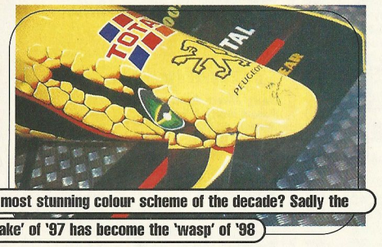
F1 in focus

RRCi gets real racy with the real racers



Surely the most stunning colour scheme of the decade? Sadly the Jordan 'snake' of '97 has become the 'wasp' of '98

Er, yes please

F1, the pinnacle of motor sport. Nothing else comes close for glamour, budget and hype. From Monaco to Monza and Silverstone to San Marino the Grand Prix circus brings out the stars and the wannabe stars to bask in the bright lights of the real stars. Schumacher, Hill, Villeneuve and Hakkinen, top dogs in the top competition. Nascar may put on a better show, Champcars and Touring cars may have closer competition but F1 rules the roost for global TV audiences. Bill France may be famous in the USA but the world now talks about a million pounds being a 'Bernie' not a Bill!

So why are R/C F1 cars not more popular? I share the views of Peter Chaldicott and Kon Kazee, our resident F1 buffs. With a variety of kits available from a number of manufacturers and low costs why such poor support? The cars are attractive and are quick enough to entertain and challenge the skills of the club racer. So why don't more people race F1? Answers to 'Readers Writes' please!

In the meantime take a look at these beauties from Tamiya, Kyosho, HPI, Keil, Carson and Dynamic and join the elite, the F1 drivers! RRCI

Your car awaits Mr Schumacher....

Peter Chaldecott

tamiya reynard f3000

Why so rare?

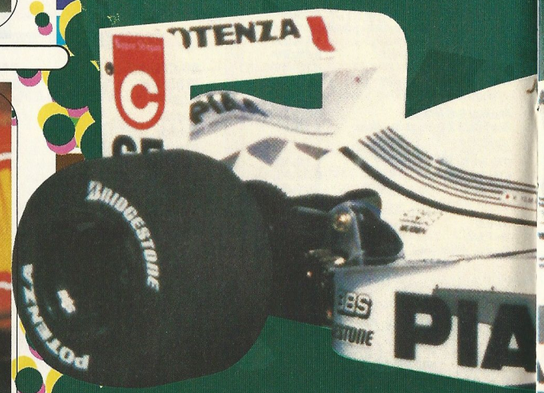
I can never understand why more people don't buy and race Tamiya F1 cars. They are relatively inexpensive, look terrific both on and off the track, are incredibly simple to build and operate, are easy to drive (provided it's dry!), and offer tremendous performance straight out of the box. This is one car where you don't need to invest heavily in tune-up parts to make it go quickly. To prove this point, I deliberately built and tested this car without any hop-up parts whatsoever, not even ballraces! It gets better.....if you want to race, there are plenty of opportunities. Many clubs run races for F1 cars and at a national level there is the Tamiya Eurocup series (see the reports in RRCi).

When the PIAA Reynard was about to be introduced, rumour had it that it would be based on a new chassis with the cells mounted down the middle like the Corally F1. If this was the case, many feared that the 'new' chassis would render all previous chassis obsolete. So strong was the rumour, that I know of at least one person who ordered one before it was even released! Well, as it turned out, the rumours proved to be false and this, Tamiya's first F3000 car, was based on the familiar F103 chassis used for the F1's. Essentially, therefore, this is a Tamiya F1 car in F3000 clothes!

Chassis

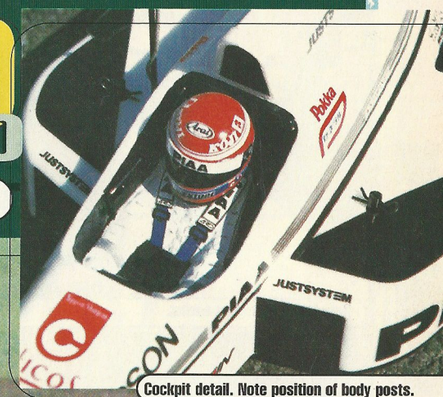
Starting at the front, the most noticeable thing about the Reynard is the size of the front wing. It is huge compared with that say of a Sauber and increases the overall length of the car by some 20mm. It is also more than twice as heavy as a Sauber wing. Should be plenty of weight and downforce on the front wheels of this one!

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

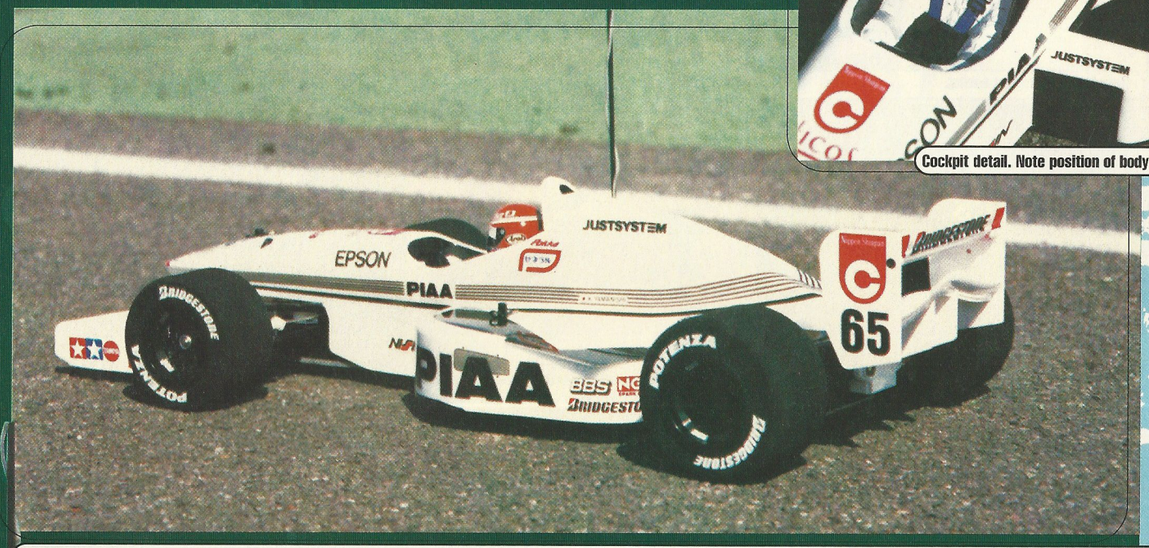


Looks nice, doesn't it?

tamiya reynard f3000



Cockpit detail. Note position of body posts.



