

# SCHUMACHER'S Chevy

RCMC sent Andy Carter to race and review the Schumacher Daytona 1:10 IC kit...

**P**icture this, it's Friday afternoon, about 3.30pm and I'm busy sorting out the world's technical and engineering problems at my CAD terminal at work. All of a sudden, the phone rings;

"Hello Andy? It's me, Alan"

"Hello Alan, How are you?"

"Fine thanks, er... listen, how do you fancy doing a review on the new Schumacher Daytona kit?"

"No problems, when do you want it for?"

"ASAP if possible, look, if you want to do it, I'll contact Tim and get him to send the kit directly to you and it will be with you first thing tomorrow morning."

"OK"

"Oh, there is one more thing...I need it built and ready to go for the Crystal Palace meeting on Sunday week-You'll be racing it."

"Yeah, no problems, ask Tim if he can sort out a Tuned pipe and manifold for me as well."

"OK Thanks Andy, speak to you soon"

"Alright, see you later mate."

That was it, short and sweet (bit like me!) and my dreams of a relaxing weekend, sorting out my LAZER ZX-R were suddenly shattered. Not being really clued up on i.c. powered cars,

I thought that this race meeting was only going to be a club meeting where I could put the car through its paces and get a feel for how competitive it was. Not so... A quick phone call to George Land of Helger racing informed me that this 'club meeting' was in fact, a round of the National Championship and some of the Dutch Serpent guys were coming over to race.

It began to dawn on me that I hadn't just put my foot in it as such, more like I'd put both feet in it and wiggled them about just for good measure. Putting it mildly, I didn't have a good feeling about all this.

Anyway, I wasn't about to back out of this and so, I gave the race organiser, Walt Bailey, a call on Saturday;

"Hello Walt?, It's Andy Carter, I've got the RCMC review Schumacher Daytona kit and I've got to race it next weekend, Can you fill me in on the details?"

"No problems, It's round 3 of the British 'European Touring Car 1/10th scale i.c. circuit' Championship. Basically, we're still trying to promote and encourage this form of racing, so it's not going to be very strict, just a bit of fun."

"Great, because I've never done this before and I'm not sure about what's supposed to happen."

We then discussed the merits of Walt's Serpent Impact and my Schumacher Daytona. I might be wrong but, I definitely got the impression that Walt was not that impressed with the Schumacher car and that he was telling me without saying as much that I was going to be outclassed. Still I thought, he is very Pro-Serpent so he would say that, wouldn't he?

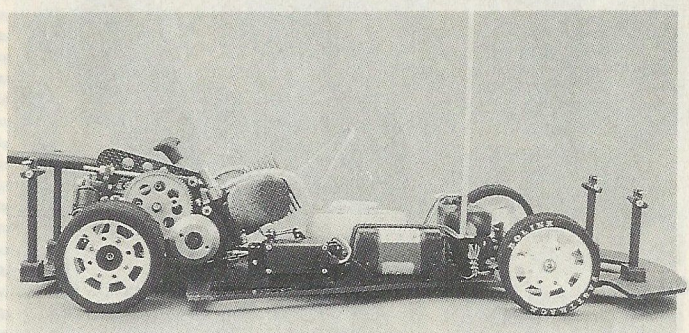
### The Kit

The kit duly arrived on Saturday and I opened it up to find several bags of bits and some photo-copied instructions and a note from Robin Schumacher saying that they didn't have any

tuned pipes at that time. No problems, I thought, if they send through the pipe during the week, I can still fit it and race next Sunday.

