

## Designed as a scale model as well as a racer, the new Tamiya Tamtech Ferrari can sit in your display case when not on the track! Geoff Driver investigates...

In the May issue of RCMC the Editor wrote an article of the new Ferrari 643 by Kyosho. Well it was not so much an article more a eulogy in praise of Ferrari and Kyosho, it made me feel a bit dizzy. Now I know that the Ed. is a bit keen on the old formula 1 and from time to time he has even let he guard slip and show emotion, well at least a sharp intake of breathe through clenched teeth. Let me tell you that this is real emotion from a man who will watch through edited highlights of the Eurovision Song Contest.

Anyway, for all of the billing and cooing he said about that car I completely agree with him on two points. Firstly the Ferrari is one of the best looking formula one cars around, the flowing lines, the proportions all look right to me. Secondly and perhaps most importantly it is red, and off course as we all know the best racing cars should be red. Of course it is a bit of a shame that the Ferrari outfit still have to get their act together and win a few races. Well good looks and performance in one car is perhaps just too much to ask. The 643 design was the last of the line of Ferrari designs based on the work of John Barnard when he designed the 639 model powered by the 3.5 litre engine in 1989. From this beginning the car worked its way into the revamped 641 and eventually the 642 with which Ferrari entered the 1991 season. After a couple of races in 1991 it was apparent to all at Ferrari (and most F1 watchers) that the car was going no where, least of all to the front of the grid. So in record breaking time the

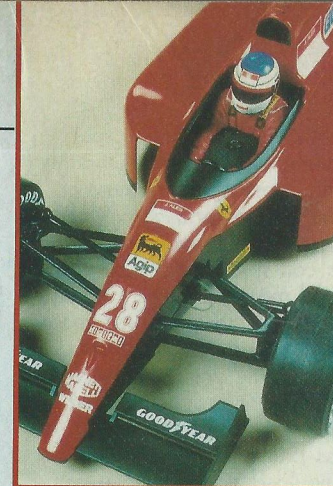
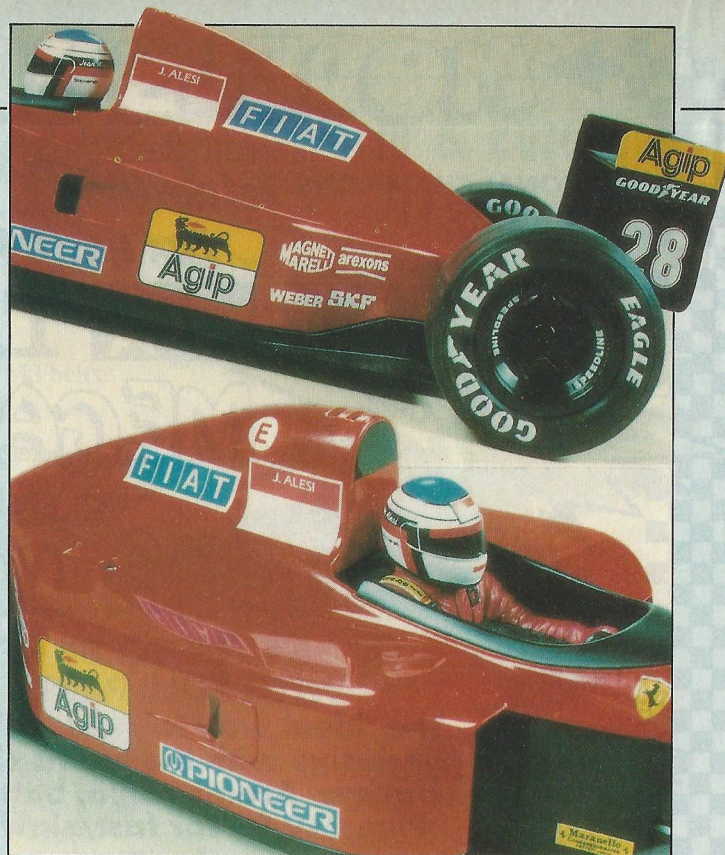
company produced the high nose aerodynamics of the 643, which even Frank Williams admitted was a pretty supreme effort and acknowledged that the Williams team could not have produced such a significant rework in such a short time scale. By the time the 1991 season really got going the 643 was on the circuits. In this form the car was thought by many to now be in its final phase of development. The original Barnard design should now be at its peak. Whether the design had reached its optimum may never be known. What is known is that the car did not perform as well as the competition despite all the effort that was put into the design. The car, even with the massive resources of Ferrari did still suffer mechanical breakdowns from time to time. After one race where the car had suffered some problem with the shock absorbers Prost described it as handling like a truck. Not a very flattering way to put a classic Ferrari into the record books.

