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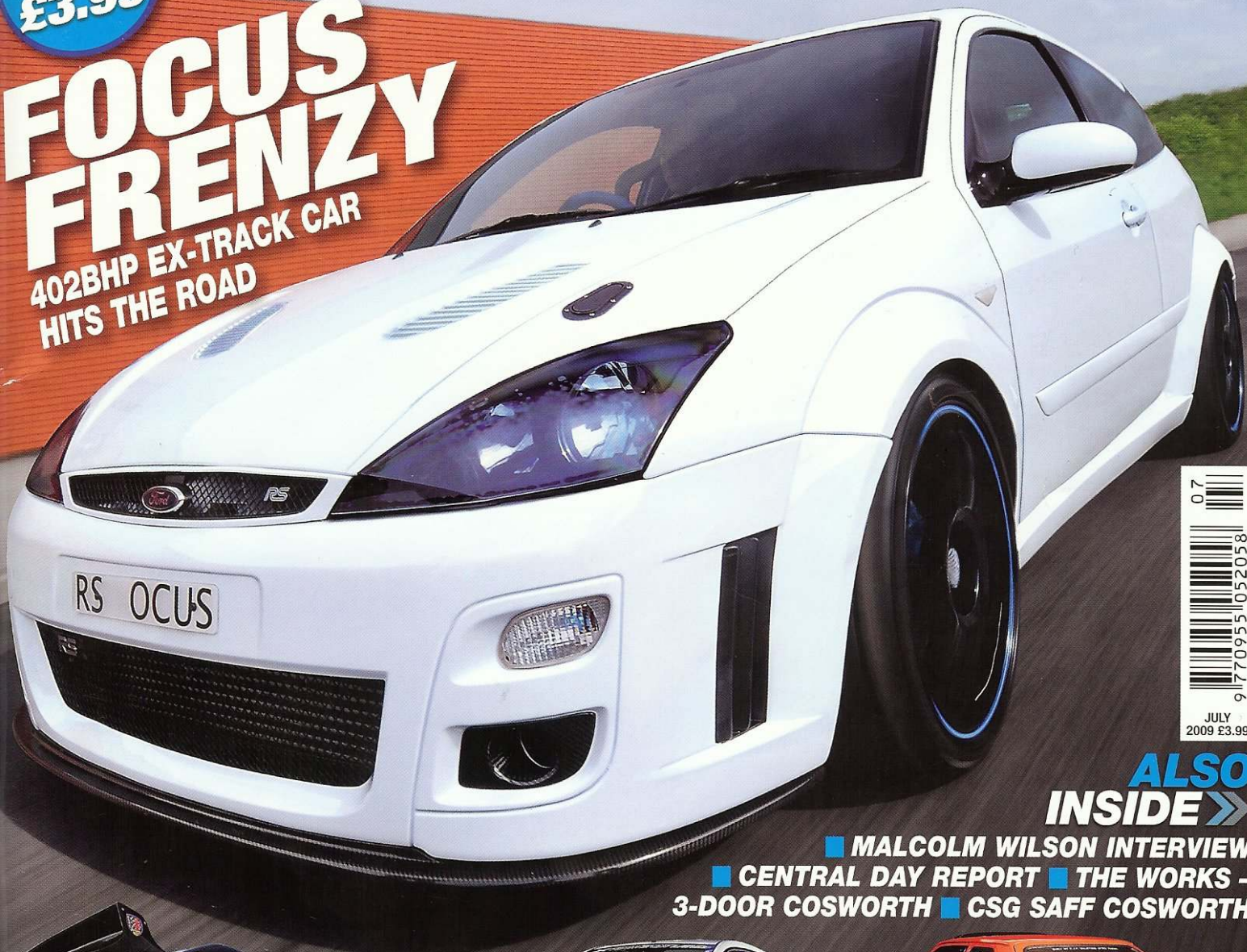
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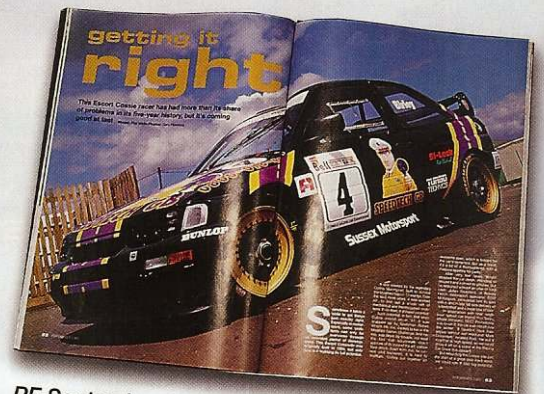
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Golden Oldie

