

DRIVEN SUPERCHARGED EVORA & BMW 1-SERIES M COUPE



evo



AUDI R8 GT
552bhp. 0-62mph in 3.6sec. First drive.

THE THRILL OF DRIVING

WORLD'S FASTEST CARS

268mph Bugatti Veyron Super Sport tested

- + 228mph BMW M5 driven
- + 2400bhp road-legal Corvette
- + Speed myths debunked
- + Our fastest ever drives
- + Red Bull's 280mph supercar



54-PAGE
SPEED
SPECIAL



PLUS

Audi RS5 group test

New quattro takes on M3, Lexus IS-F and Merc C63 AMG

New Subaru WRX STI driven

Return of the 4-door rally icon... but the end of the Impreza. p50



Crash! We bend the world's fastest one-make racer (sorry, Lambo)



JOY DRINKS LIKE A CAMEL.

The new BMW X3 xDrive20d gives you 184 hp and reaches 0–62 mph in just 8.5 seconds, but does so while achieving an impressive fuel consumption figure of 50.4 mpg. Which is great news for everyone, although it might give some petrol attendants the hump. To find out more visit bmw.co.uk/X3

THE NEW BMW X3. JOY WANTS YOU TO HAVE IT ALL.

BMW EfficientDynamics
Less emissions. More driving pleasure.



Official fuel economy figures for the BMW X3: Urban 42.2–46.3 mpg (6.7–6.1 ltr/100 km). Extra Urban 53.3–56.5 mpg (5.3–5.0 ltr/100 km). performance developments and is standard across the model range.



The new BMW X3

www.bmw.co.uk
Tel. 0800 777 117



The Ultimate
Driving Machine



Combined 50.4 mpg (5.6 ltr/100 km). CO₂ emissions 149 – 147 g/km. BMW EfficientDynamics reduces BMW emissions without compromising

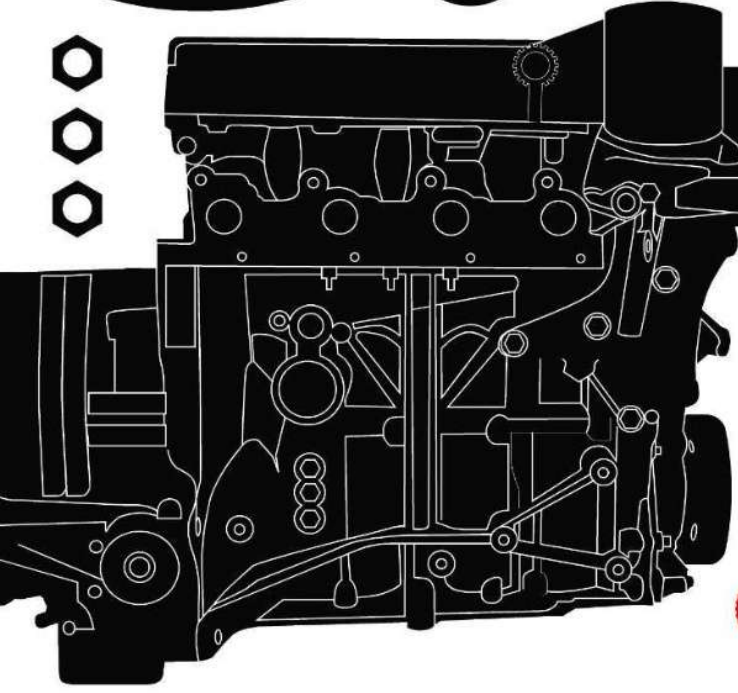


THE NEW AUDI

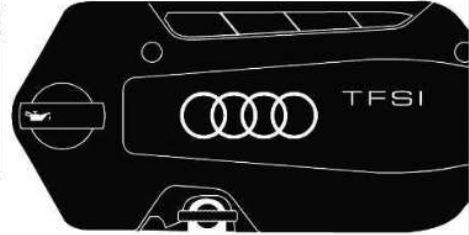
A1



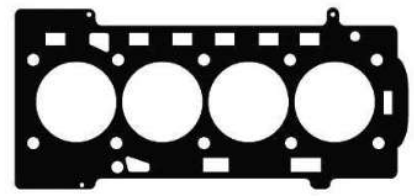
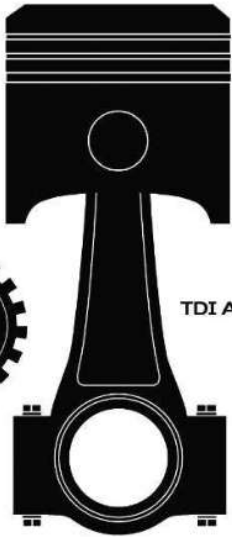
WITH POWERFUL YET EFFICIENT ENGINES



S TRONIC GEARBOX

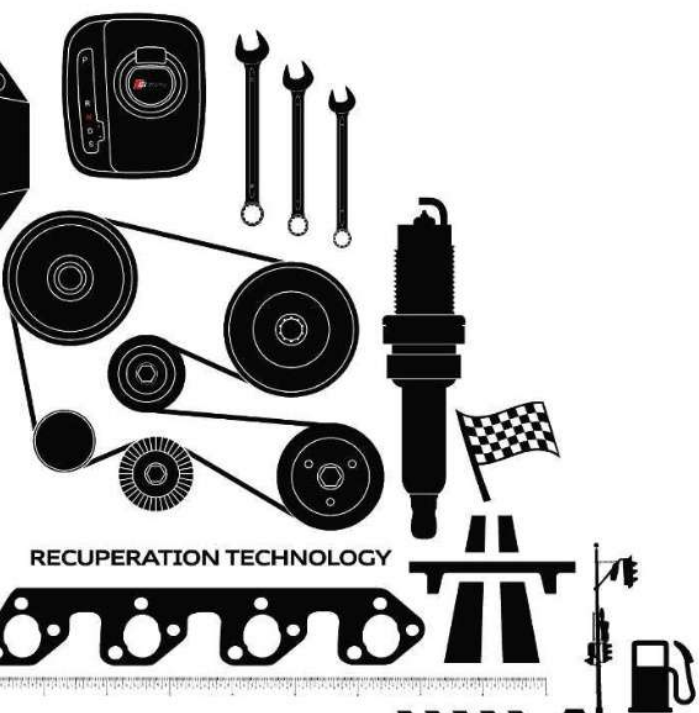


TDI AND TFSI FUEL EFFICIENT ENGINES



START STOP TECHNOLOGY





»»»» **A BIG
IDEA
CONDENSED**





SINGHA



A GLOBAL PARTNER



Mark Webber



Sebastian Vettel

RISING A NEW ERA



Contents

ISSUE 151



012 News

Red Bull doesn't just make fizzy drinks and Formula 1 cars – it does space-age supercars, too

059 Letters

Lotus needs to change, we need to stop driving Nissan Jukes, and Chris Harris needs to man up

064 On the cover: Veyron Super Sport

The world's fastest supercar is the Bugatti Veyron Super Sport. But does 268mph and 1183bhp translate into a useable and engaging road car? Chris Harris and Harry Metcalfe spent a special day with one finding out

078 Top speed stories: fact or fiction?

Supercar speed record stories always attract their naysayers. We split the truths from the myths

080 The world's fastest four-door

G-Power's BMW M5 goes faster than most hypercars...

092 Lamborghini Super Trofeo

Roger Green and John Barker in the world's fastest one-make race series

098 2400bhp Corvette

Jonny Smith rides shotgun in the world's fastest street-legal car

114 Audi RS5 v its rivals

Can the new RS5 beat the BMW M3, Mercedes C63 and Lexus IS-F?

130 Long-term tests

Our Aston Martin Roadster has gone, leaving a frisky Spaniard, a powerful Brit and a big-winged Italian to fight for its parking space

145 Buying Guide: Fiat Panda 100HP

A small bundle of Italian energy for a small handful of cash

178 Me and My Car: Chris Bale and his DeLorean DMC-12

Meet the man who found a DeLorean impossible to resist

DRIVEN

- AUDI R8 GT
- BMW 1-SERIES M COUPE
- SUBARU WRX STI
- AC SCHNITZER ACS4
- LOTUS EVORA S
- FORD C-MAX
- CITROËN DS3 99G

054





The New Škoda Fabia vRS. Made of Meaner Stuff.

Made of 180bhp, twin charged petrol engine with a supercharger and turbo, 17" alloys, 7spd DSG gearbox with steering wheel paddle shifts, LED running lights, rear diffuser, boot spoiler and chrome twin exhaust. No Cake.

Visit skodafabia-vrs.co.uk or your local retailer.

Model shown Fabia vRS 1.4 TSI 180bhp DSG 7spd at £16,155 OTR inc optional black roof at £355.00 and 17" 'Gigaro' black alloy wheels at £100.00. Tinted windows not to UK specification. Official fuel consumption in mpg (litres/100km) for Fabia vRS: Urban 36.7 (7.7), Extra-urban 54.3 (5.2), Combined 45.6 (6.2) CO₂ emissions for Fabia vRS: 148g/km.

SUBSCRIPTIONS

Tel 0844 844 0039

e-mail evo@servicehelpline.co.uk

Online subscriber service Change your address, renew your subscription or report problems at www.subsinfo.co.uk

Back issues Tel: 0844 844 0039

EDITORIAL

Tel 020 7907 6310 Fax 01933 667309

e-mail eds@evo.co.uk

website www.evo.co.uk

Unit 5, Tower Court, Irchester Road, Wollaston, Wellingborough, Northants NN29 7PJ, United Kingdom

Editorial director Harrison Metcalfe

Editor Nick Trott

Road test editor John Barker

Production editor Peter Tomalin

Art director Paul Lang

News editor Ollie Marriage

Features editor Henry Catchpole

Features writer Roger Green

Sub editor Ian Eveleigh

Senior designer Adam Shorrocks

Staff photographer Chris Rutter

Staff writer Stephen Dobie

Contributing editor Chris Harris

Contributing editor Richard Meaden

Editor-at-large John Simister

Contributing writer David Vivian

Contributing writer Richard Porter

Contributors (words)

Jim Blackstock, Simon de Burton, Simon George, Colin Hoad, Ralph Hosier, David Yu, Jonny Smith

Contributors (pictures)

Richard Stanton, Stuart Collins, Nick Dimpleby, Adam Duckworth, Neill Watson, Max Earey, Malcolm Griffiths, Nanette Schärf, Joe WWW, Gus Gregory, Matt Howell, Matt Vosper

It wouldn't have been possible without

Matthew Bird, Adam Sloman, Jonathan Fargher, Anthony Ward, Stefan Bridges, Mark Chapman, Brian Coombs, Rod Saboury, M Stocard and all at Bedford Autodrome

EVO WORLDWIDE

(Editors-in-Chief)

Croatia  Branimir Tomurad
France  Stéphane Schlesinger

Greece  Dimitris Hatzitolios
Italy  Maurizio Mozzali

Malaysia  Muna Noor
Middle East  Bassam Kronfli

Ukraine  Igor Kravtsov
Thailand  Chettha Songthaveepol

Slovenia  Matjaž Korošak
Czech Republic  Jan Langsdl

Turkey  Burak Ertem
Singapore  Sheldon Trollope

evo is available for international licensing and syndication. email Ornella Roccoletti at Ornella_Roccoletti@dennis.co.uk

ED SPEAK

Tried something new this month. I've kept a diary of the 28 days it takes to put together an issue of evo. Highlights and lowlights here...

Day 1: Great features meeting. 'World's fastest' theme emerging. We're booked on Veyron Super Sport drive, Koenigsegg Agera test lined up, we've got stories on the world's fastest street car and the world's fastest one-make racer in the bag and JB proposes an RS5 group test.

Day 4: Good and bad day. Monkey on phone raving about 1-series M Coupe, Henry off to drive new 4dr Scooby, and RS5 and rivals are in the car park. But... I've fallen out with a major manufacturer. Press officer wouldn't speak to me at Paris show. Arguments rumble on about using non-press cars in features. Fundamental differences but I'm hopeful of a compromise.

Day 6: DS3 99g just arrived. Should we feature it? Not a core evo car but it's more fun than expected. Ideal 'Outsider' methinks. Just driven Harry's new Countach too. FFeellllinnnggg aa bbbittt sshhaakkky. What a rush! Carbs rule. Exhaust pops like a beat-boxer with tourettes.

Day 8: Quiet office. Team on RS5 test but Dickie just texted saying Audi isn't the car they hoped. Pity as our TT RS long-termer just gets better. Might pinch it off Rog now my Aston's gone...

Day 10: evo is properly digital now. Zinio editions selling well and I'm working on a new interactive iPad version of the mag. It's brilliant! Plan is iTunes release by end of November.

Day 12: AM: Production halted by Cold War nuclear bomber! Got a tip-off that Vulcan will be flying at nearby Sywell - entire office decamps. PM: Langy creates shot-list for Veyron drive.

Day 14: Biggest day of the issue, but French trying to ruin it. evo's team of four miss flight connections for Veyron drive because of Gallic strikes. Time is tight: our shot-list is ripped up.

Day 18: Agera drops out. It's not yet representative of the production car. Some mags will 'test' anything but I'm not playing that game. Means we've got an eight-page hole to fill. Gulp.

Day 20: Chat with John Hennessy. Asked if Venom is ready (to replace Agera), but he's a fan of evo and doesn't want us in it until final testing is over. 'I want the car to be right for you guys.'

Day 22: Getting twitchy. Still got eight-page hole but have never put 'fillers' in and not starting now. Slim chance of R8 GT and Evora S drives though. Being pushy with Audi and Lotus...

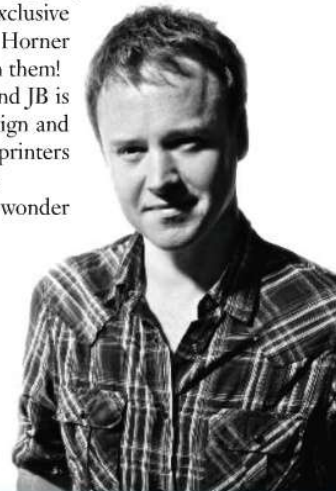
Day 24: Red Bull X1 shots in. Ollie has scored a genuine exclusive but spent the night at the factory to get it. Red Bull boss Horner rescheduled a meeting in the build bays because we were in them!

Day 27: Result. Henry gets first UK drive in the R8 GT and JB is in Spain driving Evora S before main UK press group. Design and production has got one day for layout and subbing before printers scream for the pages. 12-hour days for most of us this week.

Day 28: Deadline day! Just got Ed Speak to put together - wonder what I should write about...



Nick Trott, Editor



EVO ONLINE



EVO ON ZINIO

Brilliantly vivid digital editions of evo now at www.zinio.com. View on your Mac, PC or iPad and tell us what you think at eds@evo.co.uk



GIFT SUBSCRIPTIONS

Your Christmas pressie hunting is over! Visit www.magazinesdeals.co.uk/motoring for 6 issues of evo for £19.99 and 12 for just £39.99.



CARBUYER.CO.UK LAUNCHED

From the people who bring you Auto Express and evo, a new easy-to-use website that does exactly what it says on the, er, screen.

HEROES OF THE MONTH

THE BLADON BROTHERS

It's amazing what we Brits get up to in our garages and sheds. Take twin brothers Paul and Chris Bladon, who built trick racing motorcycle engines in their farm shed for years until one day Paul thought he'd have a go at making a micro jet engine. The brothers worked all hours on the idea until, in 2004, they finally ran their tiny jet engine for the first time. Paul sadly died from cancer in 2008 but Chris (right) continues the project, now in partnership with Jaguar (see page 18). Good work, chaps!



NEXT ISSUE

QUESTION:

WHAT HAS 5059BHP,
COSTS £1.413M AND
EATS 18.5*
PETROL STATION
SANDWICHES A DAY?

ANSWER:

THE
2010
EVO CAR
OF THE
YEAR
TEST

* There's always half an egg-and-cess sandwich left

ON SALE WEDS DECEMBER 8

evo

www.evo.co.uk

MOTERING ADVERTISING
AND PROMOTIONS

Tel 020 7907 6773 Fax 020 7907 6601
e-mail ads.evo@dennis.co.uk
30 Cleveland Street, London W1T 4JD

Group advertising director
Des Flynn (020 7907 6742)

Advertising director
Sarah Perks (020 7907 6744)

Deputy advertising manager
Tim Deeks (020 7907 6773)

Account director
Shaza Agabani (020 7907 6745)

Account manager
Helen Ruane (020 7907 6771)

Senior advertising executive
Justin Viljoen (0207 907 6772)

Advertising executive
Finn Russell-Cobb (0207 907 6743)

Creative solution director
Rob Osbourn (020 7907 6708)

Lifestyle director
Sophie Kochan (020 7907 6741)

Production controller
Michael Hills (tel: 020 7907 6129,
fax: 020 7907 6066, ISDN: 020 7580 0297)

Newstrade director
Martin Belson (020 7907 6150)

Subscriptions manager
Laura Paterson (020 7907 6148)

Communications and inserts director
Anthony White (020 7907 6472)

Director of advertising
Julian Lloyd-Evans (020 7907 6608)

Direct marketing director
Steve Price (020 7907 6147)

Marketing
Alex Seeberg (020 7907 6881)

International licensing
Ornella Roccoletti (+44 (0)20 7907 6134
Ornella_Roccoletti@dennis.co.uk)

Events manager Jemma Ryan (020 7907 6470)

Competitions Lauren Haxell (020 7907 6127)

Syndication sales Anj Dosaj-Halai
(020 7907 6132 Anj_Dosaj-halai@dennis.co.uk)

DIGITAL

Advertising manager
Elaine dela Cruz (020 7907 6806)

Publishing director Geoff Love

DENNIS MOTERING
Managing director Ian Westwood

DENNIS PUBLISHING LTD
COO Brett Reynolds
Group finance director Ian Leggett
CEO James Tye
Chairman Felix Dennis



evo is published under a license from Evo Publications Ltd, a subsidiary company of Dennis Publishing Limited, United Kingdom. All rights in the licensed material belong to Felix Dennis, Evo Publications or Dennis Publishing and may not be reproduced, whether in whole or in part, without their prior written consent. evo is a registered trademark.

Photographic repro by Gildenburgh Ltd, 30 Stapledon Road,

Orson Southgate, Peterborough, PE2 6TD. Tel 01733 391181

Printed by BGP, Bicester, Oxfordshire OX26 4QZ

Distributed by Seymour, 2nd Floor, 2 East Poultry Avenue, London EC1A 9PT Tel: 020 7429 4000. Fax: 020 7429 3625

e-mail: seymour.co.uk

ISSN 1464-2786
USPS 024-183

The Editors and Publishers of this magazine give no warranties, guarantees or assurances and make no representations regarding any goods or services advertised in this edition.

The paper used within this magazine is produced from sustainable fibre, manufactured by mills with a valid chain of custody



When you have finished with this magazine please recycle it.

Evo (USPS 024-183) is published monthly by Dennis Publishing Ltd, 30 Cleveland Street, London, W1T 4JD, United Kingdom. For subscriptions in the USA, visit www.imsnews.com or phone 800.428.3003. Airfreight and mailing in the USA by Agent named Air Business, C/O Worldnet Shipping USA Inc., 149-35 177th Street, Jamaica, New York, NY 11434. Periodical postage paid at Jamaica NY 11434. US Postmaster: Send address changes to Evo, Air Business Ltd, C/O Worldnet Shipping USA Inc., 149-35 177th Street, Jamaica, New York, NY 11434. Periodical postage pending at Jamaica NY 11434. Subscription records are maintained at by Dennis Publishing Ltd, 30 Cleveland Street, London, W1T 4JD, United Kingdom. Subscription prices: UK £42.99, Europe £48.20, USA \$99, Rest of World £78.40. All for 12 issues.



WARNING FAST NEEDS NO FRIENDS

People with relationships are advised against the playing of this game. Connecting to **NEED FOR SPEED™ AUTOLOG** enables extreme competition through precise documentation of friends' records and stats. Hard feelings. Creative profanity. Grudge matches likely. Electronic Arts™ and Need for Speed accept no liability for the dissolution of friendships, families, intimate relationships & partnerships.

NEED FOR SPEED HOT PURSUITS

19TH NOVEMBER 2010

Go to uk.needforspeed.com to learn how fast turns friends to foes.



© 2010 Electronic Arts Inc. EA, the EA logo, Need for Speed, the "N" icon and the Need for Speed logo are trademarks of Electronic Arts Inc. Trademarks and logos used under license from Aston Martin Lagonda Limited. The BMW logo, wordmark and model designations are trademarks of BMW AG and are used under license. Trademarks, design patents and copyrights are used with the approval of the game's publisher or exclusive licensee. Bugatti International S.A. The trade dress, logos, symbols and design rights in and associated with Lamborghini, Lotus, Lotus Evija, Lotus Evija GT and Evija GT are used under license from Lamborghini. Audi/Mercedes S.A. Italy. The McLaren name and logo are trademarks of the McLaren group of companies. The Mercedes-Benz name and three-pointed star device are registered trademarks of Daimler AG. Nissan and the name, logo, marks and designs of the NISSAN products are trademarks and intellectual property rights of NISSAN MOTOR CO., LTD. and used under license to Electronic Arts Inc. Pagani, Zonda, Omnia and designs are trademarks and/or other intellectual property of Pagani Automobili and are used under license to Electronic Arts. Porsche, the Porsche crest, 911 Carrera, Turbo, Boxster and Panamera are registered trademarks of Dr. Ing. h.c. F. Porsche AG. Microsoft, Xbox, Xbox 360, Xbox LIVE and the Xbox logo are trademarks of the Microsoft group of companies and are used under license from Microsoft. The names, designs, and logos of all products are the property of their respective owners and used only by permission. All other trademarks are the property of their respective owners.





WORLD EXCLUSIVE PICTURES

RED BULL'S VIRTUAL RACER BECOMES REALITY

IT STARTED LIFE IN
GRAN TURISMO 5,
NOW IT EXISTS AT
RED BULL'S F1 HQ.
OLLIE MARRIAGE
GETS UP CLOSE
TO THE AMAZING
X1 PROTOTYPE

For several minutes all I can do is walk around it in a slightly bewildered manner. Apparently this reaction is normal. Twenty minutes before we arrived, the man largely responsible for the X1 Prototype's existence, Red Bull technical director Adrian Newey, had dropped in for a sneaky peak. 'He was gobsmacked,' one of the crew tells me, adding, 'wish

we'd got a picture of his face!'

The X1 is, by any stretch of the imagination, a mad looking thing. But what exactly is it? In fact it's the answer to a question posed to Newey by Kazunori Yamauchi, CEO of Sony-subsidary Polyphony Digital, the firm responsible for the legendary *Gran Turismo* racing games. The question: what would a no-limits F1 car be like?

By sheer coincidence, *evo*'s Roger Green had posed the very same question to Newey in last month's

Planet Evo interview, to which Newey replied: 'It would need to have active aero. You would probably include the fan of the Chaparral for low-speed performance and then bolt that to the biggest engine you could find.' All of which would prove prescient, although unfortunately Newey didn't go on to say, 'Half a mo, Rog. I've been having a good think about this recently – have a gander at this.'

But then a month ago this car only existed on a computer. The X1 will



**'THE X1 PROTOTYPE IS THE ANSWER TO THE QUESTION:
WHAT WOULD A NO-LIMITS F1 CAR BE LIKE?'**

'THE X1'S TECHNICAL SPECIFICATION HAS BEEN WORKED OUT TO THE NTH DEGREE'





Above: exhausts exit from upper bodywork. Left: F1-style wind-speed sensor on the X1's nose. Bottom left: X1 model in the early stages of build

be *Gran Turismo 5*'s killer car, and according to our Sony source 'it'll be the hardest car to win and by far the fastest and best handling'. Now, in a somewhat ironic twist for a computer game company used to digitising real cars, here's one that's making the leap from pixels into reality.

It's currently parked in one of the pristine F1 build bays at Red Bull's Milton Keynes HQ. Next door is Mark Webber's 2009 car. Beyond that, this year's car, stripped of all bodywork and presumably fresh back from a disappointing Korean GP, is being diligently worked on. If we wanted a rapid, your-feet-won't-touch-the-ground exit, pointing a camera in that direction right now would be a good way of achieving it. I know this because when I innocently wander around last year's RB5 taking a few happy snaps, our minder makes me delete almost all

of them. Apparently the rear diffuser is still a sensitive area. So I hope I'm not going to get in any trouble by telling you that the top of the engine in this year's car doesn't even reach your knees. It's staggering.

The people round here are used to it, though. What they're clearly not used to is the X1. Final assembly only took place this morning and the project has been so secret that, even here, few people know what's been going on. But word has clearly filtered round and, by late afternoon as shifts are finishing, pockets of workers turn up to have a look. I catch snippets of conversation as people much cleverer than me consider the aerodynamic shape, the wheel spats, the looks and sheer potential. 'Wish we could build it' seems to be the general consensus.

It should be pointed out that this is only a model, albeit a beautifully

PLAYING GT5

■ How does the X1 Prototype drive? For now, the only way to answer that question is by getting behind its wheel in *Gran Turismo 5*. Red Bull Racing's Sebastian Vettel (pictured below) already has, and he has been setting some stunning lap times: video on the *GT* website shows him lapping the Nürburgring GP circuit in 1min 4.853sec. The fastest lap in last year's F1 race there was 1min 33.365sec...

We've had a go with *GT5*, too – even though it isn't expected to go



on sale until early December. An encoded PlayStation 3 was delivered by courier to the *evo* office and we wasted no time in hooking it up to an HD television. There were restrictions – one of which was that we couldn't drive the X1. Nevertheless, the game blew us away with the detail of its graphics. Spin off at Dunsfold (the *Top Gear* test track) and you can actually see the texture of the grass. And, yes, the crash damage is realistic, too...

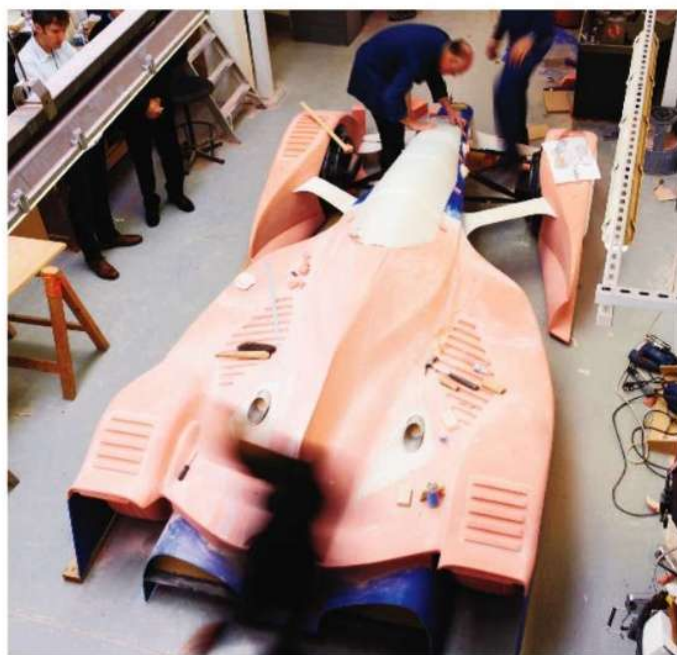
rendered and detailed one (it'll get its first public outing at the game's mid-November launch in Madrid), but a driveable, fully functioning version *could* be built – the technology is all currently available in F1.

I ask Newey if there is any possibility such a car *will* be built? 'In reality probably not,' he says, 'because the budget required to do even a simplified version of it would be pretty big, and unless you're going to do the job even halfway properly there's little point in starting it at all.'

On that subject, though, where did the X1 start? 'My initial involvement was the specification and plans. Yamauchi did the first proposal and brought it to the UK. We went through various aspects, made a second evolution and there was a bit of to-ing and fro-ing from there. I remember very clearly that my first sketches were done on a skiing holiday in February, though!'

Newey has clearly enjoyed the freedom afforded to him by the project. 'It's refreshing to turn your mind to something where regulations aren't a factor,' he says, 'because obviously with my day-to-day work, regulations are key to how we design the car, so there's a bit of escapism involved, if you like. The X1 has been fun as a sort of "what if?" project...'

That may be the case, but don't for a minute think that Newey has skimmed on detail. The X1 has been designed with the help of Red Bull's CAD software, so the technical specification has been worked out to the nth degree. We know it weighs 615kg with fluids onboard, is 4750mm long and 2180mm wide (an F1 car is only 1800mm wide, which makes the X1 a very tight fit in the transporter) and





'THE PERFORMANCE IS NOTHING SHORT OF ASTONISHING. 0-200MPH IN 6.1SEC AND A TOP SPEED OF OVER 280MPH'

less than a metre high.

Contrary to early reports, it doesn't feature a futuristic gas-turbine powerplant, but a 'conventional' F1-derived direct-injection 3-litre V6 with twin turbos, claimed to be good for 1483bhp at 15,000rpm and 526lb ft at 12,000rpm. The resulting performance is nothing short of astonishing, the claims being 0-60mph in 1.4sec, 0-120mph in 2.8sec, and 0-200mph in 6.1sec. Maximum speed is projected as being 'over 280mph'.

Where the X1 steps away from Formula 1 technology is in its active suspension and aerodynamics. The rear-mounted fan sucks air out from

under the car, alone generating a 1000kg of downforce. At 186mph the front wing contributes another 366.7kg, the rear 347.7kg. And that's with the wings in a fixed position. 'It would be very easy for it to have an active wing,' says Newey.

Calculations have shown that lateral loads could top 8G. Just as I'm thinking the tyres would never cope, I read the bit in the technical brief that details tyre load and friction. Like I said, this project has been done properly.

What gets me most is how much sleeker and more fluid the X1 looks than an F1 car. Apparently the front wheel spats improve airflow hugely

compared with an F1 car, allowing the bodywork to be smoother. There are parallels to be drawn with the Caparo T1, but the X1 also has clear F1 lineage and, from low angles, hints of Le Mans Prototypes. And insects.

My favourite viewing angle is from overhead, though, tracing the lines that start at each front wheel, curve in along the thick carbon support strut, then get picked up on the other side of the cockpit, following the bodywork round to the rear wheel; the two lines together create an 'X' shape. It looks like a Transformer caught mid-change, arms just popped loose from the body.

One last question for Newey: could

the X1 actually be driven by a human? 'It would be difficult to create an environment whereby the driver could survive those sort of G forces for a race distance rather than a single lap,' he says, 'but a combination of driver training and restraints – particularly for the head and neck – mean it would be possible.' Gamers won't have to worry about such issues, though their thumbs might struggle to keep pace.

It is just a model, but as it sits there in the F1 build area, looking companionably at home alongside Webber and Vettel's weekend steeds, I can't help but feel that the X1 is a sign of things to come.



Left: Ollie looks on as the Red Bull team puts the finishing touches to the X1 model in an F1 build bay. Below: suspension is taken from last year's RB5 F1 car. Right: fan could create 1000kg of downforce by sucking air from beneath the car – the same highly effective concept was used briefly in F1 in the late '70s before being withdrawn (see opposite page)



SEE BEHIND THE SCENES VIDEO AT EVO.CO.UK

Though it's usually the case that carefully framed rules and regulations curb the wilder and more radical engineering ideas, motorsport has occasionally allowed flashes of mad genius. Here we celebrate Formula 1's most unusual creations – and other gloriously non-conformist racers.

FORMULA 1

Brabham BT46B, Lotus 88 and Williams FW08D

■ Colin Chapman is credited with bringing 'ground-effect' aerodynamics to F1 in the mid-1970s, but it's Gordon Murray's BT46 'Fan Car' that's remembered for taking the principle to the extreme.