This one runs on Bridgestones!

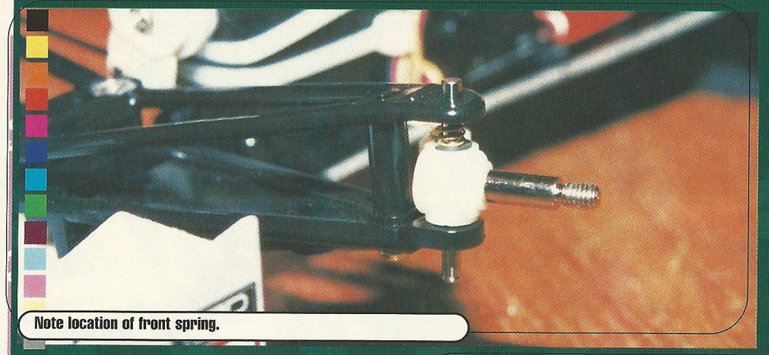
screws, screwed in from underneath. The battery bay parts incorporate two fixing points for the rear T-bar.

Front End

The front suspension comprises fixed upper and lower arms which are attached to the chassis plate by just two bolts. The front one of these also secures the front wing. This arrangement permits very easy dismantling for cleaning and replacing broken parts. Beautifully simple, but then most good ideas are! You will find that the front wing and front suspension arms are very rugged and you will be very unlucky to break them. The front uprights are carried at the ends of the suspension arms and basically comprise the upright moulding, stub axle, and king pin. The king pins are retained within the uprights by E-clips top and bottom. The uprights are free to move up and down relative to the suspension 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 king pins. The problem with this arrangement is that, if a C-clip comes adrift, you lose not only the C-clip but also the spring. Tedious if you're just 'playing' with the car, disastrous if you're on for TQ at the time! To prevent 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. Whilst on the subject of springs, Tamiya make three different front springs: silver (soft), gold (medium) and black (stiff). The Reynard comes with gold springs. Depending upon the circuit conditions, Rob and I usually run black springs when using medium or soft front tyres and silver springs when using kit fronts, but the golds seem to work well on the Reynard. Must be all that front end downforce!

Steering

The steering servo fits behind the front suspension arms and has to be butchered to remove its mounting lugs. I hated having to do this the first time, but after a while you get used to it! To fit within the narrow body of the F1/F3000 cars, the servo sits vertically on one end with the output shaft at the top pointing forwards. It is secured by servo tape to an angle bracket screwed to the chassis plate. This is another problem area, because in a heavy impact the servo can break loose from the servo tape. A cheap solution to this problem is to secure the servo not only with servo tape, but also with a tie wrap. This is effective, if somewhat 'agricultural'! A more elegant engineering solution is to completely surround the servo with angle brackets as supplied in the Tamiya extended upper deck hop-up. Rob and I use the extended upper deck in our race cars because it stiffens the chassis and allows us to run grippier front tyres without the car becoming undriveable. Unfortunately, the upper deck kit is not cheap and, unless Tamiya have recently changed its design, does not have mounting points for the rear body posts to suit the Reynard (On the Reynard, the rear body posts are some 60 mm further forward than on the F1's). Of course, the posts could be mounted as for the F1 and the body re-drilled, but it's all starting to get tedious and expensive. Unless you're really serious, I'd settle for the tie wrap! But, Tamiya, why



Note location of front spring.

don't you provide a decent servo mount in the kit?

Electrics

Between the back of the servo and the front of the battery bay there is just room to position the Rx and speedo. These are simply servo-taped to the chassis plate. I usually position the speedo behind the Rx to keep the wires to the battery and motor as short as possible.

The battery is mounted transversely and is held in place by substantial plastic mouldings. At each end of the battery bay is a retaining bracket held in place by two large 'body' clips. Replacing the battery takes but a few seconds. The battery bay parts are pretty tough and the only thing you are likely to break is one of the end brackets, and you have to try hard to do that! Unfortunately, to replace a bracket you have to buy a complete set of 'D' parts .....but for once they aren't that expensive!

Rear End

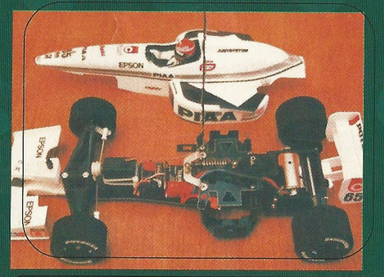
The rear T-bar is attached to the main chassis by two bolts, which can be tightened or loosened to change the handling. We usually run with the front bolt fairly tight and the rear bolt 'loose-ish'! Sorry I can't be more scientific than that. The problem with running the rear bolt too loose is that after a while the bolt hole elongates in the T-bar and the rear wheels start to steer the car. If this happens, the only option is to replace the T-bar. In four years of racing Rob has broken two T-bars, but this is a pretty unusual failure.

The motor bay comprises two plastic sideplates and plastic front and rear plates screwed together and then screwed to the T-bar. The front plate provides an attachment for the friction damper plates and the rear coil spring arrangement. The sideplates carry the rear axle bearings (sealed ballraces are supplied in the kit) and the right sideplate 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. Not only is this stronger, but it also acts as a powerful heat sink to keep the motor cooler. Unfortunately, the aluminium motor mount is rather expensive! The motor bay parts take quite a pounding and after a while cracks will appear around the screw threads. The left sideplate seems to survive quite well, but we replace front and rear plates fairly regularly.