Over ten years, 200 race victories and the lap record at Brands Hatch later, this rather special Escort Cosworth is showing no signs of slowing down. And neither is its owner for that matter...

Words: Luke Wood Photography: Gazza



PF September 1999 when the Birley/Escort combo was just getting started.



It's been fine tuned for the best part of a decade, continually tweaked, constantly adjusted and fettled to within an inch of its life but what you see before you here is an Escort Cosworth with pedigree. It is, arguably, not only the most accomplished individual saloon car ever to grace a British race track but it's driven by, and this is the bit that's really going to cause the Internet forums to go into meltdown, one of the UK's most successful saloon car drivers as well.

Let's start with the car. Originally built by Collins Motorsport in 1994 in order to compete in the Modified Saloon Challenge, the first five years of its life were not what you'd call hugely successful. Mechanical gremlins and issues with technical regulations ensured that, while it showed plenty of potential, the trophy cabinet remained bare. The Escort changed hands in 1997 when it was bought by a certain Robert Wright, but despite the Scotsman's best intentions to prove its worth in the same championship, it took part in just a handful of races before it was taken to bits with the intention of taming what was described at the time as 'a bit of a thoroughbred'. It wasn't that Collins had done a bad job of putting it together, far from it, it was just that the hugely impressive technical spec had proved to be too much for anything other than a full works team to handle. It was while it was in bits though, that Wright was offered a wad of cash in exchange for the rolling shell and the box of parts required to put it back together again. Julian Swayland of Brands Hatch based BSW

Motorsport (a company no longer in operation) was the man behind the deal, in partnership with multiple Thundersaloon champion 'Hot' Rod Birley, and the pair took delivery of the car in late '98.

"It might have been advertised as a rolling shell," remembers Rod. "But what we actually found was that the car was fixed to a set of supermarket trolley style wheels that had been attached to the bottom of the airjacks in order to move it around!"

Not a very glamorous start to proceedings then. Tasked with screwing the car back together in time for the 1999 season Rod's team was more than capable of completing a fair chunk of the work itself, although it soon transpired that some of the jobs were going to be best tackled by individual specialists. The wiring for instance, was a complete mess, so local expert Simon Lambert of Si-Leck was drafted in to design and re-fit a brand new bespoke loom while the engine itself was dispatched to Ford tuning maestro Harvey Gibb of Specialist Car Services (SCS) for a complete re-build. Featuring a long studded 200 block, Cosworth pistons, SCS spec cams and big bore head, a knife-edged crank, standard rods, eight grey injectors, a Garrett T4 turbo and an RS500 inlet manifold it may not sound like the most outrageous engine by today's standards, but it's one that's good for a solid 540bhp at 32psi and 460lb ft of torque. In a car that now weighs just 1160kg including driver, that's plenty.

Besides, reliability is a big issue when building a successful racer and when you learn

that Rod has been using Harvey Gibb's services ever since, it really says a lot for the quality of his workmanship.

"The engine has been built to provide big power but it's not at the expense of driveability or reliability," explains Rod. "I only use full boost when I have to, most of the time I settle for about 490bhp, and apart from regular maintenance between races it only goes back to Harvey for a re-build at the end of every season. Maintenance does play a big part in the car's success and if it wasn't for the skill and dedication of our mechanics Barry Reynolds and Stewart Bevan things would be a lot more stressful indeed."