Developing an idea pioneered in Can-Am by Jim Hall of Chaparral fame, Murray used a huge fan to extract air from the engine compartment of the BT46. He claimed the fan's primary role was to cool the flat-12 Alfa Romeo engine, but in truth this function was merely a welcome by-product of sucking air from beneath the car, through the sealed engine bay and out through the rear-mounted fan.

Despite protests from rival teams, the car was declared legal and Niki Lauda took it to victory in the 1978 Swedish Grand Prix. Recognising the rift his car's advantage would cause, team owner Bernie Ecclestone took the decision to then withdraw the BT46B for the good of the sport.

When the FIA moved to restrict ground-effect aerodynamics by raising ride heights, it was fitting that Chapman arrived at the most elegant solution, designing the revolutionary 'twin-chassis' Lotus 88 for the 1981 season. The outer chassis carried the bodywork and had the sole purpose of generating and exerting massive amounts of downforce directly onto the suspension uprights to which it was attached. This allowed the inner chassis – which supported the tub, engine and transmission – to remain isolated from the huge, suspension-compressing aerodynamic downforce exerted by the bodywork, and spared the driver



Above: 910bhp Monster Sport SX4 Pikes Peak special. Left: go-kart-sized Shadow Can-Am car from 1970 sported a 740bhp 8-litre V8. Bottom left: the huge fan that sucked air from beneath the Brabham BT46B

from the unbearable pummeling experienced by drivers of conventional ground-effect cars. Thanks to protests from rival teams, the Lotus 88 was declared illegal and never raced.

If the quest for downforce has remained a constant in modern F1, the search for better traction has led designers to explore many different concepts. In the 1960s the Ferguson P99, BRM P67, Lotus 63, Matra MS84 and McLaren M9A all explored four-wheel drive, but the increased weight and nose-heavy handling balance rendered them uncompetitive.

However, in the late 1970s and early 1980s, both March and Williams returned to the idea, combining it with low-drag principles pioneered in another great F1 oddity, the six-wheel Tyrell P34.

With two wheels at the front and four driven wheels at the rear – all of them smaller than conventional F1 rear wheels – the March 2-4-0 of 1976 showed great promise in early

tests, but ultimately came to nought thanks to March's meagre finances.

The Williams FW08D never raced either, but it took the same concept far enough to give the rule-makers sleepless nights. Its pace around Donington Park was sufficient for four-wheel drive and six-wheel designs to be outlawed from Formula 1 from 1983 to this day. Shame.

CAN-AM Shadow AVS Mk1

■ The 1970 Can-Am season epitomised no-rules racing. The Chaparral 2J 'Sucker Car' is the most famous from that year, but the lesser-known Shadow Mk1 was arguably the more radical. The concept was simple: stick an 8-litre, 740bhp Chevrolet V8 into something as close as possible in size and frontal area to a go-kart. The result is one of the craziest racing cars of all-time.

Using 10in front and 12in rear wheels, the Mk1 was so low it forced the driver to contort his legs and feet to reach into the footwell, where there was only room for throttle and brake pedals. The clutch was controlled from the steering wheel, pre-dating current F1 practice by four decades.

The low-drag shape gave it 20mph on its nearest rival in a straight line – 190mph versus 170 on the Mosport Raceway's main straight – but the rear-biased 25/75 weight distribution made cornering hairy!

Shadow founder Don Nichols captured the maverick spirit of Can-Am when he said of the Mk1, 'If I wanted to be ordinary, I could have bought a McLaren.'

PIKES PEAK Monster Sport SX4 Hill Climb Special

■ Built to compete in the Unlimited class at the Pikes Peak International Hill Climb, Nobuhiro 'Monster' Tajima's outrageous machine is one of the world's great no-limits racers.

Built around a one-off steel spaceframe chassis and clad in carbonfibre panels that bear only a cartoonish resemblance to a Suzuki SX4 SUV, the car is powered by a mid-mounted twin-turbo 3-litre V6 boosted to a screaming 910bhp.

Featuring all-wheel drive, two gargantuan venturi tunnels, and festooned with massive wings to claw downforce from the thin mountain air, Tajima's 1100kg ride is an artful collision of explosive rallycross power and traction, Group C downforce and good old-fashioned Japanese lunacy.

A central driving position helps Tajima place the 840bhp-per-ton projectile within millimetres of the mountain's precipitous drops, while a sophisticated management system and those two fat turbos help compensate for the high-altitude power losses. As the Pikes Peak course becomes fully paved, we can look forward to Tajima's creations getting even wilder...

Richard Meaden





IS THIS YOUR NEXT SPORTS CAR ENGINE?

COULD MICRO GAS TURBINES – AS SEEN ON JAGUAR'S C-X75 CONCEPT – REALLY POWER OUR CARS IN THE FUTURE?
OLLIE MARRIAGE AND HARRY METCALFE REPORT

A car powered by gas turbine engines. A Dan Dare-style 1950s vision of the future or a realistic way forward in 2010, as proposed by Jaguar at the Paris motor show last month with its startling C-X75 concept? To get a better idea of whether this is just fantasy or a potential reality, you first need to understand how a gas turbine works.

The principles are very simple and follow the old four-stroke engine adage: suck, squeeze, bang, blow. However, rather than moving the air with four separate piston strokes, here it's a continual process. Air is sucked in at the front, squeezed and ignited, then blown out the back. In a jet, the exhaust forms the thrust. In other applications, like a power station

or a car, the rotation of blades turns the central shaft, which can then be harnessed to a generator or gearbox.

In fact there are two sets of blades. The small rearward fan, spun fast by the hot exhaust gases, is connected to a forward compressor, helping draw more air in, which in turn means more hot air passing through the turbine, spinning it faster and so on.

The history of the gas turbine predates the internal combustion engine, with the first patent awarded in 1791 to power a horseless carriage. Many attempts later, it was Frank Whittle who finally mastered the technology in 1937, and a mere 13 years later Rover had adapted it for automotive use (see opposite). However, despite the efforts of Rover, and later Chrysler and GM, it was quickly discovered that gas turbines

WHO ARE BLADON JETS?

■ Twin brothers Paul and Chris Bladon (pictured right) were highly regarded in the 1980s for their motorcycle race engine work, but when Paul was recovering in hospital from a crash, he set about designing a micro jet engine, intrigued by the technology and potential power.

In 1989, with a prototype designed, the Bladons approached Rolls-Royce, who agreed that the design was clever. However, it didn't want to take it any further. That didn't put the brothers off, though, and by 2002 they'd cracked the major stumbling block – how to machine the tiny turbine blades in a single piece. Sadly Paul died in 2008, but he lived long enough to know of Jaguar's interest in the project.



HM

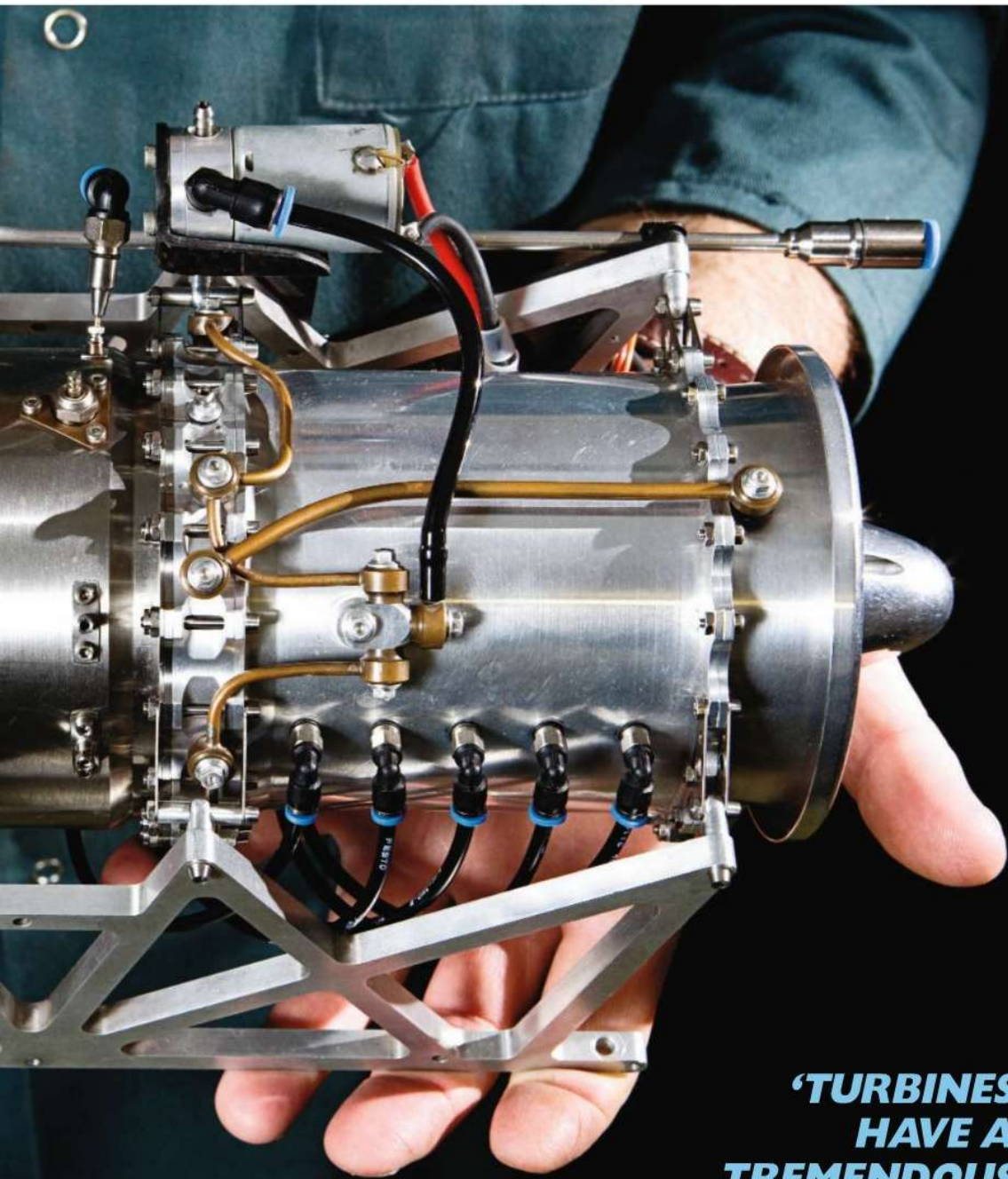
aren't ideal when directly connected to the wheels. There are a number of reasons why, including a lack of efficiency when operating across a wide rev-band, the response delay between throttle application and acceleration, the obvious heat management problems and issues with gearing (turbines spin very fast – around 80,000rpm) and noise.

However, recently the advantages of gas turbines have made firms look at the technology again. They can run on pretty much any fuel, have a tremendous power-to-weight ratio, few moving parts, no reciprocating

energy losses or vibrations and are very smooth. If they catch on, their simple design also means they should eventually be cheaper to make than a regular internal combustion engine.

So instead of having a gas turbine drive the wheels, why not let it work as a range-extender to top up the batteries of an electric vehicle? This is Jaguar's idea with the C-X75, which has been developed in conjunction with Bladon Jets. So small are the micro-turbines developed by Bladon (they weigh just 3kg each yet develop 90bhp) that Jag's designers decided to create a 'jacket' around each of the two fitted





'TURBINES HAVE A TREMENDOUS POWER-TO- WEIGHT RATIO'

to the show car because without them it looked like a couple of hairdryers had been left in the engine bay!

Interestingly, to start the engines Jaguar may use the air suspension pump now fitted to most of its cars. The pump will supply air to a nozzle at the front of each engine, squirting compressed air at the blades and starting the turbine. Fuel will then be injected into the combustion chamber and ignite, causing the engine to spin up to its operating speed of 80,000rpm. Because the turbines are so perfectly balanced, they spin on air bearings (which use a cushion of pressurised

air to eliminate the need for a physical contact between surfaces), meaning no lubrication is required.

Behind the scenes, work at Jaguar's test facility is continuing on the durability of the units. Chris Bladen told *evo* that the trick of how to couple a gas turbine engine spinning at 80,000rpm to a generator is pretty much sorted now, allowing the project to progress to the next stage and real engine trials to take place. Chris is hopeful he will be driving to the next Paris motor show in a prototype gas turbine-assisted electric car. We're hoping to hitch a ride.

KEY TURBINE CARS



ROVER JET 1 1950

■ The world's first gas turbine car, Rover's one-off JET1 hit 87mph during early tests



LOTUS 56B F1 1971

■ With 600bhp (rivals had about 425bhp) the 56B raced in three GPs, its best an 8th at Monza



TOYOTA SPORT 800 1979

■ The first ever turbine hybrid, this concept 800 used a turbine to recharge a battery pack



GM EV1 1998

■ Initially a pure electric car, at the 1998 Detroit show GM put forward a gas turbine proposal



JAGUAR C-X75 2020?

■ Jaguar is intending to use gas turbines as range extenders for in-wheel electric motors

THE CHRYSLER TURBINE

■ I drove the Chrysler Turbine at no more than 60mph, but to this day it remains one of the most awe-inspiring experiences of my career. Unlike the C-X75, its gas turbine propelled the car through a TorqueFlite automatic gearbox. The naturally laggy delivery of the turbine combined with the slush 'box dulled throttle response, but to compensate you simply nailed the gas pedal on corner-entry. Counter-intuitive, but you adapted.

Idling at 19,000rpm, the 130bhp Turbine sounded like a taxiing Boeing. Maximum revs was a scarcely believable 44,500rpm. But it worked. It was driveable. Refined. Smooth. Fifty were built and trialed in 1966, but the US government withdrew its support as the turbine was no more fuel-efficient than a V8. It ran on pretty much any 'fuel', though, including tequila and Chanel No. 5. Now that's 'flex-fuel'... **NT**



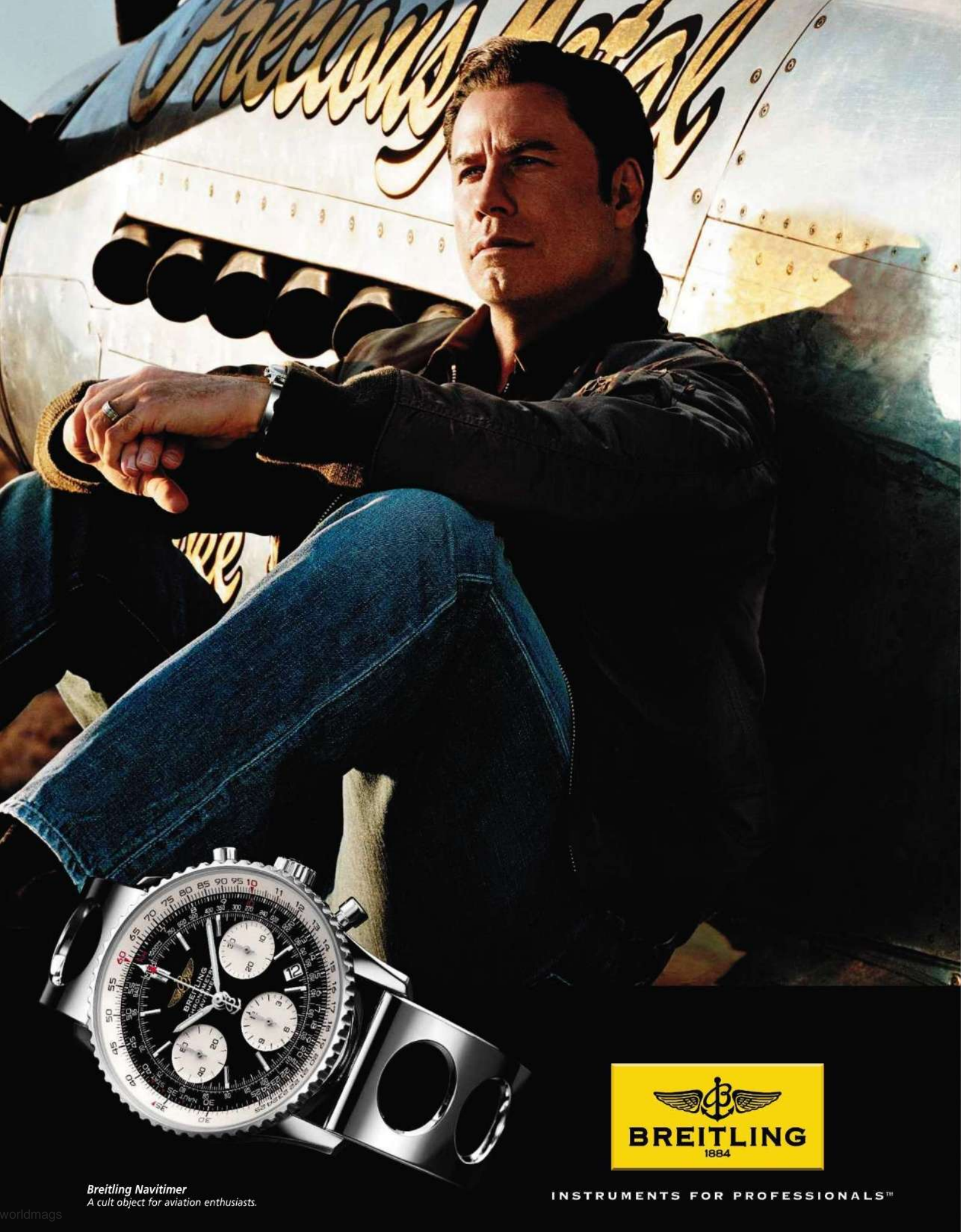


PROFESSION: PILOT CAREER: ACTOR

People are acquainted with the star, the multi-faceted actor. But John Travolta is also a seasoned pilot with more than 6,000 flight hours under his belt, and is certified on eight different aircraft, including the Boeing 747-400 Jumbo Jet. He nurtures a passion for everything that embodies the authentic spirit of aviation. Like Breitling wrist instruments. Founded in 1884, Breitling has shared all the finest hours in aeronautical history. Its chronographs meet the highest standards of precision, sturdiness and functionality, and are all equipped with movements that are chronometer-certified by the COSC (Swiss Official Chronometer Testing Institute). One simply does not become an aviation supplier by chance.

WWW.BREITLING.COM

For your nearest stockist in Great Britain and Ireland telephone 020 7637 5167



Breitling Navitimer
A cult object for aviation enthusiasts.



INSTRUMENTS FOR PROFESSIONALS™

SSC AIMS FOR 275MPH

NEW AMERICAN SUPERCAR OUT TO RECLAIM FASTEST PRODUCTION-CAR RECORD

It doesn't yet have a name, but it does have a mission – to be the world's fastest production car. SSC is taking the fight back to the Bugatti Veyron Super Sport with an all-new carbon-tub supercar to replace its Ultimate Aero model. We won't see the fruits of this project on the road until around March 2012, but SSC, headed by Jerod Shelby (no relation to Carroll), believes it has the design and hardware needed to reclaim the production-car land-speed record.

It was back in September 2007 that SSC bettered the standard Veyron's 253mph max, the Ultimate Aero TT achieving a two-way average of

256.18mph. The record is now back with Molsheim and currently stands at 268mph. Unofficially, SSC is aiming for 275mph, a figure that would seem to have been plucked out of thin air were it not for the tiny firm's proven track record.

The new car's styling is by Jason Castriota, an American who was previously at Pininfarina (where he penned Ferrari's 599) before being made design director at Stile Bertone and setting up his own consultancy. This June he was also announced as Saab's new design director, so it's fair to say he's got a proper CV.

And he's done a stunning job for SSC. Compared with the hunched Veyron,

the American supercar looks amazingly sleek. If it also does the numbers and handles well (spokesman Junus Khan told us this is 'something we're going to focus on more this time, although the Aero never gained the recognition it deserved in that area'), SSC could well hit the big time.

Under the skin is a mid-mounted bored-out version of the Ultimate Aero's 6.4-litre Chevy 'small block' V8, now fitted with new overhead camshafts as well as twin turbos. The 6.8-litre unit is said to rev to 9000rpm and is already delivering 1350bhp on the dyno running 91-octane fuel. It'll drive the rear wheels through a conventional manual gearbox, although a paddleshift will be optional.

A key aim of the new car is to reduce weight by at least 150kg compared with the Aero, the target being a 1200kg dry weight and a power-to-weight ratio of around 1000bhp/ton. To that end it will use a carbonfibre monocoque chassis with aluminium subframes at either end, and will be one of the first cars to feature one-piece carbon wheels, each weighing a mere 5.8kg. An electronically actuated aero-brake will aid stops from high speeds, while everyday useability will be enhanced by a front-lift system to help the long nose negotiate speed bumps.

Not only does the new SSC aim to overtake the Veyron, but it will undercut it too, with a list price just shy \$1m (£625K plus taxes in the UK).

Ollie Marriage



Above: car's design is by ex-Pininfarina man Jason Castriota and shows hints of one of his earlier works, the one-off Ferrari P4/5

'THE TWIN-TURBO 6.8-LITRE V8 IS ALREADY DELIVERING 1350BHP'



AUDI SET TO JOIN FORMULA 1?

PORSCHE CEO HINTS AT VW GROUP'S MOTORSPORT PLANS. BY NICK TROTT



Much has been said about new Porsche CEO Matthias Müller's recent comments on a return to F1 for the Stuttgart manufacturer. I was there when he made them – it was at the Paris show during a low-key chat with the new boss, the day before he officially started his new job.

Did Müller talk about F1? Yes – but in the context of the VW Group and in a response to *evo*'s question about

a return to Le Mans. 'There are two classes and there are two [VW Group] brands in LMP1 – Audi and Porsche,' explained Müller. 'It's not so funny for two brands to compete against each other, so therefore we have to discuss whether it makes sense for one brand to compete in LMP1 and another in Formula 1.'

This can be interpreted either as 'Porsche in shock F1 return' or 'Audi considering F1 graduation'. Which one

BRITAIN



TURBO S EXHAUSTS

Want to release a bit more potential from your new Porsche 911 Turbo S? Two companies have recently released exhaust kits for the latest 523bhp 997. Cargraphic claims a 25bhp increase with a 50 per cent reduction in back pressure and a 5kg weight reduction for its £3717 offering (above). An equivalent system from highly regarded Akrapovic costs £4278 and although the firm makes no claims about extra power, titanium parts help reduce weight by 8kg.



WIN AUTOSPORT SHOW PASSES

Autosport International 2011 takes place at the Birmingham NEC on January 13 to 16. Not only is it your chance to meet some motorsport legends – both drivers and cars – but you can also see the McLaren MP4-12C supercar in the flesh, too. Adult tickets cost £30 per day, children over five £19.50. Visit autosportinternational.com to buy yours, or head to competitions.evo.co.uk for the chance to win a pair of platinum passes. Good luck!



RACE A MAZDA MX-5

Fancy a season racing a Mazda MX-5? You could be in luck. Blendini Motorsport is looking to fully fund someone through the 2011 Mazda Racing Championship, with race entry fees paid and full mechanical support and advice. It's a fantastic prize worth over £25,000, and it's open to both novices and the experienced. A three-round scholarship will decide the winner, and you can register to take part at www.mazdascholarship.com



Left: LED rear lights set in vented panel. Right: vents reduce pressure in wheel arches. Far right: one-piece carbon wheels cover carbon-ceramic brakes

makes more sense to you?
Here's how I read it: the VW Group is serious about F1. It has been in top-level discussions with the FIA in relation to the proposed new F1 engine rules and has been pushing for a 1.6-litre turbocharged four-cylinder format, of which the VW Group has considerable knowledge.
However, something about a 1.6-litre turbocharged Porsche just doesn't rub, especially when you consider that the new engine rules are likely to be so strict that there will be little room for innovation. Porsche does not go racing in doppelganger formulae.

Volkswagen would enjoy massive marketing benefits from a Formula 1 campaign, but the prestige of F1 dovetails far better with the Audi brand, and Audi already has the structure, team and expertise...
As for VW, NASCAR rumours abound – rumours that should be taken seriously. NASCAR is populist and offers colossal marketing opportunities, albeit in a single but crucial market. And let's not forget that a non-US car manufacturer (Toyota) has already muscled in on NASCAR, paving the way for others.
Where does this leave Porsche?

Perhaps the most telling of Müller's comments involved off-road rallying: 'We are successful and we earn money in customer motorsport. We are very keen to foster that business. And maybe there is an opportunity to complete that business case for off-road customer sport. Top of the line is Dakar, and if Volkswagen win the Dakar for the third time next year then maybe there is space for Porsche.'
After that, I'd bet on Porsche lobbying the ACO to allow its hybrid 918 Spyder to enter – and have a shot at winning – the greatest Sportsscar race in the world: Le Mans.

THE GERMANS CAME OFF WURST

Faster round the Nürburgring
than the Porsche 911 Turbo



We come from the streets. Their heritage is the track.
But we went to their backyard and we beat them. With our 3.8 litre twin turbo V6
we rewrote history. Now performance is not just for the privileged.
It's for those that want it the most.

See for yourself at nissan.co.uk/sports

NISSAN GT-R FROM £59,945

Nissan GT-R is available at high performance dealers only. Visit Nissan.co.uk for further details. Information is correct at time of going to print (June 2010), price includes £55 first registration fee and road fund licence. Refer Fuel consumption figures for GT-R: CO₂ 295g/km – EXTRA URBAN 30.7mpg/9.2L/100km – COMBINED



SHIFT_the way you move

to dealer for exact specification. Model subject to availability. Nissan Motor (GB) Ltd, The Rivers Office Park, Denham Way, Rickmansworth, Hertfordshire WD3 9YS.

010627/4B

22.6mpg/12.5L/100km – URBAN 15.5mpg/18.2L/100km



THE END OF THE TOP SPEED WARS?

COULD TODAY'S BATCH OF 200MPH-PLUS SUPERCARS BE THE LAST TO AIM FOR SUCH MASSIVE SPEEDS? EVO INVESTIGATES



Speed thrills, on paper at least. From Top Trumps to showroom brochures, top speed has always taken pride of place amongst the performance statistics. The problem is that top speed is becoming almost entirely academic, and engineering new cars to achieve ever higher velocities can cause compromises in other areas, sometimes at the expense of driving enjoyment.

An extraordinary amount of effort goes into making these rarely achieved speeds technically possible. Air turns out to be very thick stuff: at 200mph the average supercar has to push over a quarter of a ton of air out of the way every second. In fact the amount of power needed goes up with the cube of speed, or in plain English, if you double a car's speed you need eight times the power. That's why most cars with around 100bhp can do about 120mph, but to reach 240mph that same car would need 800bhp.

But now, for the first time, we're hearing whispers that manufacturers might be diverting efforts away from maximising top speeds. At the moment Lamborghini is the only company to put its head above the parapet (see below), but an industry insider who didn't want to be named told us, 'if we



Seven shows the benefits of light weight

didn't have to always aim for 200mph, we would be able to put more into other areas – for example, optimising acceleration and handling'.

Weight would be an early beneficiary of this strategy. A 600bhp engine needs large radiators, extra coolant, intercoolers, hefty transmissions and sizeable fuel tanks. All of these add extra kilos, which compromise handling. Think how thoroughly involving a Caterham is with its light weight, low power and short gearing. Now imagine if other companies were to adopt a similar approach; lose the high speed addenda and reap the handling rewards, maybe fit shorter gearing for snappier acceleration.

It's not straightforward of course. Long gearing means quieter cruising, and as *evo* contributor John Simister points out, 'long gearing is often fitted to modern cars in a quest to reduce emissions and ironically the by-product of that is a high top speed'. Maybe the answer is to bring back the overdrive...

Porsche has long taken a rational approach to performance. Under the banner of 'Pure Performance', its current mission statement reads: 'Porsche stands for dynamism, agility and flexibility; as well as speed, elegance and safety.' Top speed is clearly a secondary consideration. Bugatti has a slightly different take, as we found out from Dr Stefan Brungs, marketing and sales director: 'Velocity has always fascinated mankind... so of course it is a USP for Bugatti to have the fastest car in the world.'

A curb on top speeds could yet come from another direction. To the wider public, speed often has negative connotations, and there has to be a possibility that politicians could legislate for compulsory speed limiters. After all, cars have to comply with emissions, lighting, safety and construction laws and regulations; why not speed? Car companies are walking a tightrope, balancing the opportunity of gaining sales by pushing higher top speeds against the threat of provoking a draconian regulatory response.

No-one has yet been brave enough to say their next car will be slower than the one it replaces (their marketing teams might have something to say about that), but the fact that car firms are starting to think this way could signal the start of a revolution.

IS TOP SPEED STILL IMPORTANT?

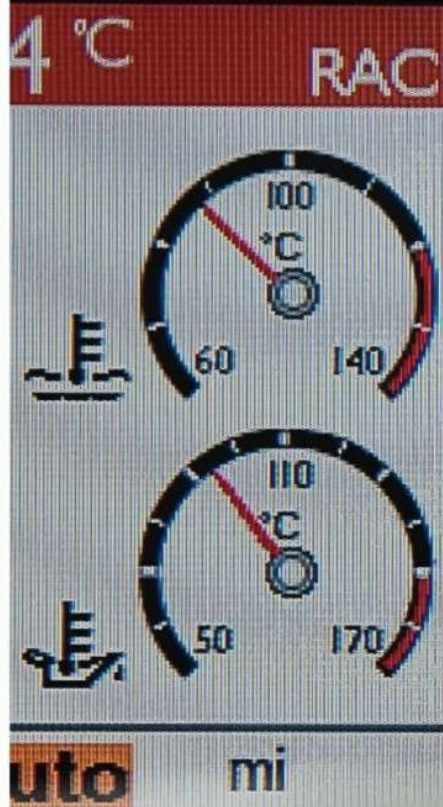
■ YES: SSC

'Top speed matters from an engineering and design standpoint because it's the most difficult performance specification to meet,' says Jerod Shelby, founder of American supercar maker SSC, whose Ultimate Aero TT held the record of fastest production car until June this year. 'To achieve extreme top speeds takes a perfect combination of aerodynamics, stability and downforce, an extremely durable powerplant and gearbox, robust cooling systems, and of course massive mechanical and aero braking systems. We used the top speed record to gain notoriety and credibility, although it was a double-edged sword as the car's amazing handling characteristics were overshadowed.'



■ NO: Lamborghini

'Until a few years ago our priorities were – in this order – top speed, acceleration and then handling,' explains Lamborghini CEO Stephan Winkelmann. 'In recent years this has been changing. Handling and acceleration are becoming more important. Top speed is not as important anymore, because all supercars are able to exceed 300kph [186 mph] and this is a speed that you cannot reach on a racetrack, let alone normal roads. The key factor in terms of better handling and acceleration, meaning more immediate pleasure in driving, is the power-to-weight ratio. This is not so much about top speed, so the future will not be so focused on increasing power. The key is in reducing weight.'



**'IF WE DIDN'T HAVE TO AIM FOR
200MPH WE COULD PUT MORE
EFFORT INTO HANDLING
AND ACCELERATION'**



With the focus shifting away from top speeds and onto handling and acceleration, could this be what the speedos of future supercars will look like?



AN INTERVIEW WITH... **JUST CAPITO**

THE HEAD OF FAST FORDS ON THE DEVELOPMENT
OF THE NEXT-GENERATION FOCUS ST

As the director of Ford's global performance vehicles division, Jost Capito is the man ultimately responsible for the worldwide success of the next Focus ST. We caught up with him at the Paris motor show to find out more about that car, why he loves British B-roads and what happened to his evo subscription...

How long have you been working on the new ST?

Twelve months so far, and we haven't really started doing any driving yet! First you have the design, then the financials and the market equation and what you change from the standard car, where you need new tools, and what they cost. It's a long list. So we have a year of paperwork and then 18 months of more enjoyable work.

Where do you do your testing?

