



car is an excellent entry into the world of Rallycross but really there is one problem with it, most of the racing going on is four wheel drive, not two wheel drive like the Porsche. The answer is the other kit available, the higher priced four wheel drive version based on the Procat, the Sierra RS 4X4.

#### All New Kit?

It's not fair to say that the RS4X4 is an all new kit, with the Schumacher Procat being such a success there was never any need to design a whole new car and so the RS4X4 was born as a Procat with a few minor changes and a clever body mounting kit.

Also a new item seen on the RS4X4 and the Porsche are the low profile, beautifully moulded, blue rubber tyres. By blue rubber we of course mean the type of rubber used and not the colour.

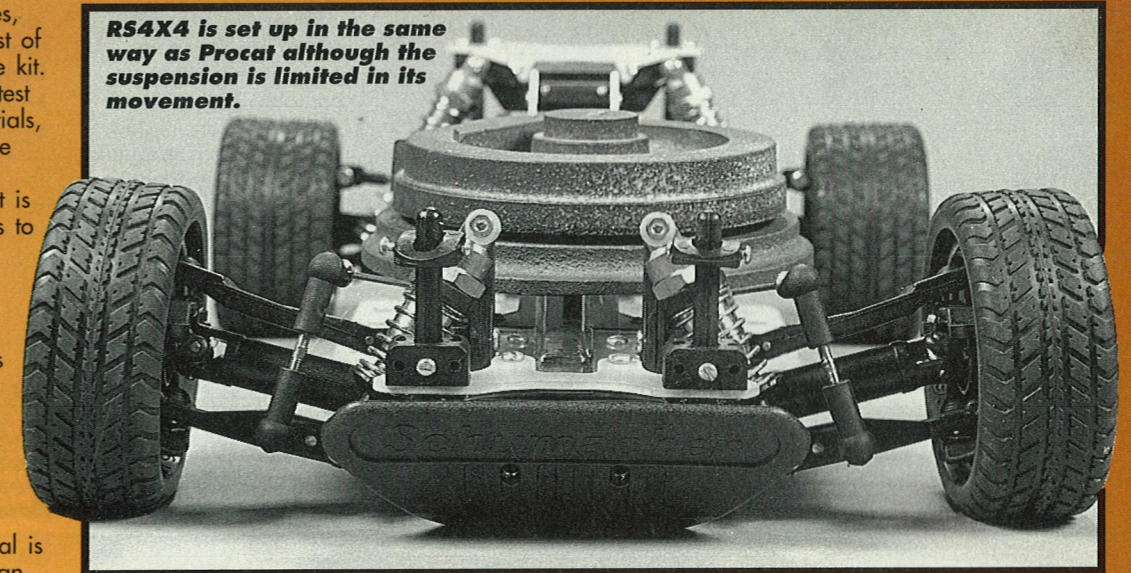
The kit has standard Procat wheels although in our photographs we added the alloy wheels made by R&D Racing just to give the car the Rallycross look.

to remove the rough edges, this also applies to the rest of the glass fibre parts in the kit. The car has two of the latest type of hex drive differentials, these are easy to assemble and give a good smooth action, the only tricky part is the thrustrace which needs to be assembled with grease before it can be put in place. This means placing the individual balls in the cage, not easy, but as long as you do the operation on a clean and tidy bench it's not too bad.

#### A Good Base

Once the rear differential is built the rear of the car can start to come together, the centre housing is clamped between two alloy plates which are pre assembled with the belt adjusters and the diff and drive belts which are also put in place at this stage. There are two drive belts between the diff and the main drive pulleys and one of the long belts which take the drive to the front diff. When assembling the rear alloy plates to the centre plastic

**RS4X4 is set up in the same way as Procat although the suspension is limited in its movement.**



housing its worth filing away the excess plate where the motor will fit, this gives the motor more room to move when selecting the pinion to be fitted to the motor.

The front gearbox is next, the diff is virtually the same as the rear although the diff needs to be assembled with the gearbox sides in place when the main diff screw is

put through the diff, this is again a little tricky but following the instructions properly gives the right end result. The front gearbox is clamped into place along with the suspension mounts through the chassis and the topplate, this allows the gearbox to be moved along the groove it sits in to adjust the belt tension, the gearbox

is then clamped into place with the four bumper mounting screws and four top plate mounting screws.