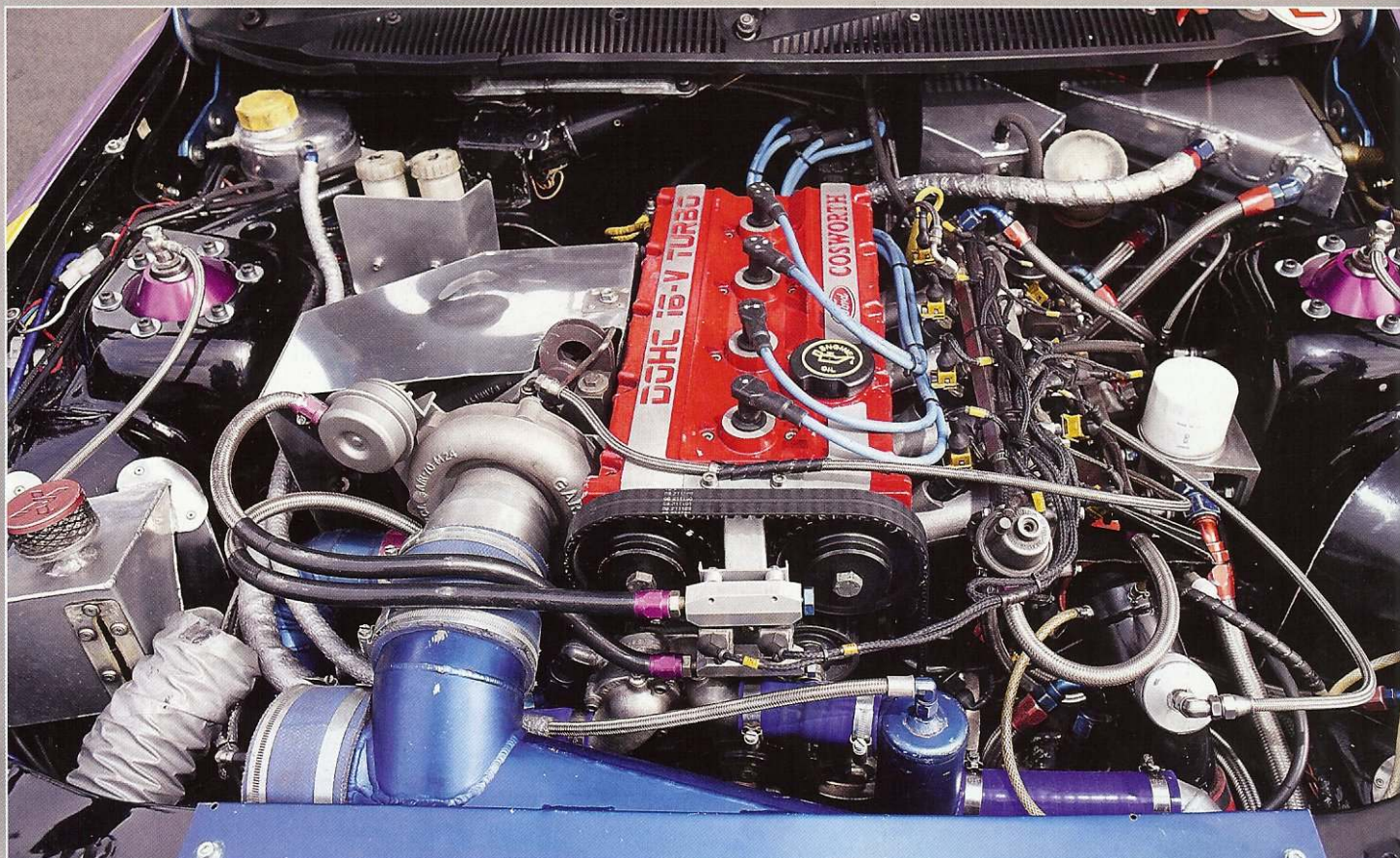
In addition to the engine work, further upgrades were made to the fuel tank, which was changed from a racing bag to a Brise alloy item, with further alloy tanks under the bonnet for water and engine oil, including one for the wet sump system.

"We did consider a dry sump system," said Rod, "but because of the way that it bolts to the front diff, it was always going to be easier and less expensive to stick with the wet one. It's not let us down yet."

The gearbox was another area that demanded expert attention and this was sent to Pete Doughty of AS Doughty Engineering Ltd for a re-build. Doughty, who is himself a former British tarmac rally champion, offered up one of his motorsport spec MT75 six-speed conversions and the straight-cut, H-pattern 'box works in combination with X-Trac limited-slip diffs and driveshafts. It's a touch on the noisy side



escort cosworth



according to Rod, but it's another item that's withstood the test of time well.