### New Offers

Not to be outdone on the Ferrari hero worship stakes Tamiya have a number of products on offer. In the static stakes there are a number of 1/24 scale cars and now in the more unusual scale of 1/14 we have an RC Ferrari in the Tamtech range. Tamiya raised its head above the Shizuoka parapet a few years ago in 1/24

scale and then disappeared, perhaps not completely from sight but it certainly took on a low profile despite lots of promotional efforts at various

motor, racing car and model shows. A few years down the trail and Tamtech is back. The model is not in the same league as far as detail is



that the same chassis will be common to all of the cars. So some compromises must be expected, although to be fair to Tamiya they will be quite small compromises as the body shells will certainly be the most significant feature on the cars.

concerned, compared to its larger relations or the static model options, but that is no great surprise. The car does look like a Ferrari, and although I have not seen any of the other cars in the same Tamtech range I would expect

### Electronic Tub

The basis of the Tamtech design is the modular electronics used in the cars. The main aspect is the combined receiver/speed

control unit designated the CPR unit. This is part of the RC electronics which is specifically designed for this type of model. So if you are thinking of fitting a conventional receiver and electronic speed control unit, forget it. I cannot say that it will be impossible to fit



## "ON THE GRID"

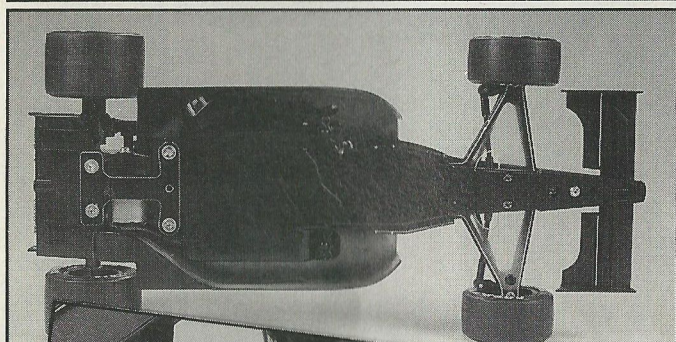
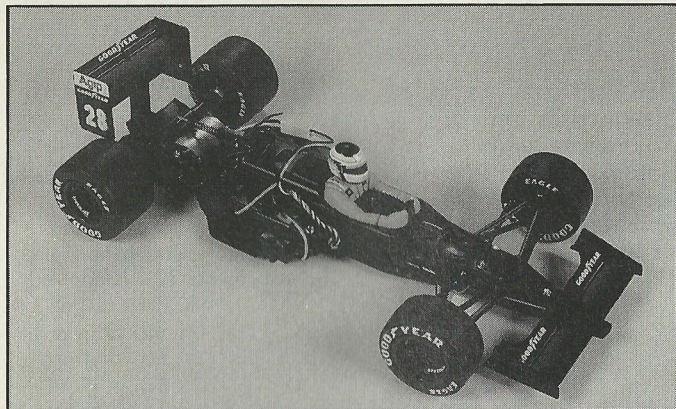
Joining the Tamtech Ferrari on the 1/14 scale grid is the Lotus 102B, from the 1991 racing season. Apart from the different body shells and wings, the cars are identical, meaning full spares compatibility. As with most of Tamiya's RC model cars, a range of "Hop-Up" parts are available, including ball races, competition motors and foam tyres. STOP PRESS! Available soon in the Tamtech Series is the 1992 McLaren MP4/6 Honda, again sharing chassis with the two previous cars.