Lommel [Ford's Belgian test centre] is our baseline, where we know every car inside and out, but we do lots of real-world driving. We use the Nürburgring a lot, because what is good on the Ring is good everywhere. But we also drive on British B-roads a lot, and in Wales. We know 50 per cent of European customers are in the UK and the B-roads are fun in the UK, so it's important to do testing there. But we

also test in Michigan, which has roads like the UK – wider, but still fun.

You'll test the ST in America?

Yes, it will be sold there in exactly the same tune as the European model, so we need to make sure it works in every market. Europe will take the lead, though, but the two departments, Team RS in Europe and SVT in America, have been more closely integrated for the last year, so they'll work together.

**'WE DRIVE 911s
AND 3-SERIES
BMWs AND
ASK WHAT
MAKES THEM
DESIRABLE'**

Will the new four-cylinder engine sound as good as the five?

It will sound different, but it will sound as exciting. We don't need the refinement of the base engine [the 2-litre EcoBoost that is already fitted in the Mondeo and S-Max], so we can accept a little NVH [noise, vibration and harshness] and develop it to add more character.

But aren't CO2 emissions of primary importance?

They're important, but not the biggest. What we are looking for and what we spent a huge amount of time on is performance feel – so it's engine response, power, how the acceleration and deceleration is. We see a lot of turbo petrols trying to get the character of diesel with low-rev boost then constant torque, and we do not believe that gives you the exciting performance feel you want to have. It must be rewarding to rev, although you should be able to have fun with it at lower revs, too.

What's the biggest challenge you face?

To get it exactly right as we did with the last ST, with all the attributes at the same level, and then convincing the marketing people in each region that the same car is the right one for them.

Do you drive rival products?

The Golf GTI, of course, and now the Mégane 250, but we have to future-proof our car, so we try to define our own philosophy for it and not just target a competitor, so we also take other vehicles. We drive 911s, we drive 3-series BMWs and ask what makes them desirable. It's not just because they're more expensive. You can do things right in cheaper cars and make them as much fun.

Will there be a three-door ST?

No, and I don't think we will miss it. Some people say, 'Oh, sales volumes will be lower because you don't have a three-door.' I don't think so because the car looks so sporty and there's no disadvantage in having five doors. It's more practical and I hate the long doors – you can't get out properly.

Thanks, Jost.

No problem. Can you sort out my subscription? I haven't seen evo since I moved to America.



Above: Capito at the Paris motor show. Left: new Focus ST is due in 2012; despite a reduced cylinder count, power will rise to 247bhp





This is an Interactive Advertisement!
Download the Clic2C App from your App Store
OR visit m.clic2c.com on your mobile browser. Open the App
then hold your phone over the Polaroid images below. Let the image focus...



Scan this Polaroid to see our Gallery area.



Member laps with Sabine Schmitz on the Nordschleife. Scan to see video.



Scan this Polaroid to see our Events.



12 Months Membership is £129.00
All Members receive the membership box with members black card and grille badge. An ideal Christmas gift!



Introducing the *Gentleman Drivers Club*, a members club created by enthusiasts for enthusiasts. We have an unrivalled selection of members events that run throughout the year. From our private booking of the *Nordschleife*, ice-driving inside the *Arctic Circle* to our *New York Grantour* at the *Monticello Motor Club*.

Our members are a group of like-minded individuals that simply enjoy driving. Our *Supercar Sunday* breakfast events are also a great opportunity to meet fellow members, whilst admiring the cars over a coffee and bite to eat – take a look at the website *gallery* to see what you're missing.

If you like the sound of what we do, why not become a *Gentleman Drivers Club* member? Visit our website to see a full list of benefits and events. This ad is also interactive, so download the *Clic2C App* on you mobile phone, then simply scan the Polaroids above to see video, galleries or a list of upcoming events...



Join us now at www.gentlemandriversclub.com

Driving Tours | Track Days | Driver Training | Social Events | Hospitality



Samsung
GALAXY Tab



LIFE WITHOUT LIMITS.



The new Galaxy Tab is perfectly sized for life on the go. With a 7" touchscreen, it's small enough to fit in your hand, yet big enough to be packed with incredible entertainment and communication features. Using the Android 2.2 operating system, it offers voice and video calling, a Readers Hub full of up-to-date newspapers, magazines and eBooks, plus access to blockbusters and classics on Samsung Movies. The Galaxy Tab supports Adobe® Flash® Player and comes with free Google Maps™ Navigation, awesome games and an ingenious integrated phonebook that combines all your social network contacts. Start living life without limits.

www.samsung.com/uk/galaxytab

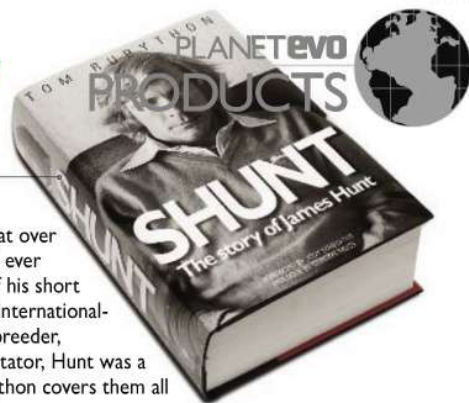
Screen images are simulated. ©2010 Samsung Electronics Co. Ltd. Google and Android are trademarks of Google, Inc.



Shunt: The story of James Hunt

Price: £17.50
From: www.amazon.co.uk

There will never be another F1 champion like James Hunt, and at over 700 pages it's unlikely there will ever be a more detailed biography of his short but action-packed life. Playboy, international-standard squash player, budgie breeder, recreational drug user, commentator, Hunt was a man of many parts – Tom Rubythorn covers them all



Ciclote

Price: £6800
From: www.ciclote.com

Have you guessed what it is yet? Made in Italy and featuring a steel and carbonfibre frame plus a touchscreen control panel, the Ciclote is in fact an exercise bike, but one that, while being perfectly functional, can be admired for its design too

1:24 scale Back to the Future DeLorean

Price: £21.95
From: www.caagis.com

How time flies – and not just when you've got a time machine. It's been 25 years since the first *Back to the Future* movie was released, so why not celebrate with this 1:24-scale model of Doc Brown's flux capacitor-equipped DeLorean (plutonium not included)



EVO ESSENTIALS

AMONGST OUR MUST-HAVE STUFF THIS MONTH: A 911 GAMING WHEEL AND A DELOREAN TIME MACHINE



Dura Fitted Garage

Price: packages from £2941
From: www.duragarages.com

Used by some of the world's largest sports car manufacturers, the Dura Fitted Garage is a modular cabinet system that provides secure storage for all the tools and equipment that would otherwise clutter up the space where your car should live. The heavy-duty steel cabinets are available in combination packages or as individual units, so you can create the perfect set-up to transform your garage

Fanatec 911 GT3 RS wheel

Price: from £156
From: www.fanatec.de

If you're planning to spend every spare moment of the next few months playing *Gran Turismo 5*, then this is the wheel you'll want in your hands. Modelled on the one from the 911 GT3 RS, this fully licensed controller features an Alcantara rim, force feedback and ABS vibration. Optional accessories include an aluminium pedal set and carbonfibre 'ClubSport' paddles



Words: Ian Eveleigh and Roger Green 031



Signature piece

LIMITED-RUN STIRLING MOSS WATCH IS SIGNED BY THE LEGEND HIMSELF.
SIMON DE BURTON REPORTS

Legends in Time 'Stirling Moss 80'

Price: £2695 From: www.legendsintime.co.uk

Peter Ratcliffe established his 'Legends in Time' company more than 20 years ago and is now the world's leading dealer in limited-edition F1 lithographs. The business has brought him into contact with a number of motorsport greats, including Sir Stirling Moss, whose 80th birthday this year is commemorated by the first Legends in Time wristwatch. Ratcliffe will produce 160 examples of the Stirling Moss 80, half with white dials and half with black. Each dial is personally signed by Sir Stirling and the watches are delivered in a signed and numbered box. The stainless steel case contains the tried and tested Valjoux 7750 chronograph movement (as used by TAG Heuer, IWC, Breitling, et al) and every SM 80 is supplied with three leather straps – black, tan and brown.



Stefan Johansson Mark VIII C 009

Price: c£6000

From: www.sjwatch.net

Students of 1980s GP racing will remember Stefan Johansson as the man who achieved a record number of 12 F1 podium places for teams including Tyrrell, Ferrari and McLaren without securing a single victory. He's since been a successful Sportscar driver, established a CART team and managed several top racers, including Indy Racing League legend Scott Dixon. As if that wasn't enough, the artistic Johansson also designs and makes watches under his own eponymous dial name. They all use Valjoux 7750 chronograph movements (just like the SM 80) and feature the same 47mm steel case with a choice of dial designs. Each style is limited to 250 pieces and the watches are supplied in an oak automatic winding box. Johansson and other professional drivers test the watches by the simple method of wearing them while racing. The California-based firm has no retail outlets so orders must be placed via the website.



Hublot King Power F1 Monza

Price: £18,500 From: www.timeproducts.co.uk

Hublot is now the 'official' watch brand of Formula 1, and this is the first in what is expected to be a whole series of F1-inspired watches from the company. With a hefty 48mm case, the Monza is suitably replete with automotive imagery: check out the vented disc-style bezel, the 'start' button for the chronograph and the strap that is made from flame-retardant Nomex... and, er, not so flame-retardant rubber. The Monza's *pièce de résistance*, however, is its sapphire crystal. It's difficult to tell from the image, but the glass is tinted red, allegedly a horological first. Just 200 Monzas will be made, which should add a useful £3.7million to Hublot's coffers. Who said F1 is getting too commercial?

On average, people only look at an advertisement for 2.6 seconds.

Visit mercedes-benz.co.uk/sls



Mercedes-Benz

Official government fuel consumption figures in MPG (Litres per 100km) for the SLS AMG: Urban 14.2 (19.9), Extra Urban 30.4 (9.3), Combined 21.4 (13.2). CO₂ emissions 308 g/km.

**LE MANS
SERIES 2010**

TOUGH ON DRIVERS, TOUGH ON TYRES.

AND THEY'RE OFF!



EVERY CORNER IS A UNIQUE CHALLENGE,
BUT TEAM MICHELIN IS SAFE, SAFE, SAFE.

TEAM MICHELIN STILL DON'T NEED
TO REFUEL. THE RACE GOES ON!

THAT'S WHAT I CALL DURABILITY
AND LONGEVITY. THANKS MICHELIN!



AND HE'S A WINNER. MICHELIN TYRES OVERCAME
ALL THE OBSTACLES! WHAT A PERFORMANCE!

Michelin and its partners have won the Le Mans Series championship for the 7th time in a row!*



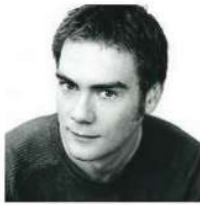
**LE MANS
SERIES**

Once again, MICHELIN tyres demonstrated a superior performance in longevity and grip. Congratulations to the winners.

Visit www.lemanslive.com for exclusive racing news, photos and videos.



*in the LMP1 category



Petrolhead

Richard Porter

A littered car interior will spoil your enjoyment of driving, reckons the *Top Gear* TV script editor. And your friends won't be impressed, either



My friend Zog is a clever bloke. From analogue synthesizers to the way outer space works, there's very little that he doesn't know about nor cannot talk about in an informed and intelligent way, delighting in the expansion of knowledge in the manner of Stephen Fry on QI.

Every couple of weeks or so, Zog and I go round to our mate Gareth's house to record a car-based podcast, and if you've ever heard our audio blatherings you'll know what I mean about Zog. Whilst Gareth and I get distracted doing crass impressions of German racing drivers and making weak puns based around obscure car names, Zog remains the quietly thoughtful, cerebral one who imbues proceedings with some intelligence and dignity.

It was therefore quite a surprise when Zog turned up the other day announcing that he'd cleaned out the interior of his lovely old Porsche 944 Turbo and that, for our amusement, he had written down all the stuff he'd found within its nicely aged interior. It was, frankly, extraordinary. Broken tyre pressure gauges, knackered sunglasses and two A-Zs of London with all of north and west London

missing – I can understand such things finding their way into a car and staying there for some time. But these were the mere tip of a rather substantial iceberg of crap that included a single ski glove, a third of a packet of pasta shapes, a set of dinosaur stickers, an out-of-date pot of strawberry yoghurt, two flyers for a London fetish club, a British Sausage Council promotional watch, four months' worth of bank statements and a kebab.

Gareth and I were so staggered by the sheer quantity of junk in the Porsche that we decided it would be amusing to have Zog read his list of it into a microphone and then set it against some woozy ambient music. The only thing is, much though the vast volume of shit in his 944 was quite funny, it was also rather troubling. Why would a highly intelligent man allow his car to get into such a state?

I suspect that he's not alone either. I once worked with another clever bloke who'd managed to fill the passenger footwell of his Alfa with assorted wrappers to such an extent that when you got a lift from him and were forced to sink your feet into

this crinkly mire you were suddenly reminded of that bit in the original *Star Wars* film when the heroes are trapped in a massive garbage-compactor. It seemed only a matter of time until you felt something with teeth hooking onto your ankle.

There's a troubling theme here too. Porsche 944? Alfa Romeo? These are cars bought by people who enjoy driving. But how can you enjoy driving when there are six kilos of chocolate bar wrappers and several parts of a broken mangle slithering around your footwells? I'd say that, quite simply, you can't. Driving with any gusto on an exciting road is no fun if there are random objects cannoning around the cabin, taking chunks out of your interior trim. No one wants to feel the Gs building, the tyres biting and the chassis working if, in the back of their mind, they've suddenly remembered there's a bottle of cheap Rioja and a jar of formaldehyde containing a mutated Victorian toad somewhere within the rear footwells just waiting to crack open and make your car smell like a dead wino's undercrackers.

Besides which, you can never

entirely rule out the possibility that at some point you might have to give someone else a lift. And if the interior is packed full of random and unsavoury cack, it feels rather like a discourtesy to anyone who happens to get into your car. If you went round to someone's house and found the floor covered in crisp packets, broken CD cases, coat hangers, half-eaten pasties and a framed photograph of Angela Lansbury, you'd probably think they'd lost their marbles. Oh no wait, there they are, hiding under that old pizza box and the pile of newspapers from 2008. But if it was someone's house at least you could make a hasty decision not to sit down. Or touch anything. In a car you're basically forced to do both, and if doing so makes you reflect on the last time you got a tetanus jab then something is amiss.

There's nothing wrong with being a bit messy, and I know because I am, but your car is a confined space and one that's subject to lateral G forces. Ergo, it's in your own interest to keep it clutter-free, especially if you're a clever bloke like my friend Zog. I mean, seriously? A kebab?

'HOW CAN YOU ENJOY DRIVING WITH SIX KILOS OF CHOCOLATE BAR WRAPPERS IN YOUR FOOTWELLS?'

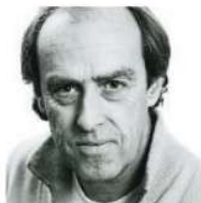


Enduring.

Oris Col Moschin
Limited Edition
www.oris.ch



ORIS
Swiss Made Watches
Since  1904



The Insider

Harry Metcalfe

Car manufacturers want us to believe that electric vehicles are the future, but Metcalfe sees them as a huge step backwards



One of the lasting impressions from the Paris motor show was how you couldn't move without tripping over the brightly coloured cables feeding sparks to all the electric cars on display this year. Electric vehicles, or EVs, were everywhere, and like it or not, today's motor industry is obsessed with these devices.

Yet having lived with a couple of EVs recently, I'm not convinced they are the answer to anything. Every time I attend a press conference attempting to brainwash me with all the benefits of an EV, I can't help but be reminded of when my mum used to tell me: 'Eat your greens – they're good for you.'

With this in mind, I see the Tesla as the asparagus of the electric-car showroom – green but tasty, if quite pricey. The Nissan Leaf, however, must be the Brussels sprout of the EV world. For a start, it's not exactly pretty. Despite Nissan's designers having a fabulous opportunity to show us what they could do with a clean-sheet design, they bottled it and created something with all the charisma of over-boiled cabbage. But it's not just the looks

'NISSAN IS TRYING TO SELL US A CAR THAT CAN'T TRAVEL AS FAR IN A DAY AS A HORSE'

that are so disappointing; it also has a ridiculous £28,000 list price, and I really can't fathom what exactly it offers customers for all this money.

Manufacturers hate it when journalists mention the words 'range anxiety', but I can assure you it's all you think about when you first try living with an all-electric car. You soon get into a routine of not choosing the EV for long journeys. But – hang on a minute – shouldn't any new technology improve on what went before? Not where electric cars are concerned, apparently. Nissan promises us that the Leaf can cover 100 miles on a single charge, but BMW promised me the same from its Mini E and the most I ever saw was 70 miles – as long as I didn't use the lights, heater or radio. I'm hearing the Leaf is no different, which is very disappointing.

Now, come on. Seventy miles in a day is the sort of distance we've been able to travel on horseback for centuries; then cars arrived and by the 1920s the Bentley Boys were blasting from London down to Monaco to catch last

orders at the casino. Yet, 90 years on, Nissan is trying to sell us a car that can't travel as far in a day as a horse. I don't call that progress.

Nissan will immediately retort that this limited range is enough to cover 90 per cent of journeys, but what about that other 10 per cent? Who fancies phoning granny and telling her that because she lives 100 miles away you will no longer be visiting her as you've just bought a Nissan Leaf and, while it's jolly economical, it can't travel that far without a lengthy recharge?

Cars are meant to offer us freedom, not restrain us on a 70-mile leash. I love the fact that I can drive a combustion-engined car out of my garage and it doesn't matter if I'm going to the local shops or to Sant'Agata, it'll take me there. It's my choice, not the car's.

So why is the industry trying to convince us to go electric? Well, it's those pesky emissions regulations again, and the EV is a bit like McLaren's F-duct – a neat but perfectly legal 'cheat'. An EV has zero tailpipe emissions, and the

rules allow manufacturers to count any zero-emission vehicle as 3.5 cars in terms of fleet-average CO2. Hey presto, lots of EVs appear.

But there is one type of EV that might just have a future, and that is those fitted with 'range extender' technology, i.e. some sort of motor to recharge the batteries. Suddenly, visiting granny is back on the agenda as range is no longer an issue. Range-extender EVs shouldn't cost that much more than plug-in-only ones either, because generators are cheaper than batteries, and the on-board battery can be much smaller (and therefore cheaper). The battery should last longer too, as the generator will keep it in optimum condition.

Even so, unless governments tax conventionally powered cars into oblivion, most engineers secretly admit EVs will occupy only a niche part of the market, simply because they don't offer customers enough advantages to outweigh their obvious disadvantages. So it's a case of nice try mum, but I'll carry on eating what I want, thanks.

THE NEW QUATRAC 3 SUV



SUMMER AND WINTER
IN ONE TYRE

QUATRAC 3 SUV

OUTSTANDING ALL-SEASON SUV TYRE. PERFECT GRIP AND EXCELLENT SELF-CLEANING PROPERTIES. COMPROMISE BETWEEN SUSTAINABILITY AND CONVENIENCE. PROVIDES SAFETY AND COMFORT IN ALL WEATHER CONDITIONS.

WWW.VREDESTEIN.COM


VREDESTEIN
DESIGNED TO PROTECT YOU



Crossed Up

Chris Harris

Although he loves Lotus as much as the next petrolhead, Harris is struggling to get his head around the company's new direction



'I DON'T KNOW ANYONE WHO DIDN'T WONDER IF LOTUS'S PARIS UNVEILINGS WERE A PRACTICAL JOKE'

To be a geographically detached observer of Lotus's Paris motor show announcements was a strange experience. I found myself glued to my laptop, scouring websites and hungrily consuming Twitter feeds for the most outspoken reactions. Of course Mr Porter's 'Sniff Petrol' feed was by far the most amusing, but even with his unparalleled skills in simile, metaphor and overall absurdity, the sense of bewilderment appears to have been underplayed.

This was undoubtedly the most exciting (and baffling) press briefing I have ever had the misfortune of missing. I don't know a single person who watched it live and didn't walk away wondering if they'd just witnessed the most perfectly choreographed motor-show practical joke since the Rinspeed Advantage R One.

Judging Lotus is problematic, though. Like just about every other UK-based car journo, I am an ardent Lotus fan – someone who has owned and run both an Elise and an Exige and, whether I like it or not, someone who must accept that Lotus's production-car strategy for the past decade has been a commercial disaster. It doesn't matter that people like me think an Elise steers and rides like the Messiah if people don't buy

the bloody things. If Lotus Engineering wasn't kept as busy as it is by most mainstream car makers' inability to produce decent motors without the help of 20 freelance blokes from Norfolk, the whole caboodle would have been flushed down the potty years ago. Lotus Engineering makes money, Lotus Cars pisses it away on yet another Elise paint job.

So people like me have to accept that Lotus needed to change. It needs to be taken seriously at more profitable price-points to make commercial sense, but even accounting for this, the five concepts shown at Paris don't appear to represent an evolution of the Lotus ethos but the complete annihilation of the brand's core DNA.

Even if it is entirely possible to concede that a new direction was needed, it is difficult to agree with the new strategy in terms of model positioning, communication policy and timing. It might even have been possible to forgive the bizarre sight of Mickey Rourke, Naomi Campbell and Brian May unveiling the new cars if it ushered in some real cleverness, but I'm struggling to find any.

Let's face it, Lotus had the chance to finally make something of its lightweight philosophy. It's hard to find any consensus of opinion on the correct, profitable future of the motor car, but one thing everyone appears to agree on is that cars will need to be lighter in the future. No one understands the subject of lightweight like Lotus. Yet in moving upmarket to take on the Boxster, the 2013 Elise will gain more than 225kg. Give me strength.

The four-door thing? Nonsense. The DB9 rival? Just ask Aston how easy it is to make money in that little niche-ette. The 911-beater? A book could be written about all those who have tried and failed. The strategic heads at Lotus have decided to target existing classes with existing thinking, and that is either lazy or foolhardy.

But that probably doesn't make enough allowance for the relationship that I – and most other commentators – have with Lotus. We love the people, especially the engineers, to the point that it clouds judgement. How the Evora won so many plaudits last year is completely beyond me. My summary? Great chassis and steering,

shoddy quality and gearchange, average everything else. You don't beat Porsche with cars like the Evora.

I suppose what I find impossible to reconcile is my current knowledge of Lotus and what it wants to become. My Lotus is small and talented, underfunded and perpetually troubled. There is, or was, no better demonstration of the difference between Lotus and any other car maker than the 2001 Autobotel Elise Championship on the TOCA tour. Forget the racing and the politics – of which there was plenty – and know this: every mechanic and driver, me included, was called Ted. You could ask to be called anything, so long as it was Ted. The genuine amusement with which we all joined in the game was underscored, certainly on my part, with the certainty that no other car company was capable of such insanity. I loved them for it. In fact I still do.

Can the new direction work? Anything's possible, but this looks like the longest shot since the last Lotus-derived expansion plan: the DeLorean. Like you, I'm watching with a sense of befuddlement and fascination, with every finger and toe crossed.

DRIVEN

○ AUDI R8 GT	P40
○ BMW 1-SERIES M COUPE	P44
○ SUBARU WRX STI	P50
○ AC SCHNITZER ACS4	P52
○ LOTUS EVORA S	P54
○ FORD C-MAX	P56
○ CITROËN DS3 99G	P56

AUDI R8 GT

- FASTEST EVER ROAD-GOING AUDI
- 100KG WEIGHT REDUCTION ■ POWER UP BY 34BHP ■ OPTIONAL 'RACE' PACKAGE

W

e haven't got long with the R8 GT and I seem to be having one of *those* Wednesday mornings. Every road in Oxfordshire that I try seems to be choked with slow-moving vehicles intent on holding me up every time we reach a perfect set of bends. Even the local hunt conspires against me at one point, and I thought they only played 'catch the brush' at the weekends. Obviously I can dispatch whole lines of traffic and buy myself some clear tarmac as soon as any sort of straight appears, but it never seems to be more than 60 seconds before I find myself staring at the rear doors of another trundling Ocado van.

And then, during one of my few unshackled minute waltzes with the GT, I glance at the speedo. It's numbered for kph so I hadn't really been paying much attention because all the numbers are big when they're in Ks and not Ms per hour. But after a bit of bead-clacking on the mental abacus it dawns on me that the numbers

SPECIFICATION

Engine V10, 5204cc CO2 323g/km
Power 552bhp @ 8000rpm Torque 398lb ft @ 6500rpm
0-62mph 3.6sec (claimed) Top speed 199mph (claimed)
Price £142,585 On sale Sold out

would still be uncomfortably big if this was a UK-calibrated speedo. It sends a slight shiver down my spine and I slow down. Yes, *those* sorts of big numbers.

In keeping with the theme of the issue, this is the fastest ever road-going Audi, with a top speed of 199mph (almost but not *quite* stealing Lamborghini's thunder). It's pretty damn brisk off the line too, hitting 62mph in a claimed 3.6sec, some 0.3sec quicker than a standard R8 V10. The improvements are down to the GT's slightly stronger engine and the serious diet plan it has been subject to. Power is up by 34bhp and torque by 7lb ft, but it's the weight savings that Audi is really keen to shout about. Bucket seats make the biggest contribution, saving 31.5kg, but lightweight carpets (yes, really) cut 7.9kg





Bucket seats make the biggest contribution to the GT's weight savings. Right: metallic Samoa Orange paint is new to the R8

'THE CLINICAL WAY THE CHASSIS ALLOWS YOU TO DISSECT A CORNER IS UTTERLY ABSORBING'



Above: door mirrors and rear diffuser are amongst the new carbonfibre exterior components. Below: interior battery cut-out switch (part of the 'Race' package) is hidden inside a pot in the centre-console cup holder



and thinner windscreen glass 9kg, while the carbonfibre bonnet, bumpers and side-blades remove 6.6kg, 5.2kg and 1.2kg respectively. The total weight loss is a very handy 100kg.

The first thing you notice when driving the GT, however, is not the weight savings but the suspension changes. No, that's a lie actually. The first thing you notice is the steering wheel covered in Alcantara so soft that if you were a child you'd want to use it as a comfort blanket. Then the second thing you notice, if you paid for it, is the optional Race package, because it furnishes the bucket seats with four-point harnesses that need to be gathered and clicked together above your navel. The pack also includes a half roll-cage behind the seats, a fire extinguisher and internal and external battery cut-out switches (the internal one delightfully hidden in a pot in a cup-holder).

Anyway, perhaps the third or fourth thing you notice is that the new coilover suspension is noticeably firmer. You now feel every lump, bump and pimple, but with the edges rounded off so that it's never a harsh or crashy sensation, which is impressive. The only time it really struggles is if you hit larger imperfections at speed, when the reduced travel and stiffer set-up can leave you momentarily in less contact with the road and more acutely aware of the mid-engined weight balance than you would ideally like. On the other hand, the GT is undoubtedly slightly fletcher of foot than a regular R8 V10, and I have no doubt that it would be quicker around any given circuit.

Further optimising those lap times is the R-tronic automated manual gearbox, the only transmission option on the 333 GTs being built. It seems slightly strange having a single rather than a dual-clutch gearbox in an Audi, but it works well. Like all such systems, it needs a slight lift of the throttle to smooth the shifts when you're not in maximum-attack mode, but judging this just right can actually be quite enjoyable and (no pun intended) engaging.

But the truth is you miss the brilliant open-gate manual. It has been such an integral part of the enjoyment of all the R8s we've driven and it seems wrong that what should be the most involving R8 of them all requires you to do no more than squeeze two buttons shaped like little paddles on the back of the steering wheel to change gear.

Which brings me back to my rapidly slowing (thanks to the eye-popping optional carbon-ceramic brakes) journey across the Oxfordshire countryside. I think the reason I found myself going so fast was that I was chasing that moment when I hoped the R8 GT would come alive, show me its teeth and wow me. I'd tried pressing the Sport button but that hadn't done much, so going faster was the only option. The GT certainly looks the part with its carbonfibre addenda but, at everyday speeds, firmer ride aside, you could be driving any other R8. The steering isn't brimming with noticeably more feel, the V10 doesn't have any added menace or bark, and with R-tronic there's not even much point in going up and down the gearbox just



This column, from above: fire extinguisher in the passenger footwell; carbon winglets are a new addition; exterior battery cut-out switch at base of windscreen; red calipers indicate optional carbon-ceramic discs



Interior retains stereo and sat-nav; steering wheel is wrapped in super-soft Alcantara

for fun. Despite all the posturing about weight saving, perhaps it says a lot about the car and who it's aimed at that the sat-nav and stereo both come as standard.

It is still a stunning car. The pace from that V10 is incredibly addictive and the clinical way the chassis allows you to dissect a corner is utterly absorbing. What's more, I love the way that the quattro four-wheel drive gives you a feeling of security yet allows you all the adjustability and, space permitting, oversteer you could want. But the standard car really already gives you all

of that and I was hoping that the GT would be noticeably different to a standard R8 in the same way that a GT3 is noticeably more thrilling and edgy than a standard 911. Instead it has become faster and firmer, but no more involving. A great car but perhaps a missed opportunity.

Henry Catchpole

EVO RATING



- Everything we love about the regular R8
- Not as hardcore as we were hoping for





BMW 1-SERIES M COUPE

■ EARLY TASTE OF NEXT YEAR'S BABY 'M CAR' ■ USES
TWIN-TURBO 3-LITRE SIX ■ £40K PROJECTED PRICE

SPECIFICATION

Engine In-line 6-cyl, 2979cc, twin-turbo CO2 n/a
Power 340bhp (est) Torque 330lb ft (est)
0-62mph 5.0sec (est) Top speed 155mph (limited)
Price c£40,000 (est) On sale Spring 2011

There isn't another car I want to be my everyday companion in 2011 as much as a new 1-series M Coupe. The car I drove wasn't the finished item, the pricing has yet to be fixed (expect around £40,000), and there are a few areas of criticism, but overall nothing that stops me badly wanting one of these things. Indeed, the reaction I felt quite strongly after a brief 15-minute drive was one of need as opposed to simple appraisal: I didn't come away immediately placing the car against its peers – I shut the door, looked at the almost cartoonish rear-axle width, recalled the performance and thought: that's a bit of me, that is. I'm not sure I ever felt that way about my E92 M3.

First, we'll expunge a couple of silly rumours. No, this car will not be built in limited numbers, and yes, it will be available in the US. We also now know that it uses a version of the familiar 3-litre twin-turbo straight-six. BMW is being deliberately, some might say unnecessarily coy about the final specification, but then there's probably some truth in project chief Christoph Simieskol's explanation that the final state of tune has yet to be set. In terms of power, he reckons around 340bhp and a little more torque than the 135i. There are larger turbochargers, but the majority of changes are calibration work. BMW knows that if this car is to be accepted as a proper M machine, it must have the throttle response and appetite for revs that characterises such models.

Does it look like an M car? Undoubtedly. In fact it has the best stance – and by stance I mean the brilliantly resolved relationship between wheel, wheelarch, camber, ride-height and track-width that defines a *proper* M car – of anything the company has produced since the E46 CSL, which is fitting because the wheels are the same. The pictures simply don't do it justice; in the raw, the rear of this car is plain rude. To accommodate the E92 M3's rear axle, it is now 80mm wider across the hips. It never fails to amaze me just how positive an impact added width and reduced ride-height can have on a shape: this car now has undeniable, decidedly aggressive appeal.

Inside, this car isn't representative of the final interior. We'll get different clock faces, the obligatory illuminated gearknob and, hopefully, a different set of front seats to the standard 135i. This looks unlikely to be a lavishly equipped cabin, or one that brings us new levels of M-titillation, but if that keeps the cost down, then it's an attitude that should be applauded.