"We've played with different ratios over the years in order to find a set-up that's a compromise for a range of circuits," he admits, "but as a whole it's proved to be really strong."

So, with drivetrain and powerplant sorted, the Escort was finally in a state to start winning and, as if to make up for the first five years, it did so in style with multiple victories in its first year under the Birley/Swayland partnership. This, however, was just the beginning.

Rod eventually bought the car outright and in the subsequent years the overall package has continually evolved, but with such a high spec in the first place, you're probably thinking that the Escort is virtually indistinguishable from the machine that was doing the rounds at the turn of the new millennium. Well, on the face of it, it hasn't actually changed all that much. The Harvey Gibb Cosworth is still running to the same spec, the chassis still runs the Group A rear beam and it still features the beautifully prepared Ford Motorsport magnesium arms and rose-jointed system that it did all those years ago. Similarly, it still has the same carbon fibre bonnet, front wings, doors and tailgate, the same Motorsport shell and Group A rollcage, the same AP Racing four-pot brakes (330mm discs at the front with 315mm at the back) and the same distinctive 10x17" Revolution alloys.

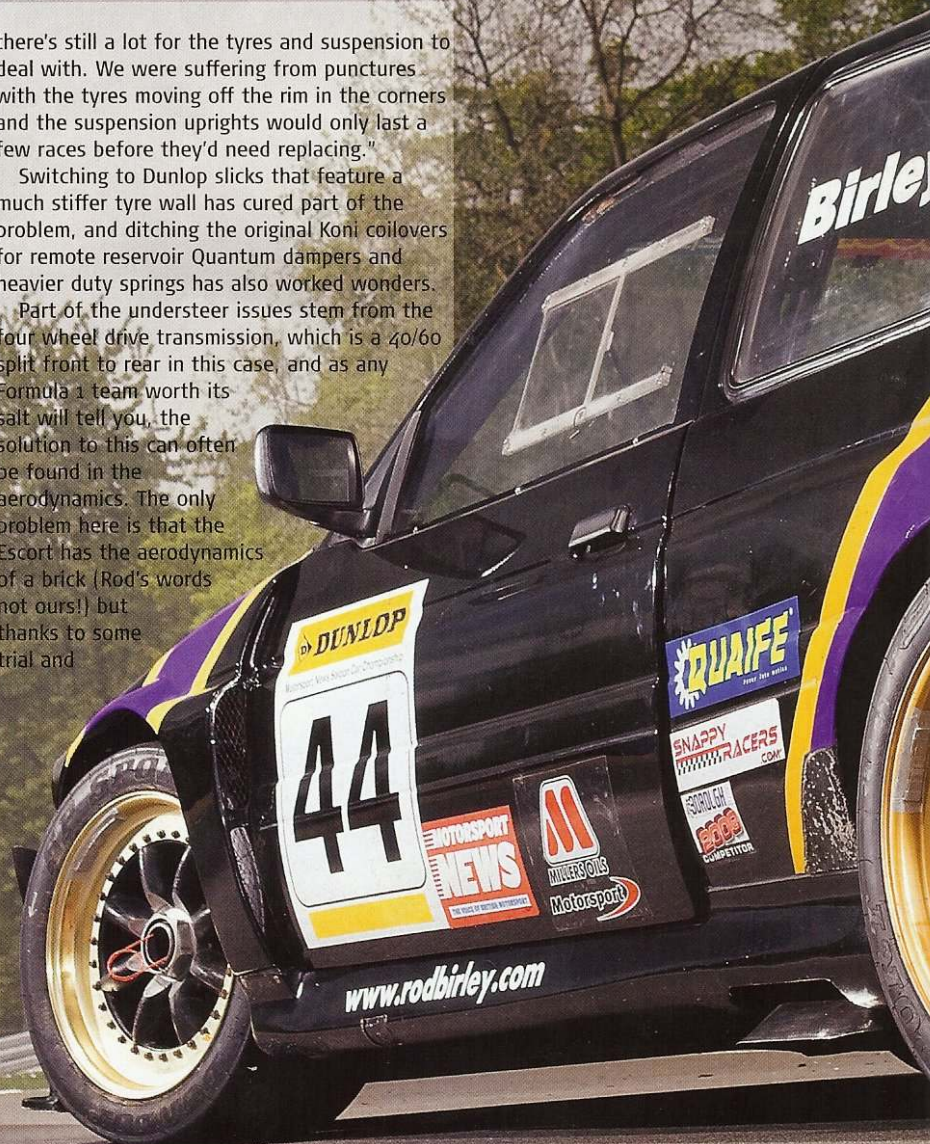
The changes that have been made then are harder to spot and have been a direct result of the 4WD Escort's two biggest disadvantages, which according to Rod are its weight and its natural understeer.

