

All the work is in the stickers. They look a bit daunting, but if you take your time they are not that difficult to apply and you will be rewarded with a stunning looking shell.

low rider!

Tamiya Porsche 911 GT1 Le Mans

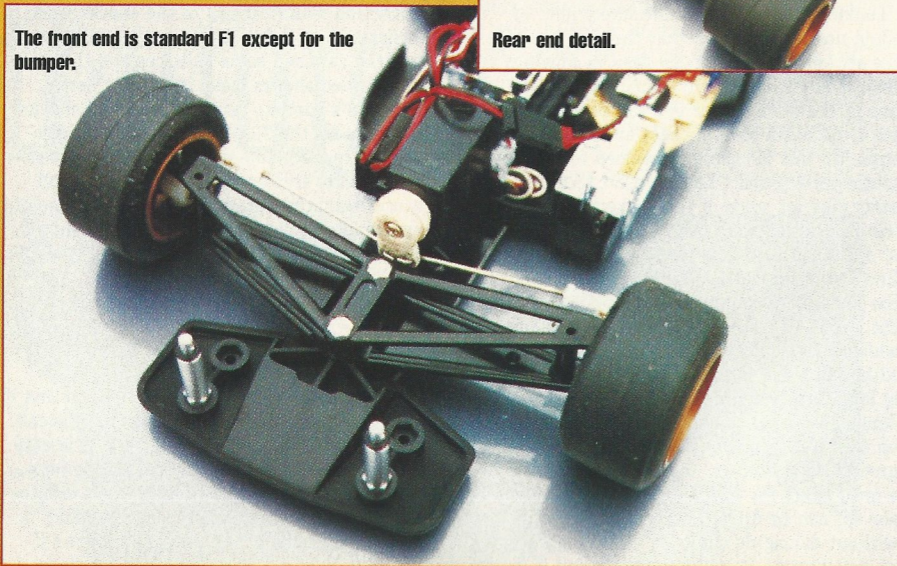
This recent release from Tamiya is the second in a new series of Le Mans type cars, which are based on a modified version of the familiar F103RS chassis used on Tamiya F1 cars. At first, I thought this was an odd concept, but in fact the reason for it is simple - the body is ultra low and would not fit anything else!

It may be surprising to many of you that I should be keen to review a car that has little or no chance of being raced! Well, for starters, the shell is absolutely gorgeous - and I mean absolutely and I mean gorgeous! Surely, it would be insane to risk it on the track with nine other maniacs? My main interest, though, is that this car comes with the same rubber tyres that have to be used in F1 this year in the Eurocup series. Given our experience with the F1 car, the opportunity to evaluate the comparative handling with a Le Mans body was not to be missed!

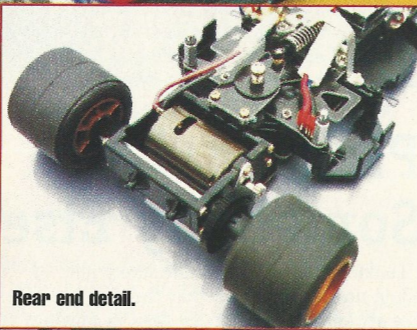
The Box of Delights

Tamiya package their kits in the most superb boxes. This one is no exception and is illustrated with a stunning rendition of the Porsche 911GT1 driven to victory in the '98 Le Mans race by Aiello, McNish and Ortelli. Inside the box, one finds the usual excellent instruction

The front end is standard F1 except for the bumper.



Rear end detail.



manual, chassis plate, T-bar, various sprues of plastic parts, hardware bags A, B, C and D, these are opened progressively as construction proceeds. F1 type wheels (in gold), tyres and tyre inserts, bodyshell, front bumper, decals and window masks, a 3-step forward and reverse mechanical speed controller complete with special mounting tray, and a sport-tuned motor.

To complete and run the car, you need a 2-channel transmitter and receiver, two servos, on/off switch harness, 6-cell nicad racing pack, polycarbonate paints: PC-5 Black, PS-1

White and PS-31 Smoke (for windows), and synthetic rubber cement and super glue for securing tyres and tyre inserts.