It doesn't make much noise on start-up. You push the familiar button and the twin-



This is a development car, hence the camouflage paint and blanked badges. Interior (right) isn't finished either. However, the mechanical package, including an updated version of the twin-turbo straight-six (left) good for around 340bhp, the manual gearbox and rear suspension and M-diff from the current M3, feels great. A spiritual successor to the E30 M3 (far right)? Perhaps

turbo six fires with a suggestive blurt, but from the moment that first soupçon of unleaded ignites, you fear that the muffling effects of forced induction may cloud your overall judgement of the car. For me, it is not impossible for a turbocharged M car to be the real deal – excluding the X6M and X5M, which are both reprehensible buckets of slurry. But the electric rasp of induction noise that floods through the dashboard in an M3 or an M5 is notable for its absence here.

Engine idling, you prod the throttle a few millimetres just to see how much sharpness they've managed to build into the car. This is one of the key differences between an M3 and a 335i: despite there being no mechanical connection between the accelerator pedal and the throttles, on the *real deal* the operation still feels more direct. The springing is harder. This car straddles the two camps, which isn't a bad thing.

You sit quite high, in the modern BMW way.

The seats on this car are 135i items and the range of adjustment is fine – they also pinch the lower torso well, which is a good thing given the road behaviour of the car.

The 1-series M uses the same steering rack as the 135i, but its wider tracks and completely altered footprint make its responses feel quicker – it's a car that wants to change direction.

The control weights are undeniably M: the clutch is long-of-pedal but engages closer to the floor than on a regular 1-series. The gearchange is short and slightly resistant, much like an E46 M3's – in fact the more I drove the car the more that comparison began to stick. From the action of its shift, to the movement of its pedals and the slightly over-thick steering wheel rim that doesn't quite reveal all that you'd like to know about the surface underneath, there is much more than a hint of E46 M3 in this car – and that is a very good thing indeed.

There's a completely new set of springs, dampers and roll bars. The rear axle assembly, including the M Variable Differential, has been swiped unchanged from the current M3, and the contribution it makes to the character of the 1-series M Coupe proves that M cars are defined by much more than high engine speeds and telepathic throttle response.

It immediately feels like a very fast car: pin it in second and the initial thrust is V8 M3-strong. It keeps pulling hard in the mid-range, and only when the rev-counter shows around 6000rpm does the shove subside. The first time it did this, a little bit of me was disappointed, but then I began to explore the flexibility of this impressive engine and, honestly, I didn't give its inability to smear itself against a 9000rpm rev-limiter a second thought. This car has immense real-world performance, in fact judged by that most important of criterion, Net Available Performance, I reckon it's as fast as an M3.



'I REALLY LIKE THIS CAR. IT'S COMPACT, REAR-DRIVEN, FAST AND NOT A PADDLE IN SIGHT'



In third gear, it'll pull from 750rpm, feels strong by 2000rpm and will tear strips off most other tackle from there to six grand. Crucially, it likes to hold on to gears: from a balanced throttle in any gear, the response is very good, certainly sharper than in a 135i, and at times it is very hard to spot the turbochargers in operation. That other telling indicator of a world-class turbo installation: the ability to match engine and gear speed on downshifts without even accounting for a puffer is certainly in effect here. Oddly, I found it easier than an M3 in this respect.

No, the noise isn't exceptional. BMW is working hard to extract some music from those turbos, but there isn't much beyond a defiant drone under load. Simieskol insists that they've still got some work to do, and any improvements they can make will be a bonus. To be honest, it didn't really bother me.

Perhaps because I was so wrapped up in the chassis? This is a seriously entertaining car.

We only had a short time with it, and I had a nice man from BMW sitting next to me, so it wasn't possible to disengage the systems and truly misbehave, but we gave it enough to expose a genuinely entertaining hustle. It's a car whose attitude is dominated by that differential, because it has so much torque pushing through it from virtually no engine speed, you're more aware of it than in an M3. It wants to understeer, but push harder and you work through a nice wide neutral window to the point where the car skims through with just the suggestion of a slide.

I can't pass comment on the brakes, because this car was a very tired old gal – specification looks good, though, with six-piston calipers up front and adult-sized drilled discs.

Couple that with excellent damping (the roads were too smooth to say much about the ride) and the short wheelbase and you have a car that darts its way around with real energy. There isn't much steering feel, but then there

hasn't been in M cars for years – even so, this is a better rack than you'll find in an E92 M3.

So, as you can tell, I really like this car. It's compact, rear-driven, fast and there isn't a paddle in sight. It has the presence of a real M car and once you acclimatise to the less zingy nature of its engine you can identify in its behaviour perhaps the most important M attribute of all: its controls somehow feel more connected and natural the harder you push. Gearchanges are smoother; progress is less jerky, faster and more pleasurable.

Yep, I'd have me one of these. If it doesn't creep beyond £40K it'll prove that the X6M, X5M and the pricing of the M3 GTS were just minor blips. Cracking little thing.

Chris Harris

EVO RATING



- Feels like an M-car
- Noise (the lack of)

europa
europa





The specialist in new and used parts from the 1950's to present day for **Ferrari, Lamborghini** and **Maserati**. For full stock listings visit www.eurospares.co.uk or call us on **0044 (0) 1787 477169**.

SUBARU WRX STI

■ FOUR-DOOR SCOOBY RETURNS ■ SHARPER HANDLING FROM NEW SUSPENSION
 ■ 296BHP FLAT-FOUR GETS SOME WARBLE BACK ■ 'IMPREZA' BADGE DROPPED

There isn't a word missing from the headline above. Subaru has decided that the car you see on these pages will no longer be called Impreza, just WRX STI. From now on the famous name will be applied only to the more mundane variants of the model. It's as if the company wants to distance itself from its past of Mica Blue paint (no longer available) and gold wheels (likewise), even though 60 per cent of the cars it sold were to fans of McRae, Burns and Solberg.

The other thing that's missing from this particular WRX STI is the hatchback that we've become used to in recent times. Such was the clamour from those same rally fans that Subaru decided to bring the saloon back to the UK (in the States and Japan it never went away), though a five-door will continue to be sold alongside. I'm not really sure which I prefer the look of. I'd like to see an obscene WRC-style wing on the back of the saloon (and one is available in other markets), but apparently the latest thing in the *Max Power* world is to take all wings off and go with the clean look, so what do I know?

Well, I do know that the 2011 WRX STI is better to drive than its predecessor. The big news under both body-styles is that the

SPECIFICATION

Engine Flat-four, 2457cc, turbocharged CO2 243g/km
 Power 296bhp @ 6000rpm Torque 300lb ft @ 4000rpm
 0-62mph 5.2sec (claimed) Top speed 158mph (limited)
 Price £32,995 On sale Now

car gets new 'Spec C' suspension, which sees spring rates up by 15 per cent at the front and a massive 53 per cent at the rear. The front and rear anti-roll bars are also thicker, the subframe bushes at the rear have been changed to improve camber stiffness and the ride height has been dropped by 5mm. In a final quest for increased grip and improved dynamics, the wheels have grown from 17 to 18 inches in diameter but have shed 2kg per corner in weight while the tyres have gone from 235/45 R17 to 245/40 R18.

The turbo flat-four is basically unchanged from the previous generation. Peak power remains 296bhp at 6000rpm, torque 300lb ft at 4000rpm. The most engaging thing is that the new exhaust system has a larger centre box and wider-diameter piping so that some of the distinctive boxer burble is back.

As soon as you climb inside the car it's obvious that, even if Subaru lags behind European manufacturers in cabin design and pleasing plastics, it knows how to pick a good seat. The Recaros in the front are new and feel more aggressive in their bolstering,



Above: turbocharged 2.5-litre flat-four still has 296bhp. Below: four-door body looks dull without big rear wing

squeezing you particularly snugly just above your hips.

Press the starter button, depress the clutch, and the gearlever goes home as precisely but a little more slickly than before, which is nice. We've picked up our test car from just near the Eurotunnel in Folkstone, and even by the time we've journeyed the couple of miles to the train it's obvious that this latest STI is much improved.

There are some good corners as we head south of Calais towards the circuit at Croix





'THE WHOLE CHASSIS SET-UP FEELS PLEASINGLY FIRMER AND MORE DIRECT'



Above: interior materials and finish still fail to impress – especially in a car that now costs £33K – but the superb Recaro seats (below) are some compensation. Top: revised chassis has improved in-corner responses



en Ternois. The roll when turning-in that afflicted the old car is gone and the whole chassis set-up feels pleasingly firmer and more direct. The steering has more meat, and inputs have a much more accurate and incisive result, so you can be more confident placing the car in a corner. The firmer set-up and wider tyres mean there is a slightly increased tendency to follow cambers, but you're so much more connected to what the front end is doing that it's not a problem. The ride is undoubtedly firmer, but the STI still rounds off the bumps well enough to ensure that it's not an uncomfortable place to be.

So, it drives more like an Impreza should (yes, I know, but I'm sure everyone will call

it that) and it looks more like an Impreza should, but it also costs more than an Impreza should. The price of £32,995 (for either hatchback or saloon) is up a hefty £5000 on the old model, an increase that Subaru blames on the poor yen/sterling exchange rate. This means the STI no longer undercuts Mitsubishi's Evo on price, so it will have to rely solely on those improved dynamics when the inevitable twin-test takes place...

Henry Catchpole

EVO RATING



- Better to drive
- Bigger price; needs a wing

AC SCHNITZER ACS4 TURBO S

■ TUNER CREATES BEST-HANDLING Z4 YET
■ POWER UP TO 375BHP ■ STYLING
TWEAKS BRING ATTITUDE TO MATCH



SPECIFICATION

Engine In-line 6-cyl, 2979cc, twin-turbo CO2 210g/km
Power 375bhp @ 6100rpm Torque 383lb ft @ 4250-4900rpm
0-62mph 4.6sec (claimed) Top speed 186mph (claimed)
Price See text On sale Now (www.ac-schnitzer.co.uk)

Have you ever seen a better-looking Z4? Me neither. The combination of lowered suspension and dark alloys transforms the demeanour of BMW's roadster. It would look even cooler without the stickers, but this is AC Schnitzer's demonstrator, and besides, there's a suitably serious uplift in power to back up the appearance. Mind, as this is based on the new 335bhp Z4 sDrive 35is, it wasn't exactly short of grunt in the first place.

As a demo car, this Z4 is fitted with just about everything in the catalogue. Body-wise, there's a curvy carbonfibre splitter and, above that, an Aston-style set of aluminium spars; on the flanks there are new wing panels with SLR-like chrome strakes, and at the rear a pair of neat boot-lip winglets and a reworked valance.

Mechanically, the suspension is lowered by an inch and fitted with stiffer, rising-rate coil springs, a fatter rear anti-roll bar and re-tuned dampers. Those new, airy 19in forged rims help,

too, minimising unsprung weight. The tyres are Conti Force Contacts – Continental's first trackday tyre – and then there's Schnitzer's brake kit, with bigger discs front and rear and six- and four-pot calipers respectively.

The power of the twin-turbo straight-six is lifted to a mind-focusing 375bhp thanks solely to reworked engine electronics, while replacement exhaust back-boxes give the motor a louder, more appealing voice. And it doesn't take long to appreciate that every last one of the claimed horses is there; the swell of torque in the mid-range is now mighty.

Better still, there's a much more connected feel about the chassis, both in the sense that the car's front and rear now work as a whole and that you can feel what's going on at each corner. This is the first Z4 we've driven that feels fully exploitable. Yes, it's a firm set-up, but the ride has hardly deteriorated compared with the stock car on its run-flat tyres.

There's a more consistent weight and more realistic feel through the steering, and there's no shortage of grip, either. In fact, there's almost too much – those Contis hang on and on, so the engine is straining on full boost when the torque does overcome the traction. As soon as that happens with stability off, the boost is released and the rear tyres spin up even faster, snapping the car sideways. There's great

Dark 19in alloys (right) and carbon splitter (below) give the Z4 a more aggressive look



pleasure to be had in simply working within the ACS4's considerable limits, though. There's a clarity and focus to its dynamics, and you can feel the rear digging in and getting the torque onto the road. It's an engaging, rewarding drive.

The total conversion as seen here adds a substantial £24,767 to the cost of a £44,220 Z4 35iS, making it a near-£70K car, though everything is available individually. A 'driver' pack, with the engine, suspension, brakes and wheels, would be £16,306. Still not cheap, but it turns the Z4 from a wannabe into a proper sports car, and a handsome one, too.

John Barker

EVO RATING



- Brings out the sports car in the Z4
- Doesn't come cheap



INTRODUCING THE ALL-NEW BOX. AT AN ALL-NEW PRICE.



THE ALL-NEW VOLVO S60 D3 ES FOR JUST **£299 A MONTH.***

Surprise. The S60 D3 ES. A Volvo that breaks all the rules, performing like no Volvo before. To put it through its paces, call 0800 400 430 or visit volvocars.co.uk



Volvo. for life

Fuel Consumption for the all-new Volvo S60 D3 ES in mpg (l/100 Km): Urban 39.2(7.2), Extra urban 67.3(4.2), Combined 53.3(5.3), CO2 139g/km.

*Volvo Business Partner contract hire is available to business users only. Subject to status. Indemnities may be required. Rentals are based on vehicles with metallic paint. Examples exclude VAT and are based on 36 month non-maintained agreements, an initial payment (3 monthly rentals) of £897 + VAT, followed by 35 monthly rentals of £299 + VAT, with a mileage of 10,000 miles per annum. Vehicle returned must be in good condition and within agreed mileage, otherwise further charges will be incurred. Prices correct at the time of going to print, are subject to change without notice and do not take into account any variation to government taxes or charges arising after the date of publication. Subject to availability at participating dealers for vehicles registered between 1st October 2010 and 31st December 2010, or while stocks last. Not available with other promotions.

Volvo Business Partner Contract Hire is provided by Lex Vehicle Leasing, trading as Volvo Business Partner, Heathside Park, Heathside Park Road, Stockport, SK3 0RB. Certain categories of business user may be excluded.

Image for illustration purposes only.



LOTUS EVORA S ■ NEW 345BHP SUPERCHARGED EVORA ■ REVISED CHASSIS ■ A TRUE 911 RIVAL?

The addition of a supercharger has a profound effect on the Evora. It lifts the output of the 3.5-litre V6 from a slightly lazy 276bhp to a much more alert and interesting 345bhp. At the same time, it moves the upwardly mobile and ferociously ambitious Lotus into core Porsche territory, standing the Evora toe-to-toe with the entry-level 911. On power, weight and price, there's not much in it, and Lotus's chassis experts have been hard at work, refining the Evora's sublime dynamics to exploit the extra punch.

If the supercharger wasn't on show in the back window you might never guess that this Evora has forced induction. There's none of the rasping whine that characterises the supercharged Exige, and the instantaneous throttle response and linearity of the power delivery give the impression that there is simply a bigger engine in the back. The 'charger is an Eaton TVS (twin vortex series), its installation engineered in conjunction with Australian firm Harrop, and as well as

SPECIFICATION

Engine V6, 3456cc, supercharged CO2 239g/km
 Power 345bhp @ 7000rpm Torque 295lb ft @ 4500rpm
 0-60mph 4.6sec (claimed) Top speed 172mph (claimed)
 Price £57,550 (2+0) On sale Now

lifting power to 345bhp at 7000rpm it also bumps up torque by around 35lb ft right across the rev-range, peaking at 295lb ft at 4500rpm. It's cooled by a pair of oil/water radiators mounted in the nose – along with the associated pipes and fittings, plus the mass of the 'charger itself, the installation adds a significant 50kg to the kerb weight.

This may now be a 1430kg Lotus – no flyweight – but its chassis is reportedly remarkably sensitive to changes. Most of the work has focused on the suspension bushes, which have been re-rated to reduce camber compliance and increase lateral stiffness – in short, there's less give in cornering and less geometry change, too. The spring rates remain the same, the damping has been tuned to suit the new suspension characteristics and there has been work on steering feel to give more consistent weight on centre and

on lock. A new option is larger, diamond-turned wheels (up from 18/19in front/rear to 19/20in) fitted with the latest generation Pirelli P Zero Corsa tyres with a more conventional tread pattern, making them less noisy and grippier in the wet. Our test car had these fitted, while standard kit includes the close-ratio gearbox (a must-have on the stock Evora) and the rear diffuser.

Almost from the moment the wheels start rolling, the S feels quite different to the regular model, the steering having more weight and the ride being a fraction firmer. There's a bit more of a boom from the V6 on start-up, though that's probably because this car has the optional sports exhaust, too (the stock system is valved to manage back-pressure across the rev-range). It's still not an evocative-sounding engine when you're loafing around, its voice merely a collection of whirrs and zizzes; it's much better from the outside, or with the windows down. There's no question the power is all there when you put your foot down, though, the V6 snapping the Evora forward with welcome vigour, and sustaining the push all the way to 7200rpm if



**'RIGHT AWAY,
IT FEELS QUITE
DIFFERENT TO THE
REGULAR EVORA'**



Above: neat supercharger installation lifts power of Toyota-sourced V6 from 276bhp to 345bhp. Above left: power slides now an option, despite lack of slippery diff. Below: optional diamond-turned forged alloys with sticky P Zero Corsas. Above right: diffuser is standard



you've pressed the 'sport' button.

It's a good solid push, especially noticeable at low revs and exiting bends, when it gives the rear tyres a tougher workout. As mentioned, although the changes to the chassis appear mere details, the S has a quite different feel. The standard car had an Elise-like delicacy, a lightness, a deftness, that made it effortless over difficult roads. The new set-up suits the output of the S, bringing more direct and less easily deflected steering and more positivity and control in the corners at the small expense of a firmer, slightly noisier ride.

DPM (Dynamic Performance Management), Lotus's stability control, is standard on the S and works well, subtly keeping excesses in check. A looser leash when the 'sport' button is pressed allows you to feel what the car does if you push to the limits. Answer: despite the mass of that tall V6 and the extra torque, the Evora S behaves exceptionally well. There's oodles of feedback and the limit is a soft edge rather than a cliff edge.

With DPM off, the nose runs a little wide at first, but keep the throttle on and the torque will tip the balance rearwards towards the

end of the corner until the rear is slipping slightly. You now have options that weren't open to you in the stock Evora, and although the weight can carry the rear if you back off sharply into a turn, it won't keep going, the chassis feeling flat and poised and recovering to neutral as the speed scrubs away.

On track it's superb, power-sliding despite the lack of a limited-slip diff and showing that same composure through high-speed corners. The gearshift is a little disappointing under pressure but the many small changes, which will also filter down to the stock Evora, make it more direct in general use.

It's a different sort of Evora, the S, a more direct, more focused and much faster one. Better than a base 911? Different. Not as rich in character or as polished as the Porsche, particularly when ambling, but a compelling alternative. Bodes well for the future...

John Barker

EVO RATING



- Extra power makes Evora a genuine 911 rival
- We know what happens to most 911 rivals

DRIVEN: THE OUTSIDERS

FINDING THE THRILL OF DRIVING... IN UNLIKELY VEHICLES



FORD C-MAX

OK, it's an MPV. Not an **evo** thing, really, although a Ford S-Max and a Vauxhall Zafira VXR have passed through our portals in the past. But there's something different going on here.

A Ford Focus is a good car to drive. Among mainstream hatchbacks, nothing gets closer to **evo** values of steering, handling, ride, flow. Much of this rubbed off on the first C-Max, which belied its staid, boxy looks by being a much better driving machine than perhaps it needed to be. Now look at the latest-generation C-Max you see here. Not quite so boxy any more, is it?

Soon there'll be a third-generation Focus. It will have a 'faster' roofline than the current hatchback and a smidge less rear space. As before, the C-Max precedes the regular Focus and gets the new platform first. There is also an extended-family-friendly Grand C-Max, with seven seats and clunkier styling, and that means the five-seater C-Max (with prices starting at £16,745) can play the style card in a way the old one could not. It's the regular-Focus alternative for people who really do need a useful rear cabin.

Ford's marketing pitches it as the empty-nester version. Subtext: high driving position for seizing-up joints, a distant dash and a good view forward for long-sighted eyes. Sounds like a recipe for terminal



Exterior has lost much of its boxy look for more dynamic lines



Interior is well finished with a more stylish dash than before

dullness beneath a superficially 'sporty' veneer, but that notion sells the C-Max well short. In fact it's a whole lot more than that.

The new 1.6-litre, 148bhp, turbocharged EcoBoost engine (which takes the price up to £19,745) is part of the draw. It pulls hard from low speeds with minimal lag, thanks to the airflow-scavenging effect made possible by extremely variable valve timing, yet it revs with vigour. Overtaking is a breeze, helped by Ford's new, slick-shifting six-speed gearbox.

But the best bit is the way you lose all notion that you're in an MPV as soon as you aim at some inviting bends. You sit quite high, so your sight-lines are longer and you can carry speed over undulations. Yet the C-Max neither rolls much nor suffers the artificial lateral stiffness that troubles many lofty cars. It just steers incisively and naturally, disguising its electric power steering well, and flows on throttle and brakes just like a Focus should. And it rides beautifully, so your offspring lounging in the back won't suffer for your amusement. The C-Max does it all.

A multi-purpose vehicle? I should say so.

John Simister

- ✔ Tidy handler, strong engine, practical
- ✘ Do you really need all that space?



CITROËN DS3 99g 1.6Hdi

The last time we had a Citroën in Outsiders, it was the C6, the most off-the-wall executive saloon that taste can buy. Now we have perhaps the most rational car in the French firm's line-up. Yes, it's a DS3, so the bodywork has a bit of strut and funk about it, but what's underneath sounds far too virtuous to be any fun.

This car has but 90bhp and puts out a mere 99g/km of CO₂, yet Michelin Energy Saver tyres aside, there are no outward signs of parsimony, so you're free to enjoy it for what it is – perhaps the most naturally talented and evenly balanced car in the DS3 line-up. No, it's not as fast as our long-termer with its turbo'd petrol engine – 0-62mph takes 11.5sec here – but what the 1.6-litre turbodiesel does deliver is a good wodge of smooth, evenly and quietly delivered torque in each of its five well-chosen ratios.

But the real enjoyment comes from maintaining momentum. This £13,800 DS3 trades the hotter version's more superficial excitement for a deeper glow of satisfaction, adopting an easy, relaxed gait. Sat back within the chassis, you feel front and rear move in harmony.

This could well be the sweetest DS3 in the whole range. In fact, it put me in mind of another car that appeared on this page recently – the BMW 320d Efficient Dynamics. Maybe there's something in this new wave of eco-cars...

Ollie Marriage



- ✔ Looks good; drives sweetly
- ✘ A bit sluggish off the line



Tame the Road



**Winter
i*cept evo**

Awaken your passion for the open road. When you'd rather take the road less traveled, there is nothing Hankook tyres can't handle. **Now who's in control?**

HANKOOK
driving emotion

Hankook Tyre U.K. Ltd. : Fawsley Drive, Heartlands Business Park, Daventry, Northamptonshire NN11 8UG, U.K.
Tel: +44-(0)1327-304-100 Fax: +44-(0)1327-304-110

hankooktyresuk.co.uk



DMS AUTOMOTIVE
UNLEASHING PERFORMANCE

THE ULTIMATE IN UPGRADES, AT DMS
WE'VE BEEN UNLEASHING AUTOMOTIVE
PERFORMANCE FOR OVER 15 YEARS

PORSCHE:

997 TURBO » 625+BHP
996 TURBO / GT2 » 600+BHP
997 CARRERA S PDK » 400+BHP
997 CARRERA S » 376+BHP
997 CARRERA » 348 BHP
CAYENNE DIESEL » 292 BHP
997 GT3 UP » 436 BHP
996 3.6 » 344 BHP
BOXSTER 3.4S » 336+BHP
CAYMAN S » 342 BHP
CAYENNE GTS » 440 BHP
CAYENNE TURBO 4.5 » 565+ BHP
CAYENNE TURBO 4.8 » 578+ BHP
CAYENNE TURBO S 4.8 » 600+ BHP
PANAMERA TURBO » 600+BHP

MERCEDES-BENZ:

SL65 AMG » 650 BHP + DE-LIMIT
AMG S5 KOMPRESSOR » 580+BHP
ALL AMG MODELS FULL DE-LIMIT
C63 AMG » 530+BHP +DE-LIMIT
SL63 AMG » 560+BHP +DE-LIMIT
RE-MAP & LOWER ABC SUSPENSION
CL600 BI-TURBO » 580+ BHP
S500 2008 » 411+BHP
SLK55 AMG » 389 BHP
SLK 350 » 328 BHP
200K » 205+BHP
NEW C CLASS PLEASE CALL
280 CDI V6 » 257 BHP
320 CDI V6 » 274 BHP
420 CDI V8 » 358 BHP

ALL OTHER CARS PLEASE CALL US

BMW:

BMW M5 V10 » 548 BHP 205 MPH
M3 E90/92 » 445 BHP + DE-LIMIT
M3 E46 » 370 BHP + DE-LIMIT
335i » 370+ BHP + DE-LIMIT
650i » 398 BHP + DE-LIMIT
330D E90 » 276+ BHP
320D E90 » 209 BHP
330D E46 » 260+ BHP
NEW 7 SERIES PLEASE CALL
123D » 252 BHP
X5 3.0D » 278 BHP
X6 35i » 370+BHP
X5 / X6 SD » 334 BHP
X6 X50i 4.4 » 500+BHP
535D / 335D TO 334 BHP

EXOTIC & MISC:

FERRARI 599 » 647 BHP
FERRARI 430 » 525 BHP
FERRARI 360 » 440+BHP
GALLARDO » 546 BHP/ LP640 TO 700+
GALLARDO LP560 » 600+BHP
MASERATI GRANTURISMO
& QPORT » 438 BHP
AUDI RS6 V10 » 680+BHP +DE-LIMIT
AUDI B7 RS4/ R8 » 439 BHP + DE-LIMIT
AUDI Q7 4.2 TDI » 387 BHP
AUDI A5 30TDI » 298 BHP
AUDI R8 V10 » 592+BHP
RANGE ROVER TDV8 » 338 BHP
R ROVER SPORT 3.0D PLEASE CALL
R ROVER SPORT 2.7D » 240 BHP
BENTLEY CGT / F-SPUR » 620 BHP
BENTLEY GT SPEED » 670+ BHP

DMS 996 TURBO
"STUPENDOUS EXPLOITABLE
PERFORMANCE"
EVO AUGUST 04

DMS 330CD
"NEW ECU MAKES CAR SO
MUCH FASTER YOU SIMPLY HAVE
TO HAVE IT!"
AUTOCAR OCTOBER 04

DMS 535D
"LAUGH-OUT-LOUD FAST"
EVO JUNE 2005

DMS SL55 AMG
"THIS CAR IS STUPENDOUSLY FAST"
PERFORMANCE CAR MAY 2008

DMS 997 TURBO
"IT'S EPIC, HILARIOUS AND
ADDICTIVE IN EVERY GEAR, YET
DOCILE WHEN CRUISING"
EVO SEPTEMBER 2008

DMS RS6 V10
"THICK LOW END TORQUE MORPHS
INTO OHMIGOD TOP-END"
EVO MARCH 2009

DMS 335i
"AS QUICK AS AN M3 ON
THE ROAD"
EVO MARCH 2009



Letter of the Month

Lotus Repositioned

I can hear the howls already. As Lotus makes a bold leap to reinvent itself as a premium sports car manufacturer, legions of Elise owners like me will be lamenting the death of the current lightweight 'basic' model philosophy.

Yet hang on a second; Lotus Cars has not made a profit for ten years. Ten years in which it has basically been selling minor revisions of a model launched in 1996! Lotus clearly has no future doing 'a bit more of the same'. The whole business model must be ripped up or Lotus will be another misty-eyed memory.

The master plan (evo 150) looks full of challenges, not least the need to make perceived quality match competitors in these rarefied market segments. The Evora may have delighted journalists, but sales are

slow because customers are not yet comfortable buying a £60K Lotus, so managing those brand expectations is going to be key. The new designs themselves are variably convincing but at least Lotus has gone for a styling palette that is consistent and fairly distinctive.

So I suggest we put aside the loss-making nostalgia, give the new team a cautious round of applause, and see if they really can deliver cars to savour, cars that might actually secure the company future.

As for replacing my Elise sometime, another article in issue 150 gave me an idea... I wonder if Caterham Cars would like to add a second range by repeating what it did when Colin Chapman walked away from the Seven?

Bruce Woodhouse, Skipton



Lotus fans need to join the company in looking to the future, reckons Bruce Woodhouse

ROAD ANGEL™
Professional
connected

THE STAR LETTER WINS A ROAD ANGEL PROFESSIONAL CONNECTED SAFETY CAMERA AND BLACKSPOT ALERT DEVICE WORTH £294.99.

The Professional Connected uses mobile phone technology to automatically and wirelessly download updates as you drive, so you never need to plug it into a PC!

For more information visit www.roadangel.co.uk



Top. Cat.

Absolutely stunning! The new Jaguar C-X75, that is (evo 150). Until seeing this car I had begun to be firmly convinced that we were living through the late autumn of a golden age of cars and motoring. Manufacturers' attempts to build politician-pleasing cars was surely the beginning of a fairly steep and slippery slope to the automotive equivalent of the zombie's living death. Even Porsche with its amazing 918 seemed to be continuing the uneasy arranged marriage between internal combustion and electrical motivation in an effort to 'environmentalise' the motor car and in particular the sports car.

Yet the gas turbine and the electric motor are surely the perfectly symbiotic technological marriage. Now suddenly the possibilities of the car surviving in an exciting and mechanically interesting way have been completely opened up again!

Can you imagine the fantastic whistling and whining soundtrack of this thing on full chat? Or that eerie whistle as you arrive in the car park like the opening title sequence from *UFO*? (Older readers will know what I'm on about.)

Then there's the exquisite shape



James Cahoon thinks evo should do more to halt the rise of paddleshift gearboxes

that makes so many current offerings look overblown and overwrought. Please don't make us wait ten years for the body at least, Jaguar. Surely with modern low-volume manufacturing technology we could see a version of this car with a V8 in the back. It would certainly give Audi a damn good run for its money.

Jaguar is changing the automotive landscape. As Harry Metcalfe so rightly said, 'who'd have thought it?'

Mark Taylor

Shifting attitudes

Surprise, pleasure and disappointment in equal measure. That's what I felt after soaking up Chris Harris's column in issue 149. On a personal level, I totally agree with his sentiments. Robot gearboxes

massively reduce driving involvement. It's that simple.

With the pleasure accounted for, what surprised me was Harris's evangelising tone. It's surprising because a robotised 'box has never prevented Harris and evo from awarding cars with the ultimate five-star accolade. Most recent, of course, was the Ferrari 458. In fact, in the very same issue Harris once again refuses to punish the 458 for its double-clutch 'box, preferring not to offend Ferrari and hiding behind the age-old horses-for-courses cliché.

As for the disappointment, the fact that the 458 isn't at least offered with an optional manual 'box is pretty much a travesty. The 458 and Ferrari deserve to be marked down, even if that means evo heading up

Ferrari's shitlist and not being invited to launches. Moreover, if proper drivers' cars are to survive as a breed, somebody influential has to speak up for them. Man up, lead opinion and burn a few bridges. If not the likes of evo, then who?

Unfortunately, the answer is nobody. Even if evo had a sudden change of heart, it's very probably too late to turn the ship. With that in mind, please let's not have any more moaning in these pages about the inevitability of a turbocharged, double-clutched, stability-controlled future. You've had your chance to make a difference. You blew it.

