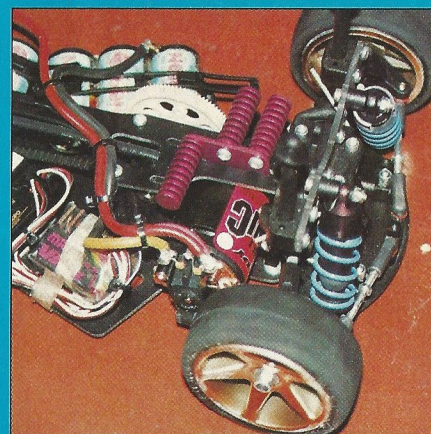## The Power of the Pug (Schumacher SST 2000 Review)

# class of 98

I It's been a little over two years since Schumacher's first S.S.T. (Schumacher Scale Tourer) hit the tracks, the S.S.T. was a new car and concept. A totally new set of mechanics had been assembled and it was the only car of this type that came fully assembled, so anybody could be on the track in a matter of hours. A great deal of thought had gone into its design, all the suspension parts were common, so only a small spares stock was required. A simple two belt drive system was used.


The motor heatsink is a speed secrets option. This is a must.

## Develop or...

Through the summer and winter of '96 Schumacher's hard working R&D team led by Phil Booth, using then team drivers David Spashett and Mark Christopher, were out most weeks pushing through a huge development programme, whereby several tweaks were found.
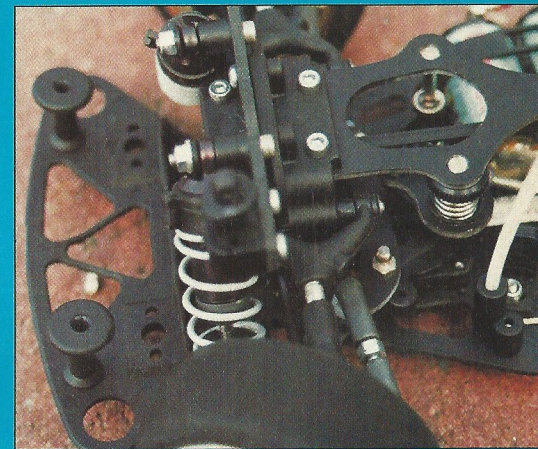
But the original car had several shortcomings. It was only part ballraced, and stick pack nicads had to be used (saddle pack being the "norm") and the chassis was not very forgiving to drive in less than experienced hands.

**All that glitters is gold!**


Boxing clever.


Left: A neat cup holds the spur gear, quick changes are now on.

The first fruits were the saddle pack racing chassis which Steve Rouse tested early in '97. This car was a great deal better, it was not fully ball-raced, had a centrally mounted nicad pack and several other minor mods. Immediately results started to happen, but again these were in the hands of world class drivers, so the R&D team came out to work again. Schumacher still wanted a kit that any-

The lugs on the front bumper are for a foam support.

## But more about the car:

The first new part is the chassis and top deck manufactured in W.F.E.. The chassis sits the nicad pack on the right of the chassis centre line, the motor and electrics to the left. This gives a near perfect weight balanced car. The outcome being a very predictable handling race car. A much slimmer top deck completes the package.
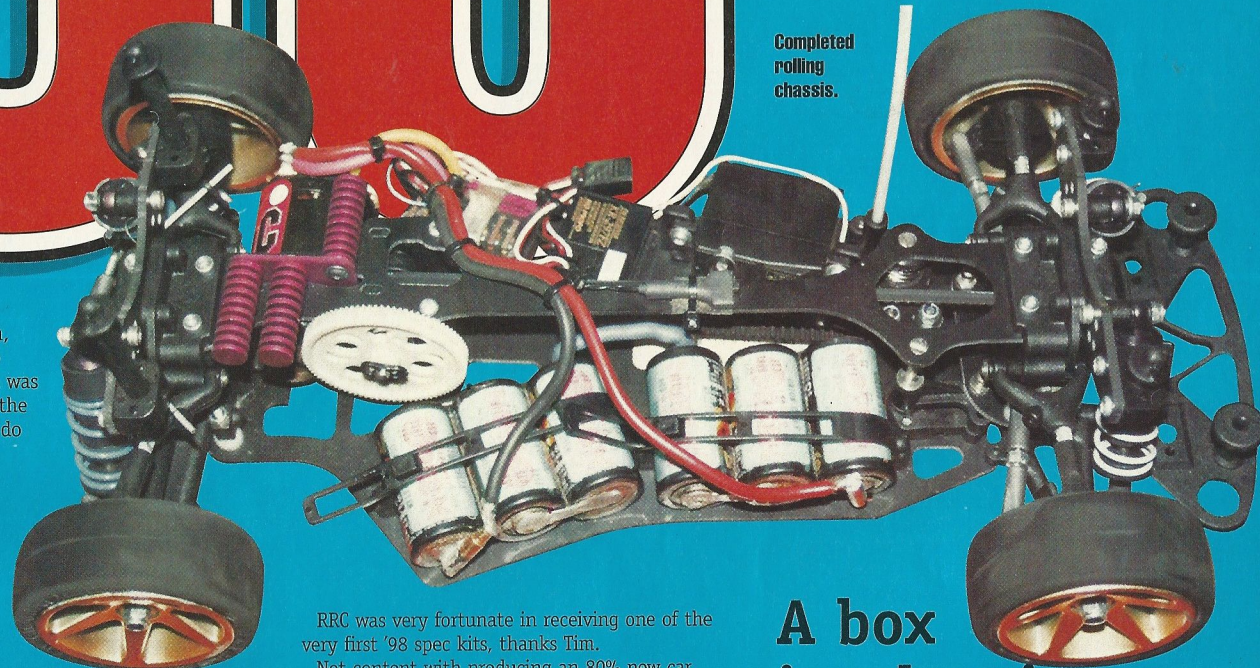
Secondly a new centre track rod with a reduced amount of Ackermann (inside wheel moves less on full lock) gives more straight line stability, along with an increased caster lower wishbone set (7.5°-13.5°). Also the caster increase gives more grip out of corners.