Chassis

As with the F1 cars, the chassis is basically a flat plate with a T-bar mounted rear pod carrying the motor and rear axle assembly. The front bumper, front suspension, servo mount, and battery bay parts are all secured to the flat plate by countersunk screws, screwed in

from underneath. The battery is mounted transversely and is held in place by substantial plastic brackets, which are secured by two large body clips. These parts are very rugged and rarely fail on F1's. The main differences between this chassis and the standard F1 chassis are the front bumper which replaces the front wing, the four fixed length metal body posts, and the receiver aerial support.

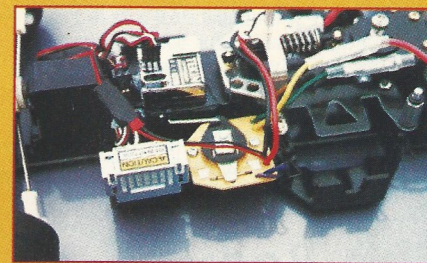
Front Suspension

The front suspension is standard F1 and comprises fixed upper and lower arms, which are attached to the chassis plate by two bolts. The front bolt also secures the front bumper. The uprights are carried at the ends of the suspension arms and are free to move up and down relative to the arms to provide the suspension movement. The instructions call for the springs to be fitted beneath the lower suspension arms and retained by C-clips clipped to the bottom of the kingpins. The trouble with this arrangement is that, if the C-clip comes adrift, you lose the C-clip and the spring. To overcome this, I prefer to sandwich the spring between the top of the upright moulding and the upper suspension arm. The function is the same, but now there is no chance of anything falling off.

Tamiya make three different front springs: silver (soft), gold (medium) and black (hard). The Porsche comes with gold springs. With the rubber tyres, black springs are usually the norm on F1's, but the golds seem to work fine on the Porsche.

Rear End

The rear T-bar is attached to the main chassis by two screws, which can be tightened or loosened to alter the handling. The motor bay comprises two plastic side plates and plastic front and rear plates that are screwed together and then screwed to the T-bar. The front plate provides an attachment for the friction damper plate and the rear coil spring arrangement. The friction damper damping effect can be altered by an adjusting nut and by applying different viscosity grease to the friction pads. For high-grip surfaces, the adjuster nut should be tightened and hard grease applied to the friction pads, whilst for low-grip surfaces the adjuster nut should be loosened and soft grease applied to the friction pads. This was my first experience of the adjuster nut arrangement and I was concerned that there was no locknut or other means of locking the adjuster nut in position. As it turned out, this concern was well founded! When running the motor up prior to the track test, the adjuster nut unscrewed itself and fell off together with the upper spring and friction pad. Since I had no locknut that would fit, my answer was to fit a body clip across the threads of the damper post to prevent the nut from unscrewing. This solved the problem, but I cannot understand how the standard arrangement can possibly be reliable! The motor bay side plates



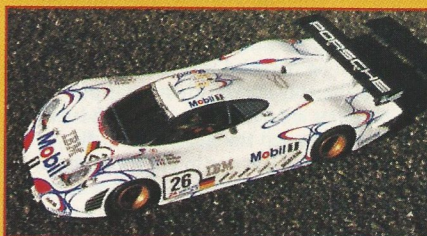
The mechanical speed controller - okay for the parking lot, but probably better replaced by an electronic speed controller for the race track.

carry the rear axle bearings (sealed ball races are supplied in the kit) and the right side plate serves as the motor mounting plate. If you intend to do any extended running, I would recommend replacing the plastic motor mount with an aluminium one, which is stronger and acts as a heat sink to keep the motor cooler.

The motor drives through a pinion/spur gear arrangement direct onto the rear axle, which is very efficient and ensures that the car has a lively performance even with the sport-tuned motor provided. The rear axle incorporates a ball differential arrangement, which is both simple and easily adjustable.