The suspension of the car is pure Procat, the front end has the ever impressive fold back system which allows the whole side of the suspension to pivot backwards in the event of a crash, this allows the car to be crashed quite



# RS4X4

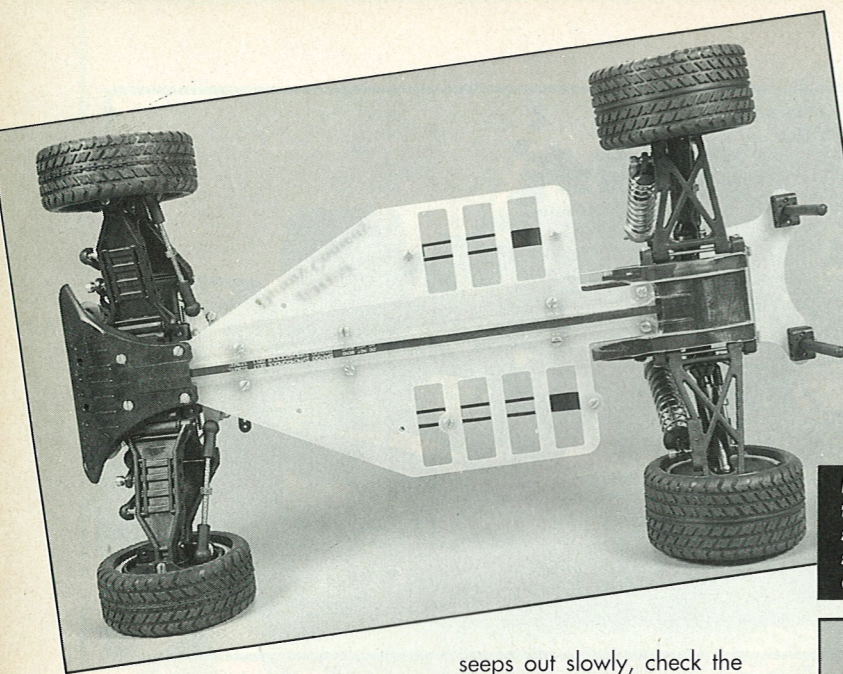
Last month we reviewed the Schumacher Porsche 911 Rallycross car, the kit was based on the Cougar and filled a hole in the newly formed market of Rallycross that no-one else had yet taken care of. The

As already said the car is based on the Procat, this means that the base of the car is the glass fibre chassis. This needs to be given a quick going over with a file

### Model Cars Assesses the latest Schumacher on offer

#### Specifications

Car	Sierra RS4X4
Drive	4 Wheel (3 Belts)
Diffs	2 Ball Hex Drive
Gears	48 dp (supplied with spur and pinion)
Tyres	On Road Blue Rubber
Wheels	Plastic
Suspension	Unequal Length Wishbone and Tie-rod
Damping	Alloy Oil Filled with Diaphragms
Chassis	Glass Fibre
Tune-Ups	Front Roll Bar
Body	Parma Sierra 4X4
Configuration	Saddle
Helpful Items	Aerial Servo Saver Spares



protection against dirt getting into the main chassis area. The bodyshell is the Sierra Cosworth from Parma, this body was originally drawn up by Richard Delves of Helger Racing and represents the current rally car being used by Ford. Our thanks must go to Richard at Helger

for the excellent paint job seen on these pages. The body mounting system in the kit is excellent and the best available, two glass fibre plates form the mounting for the bodyposts which are specially moulded. The posts have a typical Cecil Schumacher look and feel to them, they are light, strong, and simple, and work perfectly. Maybe now there

**Left; Underside of the chassis is unprotected except for the belt which has a lexen cover. Below; Rear shocks mounted as per Procat on the clever wing/shock mount. Bottom; Rear body posts can be cut down as they sit low in the blocks.**

hard without breaking anything! the system gains its elasticity from four specially moulded rubber bands which join the two sides of the suspension together. The system is difficult to describe in words but if your not familiar with the system pop along to your local model shop and have a look, it's a real piece of engineering.

The only really difficult stage in the assembly is the drive shafts, these are still tricky and take a while to master. The only advise to give is to be patient and keep at it, as the instructions say you'll soon get the hang of it!