Now with the increased stability Schumacher have given the SST more speed with the addition of lightweight alloy blade diffs, and the plastic blade driveshafts, these too are very light and are simple and cheap to service.


Completed rolling chassis.

## Class of '98

In mid summer several special parts seemed to be filtering out from Schumacher's factory in Northampton. Radical nicad layouts, geometry changes, lightweight parts. It didn't take long to see that Schumacher had indeed "cracked the code", but when would the parts become a car... the answer is now.
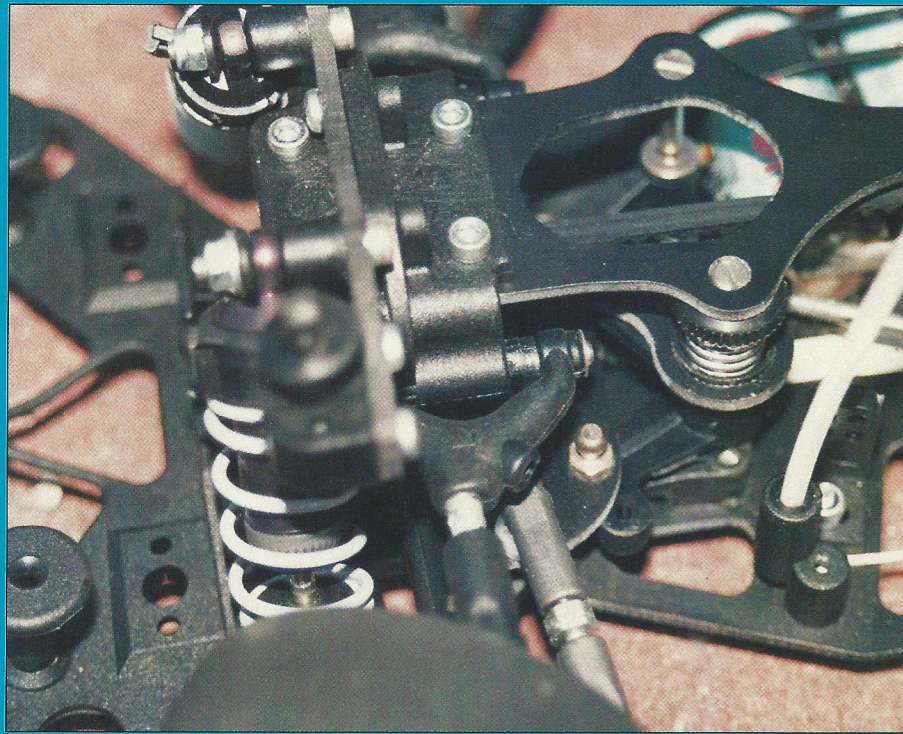
body could win with, which was simple to prep and set up and was quick straight from the box top... did they do it? Read on.

RRC was very fortunate in receiving one of the very first '98 spec kits, thanks Tim. Not content with producing an 80% new car, Schumacher have joined forces with Peugeot's motorsport division and have a fully licensed replica of the 406 raced in the British Touring Car Championship by Tim Harvey and Patrick Watts, complete with original decals and a true scale wing with two downforce levels.