The motor drives through a pinion/spur gear arrangement direct onto the rear axle, which keeps transmission losses to a minimum. The mesh is adjustable by moving the motor, and should be set so that there is a small clearance between the teeth. Do not set the mesh so that it is tight. Unfortunately, the standard Tamiya pinions tend to be a bit soft and after a while you will find that the teeth become bent over. Alternative, stronger pinions are available (but not from Tamiya), or you could consider changing the pinion and spur gear to Tamiya fine mesh. Fine mesh is more efficient and runs much quieter than the coarse mesh supplied in the kit. Beware though, fine mesh has to be carefully adjusted if the spur gear teeth are not to be stripped!

The rear axle incorporates a ball differential arrangement which is both simple and easily adjustable. I was very pleased to discover that the diff. in this kit was silky smooth. If, after some hours of running, you find the diff. becomes notchy and rough, it probably means that the balls are no longer round. You might consider replacing them with tungsten carbide balls which should eliminate this problem.

The rear wing is secured directly to the back of the motor bay rear plate. Earlier F1's were fitted with rear wings made from quite flexible plastic and were virtually indestructible. Unfortunately, later F1's and this car have rear wings made from more brittle material. The result of this is that we now go through rear wings like wildfire! Taking a cynical view, could it be that Tamiya have realised that by using this new material they sell more spares?



Finished and ready to roll.

Tough Car

Whilst I have highlighted the parts that break or cause problems, I would not want you to be left with the impression that these cars are in any way fragile. Not a bit of it. As r/c cars go, Tamiya F1/F3000's are about as tough as they come and take a tremendous amount of punishment. My knowledge comes from years of racing these fun little cars. To put things into perspective, at a conservative estimate I reckon that Rob's current race car has more than 300 racing miles on it and at least as many again in testing/practice. That's a lot of miles for a little car!

Body

As is customary from Tamiya, the bodyshell is a superb moulding which looks very realistic when finished.

Trimming this shell is quite difficult as there are some tight curves to negotiate at the back end. My technique is to trim as neatly and close to the line as I can and then smooth the cut edge with wet and dry glass paper. This can be wrapped round a piece of dowel for the curves or a flat block for the straight bits. Remember that smooth curves are good, sharp corners and ragged edges encourage the start of cracks. Initially I was very displeased with my trimming around the back of the shell. It was not particularly neat and there were several scissor nicks. However, 5 mins with the wet and dry soon put matters right! It is well worth the extra effort.

Apart from the cockpit area, the paint job on this model is simple..... just spray white! Don't forget to protect the outside of the shell from overspray (Tamiya don't yet produce the F1/F3000 shells with the protective film found on the touring and M-chassis cars) and don't forget to seal the holes for the body posts, aerial and helmet fixing.

Tamiya decals are usually a delight to apply, but for some reason those in this kit lacked the normal degree of 'stick' and some have already started to peel at the edges. I have to say that this is most unusual and something that I have not encountered before in any Tamiya kit.

When finished, the car looks terrific and would make a fine display model. Being able to drive it as well is the icing on the cake!

Quick Spec

1:10th scale electric scale F1/F3000 car. Supplied with lexan shell, injection moulded parts and all decals. 540 type motor included. Requires a 2 channel radio and an electronic speed controller to complete. Part ballraced.

Tester Kit

Futaba FF3 radio
Acoms AS11 servo
Tekin TSC410S speedo
Infinity 1700 SCR's

Likes

Performance
Looks
Build quality
Instruction manual

Dislikes

Servo mount
Brittle rear wing
No protective film on outside of bodyshell

Tyres

The Reynard comes with standard 'kit' front tyres and narrow 'kit' rears. The 'narrow' rears are another example of Tamiya's obsession with scale fidelity. I have a personal preference for the wider kit rears, but I must say that the Reynard is very nicely balanced on the tyres supplied.

If you are new to driving r/c cars, I would advise that you stick to kit tyres all round. For racing, we usually use medium or soft front tyres to eliminate understeer, but with these tyres the car does become more difficult to drive. For the rear, if using tyre additive, you should only need 'kit' tyres. Without additive, you could try softs.

Note that if it is very damp, none of the Tamiya foam tyres work. In these conditions the car will be undriveable unless you invest in a set of damp tyres which are available from other manufacturers (note though, these are not legal for the Eurocup series).

In the wet, Tamiya tyre caps work well..... so well, in fact, that the cars can sometimes be faster in the wet than in the dry! Because of the danger to the electrics, though, unless you really have to run in the wet, I would advise that you stay in the pits..... speedos are expensive to replace!

How Does It Go?

Very well indeed, thank you!

Rob and I gave the car its first run at the track at Turbary Common in Bournemouth. It was about two hours before the start of the Argentine Grand Prix and really got us in the mood! I tracked it up and did a couple of exploratory laps before handing it over to himself. He liked it so much that I never got another go!

In the space of 30 mins we had a number of interested onlookers, several of whom were prompted to ask, "how much is one and where can I get one?"

The Reynard is powered by only an RS540 motor, but with the gearing supplied has a fair turn of speed down the straight. Certainly enough to be 'interesting'.

We did nothing special to set up the handling..... we just built it and drove it. The track was dry for the test, but we used no additive. As expected, the car understeered, but by no means as much as some F1's we have driven. The set up as it comes is ideal for less experienced drivers and the car is really very nice to drive. I've driven numerous F1's, but I can't wait to get out with this one again. Trouble is, if I want to drive it, I'll have wait 'till Rob's not around!