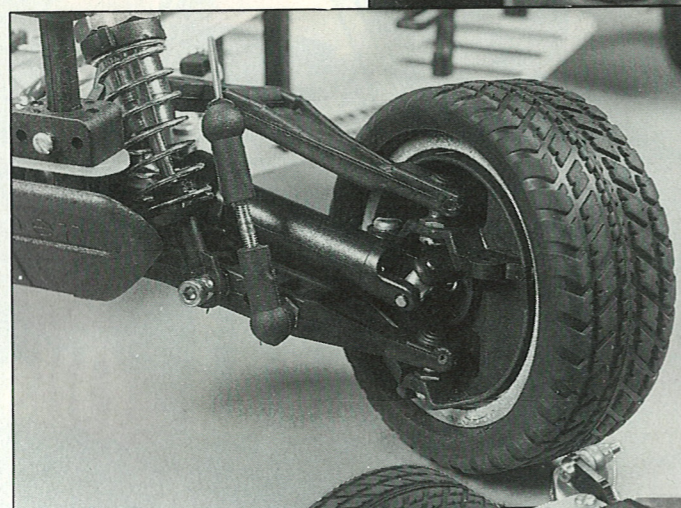
### Back Up

The rear suspension is a more standard affair, the bottom arms pivot on a wire pin which is held in place by left and right handed mounts, these in turn are held to the gearbox side plates by long self tapping screws, the top links of the suspension are adjustable ball joints with left and right handed turnbuckles for easy alteration.

The shocks in the car are the latest coated items which keep the oil clean by means of not wearing out, and due to their slippery surface give a very smooth silky performance.