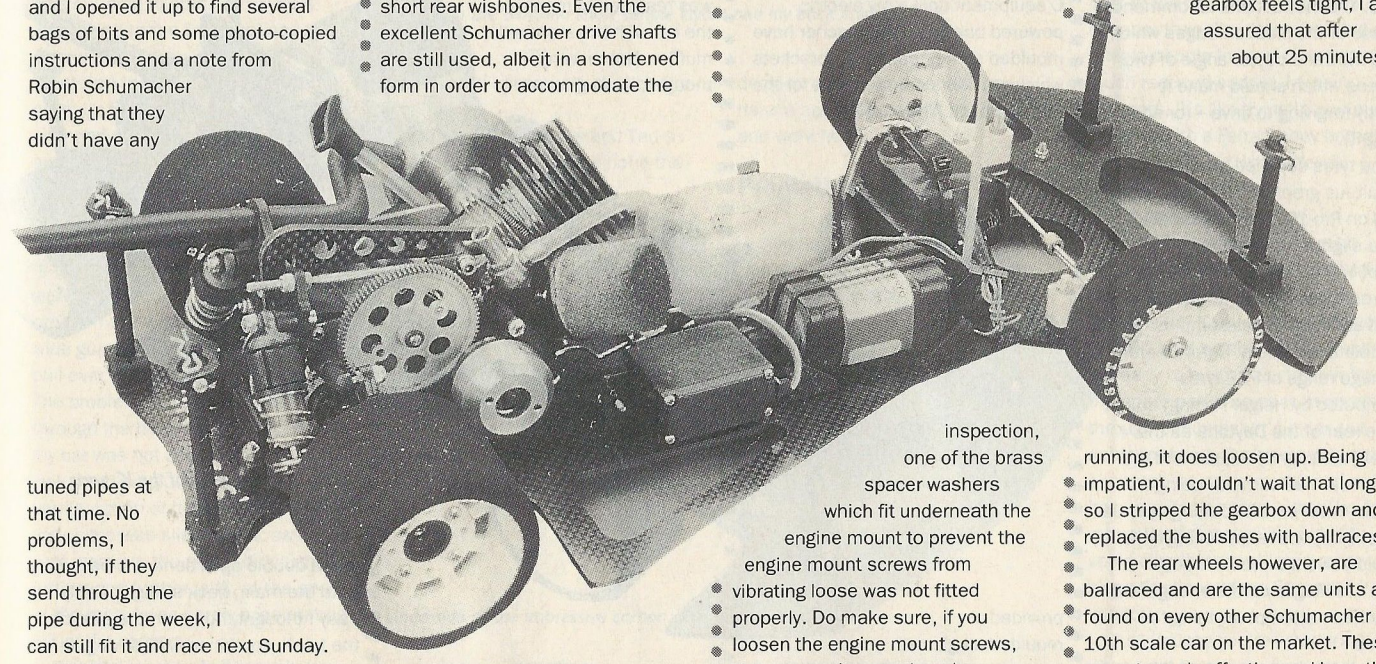
The Schumacher Daytona kit is a 1/10th scale i.c. engined circuit racer, designed to race on flat tracks. It is a two wheel drive car and is powered by the same Irvine 15 (2.5cc) engine as fitted to all of the other Schumacher Nitro 10's. In fact, it retains the same gearbox, engine and fuel tank all mated to a

## IC DAYTONA



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new Graphite chassis with Pro-10 style front Suspension mounts and short rear wishbones. Even the excellent Schumacher drive shafts are still used, albeit in a shortened form in order to accommodate the



The Suspension at the front is controlled by two tiny coil springs, held in place by the king-pin and the suspension block. At the rear, the movement is controlled by two oil filled dampers which can normally be found on the front of many of the Schumacher cars.

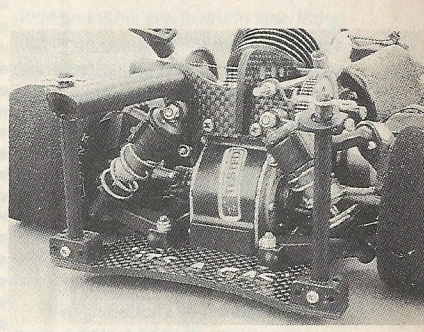
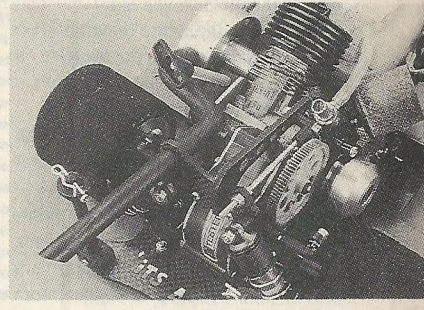
The front suspension mounts, steering blocks and coil springs are in fact taken straight from the Associated RC10L pro-10 kit and, in my kit, they came in the Associated numbered plastic bag. This did surprise me a little bit but, none the less they have worked very well on the Associated car and are, if nothing else, very strong (they'll need to be with my driving finesse!!). Unfortunately, the front wheels are held on by E-clips which do not allow quick tyre changes to be made so I managed to obtain a set of the excellent PSE replacement stub axles which are threaded to enable a lock nut to hold the wheel and tyre on.