## A box is a box is a...

Well this time it's not, with the Peugeot connection Schumacher have come up with a real honey. An amazing bit of artwork gives a glorious reproduction of the 406 body shell, all the

The '98 track rod and high castor wishbones give amazing stability.


Schumacher's white dots gave a surprising amount of grip.

## Open the Lid

As I stated in the preamble, the SST comes fully built, requiring just the fitting of radio gear etc. The fitting being fully covered in the instructions, a very neat set of diagrams tells all. I did do a dummy build using blue tack instead of servo tape, I checked the balance, then marked the chassis with a felt pen, and added the servo tape. With this type of layout any radio gear will fit, so you don't need mini receivers or speed controllers. All '98 specifications SST's are set-up at the factory for caster, camber and toe-in. As conditions vary the effect of the various adjustments are detailed on page 11 of the manual.
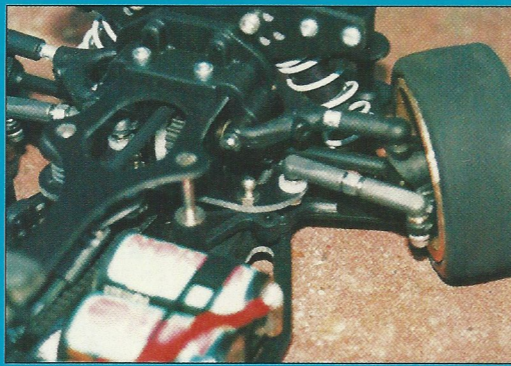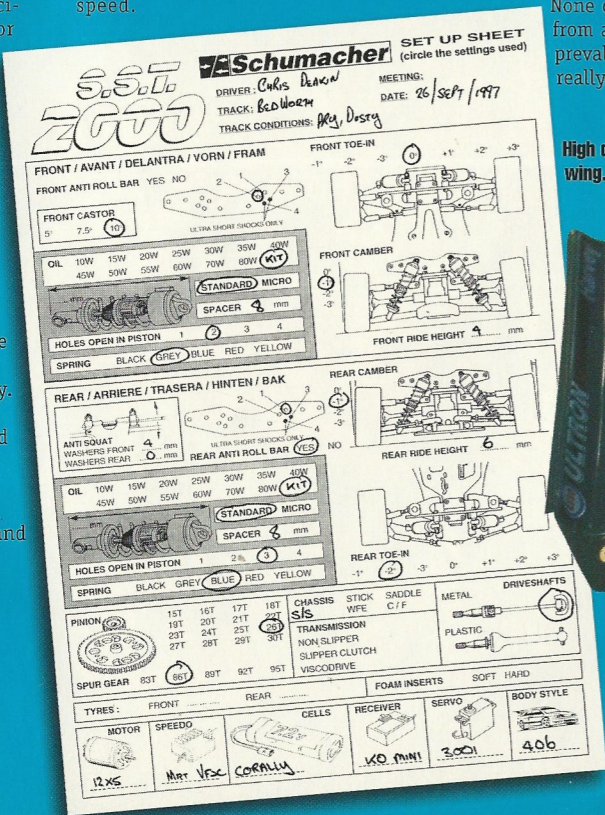
## Testing Time

With the shell superbly painted by Ken Huxtable, it was off to Bedworth for the track test. Prior to this I had acquired a spring tuning kit, a roll bar kit and a motor heatsink from Schumacher (these are all parts which will be available in the racing chassis kit - but not the body shell) so I could "tune" the car to the day.

All the SST's now come with the white compound rubber slicks, these give a good level of grip and are of course legal for Schumacher's own race series. I had installed a Reedy 12 x 5 motor for loads of belt stretching power, and some Corally 1700 nicads.

technical details of the full size racing 406 and the scale racer; do not throw this away, it should be put on display!
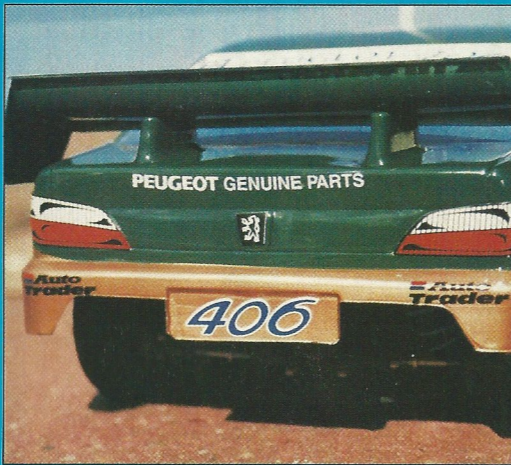
## Run One

What can I say, it was truly amazing, this felt like an old friend I'd known for years. Stable wasn't the word, hands off the car tracked straight as an arrow, no tank slapping. Considering the dust on the track that day, the grip was brilliant. With the permanent 4WD braking was sharp, all four wheels locking with that nice squeal, I had started with the smaller of the two wings provided with the kit, this didn't give enough grip to balance out the downforce generated by the splitter on the front wings. No problem, a simple change to the larger upswept wing.