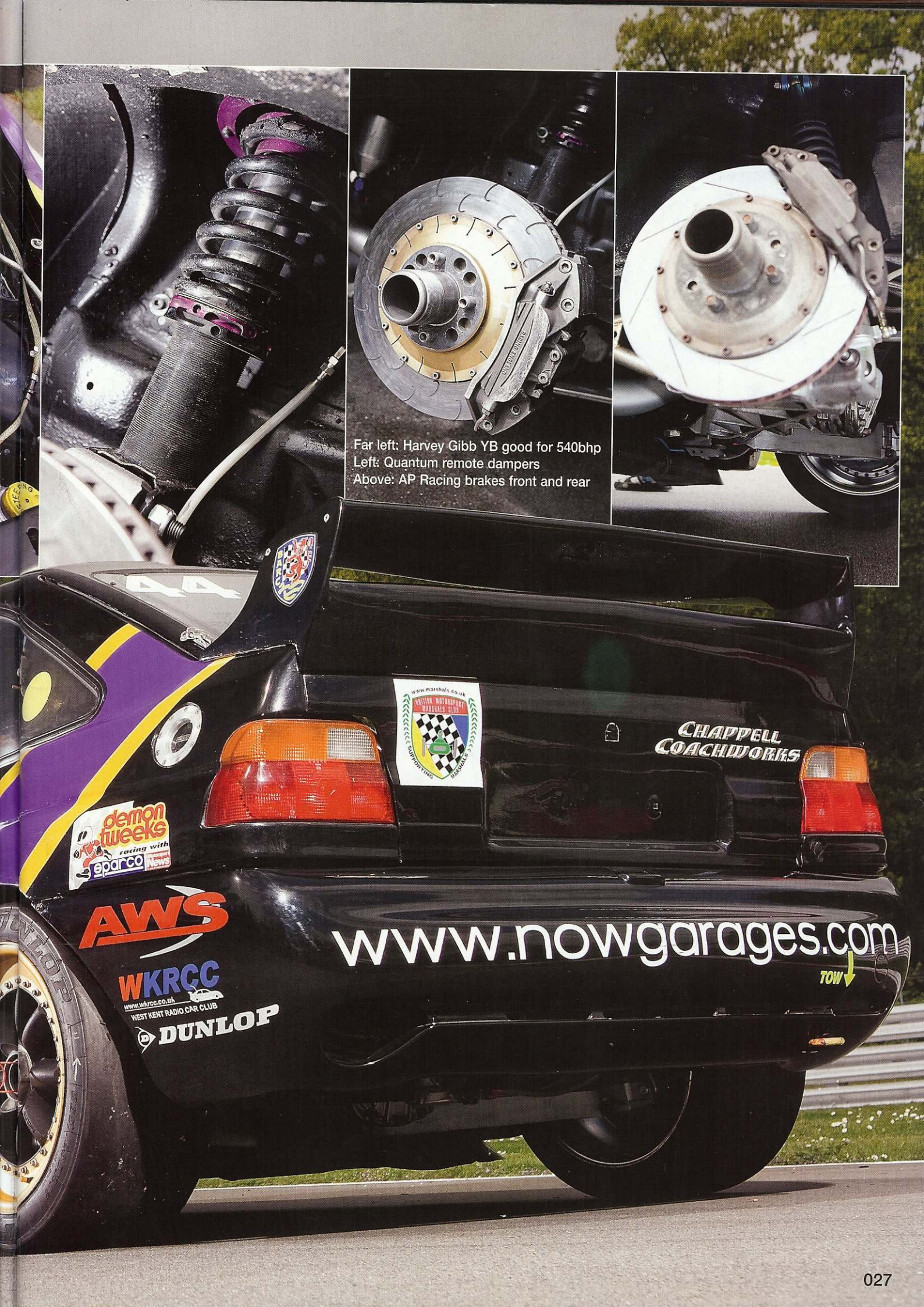
"We've tried to loose as much unwanted ballast as we could, so items like the airjacks were removed very early on," explains Rod. "but even with as much weight removed as possible