The engine and gearbox assembly is already mounted onto the carbon fibre chassis plate but, upon

inspection, one of the brass spacer washers which fit underneath the engine mount to prevent the engine mount screws from vibrating loose was not fitted properly. Do make sure, if you loosen the engine mount screws, that you apply a good grade threadlock to the screw when re-tightening it up because otherwise, the screws WILL vibrate loose as mine did!!!

### Ballraces

The gearbox is not ballraced



Rear suspension on the car features oil filled short dampers but no roll bar.

which also surprised me. However, as Tim Walden of Schumacher explained to me, most people will not be interested in stripping the gearbox down very regularly in order to keep the bearings clean so therefore, after a while, the bearings will seize up and cause more damage than just running the gearbox on plain sintered bushes will ever do. If your gearbox feels tight, I am assured that after about 25 minutes

running, it does loosen up. Being impatient, I couldn't wait that long so I stripped the gearbox down and replaced the bushes with ballraces. The rear wheels however, are ballraced and are the same units as found on every other Schumacher 1/10th scale car on the market. These are extremely effective and have the added advantage of having removable seals so that cleaning is very easy.

### Short wishbones

As stated earlier, the rear wishbones are very short in order to

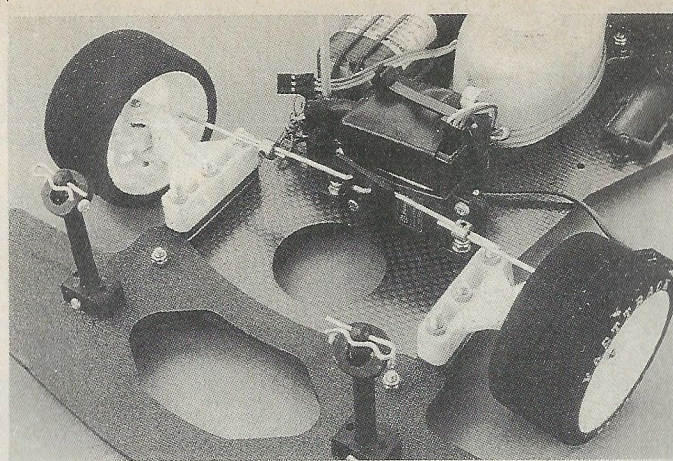
enable the Pro-10 style rear wheels and adaptors to be fitted without making the car too wide. Rear suspension movement is controlled by the dampers but is limited by the use of two screws which are tightened through the rear wishbones and, when tightened down, hit the chassis plate and create a type of 'bump stop' which prevents the damper and wishbone moving further downward. There does seem to be a great deal of travel available which, for a circuit racer, is unused. It would appear, at first glance, that the rear shock mount could be revised in order to make more use of the suspension movement and damper travel. Having said that, the shock mount itself is made from the same material as the chassis plate and should prove very resilient to damage. The camber can be adjusted by shortening or lengthening the upper track rods and the toe-in angle can also be adjusted by moving the wishbone mounts slightly. Whilst on the subject of suspension settings, the castor of the front blocks can be changed by adding the supplied plastic wedges. The term castor angle can be quite difficult to explain but, as a rule, the smaller the angle of castor, the quicker the car will initially turn in but it will understeer more as the power is applied. A car is more forgiving to drive if it has an increased castor angle. The instructions recommend the use of the plastic wedges which gives the car a castor angle of two degrees which should make it slightly forgiving to drive - (or so I thought).

The tyres supplied are the ubiquitous green rubber compound used on Pro-10 cars on the back and a slightly harder blue compound on the front. Both front and rear tyres come pre trued and glued and look to be examples from the Bolink collection. Unfortunately, the huge range of PSE tyres (distributed by Helger Racing) do not fit the rear of the Daytona as the wheels are slightly deeper and rub on the rear hub carriers. Using a shorter outer pin and cutting the hub carrier away with a modelling knife should solve the problem but I wasn't feeling accurate enough with my knife to attempt anything too drastic.