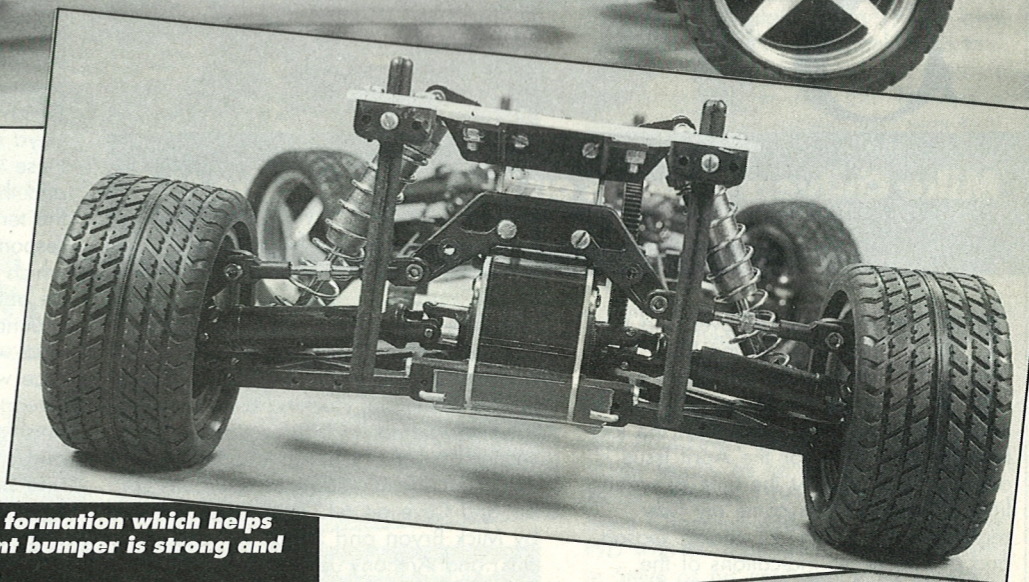
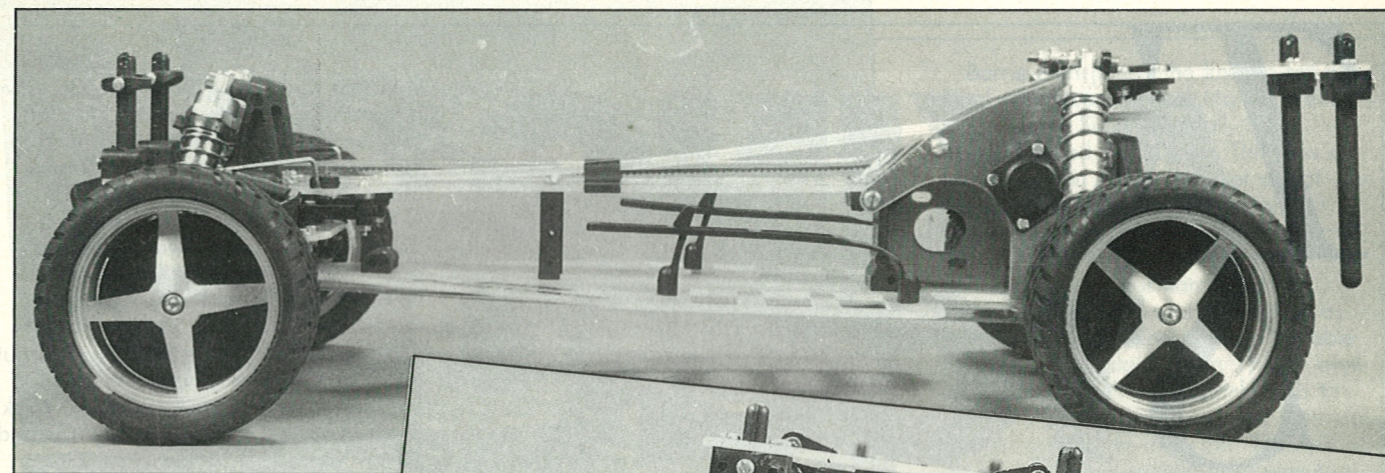
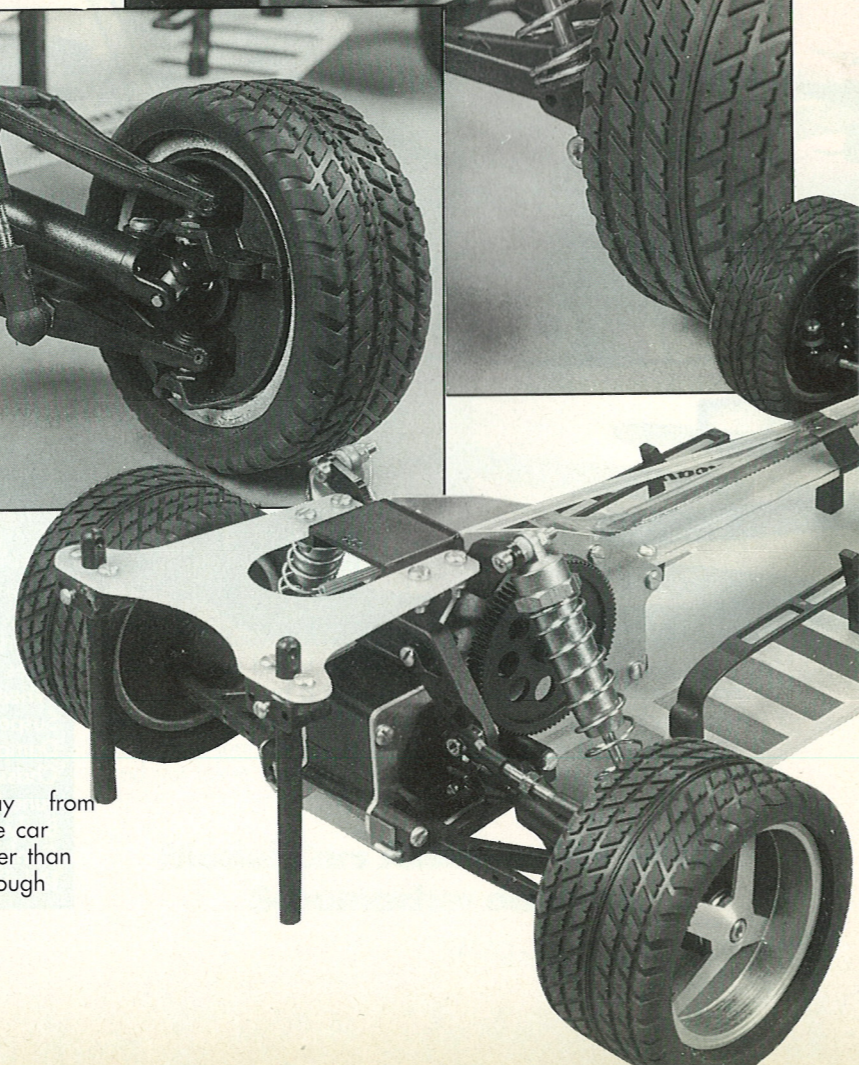
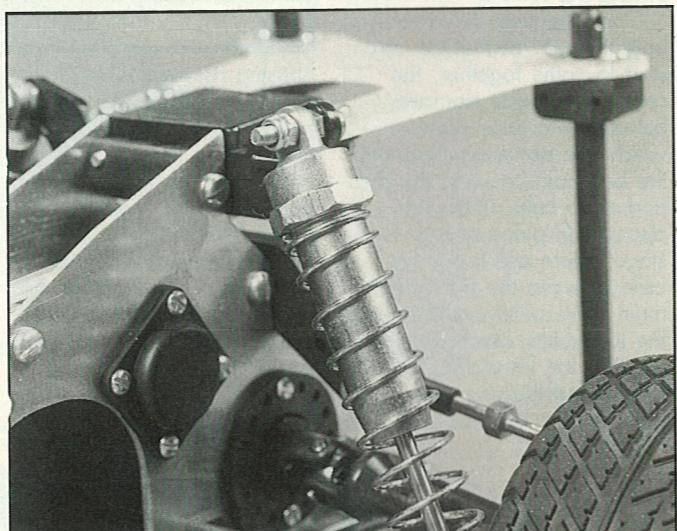
The shocks contain a number of seals which stop the oil escaping out, there are two rubber "O" rings and two brass inserts along with a couple of washers. During assembly the brass inserts (of which there are two types) need to be placed in correctly otherwise the oil

seeps out slowly, check the diagrams carefully as the brass parts look similar but are in fact different. On the RS4X4 the shocks have movement limiters to stop the shock allowing the wheel to hit the bodyshell, these are simply a series of plastic tube spacers which are placed inside and out the shocks, we didn't fit these to our car as we wanted to use the car outdoors on very rough ground although if the car is to be used on a relatively flat surface we advise the use of the spacers.