there's still a lot for the tyres and suspension to deal with. We were suffering from punctures with the tyres moving off the rim in the corners and the suspension uprights would only last a few races before they'd need replacing."

Switching to Dunlop slicks that feature a much stiffer tyre wall has cured part of the problem, and ditching the original Koni coilovers for remote reservoir Quantum dampers and heavier duty springs has also worked wonders.

Part of the understeer issues stem from the four wheel drive transmission, which is a 40/60 split front to rear in this case, and as any Formula 1 team worth its salt will tell you, the solution to this can often be found in the aerodynamics. The only problem here is that the Escort has the aerodynamics of a brick (Rod's words not ours!) but thanks to some trial and





Far left: Harvey Gibb YB good for 540bhp
Left: Quantum remote dampers
Above: AP Racing brakes front and rear

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FORD FACTS

ENGINE

Harvey Gibb race spec 2.0-litre Cosworth, long studded 200 block, nicosil liners, Cosworth pistons, standard rods, knife-edged crank, big bore head, RS500 inlet manifold, 8 grey injectors, Garrett T4 turbo, Weber P8 ECU, 540bhp @ 32psi, 490bhp @ 1.7 bar, 460lb ft

TRANSMISSION

AS Doughty Engineering 6-spd straight-cut gearbox, X-Trac diffs and driveshafts, 4WD

SUSPENSION

Quantum remote reservoir dampers

CHASSIS

Ford Motorsport shell, Group A rollcage, Group A rear beam, Ford Motorsport magnesium arms, rose-jointed, carbon bonnet, front wings, doors and rear hatch, power steering, heated front screen, plastic windows, carbon door cards, 1160kg

