Omega

ALPHA TRACK PARTS

The ATP 'Omega' chassis immediately impresses with its clean, uncluttered approach to competition chassis design.

Pete Winton examines the latest in 1/12th scale chassis designs

TWELFTH SCALE RACERS seem to be a rather conservative (the non-Thatcher kind) bunch by nature, or perhaps a herd (as in the sheep kind). There are many items on the market for each component used in a car, but cast your eyes around any pit and you will see only two or three types in popular use. Chassis are a prime example. Most popular by far are the *Schumacher* and *Demon* but you could choose from *Associated, Delta, Parma* and *Alpha Track Parts*. The reasons for this are not clear, but a sound reputation built on track results, availability and access to spares, and the aforementioned sheep phenomenon go some way to explaining why.

The chassis reviewed here is the 'Omega', manufactured and marketed by *Alpha Track Parts (ATP)* of Leicester. It comes assembled (saving about three paragraphs!) and as a conversion kit includes the chassis, shaker plate, motor/axle unit, damper and body posts. All the major parts are made from carbon fibre except the motor/axle unit which is black anodised aluminium.

Construction

The chassis is formed into a 'U' shaped channel, the same shape pioneered by the Neil Francis' Lexan 'Phantom' chassis. Carbon fibre is the material used by jet fighters and 'Formula One' cars for lightness with high strength, and its these qualities that make this chassis design work on carpet, where the stiffness helps to make the suspension work with the high grip available.

The motor/axle unit is described by *ATP* as a torque cage and is well made and very strong. The rear axle bearing housings fit into two square Lexan plates through a hole which is offset to the centre of the square. By fitting the plates into the square holes in the chassis in varying positions it is possible to alter the ride height of the rear of the car, the first such chassis from an English manufacturer to include this feature. This is not a simple adjustment to make but it is useful to have some control over the ground clearance to influence ride height as tyres wear. The damper is much the same as the *Schumacher* item, two PTFE washers either side of a damper plate attached to the rear axle. The washers are held in place by two springs one above the plate, one below. A nylon nut clamps the springs down and a fibreglass whip aerial fits into the damper post. The shaker plate has two 'ears' for the cell retaining rings; stick cells are required.

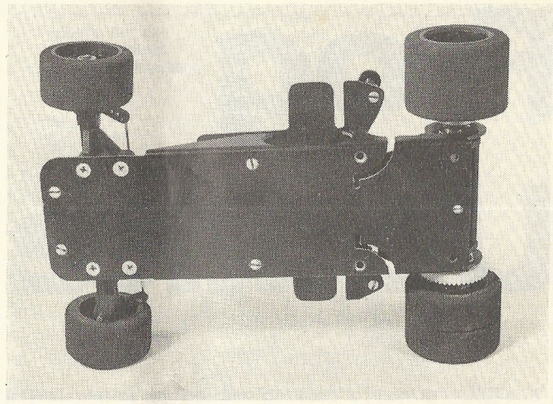
The front of the chassis is drilled to accept *Associated* front blocks and a set of the spring variety (from 12is) were fitted. The body posts were threaded nylon rod and looked fragile, but no trouble was experienced.

Included for review was a differential from *ATP*. This is a very neat unit which is totally different from existing diffs. Contained within the aluminium housing are four, star bevel gears to provide the differential action mounted on ball bearings throughout the line of the axle. The nut on the end of the axle is provided to adjust freeplay in the bevel gears, and once adjusted needs no further maintenance. Indeed, apart from oiling the two exposed bearings this diff requires virtually no attention. With the geared system there is of course no drive gear slip at all. The low maintenance and consistant no slip performance are very attractive features, but until a different wheel system is developed it is necessary to use the *ATP* sleeve system. Currently priced at £18.00 it will find favour if geared diffs become the in thing since *ATP* have a lead on their competitors due to over a year's testing in competition by Alan Blakeman.

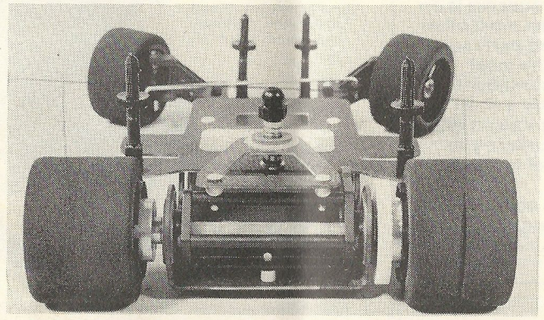
Lastly, *ATP* provided a pair of their front wheels. These are six spoked in black moulded nylon and feature a thin walled bearing hub. They looked very nice indeed and ran true and straight, but why-oh-why do we always have black wheels. Only *Phil Greeno Models* do wheels in yellow or red, by why not blue, white, green, orange, etc. Come on moulders, show some imagination. *ATP*'s wheels (despite being black) are a very nice alternative to the usual wear, and keenly priced at £1.00 per pair.