Conclusions

A great looking car that goes as well as it looks. The fit and quality of the parts is superb and as ever the Tamiya instruction manual is second to none. I can hardly imagine a more simple car to build and operate. Being tough and easy to drive as well as quick, it is ideal for both the novice and the experienced. So why not forget touring cars, buy one of these and come and have some fun with the F1 racers! **RRCi**

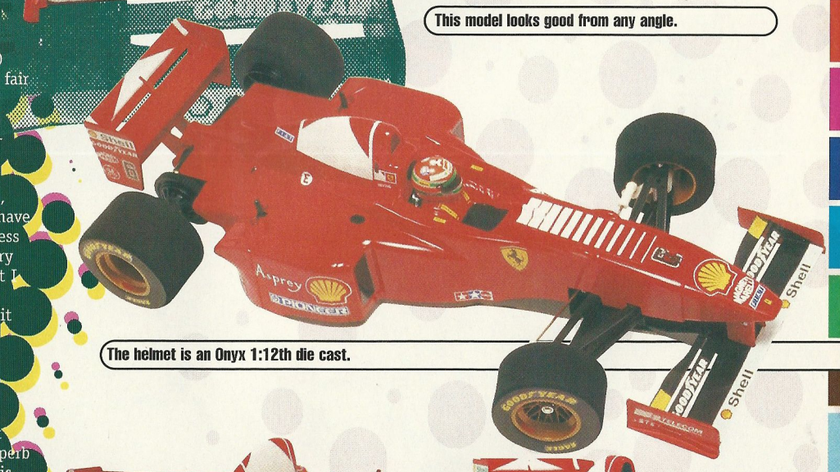
ed's red

ed's red

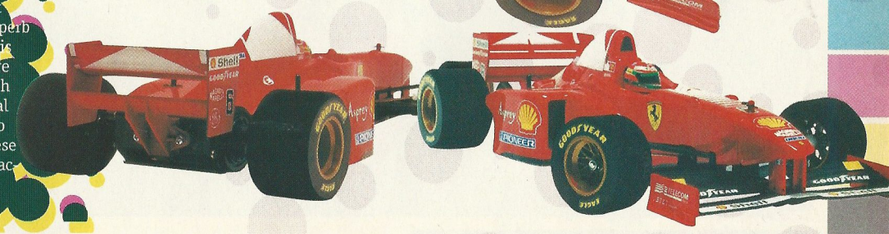
When the Reynard came in I had a quick peek at it before it was sent to Peter C. What a smashing car I thought, might be nice to have a go with one of those sometime. After all Peter C and Kon Kazee have both been selling me on the joys of low cost racing with F1.....

But then I thought no, Peter C should build it, he is the Tamiya F1 specialist. Then the Ferrari F310 arrived! I hesitated for a whole nano second before allocating the model to me, moi, yours truly, the Ferrari freak. At the time of writing I have not yet run the F310, every time I pencil in a test session the weather turns foul! I should be able to give my impressions next month. Taking into account the lightweight and the low rolling resistance of the model I confidently expect this to be the quickest model I have tested with a standard Mabuchi 540 type motor. All in all another beaut' from Tamiya.

This model looks good from any angle.



The helmet is an Onyx 1:12th die cast.



F1 in focus

scoop! new f1 car from christian keil

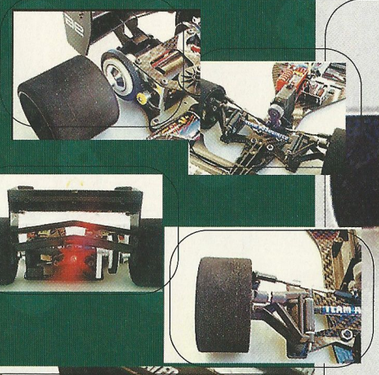
RRCi

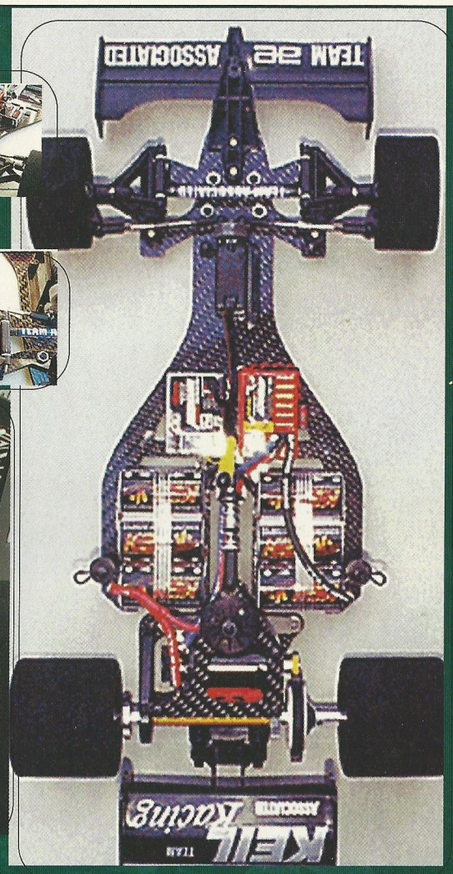
Is this the car to beat in '98?

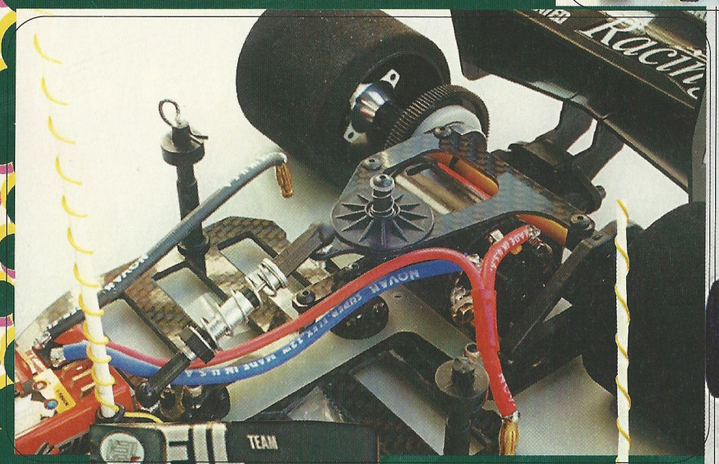
RRCi are pleased to give you this sneak preview of the Keil F1. Our resident F1 fan, Kon Kazee, has the very first prototype kit released from the grip of Christian Keil! A full review in RRCi soon but meanwhile here is a taster.