BRAKES

AP Racing four-pots, 330mm discs front, 315mm discs rear

WHEELS & TYRES

10x17inch Revolution alloys, Dunlop slicks

THANKS & CONTACT

AS Doughty Engineering

Tel: 07774 252837

petedoughty@btinternet.com

Quantum Suspension

Tel: 01798 875199

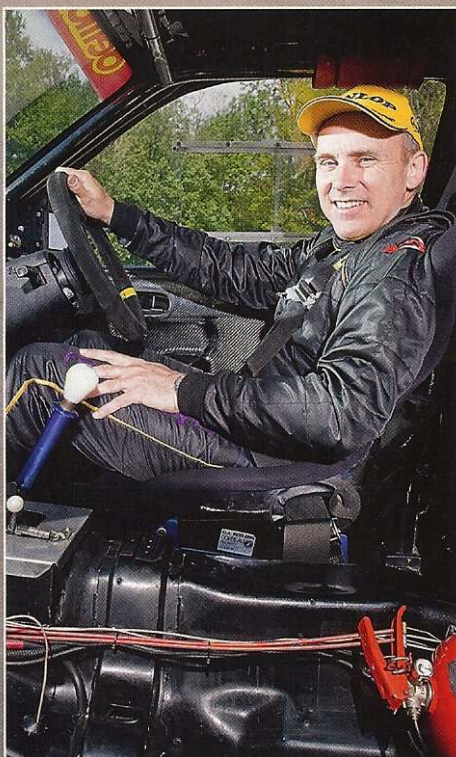
www.quantumracing.co.uk

Harvey Gibb, Specialist Car Services

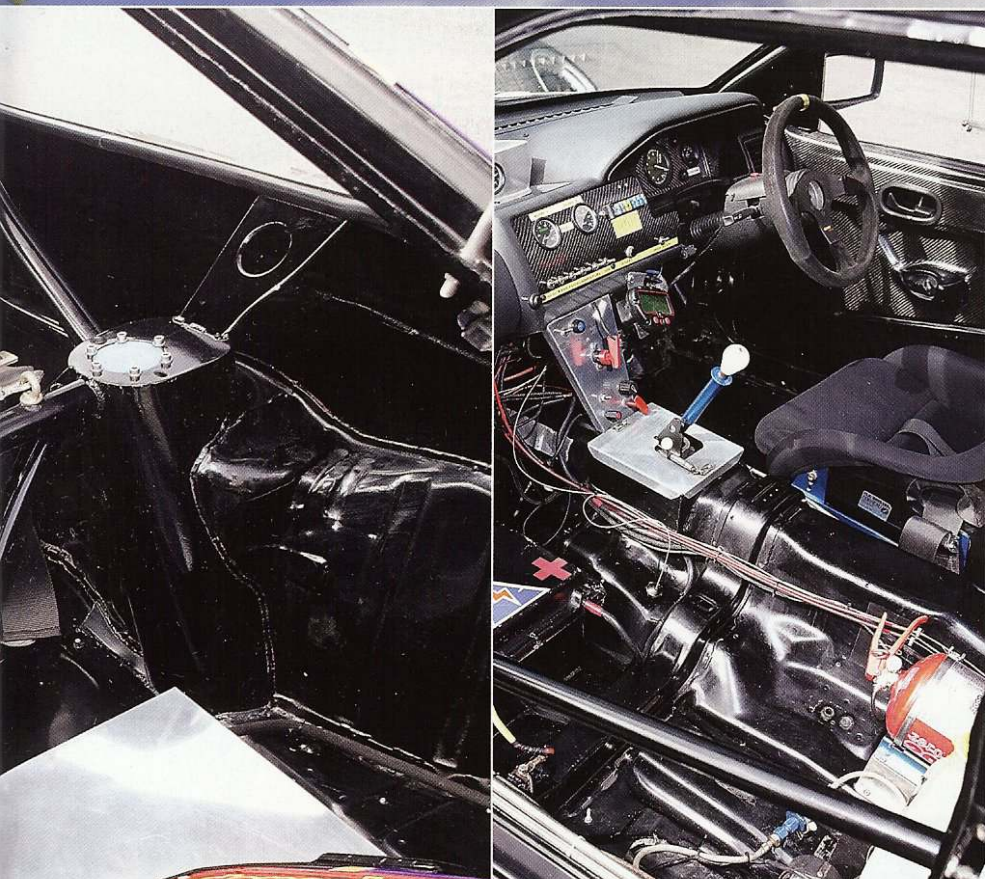
Tel: 01733 576614

www.specialistcarservices.com

www.rodbirley.com



Left: Rod Birley and (above) the place that he spends most of his time at weekends



error development with both the rear wing and the deep carbon fibre front splitter, which now features neat carbon 'winglets' on each front corner, it has been possible to improve matters considerably by adding extra downforce where it's needed.

Other than this it has just been a case of endless experimentation with setup, from anti-roll bar adjustments to damper settings, and the result of all this development is that over the years the Escort has just got quicker and quicker, notching up over 200 wins and, earlier this year, a class lap record of 49.8 seconds around Brands Hatch Indy. To put that into perspective for those that aren't familiar with lap times around Brands, this would have put him among the front four or five cars for qualifying in the opening rounds of this year's British Touring Car Championship at the Kent circuit.

"I've dipped below 50 seconds in practice before," said Rod. "But this was the first time I'd managed it in a race!"

But then he is no stranger to lap records. As the holder of the fastest outright saloon car lap at Brands Hatch, a time of 48.6 seconds which was set in his old Cosworth powered Honda Prelude, Rod's CV is mightily impressive (check out rodbirley.com for the full lowdown) and it goes some way to explaining why his time behind the wheel of this legendary Escort has been so successful.

There is a certain amount of fallout due to this success though - everyone wants a piece of him! He doesn't have it his own way all of the time of course, he isn't invincible, but the desire to 'beat Birley' has resulted in an increasing amount of serious competition in recent times. Worryingly for them, Rod reckons that there's plenty of pace to be found in his old companion yet...