Steering

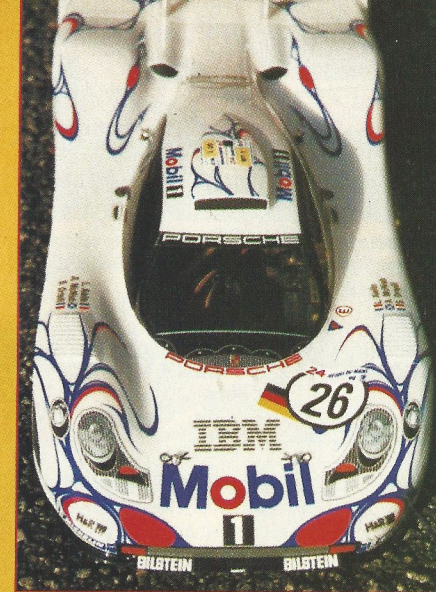
The steering servo fits behind the front suspension arms and, as for the F1's, has to be



Needs a smoother surface than this on which to run!



How would you like to see this looming large in your mirrors down the Mulsanne straight?



Surely, it would be insane to risk it on the track with nine other maniacs?

butchered to remove its mounting lugs. The servo sits vertically on one end with the output shaft at the top pointing forwards, and is secured by servo tape to an angle bracket screwed to the chassis plate. F1 experience has shown that in a heavy impact the servo can break loose from the servo tape and it is a good idea to secure the servo not only with servo tape, but also with a tie wrap.

3 Step Speed Controller

A special mounting plate is provided to carry the speed controller, its operating servo, resistor, and the receiver. The plate fits between the back of the servo and the front of the battery bay, and is fixed to the chassis plate by two countersunk screws screwed in from underneath. To ensure that the plate locates correctly on the chassis, small location pegs are moulded into the bottom surface of the plate - nice attention to detail.

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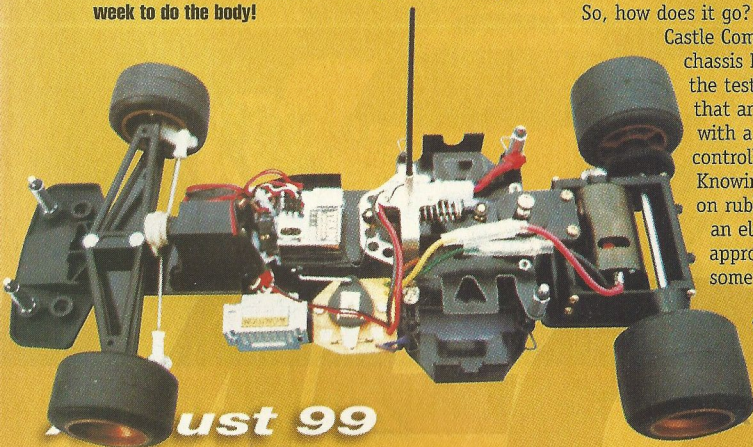
To complete the body there is a huge polycarbonate rear wing, which is mounted on two substantial aluminium tubular pedestals.

Wheels and Tyres

As mentioned previously, this car comes with the new Type A belted rubber tyres. These need special wheel rims and when buying replacements you buy tyres and rims together. The good news about these tyres is that they last much longer than foam tyres and are quite phenomenal in the wet (often better than tyre caps). The not so good news is that in the dry on an F1 car they are much more difficult to drive than foams. Like most rubber tyres, they seem to be temperature sensitive and are much better when it is warmer. We found them very difficult on the F1 car during cold winter testing. So, what are they like on this car? Go to the track test to find out!

The front tyres are fitted with normal inner sponges, just like any touring car/M-chassis rubber tyre. The sponges are first secured to the inside of the tyres using synthetic rubber cement and then the tyres are seated on the rims. You will find that the front tyres fit snugly and it is easy to achieve a good fit. When satisfied that the tyres are properly seated, secure with super glue as per the instructions. The inserts for the rear tyres are unusual. In place of the normal sponges there are strips of rubber, which fit the inside of the tyre but do not completely fill the void between the tyre and the rim. When these tyres first became available, this caused consternation amongst some of the F1 fraternity who were convinced that this could not be right! Once again, though, it is a case of trust Tamiya - the design does work! Tape is provided to join the rubber strips, but I would recommend supplementing this by also gluing the ends together with impact adhesive. The inserts are fitted inside the tyres and then the tyres are seated on the rims. You will find that, unlike the front tyres, the rears are quite a loose fit on the rims, which makes securing them with super glue a little tricky. My technique is to fiddle about with

The rolling chassis - allow an evening to get this far, a week to do the body!