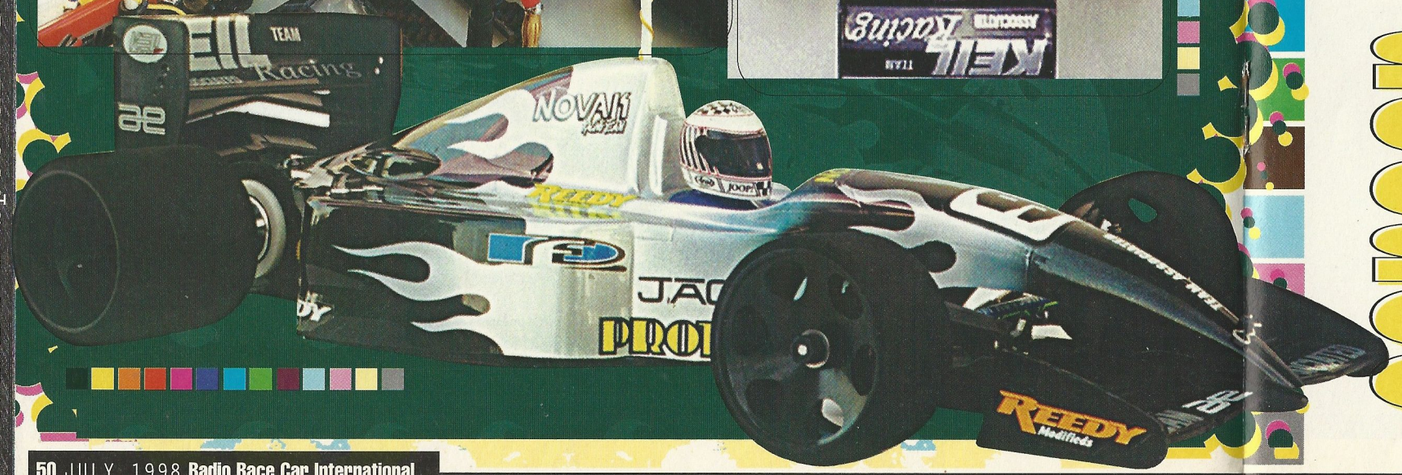
The model is based around proven components from the Associated parts bin. Both the Associated RC12LC and the RC10L2 are donors, for the front and rear ends respectively. The car is completed with a new custom designed carbon centre section from Christian himself. Expect the model to be available by the time this report hits the news stands.

Our thanks to Christian Keil for his help in providing an early, pre-production sample. RRCi



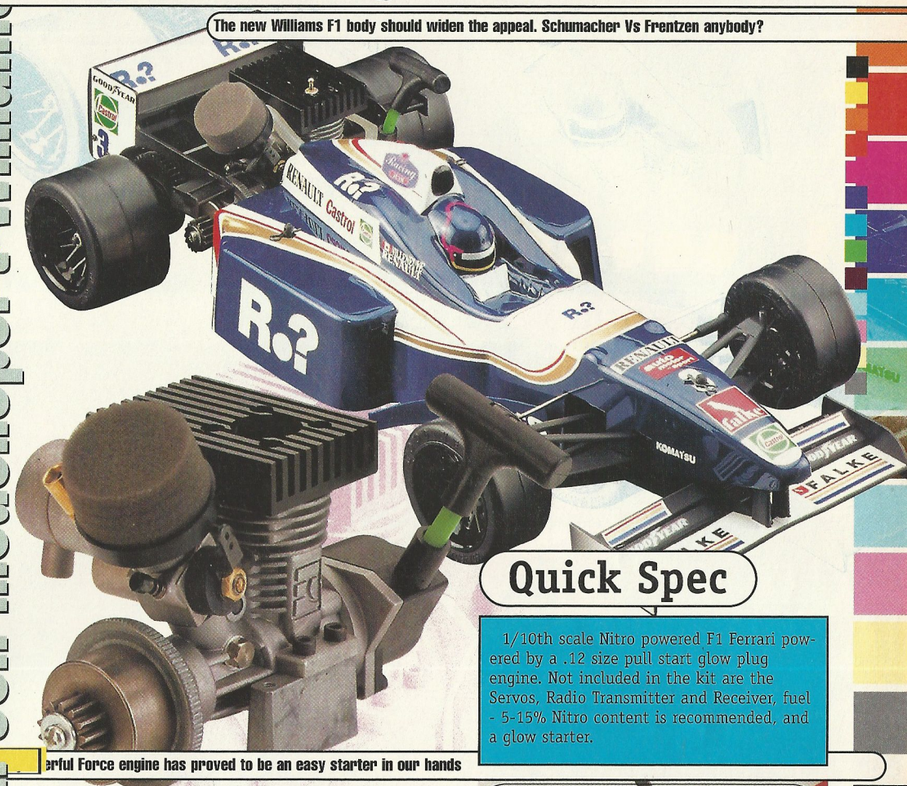






Carson model sport Williams

Fancy something different?



The new Williams F1 body should widen the appeal. Schumacher Vs Frentzen anybody?

Quick Spec

1/10th scale Nitro powered F1 Ferrari powered by a .12 size pull start glow plug engine. Not included in the kit are the Servos, Radio Transmitter and Receiver, fuel - 5-15% Nitro content is recommended, and a glow starter.

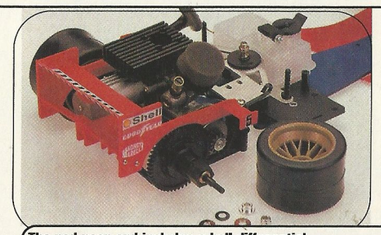
erful Force engine has proved to be an easy starter in our hands

If you really fancy something a bit different take a look at the Carson ModellSport F1 car. Powered by a powerful Force 2.11 cc, pull start Nitro motor, the model should have power to spare.

We briefly tested the car in January in Ferrari 310B form. At that time the model was being imported into the UK by MTronik. MTronik have now passed the importation to Helgar racing who have now introduced a Williams body set to pair up with the Ferrari.

No racing class for IC F1 cars (clubs please put me right if this is not the case) but a whole load of fun if you can find a suitable, safe, location.