The body mounts are, once again, borrowed from the existing Schumacher Nitro 10 series which originally were developed for the electric powered buggies. These are adjustable and must be cut down in length in order to get a suitable saloon bodyshell low enough to the chassis.

provided a moulded single cell holder for the single 1700mAh SCE nicad used for the glow lead. By the time I remembered about the receiver pack it was Saturday, the day before the race meeting so a managed to borrow a receiver pack from my local model shop (Radio Active Models in Chelmsford) which actually belonged to an Aero-

some idea as to the capabilities of the standard car. That evening, I gave my fellow RCMC scribe, Colin Leake, a quick call to warn him about my i.c. inexperience and to try to glean any information about the track or set up that I could. Unfortunately, I was left

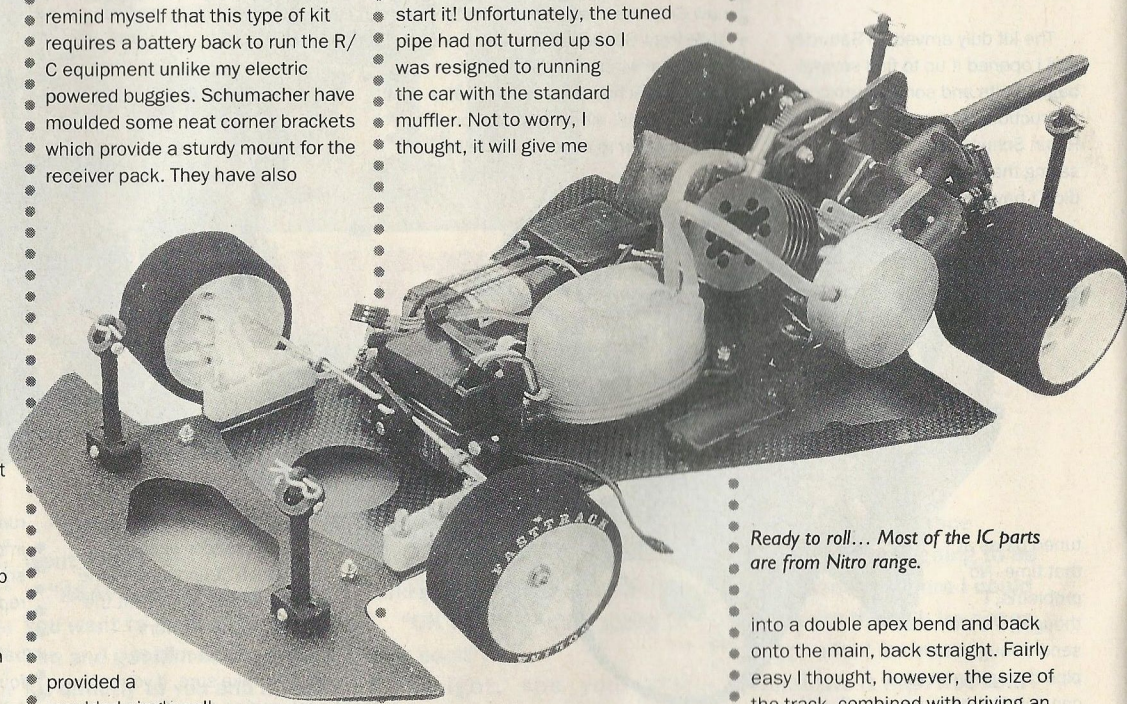


### On top

Talking of bodyshells, there isn't actually one included in the kit so that will have to be an extra purchase. The bodyshell that we used was the Parma Chevy Lumina which is in keeping with the styling of the car, in fact, the box seems to show that same body used in the photographs. Obviously, this type of car is not limited to only one bodyshell and many different types will fit. In fact, it was a toss up between the Chevy Lumina and a rather natty Parma Ferrari F40 but the Lumina won it by the merest of margins.

### RC equipment

Radio Control equipment is not included in the kit but any two channel set will suffice. I had to remind myself that this type of kit requires a battery back to run the R/C equipment unlike my electric powered buggies. Schumacher have moulded some neat corner brackets which provide a sturdy mount for the receiver pack. They have also



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*Front end of the car is simplicity itself and is also very tough.*

modelling customer of theirs (with his permission of course) so, if you're reading this Andy, I promised you a mention so thanks very much, you're a star!!!

The only thing left to do by now was to paint the shell and set the engine up. I understand paint cans so I reckoned that I could manage spraying the body but the one thing I don't understand, is the intricacies of the two stroke glow engine (even though Schumacher supply almost fool proof instructions!) so I collared Paul Bardoe of Radio Active who is extremely good at setting up and running in engines. With his help, we ran a couple of tanks of fuel through the engine and set it up so that it was so reliable that even I could start it! Unfortunately, the tuned pipe had not turned up so I was resigned to running the car with the standard muffler. Not to worry, I thought, it will give me

a little dejected after Colin reassured me that I was going to be wasting my time as I was running the wrong car, the wrong tyres, the wrong fuel and the wrong engine!