### It's a Cover Up!

Other changes to the Procat chassis are the lack of an undertray, this is replaced by a new moulding which just keeps the dirt away from the belt, this makes the car look slimmer and lighter than the Procat chassis although obviously there is no



will be an end to the half falling off, non supported bodyshells seen at most local clubs.

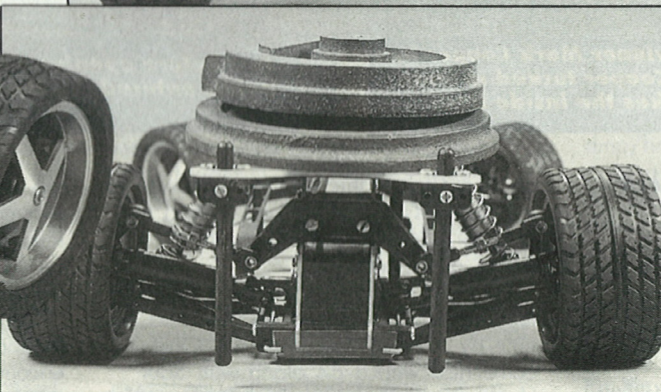
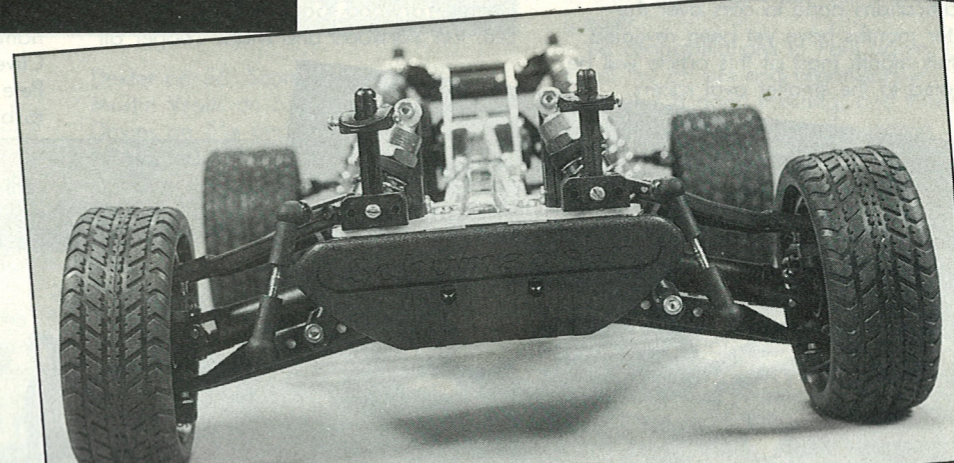
To finish the bodyshell off there is a nice set of decals, these include all the complicated bits like headlights etc, as well as a set of ordinary stickers.

### Final Touches

The kit also has the

**Chassis has a good rigid box formation which helps give the sharp handling. Front bumper is strong and sits just inside the bodyshell.**

addition of a front anti-roll bar, this is accepted to be an item used almost always on the Procat and therefore is included in the kit. Radio installation is simple, a servo saver is supplied as are the servo connections. All that is needed is a speed controller



**Above; Rear camber change is kept low. Our car shows the alloy wheels supplied by R&D Racing available direct (the wheels come with a guarantee against breakage). Body paint job in Custom Colour by Richard Delves.**

and a motor to complete the chassis, Schumacher now do a complete package of motor, speedo, battery and charger in one pack which is well worth a look at if you are not going to take your racing to seriously.

The performance of the car

is much as you might expect, if you buy one of the best chassis available you expect it to go well and this the RS4X4 does. Even the Editor put the car 2nd fastest at the Model Engineer Exhibition, so there can't be much wrong with the handling!

To sum up the car is very complete with almost everything you need to go Rallycross racing, as with the latest batch of Schumacher cars there's a spares bag which comes in helpful and the instructions are to a good standard, there's a helpful set up guide and all in all the car must be considered the best kit to date.