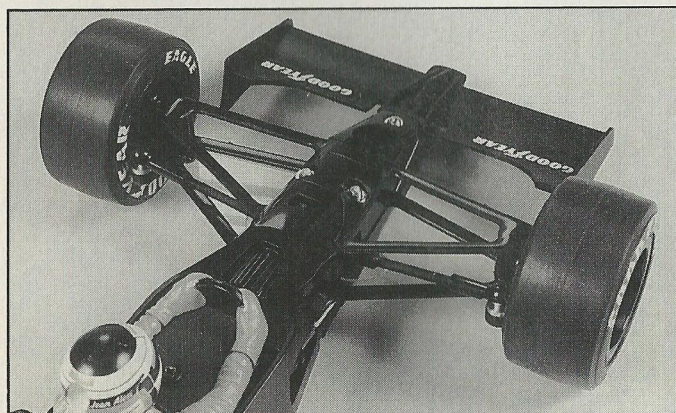
# ALL NEW FORMULA 1



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**From top, the complete chassis is of very streamline construction. Outline of front suspension is kept in scale by clever use of clear plastic stiffener. Single shock absorber on rear suspension as found on Tamtechs' larger brothers. Below, emphasis on scale appearance means suspension looks good but is still strong enough to stand up to abuse.**



conventional RC gear, but space is something of a scarcity on this chassis and the chosen position for the CPR is specifically designed just for that purpose. Having

squeezed the CPR into place it is immediately apparent that the battery pack is also a little different, Ok, its a lot different to the usual range of 6, 7.2 or 8.4 volt packs. The

space dictates that just a set of four AA size cells can be fitted into the specially designed carrier.

This leaves us with the steering servo. Things are a little cramped in this department and not at all like a conventional 1/10 or 1/12 RC car. The specially designed servo which comes with the Tamtech radio is designed to fit the available space, it will not be easy to get an alternative servo into the space. The output shaft of the servo drives a 1:1 gear to the track rods and hence the steering. Built into the output gear of the servo is the servo saver. This whole assemble is very neat and inevitably very compact.

The chassis is an injection moulded unit in which all the various components fit perfectly. By necessity the components are kept as light and small as scale allows, even so it is worth noting that areas that could be a bit vulnerable are suitably reinforced. The front suspension is a case in point. The wishbones are a single moulding. Movement of the wheel causes the upper plastic wishbone to flex, so no hinges or pivot pins to worry about. Although I cannot honestly say that I would expect any suspension movement because the front springs are so stiff. The suspension itself is a typical 1/12 design of vertically sliding uprights which carry the stub axles. The bottom wishbone is reinforced by the addition of a translucent plate which stops the bottom wishbone flexing and adds a bit of strength in case of a front end smash.

## Sleek Lines

The whole chassis design is really quite clever as the electronics are housed in a frame that still permits the sleek lines of a formula 1 car to be followed pretty faithfully. In the engine department is a small Mabuchi motor which delivers the power through a single reduction onto the gear differential. Tamiya have put their own touches of design to a fairly conventional transmission unit. The whole transmission assembly is fitted to a stand alone power pod. The pod is fixed to the

chassis by a flexing glass reinforced bracket. Although this bracket suffers most of the stresses and strains of suspension movement there is a coil spring to control rear pod movement which attaches between the top of the motor pod and the main chassis. I think the pre coloured red body is injection moulded. However it is not as rigid or as brittle as previous injection moulded bodies I have come across, and just a little squeeze around the air intakes says that it should accept the occasional knock without shattering into a million pieces. It is held in place on the chassis with screws and to finish the whole thing off is a driver figure and a rear mounted wing.

All bearings are plain, the usual selection of ball races are available to get rolling resistance down to a very necessary minimum. Ground clearance achieved with the semi-pneumatic tyres (that is euphemism for hollow) is around 4mm. With this sort of clearance forget driving it on the 4 inch shag pile carpet in the lounge, we are definitely looking for low drag circuits.

Construction is the simplest. I just left a screwdriver and a pair of pliers near the box and the car built itself. Well a bit of an exaggeration but it took me about an hour or so to build excluding painting and getting the electronics to work. There are a minimal number of things to tweak so as long as the instructions are followed there should be no problems.

## Ferrari Charge

As the car is designed to take four AA size cells it is worth remembering that many of the cheap AA size chargers available take something like 14 hours to recharge a set of cells. There are quick chargers available that will safely recharge this type of battery in around 10 - 15 minutes or so. This will be an additional expense. The car is dead easy to build. It looks good and although is not going to lay strips of rubber along the circuit the car is an excellent way to get into RC driving, it being a very manageable and a relatively simple vehicle.