For more details take a look at the January RRCi or contact Helgar Racing INT+ 1279641097 for the nearest UK stockist or email Carson Modellsport tamiya@tamiya.de RRCi



The pod rear end includes a ball differential

The neat, Tamiya like, front end features simple sliding pillar suspension

RRCi

radical racer!

radical racer!

The Kyosho F-Ten IC car

Ready for the radio to be fitted the F-Ten shows off the compact ssis

Kyosho Formura Sports

Kyosho have a reputation for producing well engineered, quality kits. They also have a reputation for creating some slightly wacky models, the Nitro powered Go Kart and the Nitro 'Quad' bike spring to mind. Great stuff!

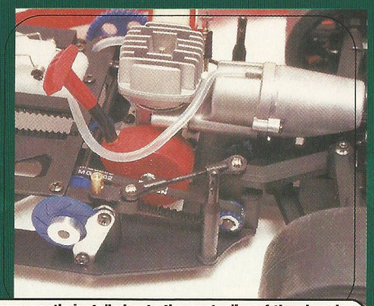
Now they have done it again with the 'Formura' Sports, that name - shurly must be some mishtake? The F-Ten is a radical model car. It is a 4WD, IC powered single seater built to what Kyosho refer to as 'Super 10' size. This is an overlarge 1:10th scale model, nearer to 1:9th in reality. It is not designed to replicate any particular model although it has elements of a number of modern F1 cars and would probably look particularly good as a 'West' McLaren, something in the shape of the nose I think. The chassis features 4WD which should make the car easy to handle. To my knowledge in the UK no class exists, perhaps Kyosho Cup '99?

Although not a stock item this model is available to special order from your Ripmax stockist at £239.99 rrp.

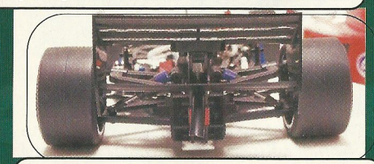
Close Up

The chassis is based upon a 'twin deck' design. It was good to see that Kyosho have listened to some of the criticism by RRCi and others and now the chassis is finished in a smart black finish rather than the raw aluminium. Neat and good looking. At this price level it might have been reasonable to expect the bottom chassis plate to feature recessed screws, but a Kyosho 'hop up' part exists to fix this.

The suspension is independent all round using wishbones and coil springs and oil filled shock absorbers. The Shocks have an unusual design. The coil spring sits inside the shocker making the unit very compact, smart looking



OS .1ngine is very neatly installed onto the centreline of the chassis.



The exhaust routing should help keep the car clean

and easy to keep clean. The car is ballraced throughout, both wheel hubs and transmission. Gear differentials are used font and rear, these are standard Kyosho design so substituting ball diffs would be simple. The engine is a .10 sized OS unit with a recoil starter. I was surprised that Kyosho used the OS when they have a perfectly adequate .12 pull start of similar dimensions of there own available. Given the weight of this substantially built model, and the transmission losses inevitable in a belt drive 4WD car, I don't expect the performance to be very 'hot', time will tell. Ripmax have now let me know that the Kyosho GS11R engine will be supplied in future samples.

A number of the parts are clearly the result of a major raid on the Kyosho parts bin for the Pure 10 GP and the Super Ten GT models. This means spares are interchangeable and 'Hop ups' are available in abundance. The suspension features adjustment for 'toe', camber and is fully jointed using pillow balls, very F1.

Build Up

The OS motor is fitted in the centreline of the model and this creates some interesting packaging solutions. The centre transfer belt is hopefully very rugged, you would certainly not want to change it too often.

The build was very straightforward but took a surprising amount of time, don't rush - this is a nice model. My notes indicate that the build went very smoothly, as always the instructions were simply first class - a known Kyosho trait. As usual no 'bolt by bolt' description, just my notes from the build. Don't tighten the brake pads as instructed, leave them loose and tighten them when you adjust the linkages later, much easier. When fitting the pins into the main gear a smear of grease helps to hold everything together. Final assembly of the main gear is a challenge, if you get an extra set of hands it would make life easier. Take careful note of the 'Check direction' type remarks in the manual, I know from the past to my cost how important these are! I found that the steering assembly had a lot of friction until it was carefully assembled and adjusted, worth taking the time. Hopping back to the drawings on Page 5 will help identify the correct parts here. A typically neat Kyosho touch appears on page 12 where a ruler is printed on the page so that fuel tube can be cut to size. When the engine is installed use threadlock on the mounting screws, you want the car to be mobile, not the engine! I part built the shocks and then left them overnight for the air bubbles to release, top up and assemble. I have a simple plastic rig with holes drilled into it to make a stand for part built shocks. Assembling the rear suspension is easier if you have a set of allen drivers rather than the supplied allen key. the wheels are identical to those fitted to my Super 10 Porsche GT1, but the tyres are thankfully soft slicks rather than the hard treaded tyres of the 'Super'. The omission of foam inners for the tyres was a surprise, but Ripmax tell me this is correct for the K-Zero type. Finally I managed to lose the clear visor from the helmet so I had to make one from some scrap lexan.

Finish Line

I painted the shell as per the box art - it looks OK but now I wish I had chosen a 'West' McLaren look, ah well. The sticker sheet is very comprehensive and features both Kyosho and OS logos. The F-Ten builds into a super looking model with a sophisticated, adjustable chassis. As you will read elsewhere in this issue the April weather in the UK was foul and our test program was severely disrupted (methinks I should have taken them to Florida with me!). So, driving impressions next month - as long as I can get the car back from Ripmax who borrowed it for the Sandown show!

P.S. 'formura' now reads 'formula' on new samples. RRCi

Quick Spec

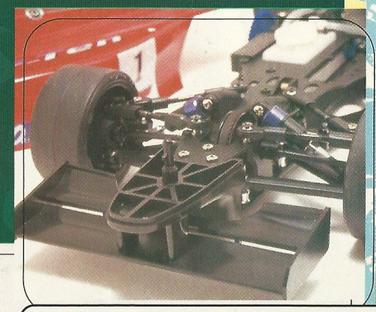
Nominal 1:10th scale, .10 IC engined single seater racer. Requires 2 channel radio. Paint, some tools, Glow Fuel, Glow start, Reciver batteries to complete.