Great, I thought, another Pro-Serpent racer, still, not to be deterred, I went along to the meeting more determined than ever.

Sunday morning saw me arriving at Crystal Palace well before anybody else save two guys who had driven up from Bristol that morning. After waiting for about three quarters of an hour, another Schumacher car turned up, driven by Jason Dearden who had difficulty with starting his engine.

I got my car out and filled the tank. It too refused to start until I noticed that there was no fuel in the carburettor!. Once this had been rectified, it started fairly rapidly and I mustered up enough courage to run the car round the circuit.

The crystal palace circuit consists of a long straight with a sweeping bend at the end followed by a short straight into a medium sized 180 degree bend followed by an even shorter straight and a tight chicane. Following the chicane immediately is a tight hairpin which leads onto a fairly long straight and

into a double apex bend and back onto the main, back straight. Fairly easy I thought, however, the size of the track, combined with driving an unfamiliar car ensured that for the first few laps, I couldn't judge the end of the long straight which led to my car becoming airborne as it tried to move the IMMOVABLE track markers!!

The car is quite twitchy to drive and is very reminiscent of a 1/12th scale car.

Ready to roll... Most of the IC parts are from Nitro range.

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### Set up

Even with the 2 degree castor blocks, the car was too positive at low speed which led to some nice pirouetting into the tighter corners. However, after a few laps, I began to master both the circuit and the car and was really beginning to enjoy myself. The car was not as quick as the Serpent cars but, I must point out, that this was, in the most, down to the lack of tuned pipe on my car which does increase the power output by some forty percent.

The Schumacher car proved very easy to drive and was not very temperamental. Unfortunately, during the second practice run, the engine cut and, upon further examination, the engine mounting bolts had come loose. In fact, one of them had vibrated so loose that the head had sheared off, making it virtually impossible to remove the rest of the screw.

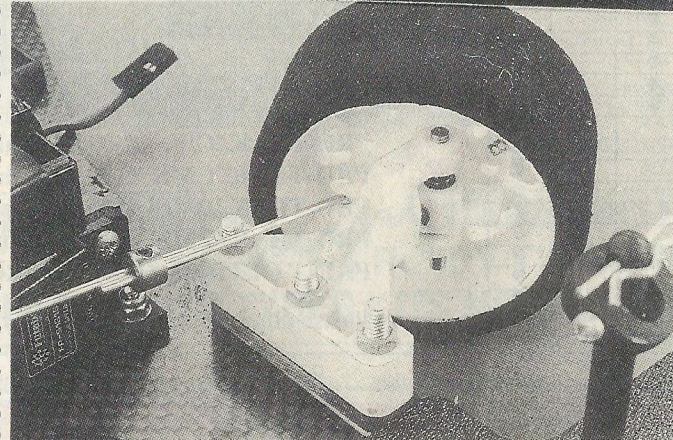
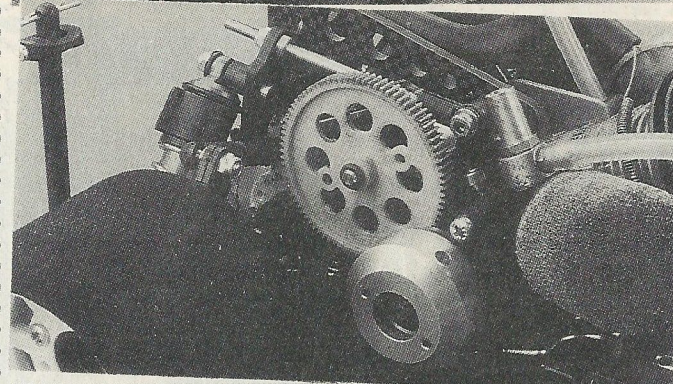
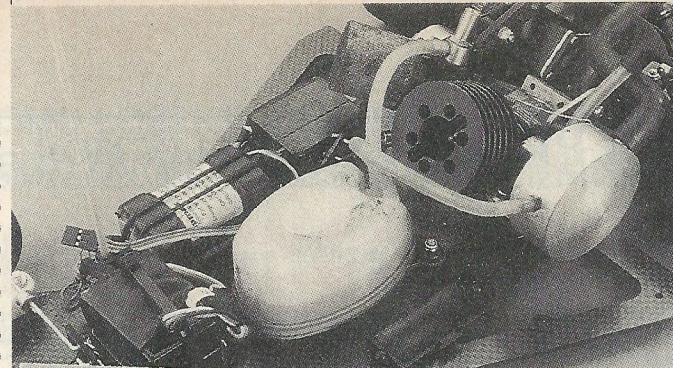
Eventually, this was removed and was duly replaced. I had, however, learnt my lesson about the quality of threadlock used and vast quantities of threadlock was reapplied to the screws to ensure that they didn't come loose.