James Cahoon

Man up? Like stick it to them about no manual 'change in the first drive (like I did), grill the project chief (like I did), end up so far off the end of the Christmas card list by using a non-factory 458 and GTO in issue 149 that the factory won't speak to me? Don't accuse me of being kind to Ferrari. Read the 458 v GT3 RS test again: there's implicit criticism of the paddleshift in there because I say how much more rewarding the Porsche's stick is.

The game isn't up. I and evo campaign hard for this stuff. But the fact is it takes two lines of attack: public criticism and

DISTRIBUTED TO MORE THAN
70 COUNTRIES WORLDWIDE



**PERFORMANCE
EXHAUSTS**

WWW.MILLTEKSPORT.COM

TELEPHONE ENQUIRIES:
+44 (0)1332 227280

E: INFO@MILLTEKSPORT.COM

evo mail

a sales trend. I can help on the one front, but not the other, and 90 per cent of people that bought 430s had them as F1s – **Chris Harris**

Badge engineering

Having just finished Harry Metcalfe's 'Insider' column (issue 150) about badge engineering in order to make a not-quite-green car more acceptable to the critical public, I wanted to share my quite successful approach to the same matter. Pictured is the badge that helps make my matt-black Nissan GT-R much more readily welcomed by even the worst CO2 hardliners. (Thanks, Mr Prius, for the loan.)

Wolfgang Krueger



How Wolfgang Krueger has made his matt-black Nissan GT-R appear green

Size matters

I read with interest Harry's 'Insider' regarding the automotive industry downsizing. Smaller engines and lighter weight are surely good things for a better driving experience. The Germans' race to put bigger and more powerful engines in their latest saloons does not necessarily make better drivers' cars.

Now, I'm not shy of these vehicles, having owned a couple of M5s in the past, but the current M5 is not really a great drivers' car because it can't disguise its weight. The forthcoming 1-series M Coupe, 'inspired by the E30 M3 in the pursuit of back to basics', sounded like a car I could be interested in. Yet it will cost £40K, have a turbo engine and weigh 1500kg. That doesn't sound like back-to-basics to me. Shouldn't a back-to-basics drivers' car be normally aspirated, low weight and affordable?

I get most of my driving thrills from my Elise SC, but even the new Lotus cars of the future will be heavier and much more expensive. Downsizing and drivers' cars should go hand-in-hand but, worryingly, I can't see it yet.

Chris Spearing

We share your desire for smaller, lighter, more affordable cars, but we think you'll like the 1-series M Coupe (see Chris Harris's early impressions on p44) – **Ed**

Leave 'em outside

At last a return to form for evo. After months of whole issues being taken up by one or two cars (F1, M3, Porsche vs Ferrari) you have produced an issue (150) with a great blend of different vehicles, some of which are dreams, some potential reality – that's what I subscribe to your magazine for!

But can you please, please ditch the Outsiders page? I don't think I'm alone when I say I really don't care about the Nissan Juke or a hydrogen-powered London cab. All the cars you review should have at least some sports car element to them – that's why I buy your magazine and not *What Car?*

As for having a Skoda Yeti as a long-term... come on guys, there's loads of new hot hatches you could be testing instead (and I'm a Skoda owner, so I'm not a badge snob). Rant over.

Joe Bilton, Beverley, East Yorkshire

The idea of Outsiders is to highlight cars with real driver appeal that might otherwise slip under the radar. Many of us have to have a practical family car as well as a sports car, so we wanted to flag up which ones are fun to drive. The Yeti's a good example – **Ed**

Warranties 'n' chips

I was intrigued by Ollie Marriage's investigation into chipping (evo 146). Having worked for a company carrying out remapping and also for a prestige car dealer, I feel I have a fairly rounded view of the advantages but also the potential pitfalls.

When carried out by a reputable company, chipping really is one of the few win-win modifications out there. I've experienced the economy, performance and driveability improvements first-hand.



Joe Bilton believes the cars on our Outsiders page have no place in evo



A visit to the Highlands allowed Ryan Docherty to enjoy his E92 M3 on some of the best roads around. He'll be going back (see 'Great north run')

However, you quote Superchips MD Ian Sandford as saying: 'the manufacturer's warranty will be invalidated because you've altered the standard specification, but that's also true if you change the tyres.' I've never come across a manufacturer who would invalidate your warranty because you changed the tyres!

A remap on a modern car, take a BMW 335i for example, is as obvious as a punch in the face. Increases of 50-60bhp are commonplace now and it would take someone who knows the product (a technician at your local dealer, say) a matter of yards to tell the difference. And despite how clever the tuners are who alter the software, the manufacturers are hardly simpletons – after all, they wrote the software in the first place – and can easily hook up to a modern ECU to check things out. You can be sure that if a manufacturer has a valid reason to reject a warranty claim, it will.

My advice: if your car is within the manufacturer's warranty, take these issues into consideration, and look carefully at any warranty provided by the tuner before making a decision.

Dan Leach

Great north run

Enjoyed the 959 v 288 GTO article (149). In fact I'm sure I recognised some of the roads on the North York Moors and the car park at the Lion Inn, Blakey. If it isn't, then it's a carbon copy. That particular road that takes you from Castleton to Hutton-Le-Hole is a dream; it's just a shame it's not both longer and quieter, but even just coasting along it takes you to a place that is pretty rare these modern times – basically enjoying driving! I feel privileged to live amongst such outstanding beauty, from Guisborough to Whitby to York and everything in between.

I must admit, though, that my recent venture into the Scottish Highlands was a blast. I was in my E92 M3 with two friends in 355s and had a fantastic

time (everyone should drive the A837 from Bonar Bridge to Loch Inveray at least once in their lives). I'll be there again next year, radio off, windows down, driving not to get anywhere, but simply for the sake of it.

Ryan Docherty, Redcar

Tyre change

A couple of months ago it was time for a new set of tyres for my beloved 11-year-old Ford Cougar. Since changing my alloys from the stock 16-inches to an aftermarket 18in model, I have always used Kumho tyres. I thought that a tyre is a tyre; what difference can it make? This time, however, I decided to spend the extra money and buy some Continental Sport Contact 3s. Wow. What a difference. Less road noise, better grip, and a much nicer ride.

It was especially pleasing, therefore, to read in your tyre test (150) that Continental came first and Kumho last. Now, I'm sure Kumhos are perfectly acceptable tyres, and indeed they were £50 cheaper a corner, but from now on I will always buy premium-brand tyres; it really is worth the extra money.

Bay Hills

The colour of money?

Amid the sparkling prose chronicling the battles between Ferrari and Porsche (issue 149), three words leapt off the page. Nick Trott described his wild teenage excitement at his first glimpse of a Porsche 959 at full chat – and 'it was brown'.

That sums up the 1980s, when greed was good and taste wasn't. Just who would have shelled out £150,000 (then) for a glorious Teutonic technological tour-de-force and ordered the thing in bloody brown? Brown was for clunkers like Allegros or German taxis, not supercars.

I can only assume the offender was a colour-blind banker... who probably wore grey loafers with gold buckles.

Ian Dow, Edinburgh

Car Insurance



Be Wiser... Save Money

- The best policy at the best price
- Search over 30 insurers
- FREE RAC Breakdown
- FREE legal protection
- Instant cover and instalments

Freephone:

0800 298 9649

Online quotes at:

www.bewiser44.co.uk

For all your insurance needs - car, motorbike, van, multi-vehicle, home & travel

Be Wiser Insurance



Buying a new car?

Don't make the wrong choice!



The website that helps you decide which new car to buy

Expert reviews in plain English

New cars rated for practicality, performance, comfort, reliability, safety, value for money and running costs

Detailed specifications

Facts and figures for every new car on sale in the UK, plus photos inside and out

Easy-to-use search engine

Find your perfect car with our powerful matching engine

Video test drives

We show you what each car is really like to drive and to own

Tips & advice

Essential guides that help you save time and money



www.carbuyer.co.uk

From the publishers of autoexpress.co.uk and expertreviews.co.uk



From the forums: 'The ultimate car'

Bunta: 'If you built the fastest racing car on land, one that throws aside all rules and regulations, what would that car look like, how would it perform, and how would it feel to drive?'

The question was posed by Kazunori Yamauchi of *Gran Turismo*



The X1 Prototype is Red Bull's ultimate car. Forum goers have revealed their

fame. So Red Bull's Adrian Newey came up with the X1 Prototype for the game (he also claims that it would be very fast and Vettel would smash all lap times in it. Yeah, course he would. lol). Fine as far as it goes, but what would you build?

I'd have F-Zero. One lower than F1 so at least ten times better – F-Zero cars would hover and go over 1500mph down the back straights. Drivers would have to be vetted for coolness before they are allowed to join in.

ShockDiamonds: I would imagine an F1 world but without the laws, rules and regulations. The cars would



Left: Bunta would like to see the 1500mph hovering cars from the F-Zero series of Nintendo games brought to life in a real race series

be techfests and the drivers, in all probability, faceless androids. Not sure we don't have the latter already, so at least we would get some further interesting technology.

Gwaredd: Mine would be Concorde with upside-down wings and massive tyres.

LT: How great would it be if somebody came up with a new Can-Am-type 'unlimited' series as the swan song of the internal combustion age, before we are all driving electric appliances on the road?

Preacher_Cain: I'd like a half-track. Armoured. With a jet engine. And

lots of guns. Extremely cool, and highly shooty.

Orange Cola: There's a Puma that runs in a rallycross series with circa 700bhp, so it's already been done. The short wheelbase has limitations.

Dinny_G: V8-powered RWD Volvo 440. Exterior and interior kept exactly as they left the factory...

Marv: Horacio Pagani already makes my ultimate car. It's called a Zonda F Clubsport with a carbon-titanium tub and a raw CF bodywork finish. Turn-key solution, no faffing around with strapping wheels to a Saturn 5 (though I admire that idea!)

JORG GRAY **THREAD OF THE MONTH WINS A JORG GRAY CHRONOGRAPH**

The originator of the best evo forum thread wins a fabulous Jorg Gray chronograph. Since gaining international attention after the Jorg Gray 6500 Chronograph was identified as the watch worn by President Barack Obama, Jorg Gray has quickly become one of the world's most sought-after brands which can be found in fine jewellery stores throughout the UK. For more information, visit www.jorggray.co.uk

Read more – and join in the debate – at community.evo.co.uk/forums

Win a seasons racing with Blendini Motorsport Round One entry from only £99!

2011 BLENDINI MOTORSPORT RACING DRIVER SCHOLARSHIP

This winter Blendini Motorsport is offering one lucky racing wannabe the chance to win a fully funded season in the **Ma5da Racing Championship, worth a staggering £25,000+.**



Photograph courtesy of Jon Elsey

The Ma5da Racing Championship is the UK's largest single make car racing championship - offering huge TV exposure.

Held over 3 rounds in front of a panel of racing experts, entrants will be evaluated on their driving, fitness and media skills.

Round 1 - January 2011, book your place on the grid TODAY by visiting www.mazdascholarship.com



www.mazdascholarship.com

www.tomrocheracing.com

Terms & Conditions Apply. Details available upon request. All entrants must be between the ages of 17 & 60, and hold a full UK driving licence, no previous motor racing experience or MSA race licence necessary. * Round 1 = £98, Round 2 = £298 Final Round = £348

DAY *of* THUNDER

*It's the world's fastest road car, and for one glorious day it was all ours. **Chris Harris***



describes an unforgettable encounter with the 1183bhp, 268mph Veyron Super Sport



“The pre-drive briefing consists of
a series of unveiled threats’





Left: Veyron Super Sport cuts through gorgeous Andalusian countryside. Cockpit (above) reeks of quality. This is the actual record-breaking car, one of five 'World Record Edition' models, all of them already sold

Please excuse the blindingly obvious observation, but besides anything else it may stand for – be it speed, wealth, exclusivity or the obsessions of Herr Piech – the Bugatti Veyron is a collection of numbers.

Some might say that boiling a £2,000,000 car down to a sticky concentrate of digits and decimal points is the ultimate insult, but then the Veyron is a car whose numbers captivate today's car nut the way the Vector did in its early-'80s Top Trumps heyday.

But having spent a day attempting to understand the ramifications of 1183bhp and 1106lb ft of torque and the laws of the public highway, it wasn't the numbers that defined the SS, which is strange because when I drove the standard car back in 2007 all I could think about were the colossal outputs and list price.

So forget the price. Take the knowledge that this car has posted a two-way average of 268mph (it went 271mph in the quicker

direction) and will beat a GT2 RS from a standstill to 186mph by 14sec and park the lot of it. Because the essence of the Veyron SS might just be definable through its launch-control software. No, really, it might.

Our day with the SS comes right at the end of the car's international press launch. So far not a single panel of any of the three cars present has been damaged, and the pre-drive briefing from Bugatti driver Pierre-Henri Raphanel consists of a series of unveiled threats to anyone considering behaving badly in the cars. I don't know how much a laquered carbonfibre front wing costs, but it's a fair assumption that acts of random carelessness in a Veyron are calculated in several years' salary.

Raphanel then spends a disconcerting amount of time delivering his speech directly at yours truly, while Julius Kruta, head of Bugatti Tradition, smirks in the background. It was Julius who, back in '07, watched someone who might have looked a bit like me drift a 164 on a wet French D-road. (The resulting shot, of a Veyron on opposite-lock, is the only pic of me driving a car I have in my house.) It would

WORLD'S FASTEST:
BUGATTI VEYRON SUPER SPORT

seem that they don't want a repeat attempt on these dusty Spanish roads.

It's not all bad though. Pierre-Henri says we'll be able to use the launch control. They haven't been letting previous groups use it because the tyre bill would have been astronomical. And so, several hours later, I find myself sitting on a straight, deserted piece of road, editorial director Harry Metcalfe alongside, Bugatti development guru Loris Bionocchi leaning in to show me how to engage launch control – or, more specifically, smokey launch control.

Smokey launch control is the unofficial name for an ESP-controlled function that allows the

SS to launch with a little more drama than the standard program will permit. Turns out the average Veyron owner quite fancied the odd show-off moment in Cannes, and the Bug's brutal efficiency wasn't leaving enough visual evidence. For a smokey launch, more torque is thrown at the rear axle and those rear 365s take some serious pain.

At first, I can't fathom how to make it work, but Loris talks me through the buttons: 'Switch the ESP off, cover the brake with your left foot, make sure the handling mode is engaged and then press the launch control button: it should say LAUNCH on the dashboard now.' He grins

and wanders away, but not before adding: 'And Chris, no longer than two seconds waiting with the throttle please.'

I've just watched the in-car video of what happened next, and I'm very glad to tell you that my reaction is one of genuine shock. Hold full throttle and the engine sits at around 5000rpm. Now simply release the brake with your left foot as your right forces the accelerator into the carpet and let the double-clutch transmission do its thing. The noise, thrust and feeling of gently counter-steering against the ensuing slide are things that people like you and I take to our graves: the thick end



SIGN HERE...

of 1200bhp pounding into pavement and the driver's head being forced back into the seat. 0-62mph in 2.5sec? 0-124mph in 6.7? I don't doubt it for an instant.

But it's when I dawdle back to try to relay my sense of shock to Loris that he delivers the killer blow about the Veyron SS, the statistic – above any single performance increment than can be attributed to it – that marks it out as the most extraordinary road car ever: 'We have tested the car with 100 of these starts in one day,' says Bicocchi, 'and there were no problems with the powertrain.' That is truly, truly amazing.

At the launch of the E60 BMW M5, we were allowed to do one launch-control start. After that, the reek of clutch was too much and the car felt like it would expire. Think that's an unfair comparison, because the Bug uses a dual-clutch tranny? When we ran a 911 Turbo S against the Atom V8 last month, the Porsche's PDK gearbox began to feel noticeably more sluggish after five standing starts.

The Bugatti has well over twice the torque of the Porsche, and yet it can run 100 potential half-shaft-slayers without a problem. It's this attention to engineering excellence that defines all Veyrons, but especially the Super Sport.

So, you've swallowed the brave pill and you've decided to order a Veyron Super Sport. What happens next?

Well, you can forget about ordering one of the five World Record Editions (like the car here, price 1.95m euros plus taxes, or around £2m at today's exchange rates) because they're all sold. So your only option is to order a 'standard' Super Sport, list price 1.65m euros plus taxes (call it £1.76m).

Now, you'd think everything would be included for that, but you'd be wrong. 'Bespoke' is the name of the game in this sector of the market and before you place an order you need to fully familiarise yourself with the options list and the multitude of paint and trim combinations. For this reason, Bugatti takes every potential customer out to the factory in Molsheim before they reach the stage of actually placing an order.

So, you might like to have the centre console finished in carbonfibre rather than turned aluminium. That'll cost you an extra £6826. Perhaps you'd like the exterior mirrors in matching carbon too; that'll be an additional £16,000 (having them finished in polished aluminium costs a staggering £32,000). Fancy having all the aluminium trim inside the cabin in a black anodized finish? It looks great but it'll cost you an extra £24,000. A mere trifle compared with having the carbon body left unpainted but lacquered: an additional £192,000, or £229,333 if you'd like a blue lacquer finish.

If you're still standing and you're happy to proceed with your Super Sport order, then a contract is drawn up detailing the exact specification you've chosen for your car, along with a polite request for 450,000 euros plus taxes (c£480,000), to be paid on signing.

Around six months later comes a further request for 450,000 euros when your car is about to enter build, and six months after that you can expect to take delivery. But not before paying the outstanding million or so.

The most expensive Veyron ordered in the UK so far is a World Record Edition that's going to cost its owner £2.18m. Still, he can rest easy in the knowledge that all Super Sports now come with a three-year warranty and servicing package...

Harry Metcalfe



Every prospective Super Sport owner gets this brochure, detailing the various options

'This 268mph machine can roll away from a standstill with no more drama than a 2.0 TDI Golf'

WORLD'S FASTEST:
BUGATTI VEYRON SUPER SPORT



A blurred landscape photograph showing a wide, flat field in the foreground, likely a golf course or a large open field. In the background, there is a line of trees and a clear blue sky. The image has a motion blur effect, suggesting it was taken from a moving vehicle or while walking quickly.

“The feeling of relentless surge actually squeezes your innards. This is the essence of the Super Sport’

WORLD'S FASTEST: BUGATTI VEYRON SUPER SPORT

From the moment you approach the SS, you know it has been built like no other car. This hardness, this level of robustness and quality has, weirdly, been the cause of the Veyron's biggest problem: it is perceived as being soulless because it is so damn good at what it does. Pierre-Henri is passionate about this misunderstanding. 'If people want a car that is all about noise and being uncomfortable, this is not the one for them: the Veyron is a useable car, a comfortable car – but when you want, you can destroy any other car with it.'

To demonstrate this, he attacks a sequence of bends and a short straight using full power and, sitting in the passenger seat, the feeling of relentless surge actually squeezes your innards. This is the essence of the Veyron SS, and why I find it so fascinating. I think anyone who dismisses it as being 'boring' in the face of Paganis and Enzos needs to spend more time with it, dig a little deeper.

The thing reeks of quality, but then so it should for £2m. The door pops with a light *der-dunk* and as it opens a waft of expensive-smelling hide sneaks into your nostrils. Not

much has changed inside compared with the standard car, save the new power-meter gauge and some trimming. But I love the bareness of it, especially now all the metalwork is matt black. It doesn't feel like a car, more like an experimental rocket-device from *The Right Stuff*. The steering wheel on this one is trimmed in a super-fine leather but its surface has been machined to give an almost suede finish: it's a clever touch because it enhances the sense that this is like no other car, even through its control surfaces. It feels tougher, stronger, meaner. The revised A-pillar and wing mirrors give much improved visibility too.

The noise is fascinating: it's nothing like as loud as a Zonda, but after the starter motor has whinnied life into each of the 16 cylinders the exhaust throws a blanket of noise rearwards that leaves people open-mouthed. If needs be, you can silence the products of high crank-speeds, but you cannot hide the effect of the vast quantities of air ingested, combusted and expelled by a quad-turbo 8-litre motor. It's the only car with an integral sub-woofer in the exhaust box: it rumbles like an action movie.

The pistol-grip gearlever sits a half-grasp from your right thigh, again finished in matt black. Move it right and you feel a positive click as the electrical connections meet: remove your foot from the brake and the car creeps forward like a conventional automatic. And I suppose it's at this stage that you have to decide if you actually want to understand the Veyron, because if you do, the fact that this 268mph machine can roll away from a standstill with no more drama than a 2.0 TDI Golf should be a cause for celebration. Because it takes a lot more engineering expertise to make 1106lb ft useable and seamless at 5mph on a loose gravel driveway than it does north of 200mph. The Veyron's trouble is that it de-bullshits the hypercar to the point that people assume it is bereft of emotion. That's like ignoring the pretty girl because she isn't jangling her bristols in your face.

Anyone who thinks like this should experience a Veyron SS at full throttle in third gear. The dusty roads around Jerez are not the ideal location for such a demonstration, but then again, no other machine of this type can

THE DETAILS

A huge part of the appeal of the Bugatti Veyron is the obsessive engineering that lurks beneath its carbon skin. Take the wheels, for example. They're a completely new design for the Super Sport and each one takes manufacturer BBS an almost absurd 30 hours of machining to create.

At least they last longer than before, meaning owners only need to throw them away every five tyre changes, rather than the hopeless three of the previous design. The cost of a new set of wheels and tyres, by the way, remains a very steep 50,000 euros, plus the VAT...

Over the top? Consider the huge centrifugal forces when those wheels are spinning at the world record 268mph. According to Bugatti engineers, at that speed there's the equivalent of 3100G acting at the outside of the wheel rim. Which means that the tiny 28gram tyre pressure sensor on the inside of the rim weighs the equivalent of 128kg...

Even the humble air-valve you use to blow the tyres up with had to be modified on the Super Sport – at 268mph

the tiny 'pimple' you find inside all tyre valves has enough g-force acting on it to cause it to open slightly, so releasing some air and causing the pressure to drop slightly if high speeds are sustained. Bugatti ended up fitting a second spring to keep it closed.

For me, it's this sort of daft detail that makes the Veyron so very special (even if customer cars are limited to a 'mere' 258mph in order to safeguard the tyres). I wonder how many other cars currently vying for the Veyron's new top speed record go to such colossal lengths to make sure everything is absolutely perfect? Not many, I suspect.

The construction of the Super Sport's tub is also different to previous Veyrons. It's formed from a new type of composite that Bugatti calls 'ultra high modular carbonfibre'. This is both lighter and stronger than the regular stuff, resulting in greater torsional strength, helping the handling and also allowing the A-pillars to be made slimmer.

The weight of the tub also drops by a useful 35kg which,

along with the 11.5kg saved by the new lighter wheels plus some detail changes to the way the radiators are plumbed, means the Super Sport weighs in around 50kg lighter than a standard Veyron. Shame it's still the wrong side of 1800kg, but then the engine alone weighs 456kg...

Harry Metcalfe



Above: Super Sport badge can be found in the engine bay on the newly enlarged chargecoolers. Left: don't kerb this. Each wheel takes BBS 30 hours of machining and costs the thick end of ten grand. Below: ducts are new for the Super Sport. The tub, including roof, is made of a new type of carbonfibre





SEE THE VEYRON
IN ACTION
AT EVO.CO.UK



‘The noise, the thrust, the feeling of gently counter-steering against the ensuing slide...’

put its power down half as well as the Veyron.

There's a quite a lot of turbo-lag in the SS: you push the throttle pedal down and it takes a second for the turbos to spool up. This is never a problem, because even while they're doing it, the car still feels as fast as a 911 Turbo. And then, amid some choice boost-puffing and the locomotive low-frequency churning of those eight litres, the noise increases as the rev-counter spins through 3000rpm – and only during this phase, from 3000-6000rpm, does it immediately feel stronger than the boggy 16:4. When you relax your right foot, the wastegates gabble away behind you and W16 settles to a contented thrum.

Tellingly, when there are two people in an SS, they talk liberally because the thing is so damn refined, but when the taps open, there

is silence. You can't talk because your brain is trying to work out if you were propelled at the horizon, or if the horizon was just dragged onto your face. It's uncanny, ludicrous and, I think, completely addictive.

Part of its appeal lies in the responsibility it bestows upon the driver. You can use perhaps four seconds of its maximum potential at a time if you want to remain within the legal limit of most countries, longer if you're willing to remain responsible but take a few chances.

The revised chassis is a huge improvement because it gives far more in ability than it removes in compromises. The ride is a little firmer, but the damping is impressive and the car has as much agility as could be expected of an 1838kg lump. It isn't a wrist-flicking device though: you peel it into a turn with the throttle

balanced, unwind the lock and feed the power in gently. The steering is now lighter than before and even though some people think it's a backwards step I think it suits the car: there's no less feel, the new kinematics make it even more responsive and accurate than before. It suits the way you drive the car: smooth steering, smooth braking, *WHAM*, surreal power.

Those brakes are probably the car's weakest link: the 400mm front ceramic rotors are huge, and even if the team has done a good job of making them useable at low-to-medium speeds, all it takes is two big stops from north of 190mph to have them groaning in despair. They don't fade, but the pedal goes a little longer in recognition of the fact that no braking system exists for a car this fast and this heavy.

What a day. In many ways the Veyron SS

‘...this obsession we have with travelling fast, witnessing



is a study into the human condition and its relationship with speed. It awakens in me the same thrill I see in my children as they push their own experience boundaries on bicycles and scooters; this complex obsession we have with travelling fast, witnessing blurred scenery, absorbing the effects of accelerated mass. I just can't get enough of it. Every thwack in the spine in the SS is an event to be cherished and I don't care that other machines offer greater opportunities to be seen and heard. Next to the Veyron they are brash plumage; strutting peacocks in the presence of a true raptor.

It is for this very reason that the Veyron Super Sport has its place in the hypercar hierarchy: its performance and peerless engineering ensure that it just happens to sit above them – way, way above them all.

FINAL THOUGHTS

It's five years almost to the day since I first climbed out of a Veyron, shell-shocked by what I'd just experienced, and blow me, it's just happened all over again. I had thought that feeling of unrelenting, torrential power you get from a Veyron on re-heat would never be bettered; surely that W16, quad-turbo engine had nothing more to give. How wrong I was. The Super Sport makes a regular Veyron feel, well, a bit pedestrian.

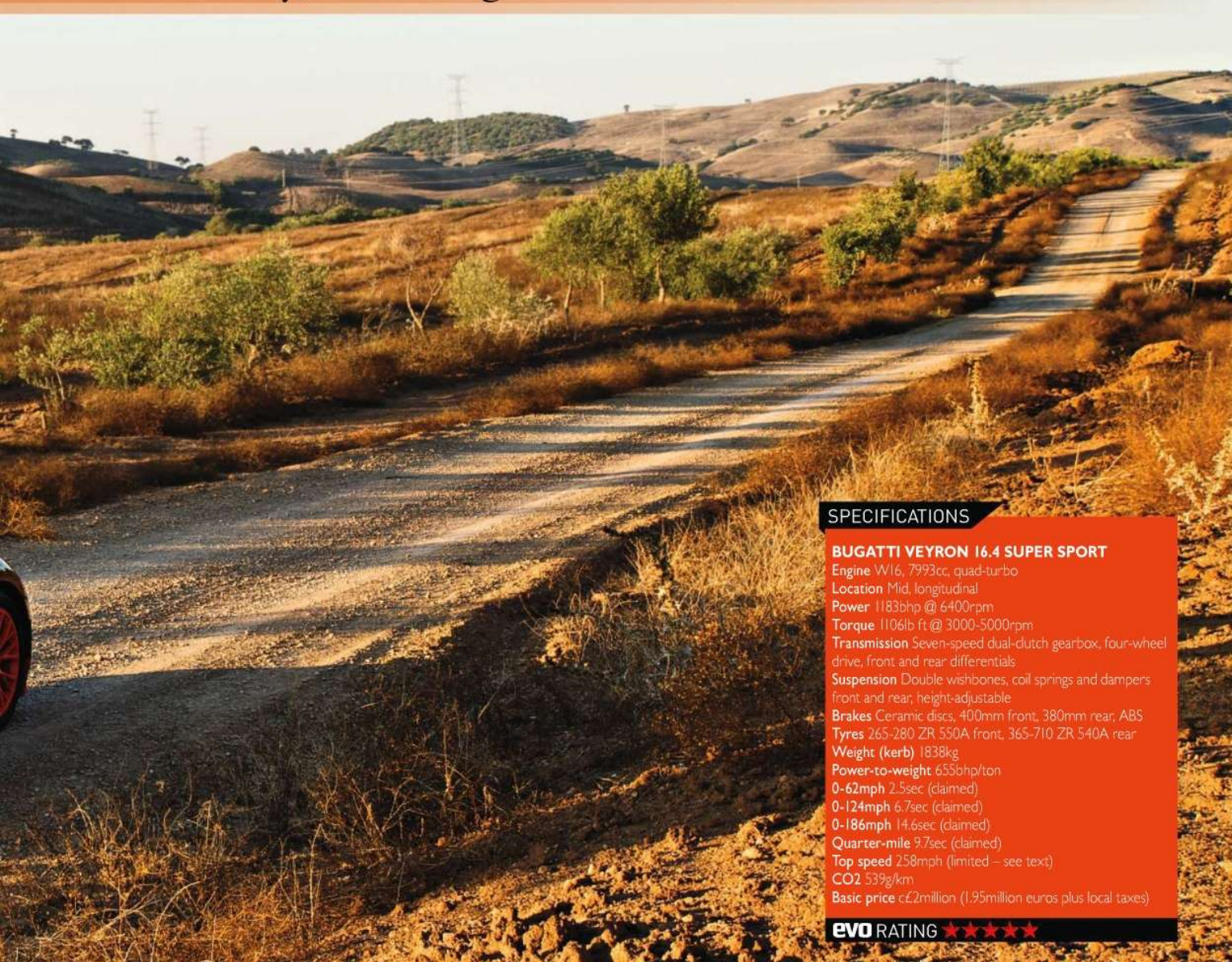
I feel for current Veyron owners, especially those who aren't just posers and really love their driving; taking a test drive in a Super Sport is going to ruin their day. Everything on this car has been improved, even those things you thought were already perfect.

The real revelation, though, is reserved for when you nail the throttle. When that engine delivers its killer punch, you'll fear for your sanity as the horizon goes all blurry and

the tacho needle does its little dance, one gear after another dumped unceremoniously. However many times you repeat this, you will never, ever tire of being pumelled by its massive forces.

We should thank the VW group for creating this complete monster of a car. They didn't create the Veyron to make a handsome profit. They did it because they could. So thanks Mr Piech and Co. It's flipping wonderful. **HM**

blurred scenery, absorbing the effects of accelerated mass...'



SPECIFICATIONS

BUGATTI VEYRON 16.4 SUPER SPORT

Engine W16, 7993cc, quad-turbo
Location Mid, longitudinal
Power 1183bhp @ 6400rpm
Torque 1106lb ft @ 3000-5000rpm
Transmission Seven-speed dual-clutch gearbox, four-wheel drive, front and rear differentials
Suspension Double wishbones, coil springs and dampers front and rear, height-adjustable
Brakes Ceramic discs, 400mm front, 380mm rear, ABS
Tyres 265-280 ZR 550A front, 365-710 ZR 540A rear
Weight (kerb) 1838kg
Power-to-weight 655bhp/ton
0-62mph 2.5sec (claimed)
0-124mph 6.7sec (claimed)
0-186mph 14.6sec (claimed)
Quarter-mile 9.7sec (claimed)
Top speed 258mph (limited – see text)
CO2 539g/km
Basic price c£2million (1.95million euros plus local taxes)

evo RATING ★★★★★

• The engine room

The heart of the Veyron is its extraordinary quad-turbo W16. It's built in a small corner of a VW engine plant, by two dedicated engineers, at a rate of just one a week. **Harry Metcalfe** reports



Ever wondered where the Veyron's engine is made? It turns out it's within VW's enormous Salzgitter engine factory, just to the west of Wolfsburg, where over 7000 VW group engines are cranked out every day. Included in this huge daily total are 1500 2-litre TDi engines, all 1.2 and 1.4-litre twin-supercharged engines for the VW group, and the 6-litre W12 used in various Audis and Bentley's Continental GT. And, every Friday, a single completed W16 Veyron engine leaves the plant and heads for the Bugatti factory in Molsheim.