Also the gearing was some way off, as I had run for some 7 1/2 mins, and it was very punchy, but may be lacking in top speed.

## Run Two

With 26 tooth pinion fitted speed was very impressive, but was still very punchy from slow corners, the lightweight transmission doing its job. The large cord wing, giving all the grip I needed in the quick corners, I still couldn't get over how well the car handled straight from the box, it really was very good, and quick too. None of the understeer I had come to expect from a moulded rubber tyred car was prevalent. In fact the front gripped really well.


The view most will get.


High down force rear wing.



## Run Three

Since I had the springs and roll bars I decided to try and unbalance the car and feel the results. By fitting stiffer springs I hoped the car would slide, and really work the tyres.

To my surprise, I got even more grip, but the car still changed direction well, turned in well, but it wouldn't spin. This shouldn't have happened. The more I tried, the SST just hung on. After several 17 lap runs I gave up, the SST sat on the tarmac, the front almost grinning at me, it had won. This version of the SST was just how Schumacher had designed it to be, quick, simple and very forgiving.

## Time for Ashby

As the Bedworth test had gone so well I really needed to find out if it was the car or just the day.

## A trip to Ashby was next:

Track time was short due to the poor weather, but it did prove it was the chassis that was the winner. Once more the grip was brilliant, the handling a real joy, three runs all on 17 lap pace stated the car was good. The same tyres were used, with no loss of performance. Just playing with the springs and rear roll bar gave the right feel. Even the kit shock oil being used, damping being adjusted with the posi-lock pistons.

I did find with the faster bends the high grip wing was not really needed, and the smallest wing was fitted.

## This is how it went

From the start line it was full throttle (turbo start) off the line, keep to the left of the main straight to miss the bump. Full throttle round the banking, drop the car into the apex of the right hand hairpin, off the throttle, a flick left, on the power, out to the right hand side of the short straight. Turn in to the left hander level with the lamp-post. Hard on the power, up the hill to the alpine drop. A wide line into the right hander, on the top straight. Full brakes, hairpin right, the SST rides the kerb, full power, full brakes, flick left, up the kerb. Full power towards the chicane, left, right, left, apply the power round the harpin by race control, on the gas.
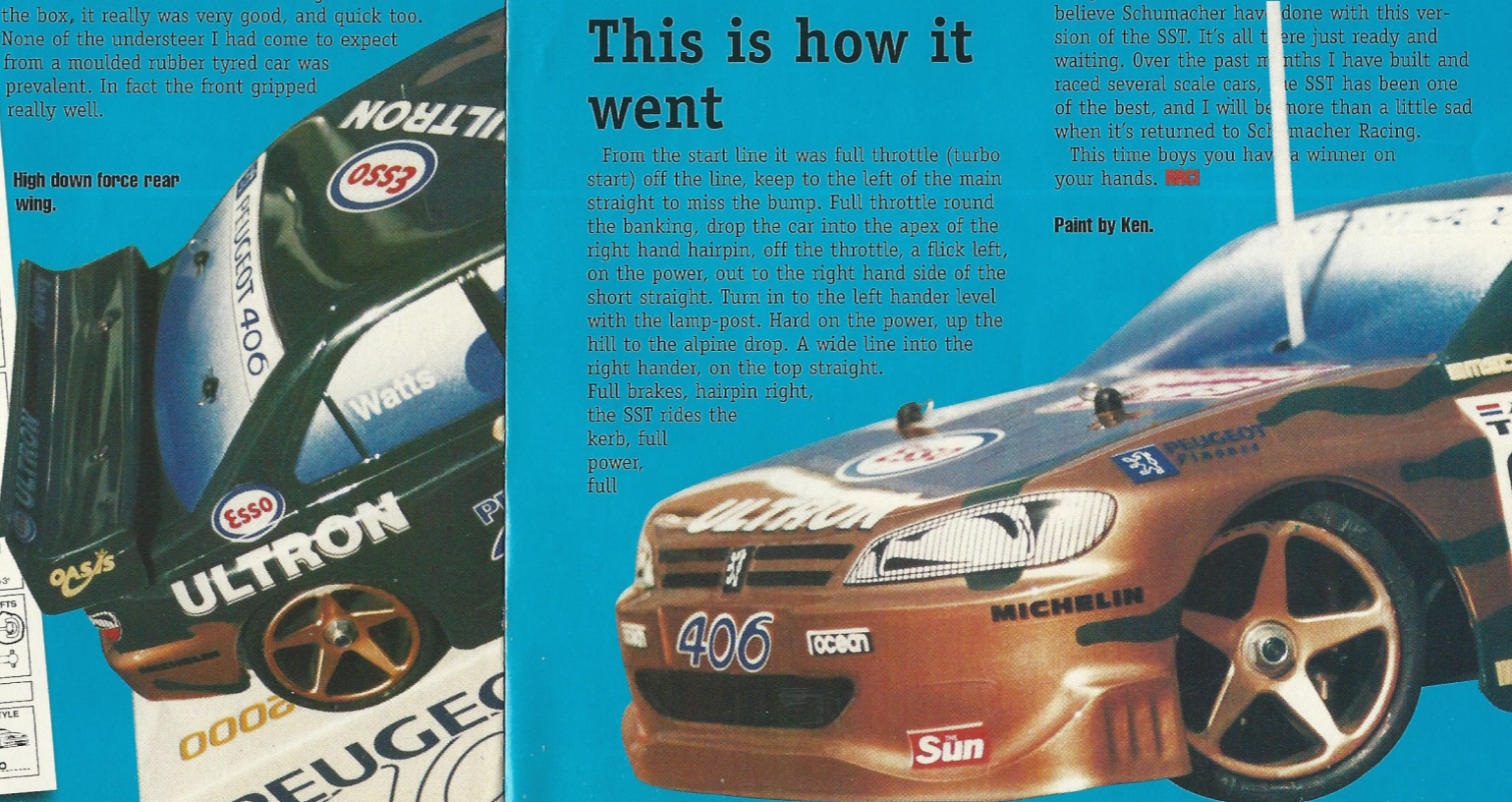
## Lap time 17.68 seconds: Not bad