Likes

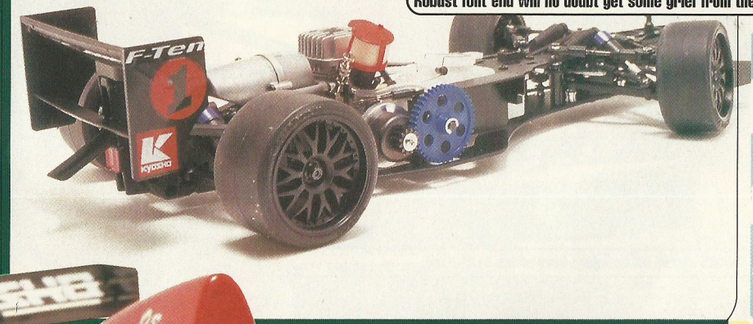
Excellent Quality
Build instructions
Robust Ball races
Parts compatibility with other Kyosho IC cars

Dislikes

Small displacement engine,.
15 more appropriate
Strange size



Robust font end will no doubt get some grief from the Ed' on the cu



Peter Emery

well red!

well red!

HPI Special edition F1 car

The HPI shows off the sleek lines of the 412T shell

Move over! The Onyx 'Berger' Helmet really looks the part on the HPI

Well Red!

This HPI F1 Car is available as an FRP chassis or as the graphite special edition. The SE version that we have built has a very comprehensive spec.

The design has been around for a little while but should remain a competitive proposition for the club racer prepared to put the effort in to understanding the setup variations available.

Some Spec!

The HPI can best be described as a 'feature rich' model. The Kit includes all the parts needed to build a full carbon chassis. A full ball race set is included along with the HPI Super Star 5 spoke wheels and medium (green) foam tyres. The front suspension has adjustments for spring rate, castor, camber and toe-in. The triple pivot rear suspension, no 'T' bar here, has adjustable spring rates and 'tweak' adjustments. The rear wing has variable downforce to cope with different track conditions. The motor mount is a hefty, anodised aluminium device for better rigidity and motor cooling. The kit includes a shell described as a 412T, but, by judicious use of paint and decals, it could be built as almost any early 1990's F1 car. A set of HPI decals were included, but not the Ferrari type decals shown in some of the catalogue shots. An adjustable ball diff and 64 Pitch gears complete the package.

What more could you need?

To complete the HPI you will need: an electronic speed controller, a 2 Channel radio, Paint, Tools. We used an M-Tronik DigiDash Speedo and a Mutiplex 'microcar' servo. Both are perfect for the job as they are small, light and very efficient. The DigiDash has one touch setup and hyperfets for high power output - No motor limit. The Multiplex servo has a universal plug that connected to my Tekin receiver without modification. Whichever servo you use needs the 'ears', normally used for fixing, cut off. A 6 cell battery pack and charger and a suitable motor will also be needed. We will initially test the HPI with a 27 turn stock motor to replicate the F1 rules run by the TORC and other UK championships.

Beta Builder

The owners manual runs to 12 pages and is a typical HPI item. Step by step instructions with diagrams lead you through the assembly with helpful hints on every page. The quality of the manual is good, but not quite the clarity of a Tamiya or Kyosho manual. The diagrams and instructions need to be studied carefully, this is a complex model in some ways and the assembly needs care.

I particularly liked the 'New driver tip' idea. Where a chassis adjustment was possible the instructions gave tips on setup for new drivers - neat.

The second 'good idea' was the Tamiya compatibility built into the model. The complete front suspension unit, the servo mount and the battery holders could be swapped between Tamiya and HPI cars. The assembly of the front suspension requires a minimum of four hands but, that moan aside, the main impression is one of quality. The Carbon parts are superb and the plastic mouldings are clearly very tough. A class act. The servo mounting is very stout and should take the knocks of competition very well. Turnbuckle steering arms confirm the 'serious race car' theme.

One area where it pays to be alert is page 5, please note that a Z210 button head screw requires an Allen key (supplied) whilst a Z221 button head screw needs a screwdriver!! These are tiny screws and this is NOT obvious and no - the manual does not draw your attention to the difference. Minus 100 points HPI! Having made a mess of that HPI promptly get points back for having an extremely easy to set up ride height adjustment, excellent stuff with interchangeable inserts for the rear pod wheel bearing mounts.

Other than page 5 assembly is straightforward. Regrettably our kit was missing a couple of minor components, nothing serious and the 'bits box' solved the problem. As this is not something we have met before with a HPI kit I must assume this was a one off as the quality of everything else is first class.

One last moan, the 'dimples' to mark the point to drill body mounting holes are slightly out. Moral - check them BEFORE you paint the body, not afterwards as we did. Cheers for the painting instructions which are excellent, very helpful.

The art of 'Tweaking'

The 'Racing Tips' sheet is Ace! Nice and helpful without being at all patronising. 'Tweak'?, Basically the 'tweak' screws allow the owner to set the chassis so that each rear wheel is carrying the same weight. This should help the car to accelerate straight, even out the tyre wear and improve traction. The Racing Tips section also covers Castor, Camber and Ride height and also gives recommendations for shocker adjustments. Excellent, other manufacturers please copy. Surprisingly this section appears to ignore toe-in, why?

Perfect Finish?

We finished the model as a Ferrari 412T and used an Onyx 1:12th scale die cast replica helmet to finish the kit off. If you don't mind the slight weight penalty these look superb and they can be bought for as little as a pound at swap meets. I used Pactra spray paint, the HPI decal sheet and a raid on my stickers box. We feel that the kit provides value for money when the quality and comprehensive nature of the kit is taken into account. This HPI kit is probably not a kit for a novice, this is despite the excellent help and advice in the manual. The kit build is more complex than a 'sport' kit and the possibilities for getting completely lost on setup are a concern but as a second F1 car, for a racer with some experience, recommended.

Our thanks to HPI, El Toro, California for supplying the sample tested here.