Salzgitter is simply vast, covering an area one and a half times the size of Monaco, but the area reserved for Veyron engine production is absolutely tiny. Inside Hall 4 is the 'Pilot Hall' where all the secret development work is done on future VW engines, and just to one side is a separate, rather nondescript area measuring just 19 x 6m. This is where the mighty W16 Veyron engine is made, and, to be frank, it's a bit of a disappointment.

But if the facility itself is a bit of let-down, the engineers assigned to Veyron engine-building are full of enthusiasm for their work, and why wouldn't they be? It takes two dedicated technicians a whole week to hand-build each W16 engine and, at the time of our visit, Super Sport engine number six is in the process of being built. In fact it's almost finished, with just a few components needing to be added before it's ready to be whisked off to the dyno facility downstairs, where an eight-hour bedding-in process will be carried out.

The assembly process begins with the opening of a wooden crate that contains the enormous aluminium block (cast in the UK, incidentally). The block is mounted on a dedicated engine stand that can be spun electrically through 360 degrees at the push of a button. From here, it gets built up in layers, starting with the installation of the crank, followed by the 16 rods and pistons being slid

into their respective cylinders. The sump is tiny – the W16 is dry-sumped with a separate oil tank (the 21 litres of engine oil that are pumped round a Veyron engine is the most for any production car).

The huge cylinder heads go on next, then the exhaust manifolds, turbos and inlet manifolds, followed by the chargecoolers, which are bolted to the top of the engine. Throughout the build process, everything is logged electronically, including every torque setting of every bolt used in the engine, so if there was ever a problem, heaven forbid, engineers could see if something hadn't been assembled correctly.

The completed engine (weighing in at 456kg) isn't exactly a thing of beauty, but then you never get to see it up close once it's installed in a Veyron and there's no doubting it does the business. In fact, as I'm about to find out, it could produce even more than the stated 1200PS (1183bhp in old money).

I ask Marian Busse, head of this Pilot Hall operation, what changes were made to the regular Veyron engine to create the SS unit. He explains that the four turbos are completely new – they're larger and capable of boosting up to 1.4bar (up from 1.2bar). The inlet manifolds were changed for a freer flowing design, the ECU was updated and the liquid charge-coolers are significantly bigger.

I then ask him if it was a struggle to reach that extraordinary 1200PS and Busse tells me that the Super Sport engine could happily have been rated at 1300PS but 1200 was the limit of the Veyron's new gearbox. So the Super Sport was effectively *detuned* to meet its remarkable 1200PS rating.

Apparently the W16 had to have the same durability standards as any other VW engine, so it was designed to last at least 300,000 kilometres. So, which engine would Busse expect to fail first as the mileage builds, a regular Golf GTI engine or the Veyron W16? 'I think it would be the Golf,' he replies. 'That is because the Veyron engine is hardly ever put under full load, so engine wear is minimal in normal usage.' He goes on to tell me about the Veyron that's currently undergoing durability trials and which has already covered 170,000 kilometres with absolutely no problems.

Within the Pilot Hall, they operate under a 'Zero mistake strategy'. You'd have to say it seems to be working very nicely...

Opposite: Metcalfe and the engineering phenomenon that is a completed Veyron W16 engine. This page, from top: the crated block arrives; amazing detail on internal engine components; valves seated in head; titanium con rods; rig spins engine through 360deg



ON THE DYNO

■ Once assembly is complete, every Veyron engine goes for an eight-hour session in a dedicated dyno room. Here, it's 'bedded in' by taking it through various rev and load levels, at the end of which a full power run is recorded and stored for reference.

Do some engines produce more than others? Part of the exercise is to make sure no engine puts out more than the quoted figures, so each is adjusted to precisely the stated 1200PS.

I mistake the fuel lines feeding the engine for coolant hoses. Seems the W16 burns 1200 litres of fuel during the dyno process. No wonder the weather's so nice in this part of Germany. **HM**



‘The Super Sport W16 was effectively detuned to produce 1200PS’

Fast Fiction? Or

In the past, supercar manufacturers made some pretty extravagant top speed claims. We try to find the truth behind three of them

JAGUAR E-TYPE 150MPH

Jaguar made great play of the E-type's 150mph top speed when the car was launched at Geneva in March 1961. But was it genuine? Cleverly, the company had already made two early production cars available to road testers from *Autocar* and *Motor* magazines, and it was the *Autocar* team, driving a fixed-head coupe registered 9600 HP, who corroborated the claim on a lightly-trafficked dual-carriageway at Jabbeke in Belgium, recording a two-way average of 150.4mph.

However, as has often been speculated, 9600 HP wasn't quite standard. For starters it was fitted with Dunlop R5 racing tyres, which increased the circumference just a tad and hence the overall gearing. That much was known at the time. What was only confirmed later was that the 3.8-litre straight-six engine was far from production-spec. In fact it was a well run-in XK150S unit, meticulously prepped with a gas-flowed cylinder head carefully matched to the inlet and exhaust manifolds, probably good for an extra 20-25bhp. As owners and subsequent road testers discovered, production E-types couldn't be coaxed much above 140mph. Still, when many family cars struggled to top 70mph, 140 was seriously fast. One-fifty was, in today's terms, practically Veyron-quick. And the E-type – or rather an E-type – really did do it. **PT**

LAMBORGHINI COUNTACH 186MPH+

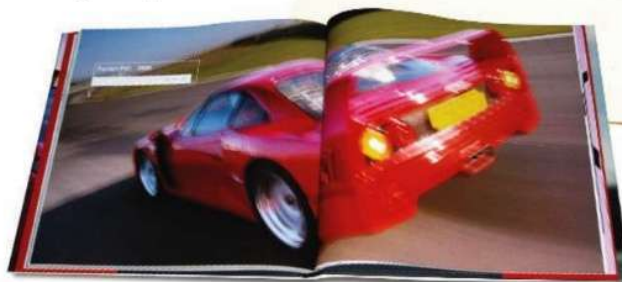
The top speed of the Countach has long been a source of contention. It wasn't helped when the first production LP400 was released back in 1974 and even Lamborghini itself claimed not to know what the true maximum speed was. After pressure from dealers, test engineer Bob Wallace took one of the prototypes to Fiat's private 5km stretch of autostrada and recorded 290kph (180.2mph), which led to the well-publicised claim that the magic 300kph (186.4mph) would be possible, given enough space. Wallace himself said he wasn't particularly interested in top speed – he was confident a Countach would go faster than any customer was ever likely to want to go...

Road testers of the period struggled to get anywhere near the claim. *Motor*, for example, reached only 160mph with a very low mileage LP400 in 1974. Four years later, Lamborghini unveiled the LP400S which, they said, could reach 194mph. This was later corrected to 184mph – and that was still considerably faster than any independent road test achieved.

In 1982, the 375bhp Countach LP500S was launched, with a claimed top speed of 196mph. One of the first examples was bought by UK

Lamborghini enthusiast Barry Robinson (whose cars always sported the distinctive registration plate BR 33) and soon after taking delivery he was talked into having a crack at a number of UK speed records in this car. During pre-testing it was discovered the Countach's top speed round the Millbrook bowl was only 158mph so they took the rear wing off and the top speed immediately increased to 168.8mph, almost 11mph faster.

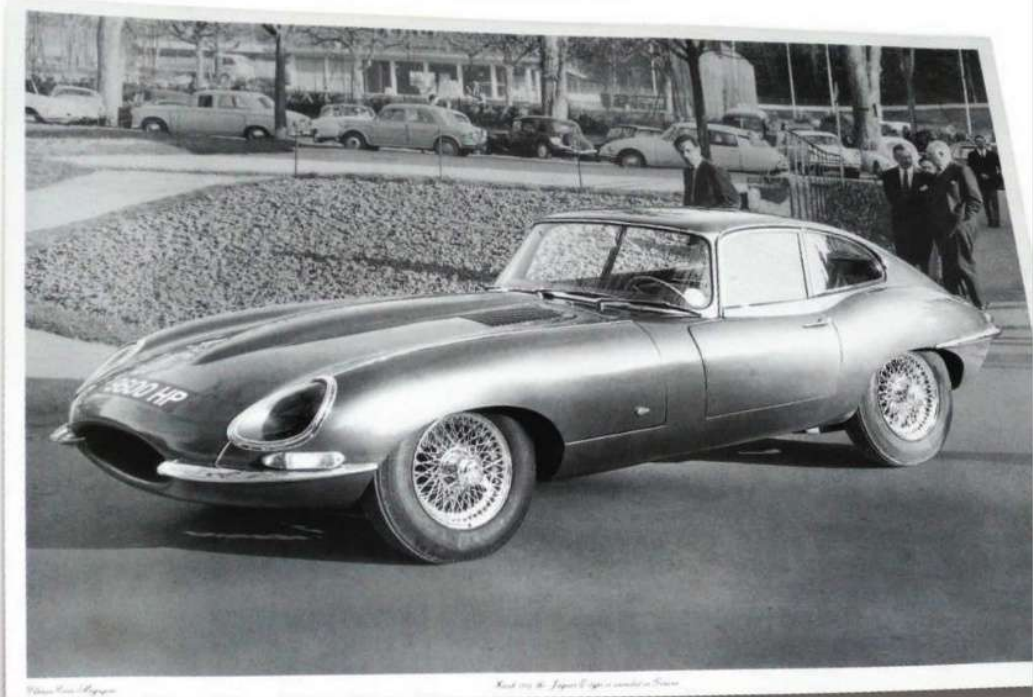
Unfortunately, on the day the records were to be set (October 15, 1983) it was pouring with rain and Barry decided to put the wing back on for stability. Along with his co-driver, Alex Poston, they went on to set 11 outright UK speed records,

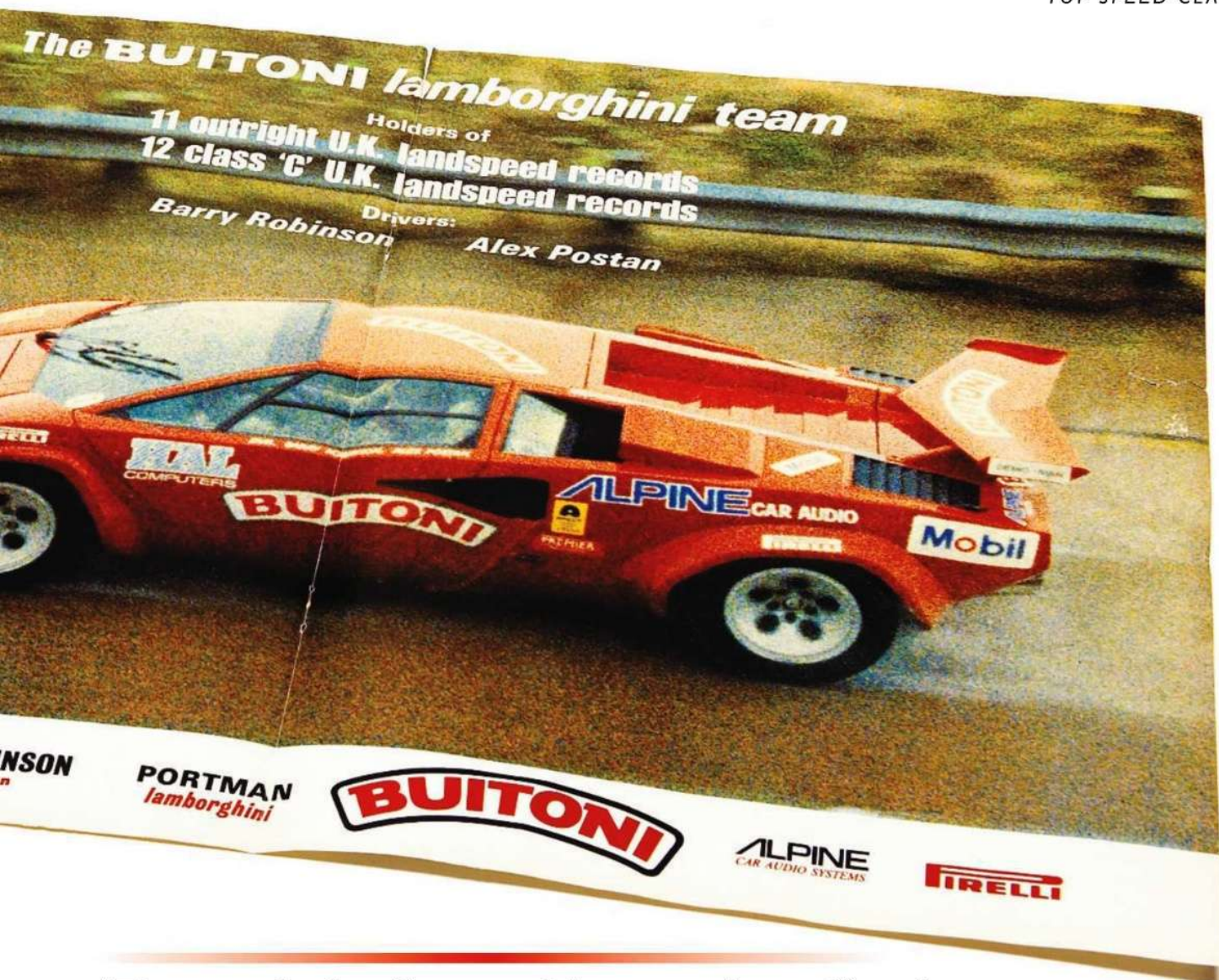


COMPUTERS LIMITED

T W ROBINSON
demolition

Above: record-breaking in the '80s but Countach top speed remained in doubt. Left: few runways long enough to test F40's 201mph V-max. Below: the actual 150mph E-type





‘They took the Countach’s rear wing off and immediately the top speed increased by almost 11mph’

averaging around 155mph for distance records between 50 and 500km. The alleged top speed, however, wasn't in any danger...

Even though it slowed the car, customers loved the rear wing and all UK press cars had one fitted, leading to relatively disappointing performance figures when compared with Lamborghini's official figures (set using test cars without a wing). And so the debate went on. Then, in September 1986, *Fast Lane* editor Peter Dron went out to the factory to sample a customer Countach QV – crucially without a rear wing. With the owner driving, they recorded 195.2mph between kilometre posts on the autostrada and 184.9mph in the opposite direction. Averaging out at 190.1mph, this is by far the fastest independently recorded top speed for a production Countach. Just how repeatable that figure was is open to debate, of course... **HM**

FERRARI F40 201MPH

■ There was little doubt that one of the reasons Ferrari built the F40 was to stick two red fingers up at Porsche. The 959 had stolen the 288 GTO's top speed record with a 197mph (versus 189) run and Enzo wasn't having any of it. Although it has never been confirmed, you sense that the car that celebrated the 40th anniversary of Ferrari simply had to be the fastest car in the world. And it was.

Ferrari claimed a top speed of 201mph in 1987. It was a gloriously provocative claim – just over 200mph and just ahead of the 959. That the F40 was a barely disguised race car and the 959 a comfortable, all-weather 4wd supercar did not matter – the F40 had exceeded 200mph. Or had it?

Few disputed the claim – the F40 produced nearly 80bhp more than the 288 GTO – therefore the maths added up. Contemporary magazines

carried out plenty of acceleration tests, but few had runways or test tracks long enough to test the top speed. Indeed, *evo* contributor Mark Hales reported winding an F40 up to 170 'followed by the wrestle to get the Ferrari stopped before the test track ran out' in the book *Into The Red*.

Interestingly, it was not *Quattroruote* magazine's confirmed 200+mph top speed run that silenced the doubters but a guerrilla video made by a Japanese gentleman in which he filmed himself comfortably exceeding 300kph (186mph) on the highway. Watch it on YouTube – it looks easy.

The story doesn't end there. The legend that is Dario Benuzzi slapped on his fast shades in the early '90s and took an 800bhp F40 Evolution to 233mph at Nardo, and then in 2006 Amir Rosenbaum of Spectre Performance took an F40 on skinny drag-tyres to 226mph... on the salt of Bonneville. **NT**



5-LITRE V10
SUPERCHARGED
750BHP
0-124 IN 9.7SEC
228MPH

*It may look like a near-standard BMW M5, but the
G-Power Hurricane is the world's fastest saloon.
Henry Catchpole drives one as fast as he dare*





Eyelids are still heavy and, somewhere inside my skull, a slightly fuggy brain is trying to reconcile these facts: 1) It's the first morning since last winter that the darkness has receded to reveal a sparkling white frost blanketing fields and windcreens. 2) We are in France. A France that is currently running out of fuel thanks to some students protesting about *liberté, égalité et fraternité* or some such rot. 3) We are about to rendezvous with a BMW M5 that I suspect will not only have serious traction issues but also a drink problem.

You might not be familiar with G-Power, but since 1983 it has been tuning BMWs just south of Ingolstadt. And for the last few years it's been at war with a rival on the other side of Germany, namely Brabus. G-Power currently has the upper hand because, almost exactly two years ago, this car, the Hurricane RS, grabbed the title of world's fastest saloon from Brabus's Mercedes CLS-based Rocket. The speed was GPS-verified at a faintly ludicrous 228mph – just 1mph faster

than the Brabus, but fast enough. (In fact, since then an 'RR' version has gone even faster, as you can read on page 86.)

We've come to a hamlet north-east of Paris, to a used car dealer called Stocard Auto. With its tacky neon sign and small forecourt of random second-hand Gallic saloons and hatchbacks with prices scrawled on the windcreens, it's not the place you'd expect to find a 750bhp twin-supercharged M5, but the proprietor is a good customer of G-Power's.

Monsieur Stocard himself is in a barn at the rear, changing bits of trim. He doesn't speak a word of English but thankfully photographer Nick Dumbleby speaks fluent French as well as brandishing a camera with no little flair. Apparently three weeks ago M. Stocard 'broke' his last Hurricane RS and so G-Power built him a new one (with the engine from the old one), which he picked up yesterday afternoon and drove back here through the night.

A closer inspection of the bowels of the barn reveals the panels of the previous car hiding in the shadows, including a rather crumpled

**WORLD'S FASTEST:
G-POWER HURRICANE**


ON A HALF-MILE STRAIGHT IT EASILY BREACHES
THE STANDARD M5's 155MPH LIMITER'



Left and above left: barn-cum-workshop at Stocard Auto is home to this particular Hurricane RS. Right: panels from Monsieur Stocard's previous Hurricane. Top right: new dials await fitment; speedo reaches 400kph (249mph). Bottom right: G-Power's 20in 'Silverstone' alloys, with massive six-pot calipers behind; bigger discs are on the way



left-rear door where he 'broke' it. In his office there are posters of various G-Power machines covering the walls. On his desk, next to a Pink Floyd album, is a set of instruments awaiting a home in the M5. The speedometer has been recalibrated to reach 400kph.

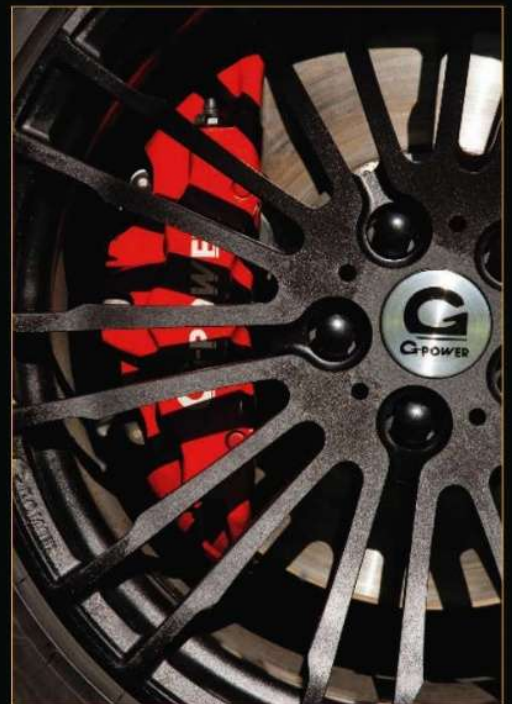
M. Stocard tells us that there are three things he plans to do to his car: switch the brake discs for larger, more ventilated rotors to go with the huge six-pot G-Power calipers; change the exhaust for an Akrapovic system, and have the whole car wrapped in a matt carbonfibre-effect vinyl, complete with Hurricane decals. I'm glad that the latter hasn't happened yet. I love the fact there is no posturing with this car, just a set of almost fragile-looking, spindly-spoked black wheels. Like this, the Hurricane looks supremely stealthy – a supercar assassin that would mug an Enzo and disappear before its driver knew what had happened.

We set off to find some roads (local ones because of the fuel situation) for photography. Dimpleby elects to travel in the Hurricane so that he can *parlez Français*, while I follow in our

long-term Audi TT RS with all the camera gear. The outside temperature is still reading -2 as we potter through a few rustic villages. Following in the G-Power's wake is like waiting for the traffic lights to change at Santa Pod. Every time a straight appears I wonder if this will be the one where M. Stocard will open up the M5 and I know I need to be ready in case he does. Eventually, the tarmac unfurls dead-straight through some fields and he drops the 750bhp sledgehammer. The Audi is a quick car but I haven't got a hope as the black shape disappears up the road. I feel like a slightly portly terrier trying to keep up with a greyhound chasing a thrown stick. In a stretch that can't be more than half a mile long, the Hurricane must have easily breached a standard M5's 155mph limiter...

Even more extraordinary is the sound. The TT RS has a wonderfully vocal five-cylinder, but rising above its flat-chat warble is a shriek that seems to be somewhere between a wrung-out superbike and a lightly silenced F1 car.

When we stop ten minutes later I ask if we can have a look at the engine. As soon as the





Left: interior stays standard bar a G-Power badge (pictured right) and a numbered plaque. Right: Catchpole in the driving seat. Far right: twin superchargers and bright orange intercooler now fill the engine bay



'YOU CAN ALMOST FEEL YOUR ARMS GETTING LIGHTER

gas struts hoist the bonnet skywards it becomes obvious where your money goes at G-Power. The massive orange dual-flow water-to-air intercooler grabs your attention first, but you then notice the two ASA T-316 superchargers positioned behind the headlights. Out of sight are forged pistons by Mahle along with strengthened rods and pins. The result is a staggering 50 per cent increase of 250bhp over the standard M5 V10, making 750bhp at 7800rpm. Peak torque rises by 206lb ft to 590lb ft at 5000rpm.

The acceleration figures don't seem that extraordinary at first, with 0-62mph taking 4.5sec. However, once you've overcome the initial traction issues, things get interesting, with 124mph (200kph) taking just 9.7sec and 186mph (300kph) coming up in 26sec dead. Epic stuff.

M. Stocard seems keen to stick behind the wheel of his car whilst the photos are taken, so

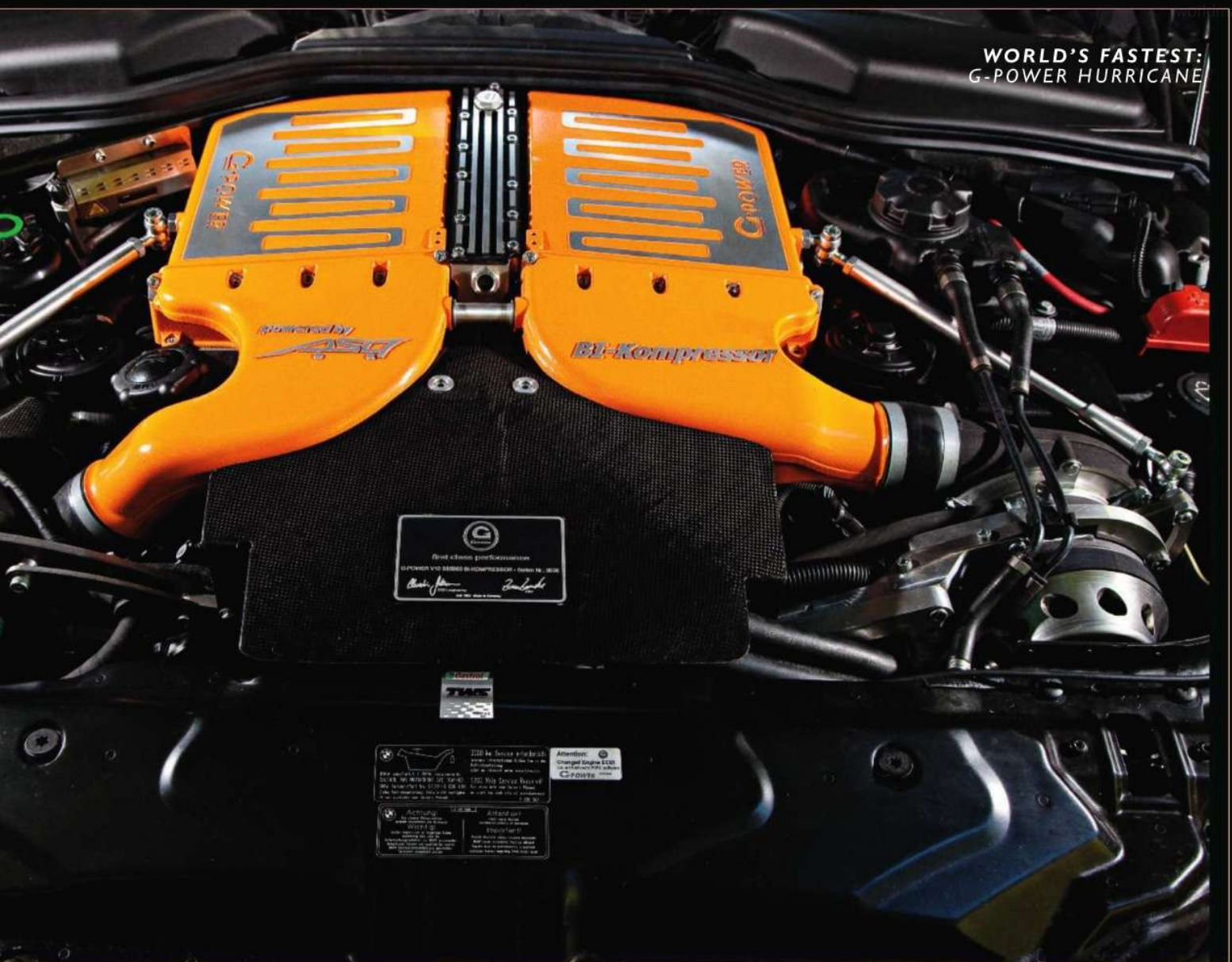
I watch it kicking up the autumnal carpet of leaves as it slips amongst the shadows of the trees. And so the shoot progresses – until I hear them talking in French again and Nick explains that M. Stocard needs to get back to his garage. I ask Nick to politely ask if I might drive the car, as it's fairly essential for the feature. M. Stocard looks from Nick, to me, and back again, but after we repeat our assurances about insurance he slightly reluctantly takes his place in the passenger seat. Phew.

The interior of an M5 has never been the sportiest of environments, but this car, with its slightly worn leather seats and curiously high-set driving position, feels utterly incongruous now I know what's under the bonnet. G-Power will do you a bespoke steering wheel but this car has the standard item. A twist of the key and the Hurricane comes to life with no more theatre than the standard car. Rather to my surprise,

M. Stocard leans over and presses the 'M' button on the steering wheel, which summons up the full works and simultaneously relaxes the traction control. The extra torque is palpable and as we pull away I squeeze the throttle pedal as if it's the tail of a sleeping tiger. Apparently the Hurricane will spin its wheels in fourth...

Short-shifting with the right-hand paddle, I try to ask M. Stocard if he has had any trouble with the transmission – it's always felt brutal in the standard car and I have my doubts about it coping with the extra shove. Unfortunately my French isn't quite up to it and after a couple of minutes of shrugging we lapse back into silence.

G-Power replaces BMW's electronic dampers with its own passive set-up and it's very impressive even on poor roads. It retains that slightly flighty M5 feeling, though, giving you a sense that it's riding the surface of the road rather than really hooking into it like some cars.



AS THE BLOOD IS FORCED AWAY FROM YOUR HANDS'

I know the straight is coming and so I change down a couple of gears in readiness, at which point I realise that, despite the graphic saying we're in the fastest shift mode, G-Power has wound back the gearshift times to protect the 'box. A village name with a red line through it appears and so, still mindful of the sleeping feline analogy, I give it as much as I dare.

Wheelspin takes hold as I try to use most of second gear. Third is better, and I grab fourth then fifth before braking in plenty of time for the corner. Blimey. It's not like the almighty hit of a turbocharged Brabus, but it's every bit as thrilling. There's a surreal feeling because the Hurricane is incredibly smooth as it revs and piles on speed. From about 3000rpm the acceleration is like the heady spike you get above 7000rpm in a 'normal' M5, but instead of it lasting just half a second it's sustained for as long as you keep your foot down. You can

almost feel your arms getting lighter as the blood is forced away from your hands on the wheel and back towards your body. Then, just as you're trying to think when to change up, the stratospheric-rpm bhp spike kicks in, unsettles both you and the rear tyres and makes the decision to flick another gear home easy.

The fact that the power is always instantly available as soon as you get on the throttle means you can mobilise the rear at pretty much any given moment, making lines through corners very... adjustable. I get one more run up through the gears, still on a road completely unsuited for high-speed work, and it doesn't get any less extraordinary the second time around. What's more, I love the fact that I've never been so fast so anonymously. When I start an international life of mystery I shall drive a G-Power Hurricane RS. But possibly not in France during a fuel shortage.

SPECIFICATION

Engine V10, 4999cc, twin-supercharged
Location Front, longitudinal
CO2 n/a
Power 750bhp @ 7800rpm
Torque 590lb ft @ 5000rpm
Transmission Seven-speed SMG automated manual gear box, rear-wheel drive, M differential, DSC
Front suspension MacPherson struts, coil springs, adjustable dampers, anti-roll bar
Rear suspension Multi-link, coil springs, adjustable dampers, anti-roll bar
Brakes Ventilated and cross-drilled, 380mm front, 370mm rear, ABS, EBD
Wheels 9 x 20in front, 10 x 20in rear
Tyres 255/35 ZR20 front, 285/30 ZR20 rear
Weight (kerb) 1913kg
Power-to-weight 398bhp/ton
0-62mph 4.5sec (claimed)
Top speed 228mph
Basic price c.£263,800

evo RATING ★★★★★

G-POWER'S SECOND WIND

Not content with its 228mph world record, G-Power has developed an 800bhp version of its twin-supercharged M5. **Henry Catchpole** reports on what happened when it went testing

You wait ages for one record-breaking saloon... G-Power has built another Hurricane, even faster than the one you've just been reading about. It's called the RR and apparently they didn't even really mean to break their own record when they went testing with it...

The RS on the previous pages took the 'World's fastest saloon' title back in 2008, but in July this year the chaps from G-Power went

back to the Papenburg test track where they do a lot of the development work on their cars. They were testing a new 800bhp version of the twin-supercharged BMW V10 and decided to do some runs to see how the temperatures were stacking up at sustained high speed. Apart from the engine and a discreet bodykit, the car was completely standard, though the wheels were swapped from the usual 20in rims to smaller 19in items wrapped in Michelin Pilot Sports certified for top speeds in excess of 370kph.

G-Power had always believed the Hurricane could go faster than the original 2008 record because the conditions that day had been extremely windy. This time the weather was perfect: 14 degrees Celsius and no wind. Oh, and it was night-time. Niki Schelle, a former driver with the Suzuki rally team and now a presenter on the German television programme *Grip*, was to do the driving.