The SST made it look very easy, when a car is this stable it is simple to plan your lines, you know it will "hold" that line. To carry as much speed through a corner as possible without too much tyre scrub. All right you may say the SST suits my style of driving, maybe this is the case but the SST has been winning all over the UK in several different drivers hands, even Tim Walden has been flying of late (just a little dig Tim!). In fact the last round of RRC's own very competitive On Road series was won by an SST.

## Last Lap

With Scale Saloon racing becoming so competitive it's very hard for any manufacturer to come up with a package that is light years quicker than the rest. Most of the chassis's are quick, the big thing is to be able to build a car that can be quick in 90% of people's hands, not just in the odd 10% of the best. This I believe Schumacher have done with this version of the SST. It's all there just ready and waiting. Over the past months I have built and raced several scale cars, the SST has been one of the best, and I will be more than a little sad when it's returned to Schumacher Racing.

This time boys you have a winner on your hands.

Paint by Ken.

## Quick Spec.

4WD. Twin Belts. Full ballraced. Alloy diffs. WFE side saddle chassis. Narrow top deck. Blade drive shafts. Low line transmission. Fully independent suspension. Oil filled coil over shock absorbers. Adjustable front camber, caster, toe in. Adjustable rear camber, anti-squat toe, Integral servo saver. White compound rubber tyres. Hex drives. Gold spoke wheels. Peugeot 406 body shell.

## Testers Kit

| | |
|---|---|
| RADIO: | KO Vantage II |
| SERVO: | Futaba 3001 |
| RECEIVER: | KO Mini |
| SPEEDO: | V.F.X. (Lit 1 = 60 amps. Lit 2 = 40 amps. Ramp 30. Brakes Max) |
| MOTOR: | Reedy Trisonic 12 quin (gear ratio 26 x 86) |
| NICADS: | Corally Team spec 1700 SCRC-SP |
| CHARGER: | Schumacher |
| TYRES: | kit |
| BODY: | kit 406 |

## Options Used

U1909W   Motor Heatsink
U1912K   Spring tuning set
U1919H   Anti-roll bar set

## Likes

406 body shell - great decals
Side saddle chassis
Centre track rod
Adjustability
Ballraced
Alloy diffs
Quality
Strength
Full set of speed secrets
Quick release spur gear
It's fast

## Dislikes

Giving it back!

## '98 Features

Peugeot 406 body and decals
Side saddle chassis
Slim top deck
Alloy blade ball differentials
Blade driveshafts
Centre track rod set
Front wishbones (high caster)
Quick change spur gear retainer