Champs qualifier, Bud Bartos. This latter sheet contains some very useful advice and should certainly be read before construction commences, as indeed should the basic information.

Assembly

Assembly commences with the front end and no problems were experienced. The unit is very similar, indeed one might say exactly similar to the *Jomac* 'Lightning' unit and features a camber adjustment screw, which should initially be set up parallel. One point to watch is that the king-pins move freely in the front axle, mine was free, but if there is a little stiffness this can be removed by rubbing the pins with wet and dry paper, followed by steel wool. Oilite bushings are supplied as standard but if you wish to fit ball races, as I did, the wheels and stub axles are completely compatible with races available from UK model car specialist shops. The wheels are retained by the usual E-clip. Bearings are also easily applied to the rear end which is again very 'Lightning-ish', featuring axle cams and motor cam to give maximum possible adjustment to axle height and gear mesh. Pains have been taken by *Parma* to



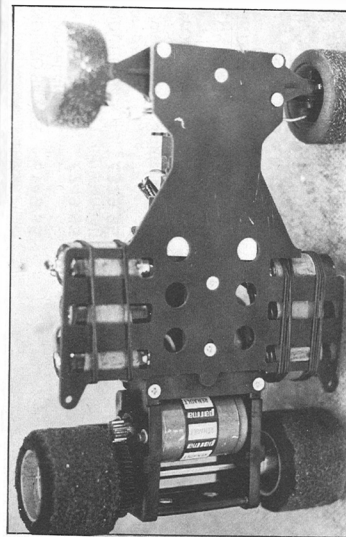
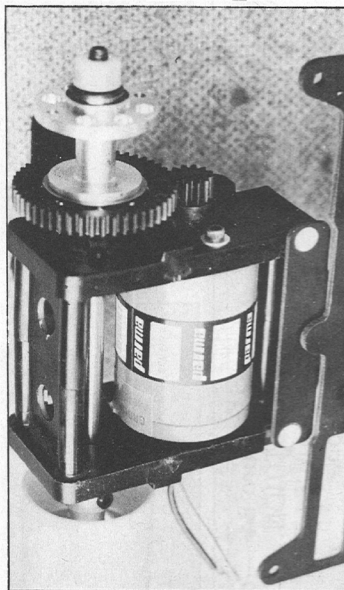
Left: 'Panther' front end, the central bolt hole takes the camber adjustment screw. Below: rear end blocks, differential and motor.



keep the weight down and it is not recommended to drill any further lightening holes in the front or side webbing although one is permitted to open out the holes in the rear webbing to half an inch. The *Parma/Associated* differential is straightforward to assemble but don't forget the smear of grease and make sure it is put together in the correct sequence. The lightweight alloy hubs are well machined and already drilled to remove all excess material. The plastic wheels are bolted to these with two set screws.

Ready trued wheels and tyres are available in soft and medium on rear and soft, medium, medium firm, firm and hard plus combo medium-soft and medium-hard on front, or you can fit and true your own tyres on the yellow plastic wheels. They will not take standard sleeves, being fractionally too large, but it only takes a few moments to unscrew the set screws and change wheels, and of course there is no chance of these getting knocked off during a race.

The rear pod assembly fixes to the main chassis plate through the T-shaped flexplate and four alloy self tappers. The standard plate is .063in. thick and should be fitted if you intend to race on carpet or outdoors on asphalt. However, for the really slippery surfaces, a much flexier plate is required. A .032in. thick plate is now available and should be obtained and fitted for silicone racing. It is also desirable to carry out a further modification for silicone



standard servo, as can be seen in the photographs, following the careful use of a needle file on the servo output spindle. With the resistor car, a diode is supplied which drops the battery voltage down to receiver level. A stiff wire antenna fits to the throttle plate, this doubles to lift the receiver aerial to an effective height and even more effectively to operate as an anti-turn over device. One evening's racing with it removed soon proved its usefulness and it was quickly reinstated. The little bit of excess upper weight is far outweighed by being able to stay upright. Of course, if you are the type who never turns over, that's another story!

On the Track

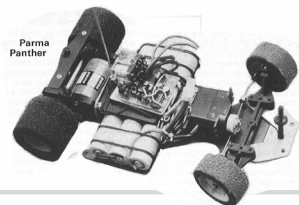
The car is competitive and is strong, especially important for most levels of racing. The quality of all components is excellent and strength has not been sacrificed for lightness. The *Parma* 'Panther' will run successfully on its first outing, if correctly assembled, particularly on carpet surfaces and then there are ample adjustments provided all round to allow for finer tuning. For silicone use it is imperative that maximum flexibility is allowed for in the assembly of the pod-flex plate-chassis area, otherwise a few frustrating hours will result. To start with, on carpet use medium rears and medium-firm fronts and for silicone I suggest the softest rears you can find and hard fronts. Also,

racing to the throttle plate arrangement. This rather rigid plate is designed to accept a mini-type servo, there is no way a standard *Futaba* or equivalent will fit, and to operate on the *Parma* resistor by means of the wiper arm supplied. Whilst being a bit fiddly, the system goes together satisfactorily. The plate is fixed to the front top of the rear pod and to a rigid plastic supporting pillar raised from the chassis plate. Three small rubber grommets are supplied to fit between the throttle plate and the pod and pillar in order that rear end flexibility is maintained. This system is perfectly satisfactory for carpet operation but leaves the car too rigid for silicone use. There needs to be much more float on the pillar-throttle plate attachment and I have simply removed the grommet and drilled out the throttle plate to quarter inch diameter and left the self-tapping screw about an eighth inch proud. This modification has

made an incredible difference to the handling of the car. If you intend to use an electronic speed controller, this can be mounted under the throttle plate if it is of modest dimensions, or otherwise on top. A neater arrangement than the throttle plate is to use another flex plate and mount the speed controller on to it.

Body mounting is facilitated by a rear body post on two alloy tubes mounted in the rear pod and by two posts at the front. This is entirely satisfactory although I prefer the one post at the front arrangement as can be seen in the photographs. There is enough adjustment in the mounts to accept a wide variety of bodies.

The receiver fits snugly onto the chassis with the servo tape supplied in front of the battery-throttle plate set up, and backs onto the steering servo. A *Kimbraugh* spring type servo saver is supplied which will fit the majority of mini servos, and even a



don't forget to round off both the outside and inside edges of the rears.

Conclusion

A fine kit from the States which will find a large following on our shores and which fully comes up to the high quality standard

that we have come to expect from *Parma International*. The *Parma* Suspension 'Panther' is distributed in the UK by Helger Racing, 72 Lauderdale Tower, Barbican, London EC2Y 8BY. £62.50. Basic kit less electrics.