It only took a few runs and the speed was recorded by a Racelogic Driftbox (the same GPS technology that *evo* uses to record all its performance data). The result was 372.1kph, which equates to a smidgen over 231mph in old money. So that's a very ordinary-looking four-door saloon travelling 20mph faster than a Lamborghini Murciélago LP640. Schelle was reportedly pleasantly surprised by how well the car handled at over 200mph, so Bangle's designs are clearly easier on the air than they initially were on the eye.

According to G-Power's Yann Laborieux, once again they thought that it could have gone faster still but fog descended, which, understandably, hampered proceedings somewhat...

One neat side-effect of the Hurricane's new V-max is that it takes it above the quoted (but as yet unverified) top speed of 370kph for the



SUPERSALOON HEROES



JAGUAR MK2 1959

■ We start our gallop through the world's fastest saloons from the last six decades with the Jaguar Mk2. Its 220bhp 3.8-litre straight-six meant it could get to 60mph in 8.5 seconds and go on to an impressive 125mph, which equates to just over the 200kph mark. A fine embodiment of the Jaguar motto 'Grace, pace and space' – which explains why they were so popular with the criminals of the day as getaway cars.



MERCEDES 300 SEL 6.3 1968

■ The W109 saloon got the 6.3-litre V8 from the vast 600 limousine almost by chance after the Mercedes board heard about a development hack which had had the engine installed in it. They decided that a 250bhp, 369lb ft monster would be the perfect tonic for Mercedes' slightly staid image at the time. When it hit the roads in 1968, the SEL 6.3 could do 137mph flat-out, making it the fastest saloon of its day.



FORD FALCON XA GT-HO PHASE 4 1972

■ Tricky one this, because only one (or was it four...) of these homologation specials ever made it down the production line. A run of 200 was planned to make the cars eligible for the Australian Touring Car Championship but then the Australian press got wind of these '160mph Super Cars' reaching public roads. Mass hysteria ensued, the government stepped in and production ceased. It only really ever did 151mph.



'A FOUR-DOOR TRAVELLING 20MPH FASTER THAN AN LP640'

Brabus EV12 'One of Ten', the current flagship car from the famous tuner from Bottrop. I ask Yann if there is much rivalry between the two companies.

'Not that we know of,' is the diplomatic but somewhat enigmatic response. 'Brabus achieved some records and so did G-Power... but since the basic vehicles and especially the basic engines are way different it would not be a fair challenge.' Read what you will into 'fair challenge'!

What G-Power wishes to leave in no doubt

is that the Hurricane will go faster still with the 800bhp engine: 'Next time our target is to go over 375kph (233mph), which theoretically is not a problem.' However, just when you're thinking that the company might be the Sergey Bubka of the world's fastest saloon record (Bubka, in case you're wondering, broke the world pole vault record 17 times but usually by no more than 1cm at a time), Yann casually lets it slip that they are sure the twin-supercharged V10 can be pushed out to 1000bhp.

The mind boggles.



AMG HAMMER 1986

■ Talking of hysterical newspaper reports, many people think the Lotus Carlton was once the fastest saloon in the world. But they're wrong. Four years before the 177mph Carlton emerged from Hethel, the 186mph Hammer had, well, hammered out of Affalterbach. The two have startlingly similar stats, the Carlton mustering 2bhp more, but 3bhp per ton less. The Hammer, however, had the one figure that really mattered.



BRABUS EV12 1999

■ The EV12 appeared alongside a Ferrari F40 on the fifth ever cover of *evo* way back in 1999. John Barker, who drove it for the mag, described it as looking 'like a taxi with tasty alloys'. The V12 was stretched from 6.0 to 7.3 litres and produced 574bhp, while the EV12 cost £146,875 – more than a brand new Diablo SV at the time. It had its entry in the Guinness Book of Records though, with a top speed of 206mph.



BRABUS ROCKET 2006

■ The Rocket's 225mph at Nardo was the record that G-Power had to beat. Its mighty 720bhp, 6.2-litre twin-turbo V12 also creates a scarcely imaginable 973lb ft of torque, which has to be electronically limited to 811lb ft when it's mounted under the bonnet of the swoopy CLS. Of course, some people say it's swoopy because it's a rule-flouting four-door coupe, not a saloon, but we think that's a bit uncharitable.

The need for speed

Driving at very high speed requires a different mind-set. Here, seven *evo* writers tell what it's like to chase seriously big numbers

HARRY METCALFE 200mph

■ It's the hero shot everyone wants to see; the frozen moment in time when the speedo needle finally stops rotating and points to a number north of 200. With so many of today's supercars boasting top speeds well in excess of 200mph, it should be easy to achieve. But it isn't.

In the UK, the Bruntingthorpe Proving Ground gives you a sporting chance, but its two-mile runway is also used for storing cars, so just as the needle is dancing with the outer regions of the speedo dial, there's a couple of hundred parked BMWs blurring past your windows. Not ideal.

No, Europe is the place to go, but you still need to be in the right car. Choosing a Bugatti Veyron makes life a whole lot easier. This car charges past 200 with the same sort of ease that a Golf GTI hits the UK legal limit. I can remember braking in a Veyron, glancing down at the tiny speedo and being shocked to see I was still travelling faster than 200mph...

It's very different in my Zonda (pic 1). Posting 180mph is easy, but beyond that every additional mile-per-hour takes an age. Which isn't good if you've got a vivid imagination. At 190 you begin thinking about punctures, at 195 you're desperately scanning the road for cars up ahead, at 197 all you



want to do is lift, but the demon on your shoulder won't let you. 198... 199... This is like pulling teeth. Finally, 200mph appears, you hear a shutter click and you can let out a huge sigh of relief.

HENRY CATCHPOLE 190mph

■ It can feel lonely in the cool of the night, but the appearance of 'company' in the form of glowing red tail-lights in the distance ahead isn't necessarily welcome. The burning dots raise the heart-rate and trigger rapid mental calculations as you count their number, estimate their closing speed and try to work out what they're attached to.

If it's a solitary lumbering lorry you can be pretty sure it's going to stay put in the inside lane – just remember to be ready for the slight turbulence as you pass. Any more than four lights and you're best easing off, but greed and the night do strange things to the mind, and against all reason you can find your



sweaty palms gripping the Alcantara tighter, weirdly reluctant to give up your hard-earned momentum.

Night-time usually means it's quieter on the autobahns. The darkness conceals dangers and so stops you worrying about them, but it can also freeze the breath in your lungs when a road surface you can't see changes unexpectedly. As you push beyond 170mph, the pale headlight beams that are trying to pierce the blackness become more and more useless because you are peering further and further beyond their reaches. Your other senses are heightened – the wind noise becomes louder, you feel every bump in the road.

My personal best is 190mph – once in a Corvette Z06 (pic 2) on the way back from Sweden and once travelling back from Austria in a GT3 RS – but I bet an extra 10mph on a warm, sunny airfield would be a walk in the park by comparison.

NICK TROTT 191mph

■ Bright red Ferrari Enzo, driving within the speed limits through a small French village near Route Napoleon. Radar gun ahead, cops looking surly and upset. Huh? Pull over?

'Your car?' they ask (pic 3). My French isn't great so I motion like a demented drummer and repeat: 'Pink Floyd! Pink Floyd!' They get the message. This is Nick Mason's car.

Still not sure if I'm nicked, though. They inspect the paperwork (in order) and check the age on my licence. I look younger than I am; they are suspicious that this fresh-faced youngster is driving the fastest and most expensive Ferrari ever. I show them a copy of the magazine I'm working for. They nod. But I'm still worried – I saw 191mph on the Enzo's speedo on a quiet road just ten minutes ago and I'm praying I didn't blast past a Kojak with a Kodak.

I motion to the passenger seat. 'Want a ride?'





‘I ran out of road at 214mph, still accelerating, but the diff oil temperature gauge was off the clock...’

One of them jumps in. I head into the hills, driving sensibly. The cop isn't happy. He wants me to drive faster. Thoughts of entrapment cross my mind, but he repeats the request: 'Faster. Faster.' I loosen the traction control.

For the next 15 minutes I drive faster than I've ever driven in my life. In an Enzo. With a cop sat next to me. He does not smile. He does not show any emotion. When he steps out, he turns down the corner of his mouth and nods in that classically Gallic appreciative way. I'm not nicked. He just wanted a ride in that car. Made me sweat for it, though.

ROGER GREEN 214mph

■ Four times I've seen the other side of 200mph. Once on the road in a Carrera GT (a GPS-verified 201mph on an autobahn), twice in 9ff creations

(221mph at Bruntingthorpe in a GT9 and 243mph in a GTurbo 1200 at Papenburg, Germany), but it was a run in the only non-Porsche-based machine of the quartet that was by far the most chilling.

An Opel Omega (pic 4) was never meant to be fitted with a 1000bhp supercharged Lexus V8, yet that was exactly what had been done by one slightly unhinged farmer from Norway. Ole Ringstad was his name and, after running the car up to 200mph in his socks (it gave him more pedal feel apparently) with three passengers aboard, he handed the thing over to me to discover its top speed while he put his shoes back on.

The Papenburg test track has two heavily banked corners linked by a pair of 2.5-mile straights. I was attacking the banking at 190mph, and although the car was stable, the centrifugal force was

compressing me hard into the seat. Could a set of Michelin Pilot Sports really cope with this level of stress? And what happens to an Omega at these speeds? It wasn't designed for this...

As the corner levelled out, the car had a tendency to jink towards the barrier, requiring a quick and precise correction. Driving at big speeds on a test track is relatively easy; it's reacting to a problem that's hard. I ran out of road at 214mph with the car still accelerating, but the gauge displaying the diff oil temperature was off the clock, showing over 300 degrees C. It was time to call it a day.

RICHARD MEADEN 160mph (for 30 miles)

■ Pssst! Want to know a secret? I don't actually like driving fast. Well, not in a straight line, anyway. There's something rather unnerving about it, basically

WORLD'S FASTEST: HIGH-SPEED YARNS

waiting for a component to pop, break or fall off. Perhaps that's why I'm one of the members of the **evo** team not to have genuinely breached 200mph.

That's not to say I haven't had a few high-velocity adventures. I can vividly remember hitting an indicated 201mph in a Porsche 911 Turbo on the way home from the Nürburgring (in reality, it was probably less). I can also recall doing 180 on an Italian autostrada in an early Lamborghini Murciélago with Peter Tomalin alongside me.

But the most memorable foot-to-the-floor escapade was 1000 miles of hoonage through the Australian Outback in a 6-litre Monaro VXR (pic 5). Photographer Andy Morgan and I were tasked with driving from Alice Springs in the centre of Australia to Darwin on the northern coast, using the Stuart Highway. Back in 2005 it was one of the few roads on earth without a speed limit (no more, alas). I can still feel the strange tingle in my stomach as we powered away from petrol stations, accelerating from nought to V-max and then staying there for as long as we fancied.

Thanks to the extreme heat – upwards of 46 degrees C – and weak 91-octane fuel we never troubled the Monaro's claimed 180mph. Still, the big Chevy V8 pulled us to 165mph and kept us there, often for absurd periods of time. I think our record was a full 11 minutes at 160mph, which equates to a straight of almost 30 miles in length. Slowing to 125mph for the kink at the end of it felt like we'd stopped. Surreal.

OLLIE MARRIAGE 178mph

■ Fastest I've ever driven? 215mph. In a TVR Tuscan S (pic 6). At least that's what it said on the speedo...

Why you can never trust the speedo was just one of many lessons I learned at Bruntingthorpe about eight or nine years ago when the mag I was working for gathered together a bunch of very quick cars, including a Caterham R500 and that TVR.

In the Caterham I discovered the importance of aerodynamics. The 230bhp R500 struggled to 145mph, but it was what happened when I lifted my right foot that shocked me. The square, upright front end instantly became the world's most effective airbrake, slowing the car so quickly that it felt like I'd thrown a parachute out the back.

The Tuscan S was much more slippery – in more ways than one. I've since had it confirmed that this particular car wasn't using the standard 390bhp 3.6-litre straight six, but a 'special' one. Which



'We accelerated from nought to V-max then stayed there for as long as we fancied'



explains why it idled so lumpily. And why it posted 0-60 and 0-100mph times of 3.8 and 8.1 sec.

150mph was no trouble, nor 160, nor 170. In fact I'd swear the needle seemed to pick up speed as it arced round past 180, 190 and then, magically, 200. My first 200mph experience! Only it wasn't. The laptop being cradled by my passenger told the truth: 171mph. Quite a frantic 171mph it must be said, as the nose started wandering. Be brave, I told myself, just keep your toe in and see if the Tuscan can muscle its way to 180mph.

It never got there. Not because I ran out of room,

or even because I chickened out, but because at 178mph I went deaf. That was when the air pressure ripped the roof panel out...

CHRIS HARRIS 207mph

■ There isn't one 200mph, there are actually two very different 200mphs. The first is the sanitised test-track 200mph. The one where you take something with the necessary horsepower and slipperiness and attempt to extract the double ton. Even in the safe confines of a long runway, 200mph gets your attention because you can't avoid operating in the conditional tense – the 'what if?' scenario. Hearing becomes the primary faculty as you develop an unerring capacity to think you've spotted a strange noise. But at 200mph a Murciélago is nothing more than a collection of noises: worrying gnashes, oscillations and graunches.

The other 200mph is, for me, the proper 200mph. The street 200mph. The one where you choose your moment, squeeze the pedal and aim to travel at the speed first glorified by the Ferrari F40. Speed in a straight line isn't that impressive, but it is addictive. I drove a GT2 RS back from a shoot to the factory recently and did 207mph (pic 7). It should feel ordinary by now because I do it quite a lot these days, but it's the wind-down from the attack that gets me every time: it's the speed equivalent of the post-coital fog – the moment to grin and savour.

But even if you get beyond 200mph on a regular basis, the Veyron remains a car apart from all others. Back in 2006 I was shooting a story for *Autocar* near the Bugatti factory. At around 2am on the A5 near Karlsruhe, Germany, we did 227mph – the Veyron felt more stable and less stressed than a Murciélago at 190mph. To be able to do that, legally, on a public road is what the thrill of driving is all about.

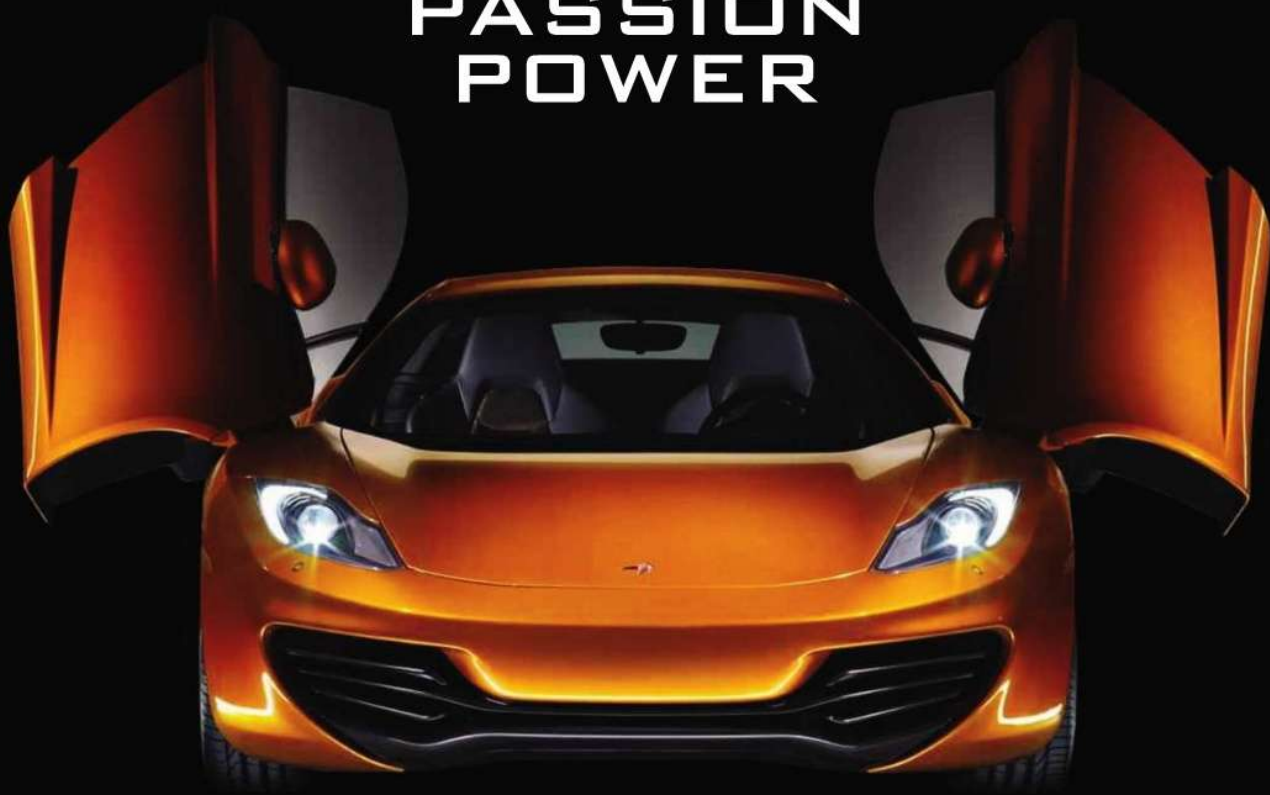


PistonHeads 

THE PERFORMANCE CAR SHOW

13-16 JANUARY 2011* NEC BIRMINGHAM

PERFORMANCE PASSION POWER



Your ticket includes...

...a seat in

The FIFTH GEAR 
Live Action Arena FIFTH GEAR

...exotic

**Performance
Cars & F1 Grid**

...McLaren greets on the exclusive

McLaren Showcase
including the all new MP4-12C

Starring:



Jason Plato | Tiff Needell | Jake Humphrey | Murray Walker | Martin Brundle

BOOK NOW
PISTONHEADSSHOW.COM
0844 581 1239

INCLUDES ACCESS TO


AUTOSPORT
INTERNATIONAL
The Racing Car Show

*13th & 14th January - Registered Trade visitors only



SPA WARS

Single-make racing comes no faster than the Lamborghini Super Trofeo, as **Roger Green** and **John Barker** experienced first-hand over one action-packed weekend in Belgium

The Lamborghini Blancpain Super Trofeo is the fastest one-make race series in the world. So says Lamborghini, and as Bugatti has yet to launch a £1bn Veyron Trophy, and nobody from the Porsche Supercup or Ferrari 430 Challenge has piped up, it must be true. What's absolutely certain is that it's an incredible thrill from behind the wheel of one of the 562bhp, four-wheel-drive Gallardos,

especially around Spa-Francorchamps, one of the world's greatest and fastest race circuits. In the dry, the V10 Lambo laps the 4.352 miles at an average speed of well over 100mph, hitting a peak of 165mph! Even in the wet it averages over 90mph...

This is the story of what happened when Roger Green and John Barker took on the series regulars – and each other – at the classic Belgian track. They joined the action in VIP car no. 2, engineered by Lamborghini's Pierluigi

'call me PG' Barbieri. The glamorous Super Trofeo series runs a two-driver pro-am format (one of the pros is front-running GT1 driver Peter Cox), though after a brief chat, Green and Barker decided team **evo** was more am-am. Inevitably, though, just below the surface there was an unspoken tension simmering over who would be faster. The weekend's three races (each 40min, with a set pit-stop window and minimum pit time for the changeover) would provide an answer, of sorts...





Pictures **Nanette Schärf and Malcolm Griffiths**

Thursday 13:05

Free practice



RG: Our meticulously planned weekend has gone off script before either of us has even driven the car. JB was due to go out first, but apparently his radio earplugs aren't working and he's rushed off to find a man who can fix them. I reckon he's had a bout of pre-race nerves and doesn't want to be the one who stuffs the car before the other driver has had a go...

The green light blinks on at the end of the pitlane and I trundle out in the midst of an exotic traffic queue. I find a little space and open the taps. Wow! It's like these cars were made for this magnificent circuit. The Lambo V10 can really cut loose here, although it's unnerving just how fast you rush up to the epic corners Eau Rouge and Blanchiment.

On each lap I push a little harder until 'PG' crackles in my ears that it's time to come in and hand over to John.

13:25



JB: The only other time I've raced here was in the Caterham CSR series a few years ago. The Lambo feels every bit as good, but more of an event, more momentous. It has a great deal more momentum, too, as I discover when I try to take Eau Rouge in fifth. Well, the Caterham could... No harm done, though, at least not to the car. We end up 9th out of 12, on a best of 2.34.197 (by me, ahem), which is an average speed of 107mph.





18:10 Qualifying

JB: It's absolutely lashed it down during the afternoon and it's still wet as we're let out for qualifying. Annoyingly, my radio isn't working again. I tread gingerly at first but I soon discover that the grip on the Pirelli wets is so good that the braking points are not far off those in the dry. Out of La Source on one lap the rears spin up and point me at the wall, but it's quickly gathered up without harm. It's no Audi Quattro, this Gallardo, but by the same token I can't imagine pushing a simple rear-drive car with nearly 600bhp as hard. Now, if only I can put together a clean lap...

18:20

RG: Ten minutes into the session, I clamp my helmet on. JB will be in soon and putting all this clobber on shuts out most

of the outside world. It allows you to begin to focus on the job in hand, to run the circuit through in your mind one last time. The track is drying very slowly, so I need to learn where the grip is and how far I can push, building up to a maximum-attack lap at the end of the session. The earplugs muffle everything except the staccato *thump-thump, thump-thump* of blood pumping through my veins.

18:25

JB: Driving in the wet is an utterly absorbing challenge: getting on the power as early as possible, getting on the brakes as late as possible and feeling for the maximum corner speed – tricky through three-figure Blanchimont. I haven't seen a board yet but I reckon I've nailed a good one. Might as well give Rog a go.

18:25

RG: What the hell's going on? Where's bloody Barker? The team have been holding a large 'IN' board over the pit wall for ten minutes now, but he just keeps driving by. Is this a premeditated plan to hog the car? We're supposed to be a team! With less than four minutes to go he appears in the pitlane and is dragged out. I bundle in and shoot off to try and complete the out lap before the chequered flag falls. I make it, but my one flying lap is slower than JB's as I'm still trying to get my head around how unbelievably late you can brake. I vow to get my own back....

18:50

JB: Well, how was I supposed to see the board when it was after the crucial brake point for La Source? I'm not sure



Top: the pack streams through the fast and tricky turns of Eau Rouge. Top right: the Barker/Green car charges up the hill to the highest part of the track. Left: rare sighting of Green in the driving seat; interior of the Super Trofeo cars is stripped out and a roll cage and race bucket added; power is 562bhp – the same as the Superleggera road car. Right, from left to right: Barker studies the timing sheets from qualifying; the rolling start for race one; into the pits for a driver change

even PG believed the radio was kaput. At least I did get a good lap in, which means Rog will start from fifth tomorrow, surrounded by the slower drivers from all the other pairings.

20:00

JB: Dinner at the hotel with Lamborghini people. I've arranged to meet Rog in reception. I'm late, for a laugh. Blimey, he's a bit sensitive. Me? I take the frequent ribbing I get over dinner in good humour.



'Bloody hell this is a great car, and a brilliant track. I love the way the Gallardo settles into the camber'



Friday 11:15 Race 1



RG: One of the most amazing elements of racing one of these cars is the rolling starts. I'm surrounded by Gallardos as we ease onto the start/finish straight in tight formation. The red lights go out and 6840bhp is unleashed. I defend the inside, hugging the pit wall. The tactic works and I emerge from La Source in third as we barrel down to Eau Rouge on cold tyres. We all make it through, but I have to get defensive at the top of the hill. I lose a place at Pouhon, but soon gain one back.

11:30



JB: Rog is on fire. Not literally, thank heavens. We could be on for a top five finish, maybe more. Depends how good the pro drivers are, I guess; the pit stop window is open and some of the 'gentleman' racers are coming in.

11:35



RG: It's hectic stuff and I seem to spend most of my laps fending off a gaggle of cars that look like they might drive over

me if I keep this up for much longer. One nips past just before I get the call to head to the pits. I think about having a 'radio malfunction', but decide to come in.

11:36



JB: The thing about going second is that your teammate has had the best of the tyres and brakes. No. 2 feels very loose, and my first lap is a learning lap, figuring out what's left. It might not be at its best but bloody hell this is a great car, and a brilliant

track. I love the way the Gallardo settles into the camber of the right-hander that starts the downhill run from Les Combes. Then I get too keen at the next corner, the horridly long and tight Bruxelles, and run out of opposite lock. I'm spinning towards the barrier. 'Please, no!' I scream inside my head. Phew... so close. Then in the closing seconds I spin again, turning the car around. Cock. Turns out we were way ahead of the next car anyhow, and would have finished sixth with or without the spin.

16:30 Race 2



JB: I'm never sure how much good weaving on the warm-up lap does.

Makes me queasy but I feel obliged.

The buzz of the rolling start is almost literally that, the pack of warbling V10s almost a physical force. They're four-abreast into La Source hairpin, and I'm up to fifth place on the exit – it's nearly fourth, but I'm rudely chopped on the run down to Eau Rouge.

On the upslope I'm gaining on the car in front when his brake lights flicker and he jinks...

revealing the green no. 63 Gallardo broadside, smoke wreathing from its slicks. Yikes! Left it is, over the low kerb and rumble ridges. Drama over, I settle into a rhythm. This time, my radio is working. I hand Rog a car in good nick and in third place. Wonder what the trophies look like?



16:50



RG: My turn. First time through Eau Rouge the tyres seem past their best, but at Les Combes something's definitely amiss. When I brake I have to steer left to keep going straight. It's as if only one rear brake is working. The front-right is grumbling too. A couple of laps later that tyre feels really horrible as I sweep through Blanchimont at 160mph. Then, as I come onto the start/finish straight, it blows up. We're out, but my disappointment is tempered by the thought that it could have failed one corner earlier...

Saturday 08:40



RG: Turns out we had a brake fluid leak at the rear yesterday, while the tyre failure was probably caused by JB having to run off the course on lap one. As we arrive back at the track for our third and final race it begins to rain, and although it stops soon enough, the race will start in conditions similar to those in qualifying. Due to my curtailed running in the second race, I was due to get the nod to start this one, but hogger Barker's got the knowledge of the track in these conditions, so he'll start. He'd better not balls this up!



'The front-right tyre feels really horrible as I sweep through a bend at 160mph. Then it blows up...'

WORLD'S FASTEST ONE-MAKE RACE SERIES



10:00 Race 3

JB: I'm not too bothered to be starting tenth; at least there's plenty to go at! Four laps in, I've latched on to the back of what appears to be a six-car scrap for the lead. And I mean a scrap. There's all sorts of stuff coming back in the slipstream as the cars in front rub and bump, push and shove and generally slow each other down. I'm not tempted to get stuck in, though. No. 2 doesn't feel quite as sweet as yesterday, and besides, I reckon there'll be some casualties soon.

And there are. At La Source, five-into-one doesn't go. The pack splits like the Red Arrows and I drive through the middle, picking up three places – and a light tap on the rear wheel from the green Gallardo. Two laps later, with one to go before handing over, I'm turning into the bus-stop chicane when there's a massive impact. I'm suddenly going straight on again rather than right. The edge of the bonnet is at a jaunty, crumpled angle. Stunned and seeing stars, I have no idea what just happened but I know our race is over. Eventually a marshal opens the door and I tumble out.

10:17

RG: What's happened? I'm standing in the pitlane, helmet on, ready to go again. The boys are about to call

JB in and I can see them on the wall looking bemused. Where's John?

10:19

JB: I look back and see no. 2 is destroyed down the right-hand side. The back end of the green car is stove in. We were second. I feel like crying. A spectator tells me that the green car lost it on the brakes from four lengths back and hit me in the side as I got to the apex.

11:30

JB: The post-mortem debate favours the following sequence of events. It might have been the earlier tap on the rear wheel that did it, because that could have fractured the front-right wishbone of the green car, which failed under braking, smashed the disc and sent the car into a spin. Rog thinks I did it on purpose so he couldn't get any more time at the wheel. He's joking. I think.

We're both gutted, really, partly for the result we might have had but mostly for the damage to the cars. The world's fastest one-make racer is a great car and, despite our problems, it has given us a fantastic experience on one of the world's greatest race tracks. I offer to drive us back to the Channel Tunnel but Rog declines. A bit testily, I reckon...



Opposite above: Barker (seated) and Green talk tactics. Opposite below: handling goes awry as Rog takes his turn in race two. Left, from the top: puncture on the front-right corner is just half of the problem; Green is forced to retire; fitting fresh rubber; equally matched cars ensure the racing is close; damp conditions aren't too much trouble for the 4wd Gallardo. Above: onboard video shows Barker's hands being thrown clear of the steering wheel as his car is hit in the side (visit evo.co.uk to see this moment and more action from the weekend). Right: the resulting damage



WORLD'S FASTEST
STREET-LEGAL CAR



Pictures **Matt Howell**



SEE THIS CAR
IN ACTION
AT EVO.CO.UK

GONE IN SIX SECONDS

*In the time it takes a Bugatti Veyron to hit 110mph, this 1963 Corvette will be tearing past 200mph. **Jonny Smith** takes a ride in the fastest street-legal car in the world*

WORLD'S FASTEST
STREET-LEGAL CAR



‘The Vette shudders out of the garage and onto tarmac.’

I’ve been labelled the automotive devil by some people. They think I bought a good-condition split-window classic Corvette and then savagely sliced it up to make a race car. I did do that once, but it was 1980. The car was 17 years old at that time. Nobody envisaged the crazy money they would be making in 2010!

Rod Saboury raises his eyebrows and smiles with a warm, infectious grin. He certainly doesn’t seem like Satan. He appears a friendly, kind-hearted and very focused 59-year-old individual who lives in a quiet agricultural corner of Maryland, USA.

‘Heck,’ he continues, ‘if I had that kind of

foresight I’d have stockpiled a field full of early Corvettes and Hemi-powered muscle cars, sold them at Barrett-Jackson auctions in the last two years and then *really* gone racing.’

He tugs on the chain to open the shutter doors and reveal the cleanest garage I’ve ever seen. Lacquered floors, curtains over the windows and a workbench tidier than most secretaries’ desks. Thirty-odd years’ worth of trophies and magazine cuttings line the walls. At the back, a Corvette-themed stained-glass window frames a view of lush green fields. This is no workshop, this is a chapel for fast Chevy worship.

‘People think that because I’ve built the world’s fastest street car I’m some sort of

millionaire,’ says Rod. ‘I run a roofing company with one employee – me – one toolbox and one pick-up truck. If I go racing, then I’m not working or earning money.’

Rod is a matter-of-fact bloke. He takes the time to talk to everyone, and never ceases to gush enthusiasm about the flawlessly airbrushed race car under his elbow. ‘She’s got a few stone-chips on the front end now, but I like that. It proves to people it gets used on the street.’ He gestures for me to climb in. Time to discover what a car that does 0-60mph in less than a second with DOT-approved tyres, four gearlevers and electric windows feels like.

Nestling inside the cockpit, it hits you how detailed this creation is. Rod may wring all



This row, from far left: Mickey Thompson tyres are approved for road use; CO2 bottle deploys the parachutes and controls the turbos’ boost; 88mm turbos are usually found on trucks; levers for the Lenco gearbox; timing slip shows just what this 2400bhp Vette is capable of





Out on the neighbourhood roads it feels properly hoodlum'

2400bhp out of it on the strip and cruise it on the street, but this Sting Ray triples as a show car. There's a centre console to house the four-lever Lenco gearshifter. There are two drinks holders. The intricate exterior paint is mirrored inside on the door panels. The doors opening triggers a conventional courtesy light.