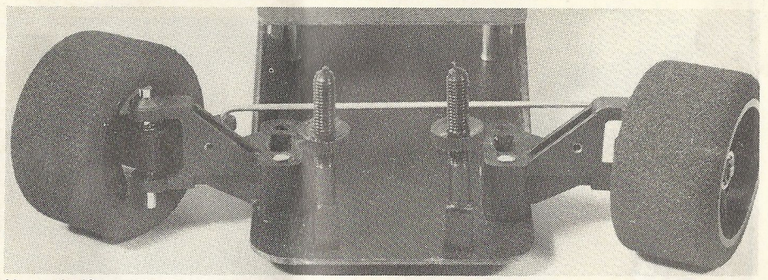
To the track

I fitted a *Futaba* '30M' servo, *Demon* '2c', and *Futaba* receiver with no difficulty and set off for the pleasant surroundings of our local club. Tyres provided were *Associated* kit rears on *ATP* sleeves and *ATP* fronts. Initial impressions were of understeer, but since some silly *!×¡ had turned my rate switch right down this was hardly surprising! Having sorted that out it was down to the serious stuff. The car changed direction well, and showed little tendency to wander in a straight line. Once turned into a corner it was stable and predictable. However, I had trouble in getting rid of all the understeer at high cornering speeds, perhaps due to lack of suitable tyres, or insufficient time to play with rear ride height setting (higher rear) centre of gravity promotes more weight transfer to the outside front wheel in cornering, thus reducing understeer).



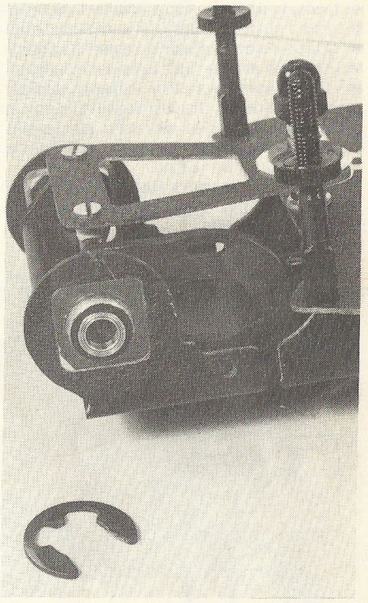
Right: 'Omega' chassis underside displaying rear, leaf-spring, cut-outs for rear-end flex à la Associated '12i.'

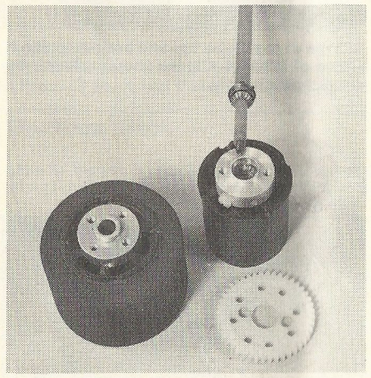




Above: the 'Omega' is designed (and drilled) to accept Associated front steering blocks (preferably spring type).

Left: the 'Omega' chassis incorporates a motor/axle torque cage coupled to an adjustable friction damper. Right: innovative rear-end ride-height adjustment system. Different side plates give varying axle positions.





Above: ATP geared differential system is well-designed/constructed to give trouble free running characteristics.

To sum up I felt the rear end adjustments were more fiddly than I would have liked and the handling was not to my personal taste. On the plus side the car is light, very strong yet simple in construction which makes for easy maintenance and low cost of ownership, features, for which this car is the best I've seen.

The car hits the 'conversion chassis' market head on in the price war. At £20.00 for the carbon fibre bits and £15.85 for the torque cage it competes with the *Demon* (now £34.95). *Schumacher* 'Clubmans' (£35.00) and *Parma* 'Panther' (£39.00). Don't forget thought that you need a set of front blocks (supplied with the *Demon* and *Parma*). Available from *Alpha Track Parts*, 11 Newark Street, Leicester LE1 5SS or leading model shops.