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the tyre until it as even and close a fit as I can achieve, introduce super glue between tyre and rim on one end only, and then wait for the glue to go off before repeating the process at the other end. This works for me and seems to draw the tyre onto the rim. When finished, you will find the tyre is quite soft and squashy - this is normal and nothing to worry about!

The Body Beautiful

When you get to this stage, if you think the job is nearly done, think again - this is where it begins! It took me only two hours to build the rolling chassis, but more than a week of evenings to paint and finish the shell! No Terry Atkinson moment here - when the Ed' sends me a box it comes with shell and all!

Ed' says, OK OK I admit that I take the easy way out but I just can't match the efforts of Terry and yourself!

Not that I'm complaining - providing I have the time, I actually quite enjoy doing shells. As might be expected, the shell is beautifully moulded and well up to normal Tamiya standards. It is quite thick around the front, sides and wheel arches and should be very strong. In line with most Tamiya kits, it comes with a thin film covering the outside to protect it from over spray and a set of window masks to save you some trouble. Painting is simple - apart from a small amount of black at the front and rear, you just spray it white. All the work is in the stickers. They look a bit daunting, but if you take your time they are not that difficult to apply and you will be rewarded with a stunning looking shell. The only stickers that might cause some problems are nos. 9 and 10, which have to be persuaded around the front corners. My answer to the problem was to cut the Michelin decal out and apply it separately. The remains of the sticker then went round the corner easily and you couldn't tell that the Michelin part had been previously cut out when it was finished. To complete the body there is a huge polycarbonate rear wing, which is mounted on two substantial aluminium tubular pedestals. These provide a firm and durable support.

Track Test

So, how does it go? To find out, I ran it at Castle Combe in May after the F1/M-chassis Eurocup meeting. Before the test, the pundits reckoned that an F1 car on rubber tyres with a 3-step mechanical speed controller would be undrivable. Knowing how difficult an F1 car on rubber tyres can be even with an electronic speed controller, I approached the first run with some trepidation!

I need not have worried, the Le Mans body with that large rear wing develops a lot of downforce and the car felt much less likely to let go than an F1. I

could power onto the straight, nail the throttle in a straight line and carry a lot of speed into the fast right-hander at the end. Through the tight infield the car felt much larger than an F1 and seemed less nimble, but I think this was probably more psychological than anything else. The only real problem I had was that, if I approached a corner a bit fast and went for the brakes, the mechanical speed controller would throw the motor into reverse and the car would immediately swap ends. An electronic speed controller would cure this and the car would then be relatively easy and great fun to drive. The car was run without any hop-ups and with the sport-tuned motor supplied in the kit. In this trim it was still fast enough to keep one of the Eurocup F1's at bay for several laps, which quite pleased me!

Conclusions

This car looks terrific, attracts a lot of interest, and actually drives quite well - certainly much better than I had anticipated given the tyres it comes with. There are problems, though: the body has very little ground clearance and you need a very smooth surface on which to run - even at Castle Combe, which is quite smooth, the body clattered on the ground a bit when going at speed: to make the car easier to drive it really needs to be treated to an electronic speed controller: and currently there are no classes in which to race. This latter point may soon be addressed though as moves are afoot to run some trial races in the Tamiya Eurocup. My own view? I don't care about the problems. I just love the look of the car and it's not bad to drive! Don't think I could drive it for 24 hours though!

Our thanks to Richard Kohnstam Ltd for supplying the review model. **RRCI**

Quick Spec

1:10th scale electric Le Mans type car based on a modified F103RS F1 chassis. Supplied with sport-tuned motor, mechanical speed controller, and rubber tyres. Requires 2-channel radio, 2 servos, battery and charger to operate.

Tester Kit

Futaba FF3 radio
Tekin FM micro receiver
Futaba FP-S148 throttle servo
Futaba FP-S148 steering servo
Infinity 1700 SCR's

Likes

Stunning looking shell
Window masks and protective film
Excellent instructions

Dislikes

Mechanical speed controller
Little or no opportunity to race

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