How does it go?

I don't know! - Yet! Sorry but the weather conspired to make a Track Test impossible. Every time we arranged to take the HPI off to the track the weather turned nasty. All being well we will have a track test next month. **RRCi**

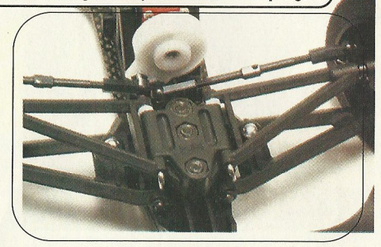
A raid on the Ed's sticker box helped to create the Ferrari look

Likes

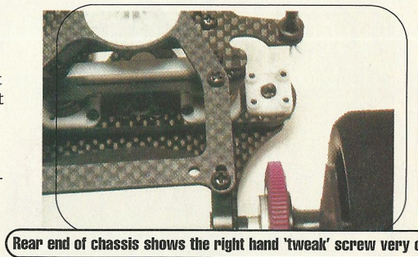
Quality of components
Completeness of specification
'New driver tips' idea

Dislikes

Some aspects of build were quite tricky

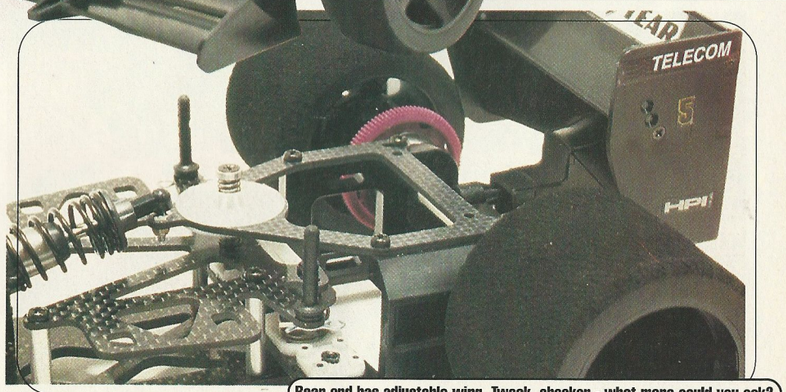


Front suspension is interchangeable with the Tamiya F1 car, features inboard springs



Rear end of chassis shows the right hand 'tweak' screw very clearly

Complete and ready to accept the radio gear the quality of the carbon components is clear to see



Rear end has adjustable wing, Tweak, shocker - what more could you ask?

Peter Emery

big stuff!

big stuff!

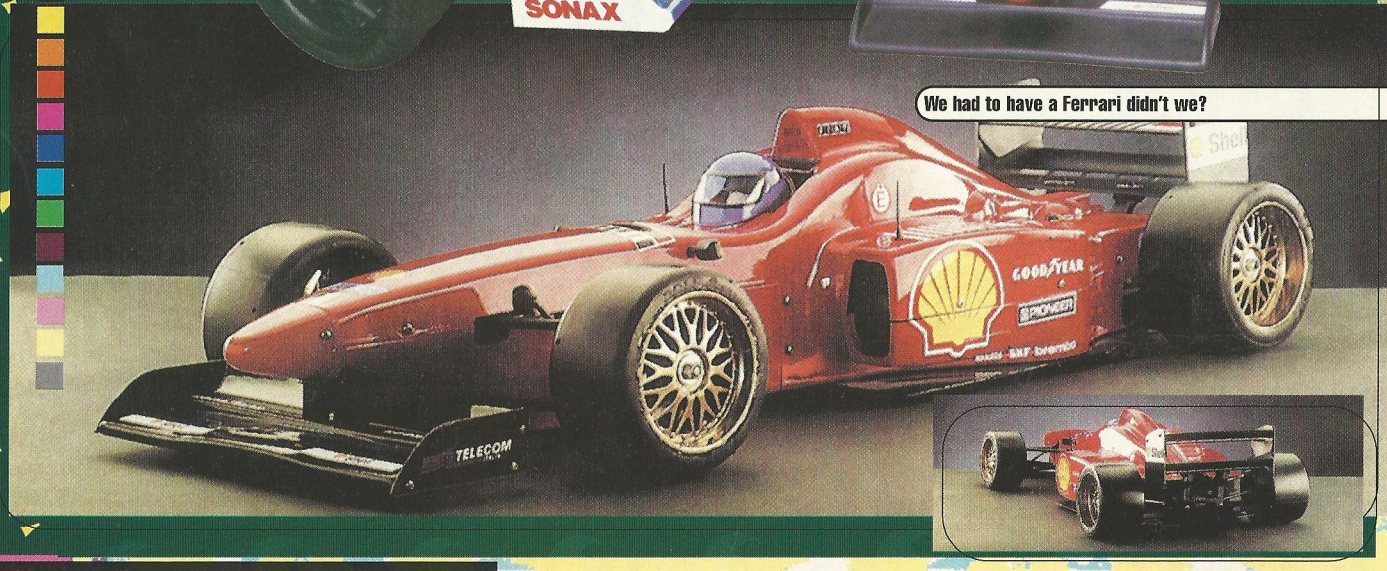
Dynamic 1:5th F1

A visit to King Cobra Racing in Lancashire is always a pleasure for anybody that likes 'Big boys Toys'! On a recent visit to sort out some bits for the FG Merc' for next month we started talking about F1's. Bob pointed out that he was expecting to receive the Williams, Benneton and McLaren F1s from Dynamic about the time our F1 special would go to press. I arranged to photograph them for the feature. On my return from holiday I rang Bob who told me that he had received the kits but sold them, all! So monster F1 is clearly in a healthy state. Bob managed to borrow back the Williams and Benneton so I could photograph them. Powered by a Tech 23 engine these small racing cars (!) really look the part and, thanks to the strong pound, UK buyers can expect lower costs than before.

Talk to Bob on INT+ 1706 250007/Fax 223210 for Dynamic, FG, HARM, and PB RRCI

Benneton or Williams, make your choice

A wet race is declared!



We had to have a Ferrari didn't we?