This minor set back did preclude me from any further practice and the first round of heats came round far too quickly for my liking when the second disaster struck.

I was getting ready for my first timed run (heat 3) and the engine was refusing to start. As my heat was called to the line, I noticed (via a conventional glow lead and ammeter) that my glow plug had given up the ghost and died. I quickly changed the plug and started the engine but, by this time, I had missed the start of the heat.

I joined the race some 3 laps into it and immediately, had to let some of the faster cars through as they were lapping me. This wasn't a problem as I would either move over wide going into a corner or simply pull over and shout them through. The problems started half way through the heat when I noticed that my car was not accelerating at all well. Not being used to this configuration of drive, I thought that the clutch was slipping but, as the race wore on, the power diminished further and further until, at the end of the race, I was barely accelerating out of the corners.

Tim Walden and Ted Longshaw diagnosed the problem as an engine related one due to my inexperience in setting them up. Unfortunately, the day before when I set the engine up with Paul Bardoe, we were running the car without a bodyshell and consequently, as soon as we put the body on, things began to



Details on the Daytona show simple layout and lay back engine.

heat up and I eventually cooked the engine.

If it weren't for Tim's and Ted's diagnosis, I would still be none the wiser as to the cause of my problems as unfortunately, the so called 'professionals' were not as helpful as I had hoped.

Maybe I'd hoped for too much, but I certainly felt that comments aimed at my car, from some of the professionals, such as 'It's like driving against a combine harvester' or 'That car's a liability out there' were not at all constructive and eventually, after the first round, I

decided that I didn't need all the hassle and derision and I packed up and went home.

### Promotion?

As I understood it, the meeting was, I was told, an event aimed at promoting this relatively new form of low cost i.c. circuit racing but, from my experience as a total novice on that day and the run up to the event, I felt that some of the more experienced racing drivers and organisers could have done a damn sight more in making newcomers

(like me) feel more welcome and I certainly could have benefitted from an insight to their vast levels of experience.

I have never been to a meeting before where I have been made to feel a complete outsider and totally unwelcome. Even at serious events within the electric off road racing scene, have the 'experts' helped the novices to make their racing more enjoyable.

The fact that my car was underpowered didn't bother me. The fact that I didn't complete my heat didn't bother me. What bothered me was the attitude of SOME (not all) of the experienced drivers who actually wanted to promote the sport (or so they had said previously!) Come on guys, at the end of the day, it's not going to succeed if newcomers and novices are not helped along in any way.

Whether this attitude would have been different had I been driving a Serpent, I will never know, but not everyone is going to race a Serpent car when there are others, like the Daytona, on the market.

In going head to head against the Serpent, it was obvious that Schumacher had adopted a different approach to the problem with their design of the Daytona. The car was much more basic than the Serpent with more 'user-friendly' ideas built in such as the pull start facility. However, before judging the car, one must step aside for a moment and look at the fact that it is considerably cheaper than the alternative and can enable people to start racing at a much reduced budget. In many respects, it's like trying to compare a Fiesta with a Ferrari; they both do the same job but with different accents on priorities!!

I'm sorry if the last few paragraphs rambled on for a bit but I do feel very strongly on those points covered but, back to the Daytona kit. If you want my opinion (for what it's worth), it's not a bad kit. It's easy to build, easy to drive and the spare parts are easy to obtain through Schumacher's extensive dealer network. It shows an 'electric approach' to an i.c. problem (i.e. it has more in common with a Pro-10 rather than a scaled down 1/8th scale circuit racer which is more along the lines of the Serpent impact).

Just in case you're wondering, when I got home, my next door neighbour gave me a parcel that had arrived the Thursday before which, believe it or not, contained one tuned pipe and manifold kit!!! That just about summed up the meeting which wasn't a fair run for the car due to one reason or another.

Underside of the impressive carbon chassis.