Saboury adores his rods and street weapons. He's built 18 of them so far. 'I average one project every two years,' he says, 'and I've been building and racing cars since 1968.' Mostly these have been early Corvettes, which it's fair to say he has a bit of a fetish for. What you are staring at here is not some replica dragster bodyshell – this is a real 1963.

Rod wanted this Vette to be just so, which

required time, patience and calculated decisions. From start to finish the project took five years, the first two of which were spent drawing up schematics and studying the drag race rulebook. Finding a suitable split-window donor also took two years. 'This shell turned up on a wooden pallet with the VIN tags,' Rod says, caressing its swooping roofline. 'To anyone else it was next to useless because someone had chopped all the fibreglass floors out, not to mention a number of repair sections.'

It had been cannibalised and left for dead, but in Rod's eyes it was perfect for the basis of his ultimate drag-street fusion. He handed over \$800 for the shell – complete with flip-up headlamps – and never looked back.

Flicking the fuel-pump switch overhead kicks off the starting drill. Within seconds the Vette fires into life and shudders out of the garage and onto tarmac. Out on the neighbourhood roads it feels properly hoodlum. The V8 engine's twin turbos make it quieter than normally aspirated or supercharged race cars, but it's still near impossible to have an audible conversation inside.

I torque down my harnesses and stare out through the Lexan screen over the bonnet bulge and turbo nostrils. If he didn't have to conform to the NHRA drag competition rulebook, which says the screen has to be bolted in and must not be glass in a car capable of covering the quarter-mile in the sixes,



THE GEARBOX

The Lenco is a manual gearbox specifically designed to endure full-bore, high-power acceleration on the quarter-mile strip. The 'box itself uses planetary gears, so it looks like a tiered wedding cake turned horizontal. Each tier is a gear and is operated by a separate lever. Why? Because they are damn strong and can be easily serviced or repaired trackside by unbolting individual gears.

On the street, the Lenco is a big commitment. Come to a halt and you must push all the levers forward before selecting first. There's a conventional clutch, but you only use it for launch and reverse; the other gears get slammed home.



WORLD'S FASTEST STREET-LEGAL CAR



Above: front suspension uses 'Strange' MacPherson struts. Below: show-car finish extends to the door hinges



Rod would have retained the standard glass windscreen and wipers.

Making the 20-mile trip through Carroll County and into the small town of Manchester doesn't warrant parachute-assisted braking, so the pair of 'chutes have been left at home. Behind the passenger seat still lives the big CO2 bottle that not only deploys the 'chutes high into clean air but also controls the three-stage boost of both turbos. That's the thing about this car – every nook and cranny is crammed with innovation.

It is surprising how compliant the car feels on twisty roads and over potholes. With a blindfold on and earplugs stuffed in, you would think this was just a fairly sporty production car. Why? Because Rod felt regular drag-style four-link rear suspension set-ups are too roly-poly off the track. Instead he went for a neat street-rod three-link system with an anti-roll bar integrated into the tubular chassis.

Between the carbonfibre rear-wheel tubs sits a tank for the intercooler. There is no spare room up front for anything besides a radiator (big enough to keep 2400 horses cool during the world's biggest cruise in Detroit), so Rod came up with a plan: sitting the 12-gallon water tank over the back axle would aid traction. That was easy. Getting water to and from the intercooler? A bit more complicated. But not for Rod, who designed the chassis tubes to double as water pipes. A submersible marine bilge pump circulates the wet stuff from within.

There's almost a Lotus approach to this. If Colin Chapman made drag cars...

But now for the biggest innovation. That V8 barking orders beneath the bonnet is a small-block, a mere 400 cubic inches (6554cc). The Chevy motor may be comparatively small but it's viciously potent, sharing an immaculately detailed engine bay with two mirror-polished 88mm turbos (normally seen on heavy diesel trucks), specially adapted 'Little Chief' big-block heads and electronic fuel injection. No nitrous. No slicks. No voodoo. On the street, Rod's small-block drinks regular forecourt petrol. Lately on the track, he's been feeding it 117-RON race petrol.

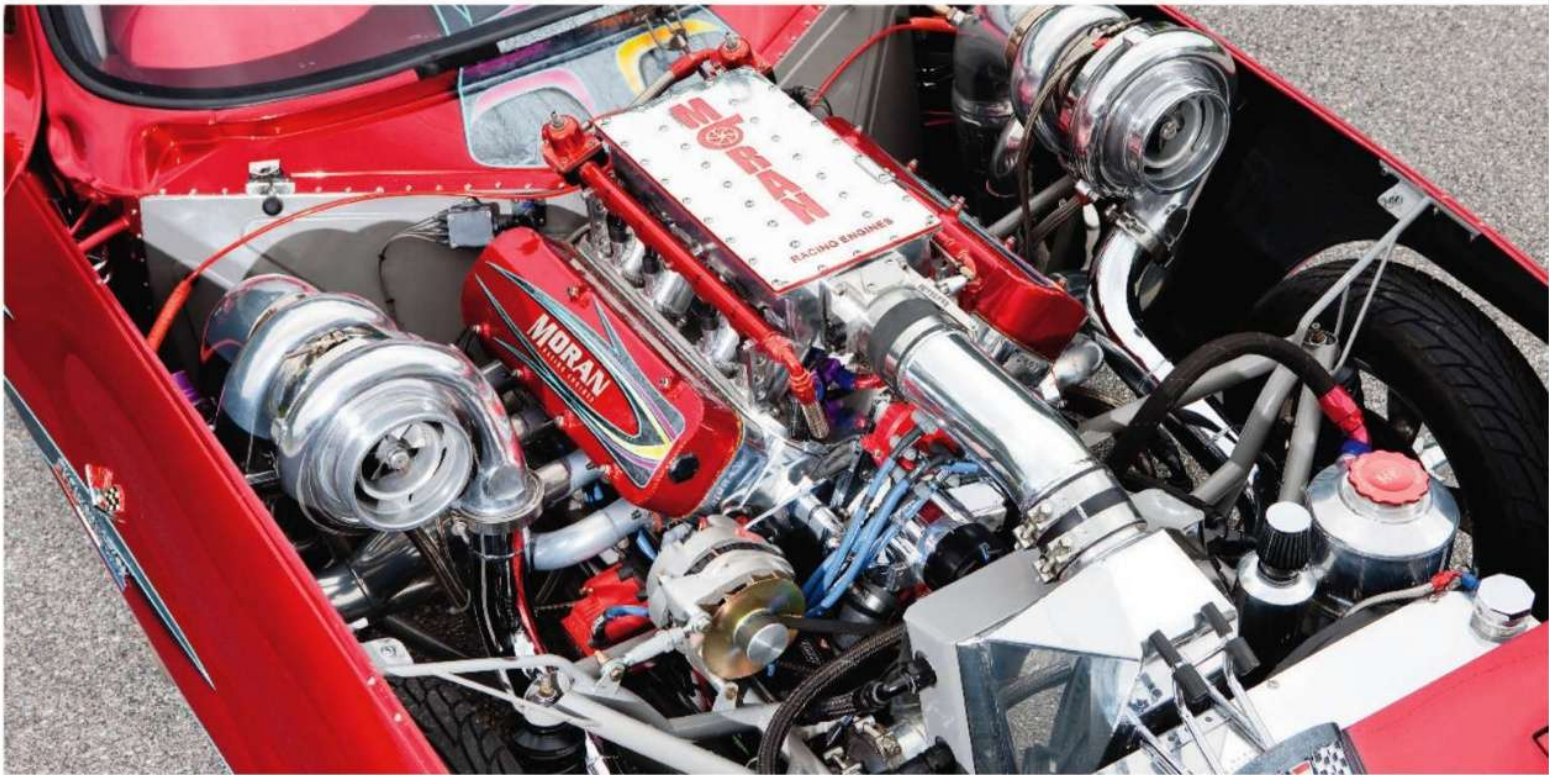
Sellotaped to the driver's quarter window is a small but vital piece of paper. It's a timing slip to remind passengers of what they're sitting inside. On September 5, 2009, Rod clinched his fastest run ever – the one to warrant that licence plate. With a reaction time of 0.54sec, the Vette hooked up and crossed the quarter-mile line doing 209.96mph, having taken just 6.75 seconds.

The thing was already doing 168mph by the 1/8th-mile marker, which took just 4.42sec. The 60ft marker was reached in 1.13sec. These are not numbers normally associated with a car that can sit in heavy commuter traffic for hours without smouldering under the collar. But then if it was easy to build a street-legal six-second car, more people would do it.

The best bit is that Rod's Michigan-based



‘With over double the power of a Veyron, here is a machine





vastly more rapid than hypercar drivers can even comprehend'

engine builder, Mike Moran, reckons the car will do 230mph. The engine has never been raced with more than 25psi of boost, yet the turbos and motor have been bolted together to withstand 40psi. It's just down to Rod to keep control, because over 200mph the front end reportedly 'gets dicey and loose'. Hardly surprising when you consider that back in the '60s, when Sting Rays were new and being road-raced, drivers said they couldn't go above 150 without the front end getting airborne...

The Autometer dials tell Rod that the engine is up to working temperature. On a quiet, open stretch of asphalt (green fields either side in case something goes pear-shaped) he slaps one of the chromed Lenco shift levers and shows me what a half-inch squirt of the loud pedal feels like. Even with the turbo boost set at half what he'd race with, the Vette barks – the side-exit pipes are like someone blasting a shipping horn into your ear – and blats forward faster than two blinks.

Not that I blinked. My brain momentarily stopped passing information to my eyelids. I've been clouted back into the Corvette's low-back carbon chair – an instant reminder (if you needed it) that here is a machine vastly more

Left: twin-turbo 6.6-litre V8 was built by Moran Racing Engines; turbos run at 12psi as the car is launched, then switch to 25psi, although even higher boost levels are possible...

Right: Rod and his wife Tina outside the immaculate garage in which the Vette lives



rapid than most hypercar drivers can even comprehend. With over double the horsepower of a Veyron, we would beat the Bugatti over the 1320-foot drag strip by some four seconds.

We run out of straight road in three seconds, if that. The throttle was dabbed at 30mph and we probably ended up doing four times that. What I know for certain is that Rod only yanked one of the Lenco levers. In that short time you mentally weigh up the sensation of speed, the sound of ravenous turbos and the fact that this car has never been near a Euro NCAP office. There wasn't the feeling of raw fear, more sheer amazement at what one man

has done to the horseless carriage concept.

Rod taps my shoulder: 'Remember, this is not a street car that you can race,' he bellows. 'It is a race car that you can drive on the street!' Normal people don't dial their brains into building a safe, handsome, durable street dragster, but then normal people don't have heart attacks working alone on a barn roof and climb down the ladder mid-attack to get themselves to hospital. Make no mistake, Saboury is hardcore.

The biggest headache during the build was the bit most folks don't notice, but something that meant everything to the owner: modifying

**WORLD'S FASTEST
STREET-LEGAL CAR**



the original bodyshell. 'I'm really particular about these Corvettes,' Rod reflects. 'I've had pictures of them on my bedroom wall since I was ten. It had to look right.'

The problem was the wheelbase. 'The original car is a 98-inch wheelbase, which is too short for trying to go over 200 in,' Rod explains. 'OK, you can do it, but the back tyres are trying to push the front of the car out the way. I felt like if I could get the car to 110 inches then it would feel safe. Then I thought how am I going to add a foot to this thing and try to keep it in proportion?' Cue longtime friend and fibreglass guru Frank Morawski for an ambitious massage

that would take him and an assistant eight months of eight-hour days to complete.

The Sting Ray's subtle stretch exercise began with eight pie cuts from the roof (above the split windows, near the fake vents) and four inches being added. Two inches were added in the rear arches, and then six inches in the back portion of the front wings.

This left the front end, the doors, the rear and the majority of the side silhouette stock-looking. Obviously the carbonfibre bonnet is longer, and it was Rod's decision to show off those huge turbos, although he's quick to point out that it's a misconception that turbos needs

to stick out into the air to work efficiently: 'These will suck wherever they are.' The rear of the car was widened by four inches and a luggage hatch was also added, which people often mistake for being original. This provides Rod access to the battery, fire extinguisher system and intercooler tank.

Pedestrians and other motorists are finding the sight of the Corvette difficult to compute. I remembered what Rod said before we left the farmland on which he grew up: 'I set out going for the effect that if you see me coming towards you on the street, it looks as if a Pro Mod car made the wrong turn off the drag strip. That's what I wanted to achieve.' It's safe to say he has achieved that. Sitting, shuddering at the lights outside the local police station feels awesome.

In four years Rod has put over 3500 road/race miles on the engine without hiccups (bar a faulty alternator on a cruise once) and has won a top-ten award at the SEMA aftermarket performance show. So is this his final project? 'I think so,' says Rod. 'I mean, where do I go from here? How much faster do I want to go? My father used to say, "Don't brag about something, boy, until you do it first." I never said this was going to run six seconds, but I built it to be a six-second car. That goal has been achieved. If you get greedy you could get unlucky, and I can't afford to crash.'

Rod won't be resting on his laurels, though. 'I'll just keep tweaking the car,' he says. 'I had the chassis made with brackets for air-con and I've found an alloy Sanyo compressor that only uses 3hp. I might try doing a six-second pass with the AC on...'



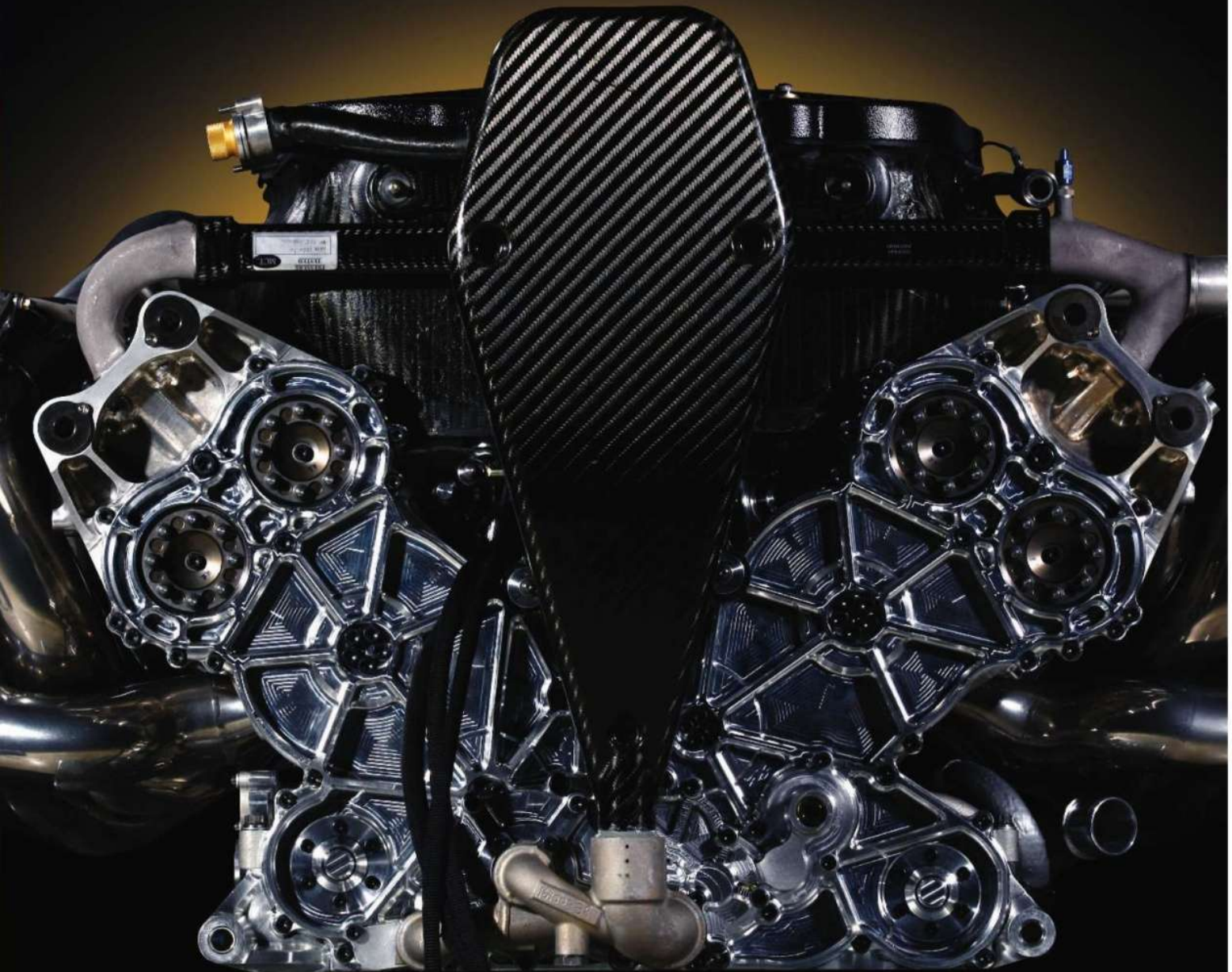
Top: cabin is equipped with a roll-cage, carbon seats, harnesses and two cupholders. Above: on the street

SPECIFICATIONS

Engine V8, 6554cc, twin-turbo
Location Front, longitudinal
Cylinder block Dart/Moran Racing Engines custom-made billet aluminium Chevrolet small block
Cylinder head Dart Little Chief big-block billet alloy heads
Power 2400bhp @ n/a rpm
Torque n/a
Transmission Lenco four-speed manual gearbox, AFT triple-disc clutch, rear-wheel drive, traction control
Front suspension MacPherson struts, coil springs, dampers
Rear suspension Street-rod three-link, coil springs, dampers, anti-roll bar integrated in chassis
Brakes Discs front and rear
Wheels 15in American Racing front, 15in custom-made rear
Tyres 24/5/15 front, 33/22/15 rear Mickey Thompson street-legal radials
Weight 1351kg (including driver)
Power-to-weight 1805bhp/ton
0-60mph sub-1sec
Standing quarter-mile 6.75sec @ 209.96mph (on street-legal tyres)
Top speed 230mph+ (est)

...and if you thought that was fast...

This 750bhp Cosworth 2010 F1 engine is the least powerful of Bloodhound's three motors. Its job? To pump 50kg of fuel every second



Pushing the land speed record beyond 1000mph requires some extraordinary engineering solutions, as **Ollie Marriage** discovered when he took a closer look at Bloodhound SSC...

ROCKET ENGINE



■ This six-inch-bore rocket blew apart during testing in the Mojave Desert. Apparently the explosion was massive. Bloodhound's hybrid rocket will be three times this size, with a diameter of 18in (45cm) and a length of 3.78m. Designed by 26-year-old British rocket engineer Daniel Jubb, it contains 1130kg of rubber propellant that is burned away by the hydrogen peroxide oxidiser. The largest hybrid rocket ever designed in Europe, it will deliver 27,500lb of thrust.

Oddly, the rocket is mounted slightly nose-down in the car. 'Computer tests showed the plume from the rocket could dig a trench in the ground, so we've gone for a two-degree upward angle to combat that,' explains Mark Chapman, Bloodhound's chief engineer.

JET ENGINE

■ 'These are the only three Eurojet EJ200 engines that aren't owned by a national government,' reveals chief engineer Mark Chapman, 'so we do have to be a bit sensitive about them because we don't want others to work out what the Eurofighter Typhoon might be capable of.' You get the feeling that simply getting hold of one of these state-of-the-art jets would be an achievement, let alone three.

They're on loan from the RAF. 'One has more life left in it than the others – about 22 hours – so that's the one we'll be using for the actual runs,' says Chapman, 'but if we'd had to buy a new one, it would have cost £4.5million...'

How much thrust does it provide? 13,500lb,

or 20,000lb with the afterburner lit. Needless to say, the 1.5-ton jet's fuel consumption does increase with the reheat on, from 1.3kg per second to 4.3kg. Mind you, that's a tenth of what the rocket burns through in the same time...

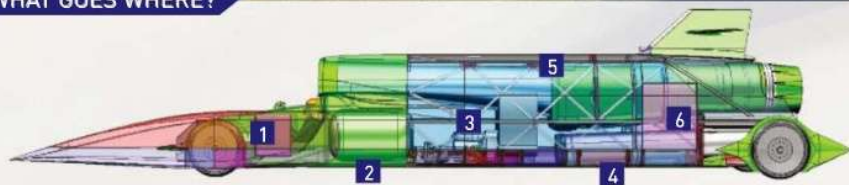
The jet engine will chiefly be used to get Bloodhound off the line and up to 300mph, although unlike a road car, Bloodhound isn't at its most accelerative at low speeds. '0-100mph will take about 15sec,' says Chapman, 'but when the rocket is fired, acceleration will ramp up enormously.' Another 25 seconds later, having covered around six miles, Bloodhound should be at peak speed, driver Andy Green having withstood 3G of acceleration.

BODYWORK

■ Close attention has been paid to wear on the bodywork. 'Thrust SSC had an aluminium undertray,' explains Chapman, 'but it got so bombarded that it became very thin, so we're going for steel this time to combat that.'

For the upper body, the front section is carbonfibre, while the rear is aluminium over a steel spaceframe. 'We looked at cloaking the whole body in composite [carbonfibre],' says Chapman, 'but weight isn't a key issue and we were worried how heat soak from the engines might affect the rear skin.'

WHAT GOES WHERE?



Behind the carbon nosecone, the driver (1) sits within an aluminium safety cell. The tank behind him (2) contains a ton of hydrogen peroxide fuel, pumped to the rocket by the

Cosworth F1 V8 (3). The rocket itself (4) sits beneath the jet engine (5). The purple panels (6) are air brakes. These are deployed before the parachutes and, finally, the wheel brakes.

AERODYNAMICS

■ The team believes Bloodhound's aerodynamics are now so good that these small front winglets are surplus to requirements. Even working with the most advanced software available – the same package used by most F1 teams – to get here it's taken 18 months and 13 different design iterations (including one that created 11 tons of lift at the rear of a car weighing only 6.5 tons...). 'We don't want downforce, because that'll push the wheels into the surface,' explains Chapman, 'but obviously we don't want lift either. What we've got is zero lift at Mach 1.3 [990mph], although there might be some instability on the way to that speed.'

TAIL FIN



■ Already signed up to sponsor Bloodhound? Then your name is on this full-size model. 'We needed to check we could fit on all the 300,000 names that we want to, and keep them legible,' says Chapman, 'so we've duplicated the names we've got so far and repeated them.' It costs just £10 to add your name – visit www.bloodhoundssc.com for details.

FUEL-PUMP ENGINE

■ Yes, Bloodhound will use Cosworth's 2010 F1 engine (as supplied to Lotus, Virgin and Hispania) as no more than a fuel pump, albeit one that has to shift 963 litres of hydrogen peroxide from tank to rocket in just 20 seconds. That's a rate of 48 litres per second. For reference, a conventional fire-engine hose throws out about 6 litres a second. Understandably, Cosworth is a bit shy with the technical details, but we do know that at 18,000rpm each piston moves through the cylinder 300 times per second.

WHEELS



■ 'Such is the G-force operating on the wheels – about 50,000G at the rims – that when Thrust SSC did its runs we found that not only were stones getting embedded in the aluminium but the metal was growing out around them, making them part of the wheel!' So Bloodhound's Lockheed Martin-built wheels are titanium, and will undergo ballistics tests using stones from Hakskeen Pan in South Africa, where the runs will take place. The wheels will also be spin-tested to check for deformation. Due to the weight (147kg each) and speeds (170 revolutions per second at 1000mph) this will be conducted in a lab that checks power station turbines...

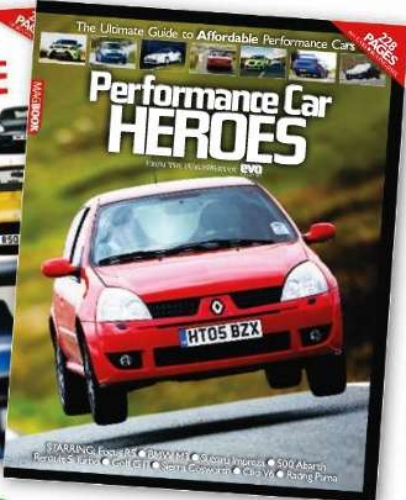




AVAILABLE ONLINE NOW AT **evo.co.uk**



LIMITED-EDITION EVO PRINTS
HIGH-QUALITY A2 PRINTS. LIMITED TO 150 OF EACH
£4.99 PLUS P&P



EVO MAGBOOKS
IN-DEPTH PERFORMANCE TESTS, DETAILED
BUYING ADVICE AND LAVISH PHOTOGRAPHY
From **£7.99**

EVO T-SHIRTS
£19⁹⁹ EACH



ALSO ONLINE NOW



EVO SUBSCRIPTION
GET 12 ISSUES OF
YOUR FAVOURITE
MAGAZINE FOR JUST
£42.99



EVO MUG
THE MOST
DESIRABLE
EVO ACCESSORY
OF ALL!
£3.99



EVO BOX FILE
KEEP YOUR EVOS
SAFE AND ORGANISED
IN THESE EXCLUSIVE
BOX FILES
£12.99

Speed freaks

Bloodhound has its sights set on 1000mph, but how fast can other, perhaps less obvious modes of transport travel? **Stephen Dobie** investigates



FASTEST SCHOOL BUS 367mph

■ Built by Paul Stender and his team in Indianapolis, USA, this school bus (pics 1 and 2) is powered by a Phantom jet engine. Its 150-gallon fuel tank is emptied during a quarter-mile run (the flames are a by-product). 'I built the bus for two reasons,' says its creator. 'The first is to entertain people because, come on, it's a jet bus. The second is to keep kids off drugs. Jets are hot, drugs are not.'

FASTEST PLANE 4519mph

■ Yep, 17 times quicker than a Bugatti Veyron Super Sport. It's a record set 43 years ago, too, pilot Pete Knight manning the rocket-powered X-15 'spaceplane' at the edge of the stratosphere.

FASTEST BICYCLE 167mph

■ A bicycle that's faster than a Porsche Cayman? Sort of. In 1995, Dutch cyclist Fred Rompelberg

slipstreamed a drag racer on the Bonneville salt flats and hit an extraordinary 166.9mph.

FASTEST GO-KART 253mph

■ Who sticks a rocket on a go-kart in order to outpace a McLaren F1? Rosco McGlashan, the 60-year-old Aussie who's currently competing with the Bloodhound team for a 1000mph+ land-speed record, that's who.

FASTEST SOFA 92mph

■ Marek Turowski can breach typical motorway cruising speeds on his couch thanks to the 65bhp 1.3-litre Mini engine slung over its back axle. It's a sofa that's fully road-legal, too.

FASTEST BOAT 318mph

■ Ken Warby's 'The Spirit of Australia' reached 317.596mph back in 1978. This is the most dangerous speed record to chase – it's reckoned around 85 per cent of attempts end fatally.

FASTEST SKATEBOARD 81mph

■ Officially judged by the International Gravity Sports Association, Mischo Erban reached 80.83mph, the fastest speed recorded on a board, in September this year – wearing a leather suit, gloves and full-face helmet, naturally.

FASTEST LAWNMOWER 97mph

■ Sadly no longer held by Project Runningblade, which our own Ralph Hosier was a part of, the fastest mower crown has been reclaimed by



There are no excuses for being late for school on this bus. Well, except that it runs out of fuel after 400 metres...

WORLD'S FASTEST: FAST AND CURIOUS

American Bobby Cleveland, his 96.529mph beating Runningblade's 87.833mph.

FASTEST ROLLER COASTER 149mph

■ It's a long time since Ferrari could claim to make the world's fastest road car, but it now holds bragging rights to a record that more of us mere mortals can enjoy: world's fastest rollercoaster (pic 3). You'll have to make your way to Ferrari World in Abu Dhabi, though, to be propelled from 0-62mph in 2sec and on to 149mph, reaching (and falling from) heights of 62m. Second place goes to the Nürburgring's 134.8mph Ring Racer.



FASTEST REMOTE-CONTROL CAR 162mph

■ The 11bhp motor in Nic Case's 161.76mph 'Schumacher Mi3' (pic 4) must give it one of the canniest mph-per-bhp ratios going. And as Schumacher Racing are based in Northampton, it's a record we Brits can be proud of.

FASTEST TRAIN 361mph

■ The title of world's fastest train is one of the more muddled transport records, thanks chiefly to rail travel's numerous methods of propulsion. Set in 2003, the headline figure of 361.01mph belongs to Japan's JR-Maglev MLX01 (pic 5). Its use of a magnetic-levitation track gives it a considerable advantage, though. The quickest conventional 'wheels and rails' train is France's 357.18mph TGV.



Picture: PPA

FASTEST MOTORCYCLE 376mph

■ 376.363mph in something with four wheels sounds a bit scary. On a motorbike it sounds bloody terrifying. Yet that's exactly what the fantastically named Rocky Robinson achieved with the Top1 Oil/Ack Attack Streamliner (pic 6) in September 2010, snatching the record back from Chris Carr's 367.382mph BUB Enterprises Streamliner at the same location, Bonneville salt flats.



Picture: Ray the Rat

12 MONTH
VOUCHERS FROM £99



SOCKS FOR CHRISTMAS? PUT YOUR FOOT DOWN!

Drop some hints this Christmas and you could be burning rubber in the sensational BMW M3, a single seater racing car or a bona-fide rally car! With more time behind the wheel than other UK circuits, expert instruction and new 'Ignition' gift vouchers starting from just £99, make it known what you really want this year and you might just get it. Give us a call or check out our website.

FOR MAXIMUM VALUE BUY DIRECT FROM MSV - OWNER OF BRANDS HATCH, OULTON PARK AND BEDFORD AUTODROME



Your Car. Our Circuits. **Club MSV** trackday vouchers available from £25 - £500.



PalmerSport vouchers are also available. Give someone the gift of the world's greatest driving event.

0843 453 1000

WWW.MSVDRIVINGGIFTS.COM

MSV

YOUR **FANTASTIC** SUBSCRIPTION OFFER

- ✓ **3 trial issues** of **evo** to start your subscription – if you're not 100% satisfied, you can claim a full refund
- ✓ **FREE** Maglite® Solitaire®
- ✓ **SAVE up to 19%** on the shop price
- ✓ **FREE** delivery of every issue to your door
- ✓ Hot-off-the-press **exclusive collectors' editions** – not available in the shops

PLUS!

Subscribers receive **EXCLUSIVE** collectors' edition covers, not available in the shops!



evo 3 TRIAL ISSUES ORDER FORM

- YES!** Please start my subscription to **evo** with 3 trial issues and send me my **FREE Maglite® Solitaire®**. I understand that if I'm not completely satisfied I can write to cancel during my introductory period and claim a **FULL REFUND**. The 3 trial issues and **FREE gift** are mine to keep, whatever I decide.
- I am an existing subscriber.** Please renew my subscription with this offer.

YOUR DETAILS

Mr/Mrs/Ms	Forename	Surname
Address		
Country		
Postcode		
Daytime phone		
Mobile No.		
Email		Date of Birth

3 EASY WAYS TO PAY – (Gift available in UK Only)

CHEQUE/CREDIT CARD – 12 issues – £42.99 – (Save 18%) – UK Only

- I enclose a cheque made payable to Dennis Publishing Ltd.
- Please charge my: Visa MasterCard AMEX Debit/Maestro (Issue No.)

CARD NUMBER	START DATE	EXPIRY DATE
<input type="text"/>	<input type="text"/>	<input type="text"/>

SQND	TODAY'S DATE
<input type="text"/>	<input type="text"/>

DIRECT DEBIT – Just £21.30 every 6 issues – (Save 19%) – UK Only

BEST DEAL!

Dennis Instruction to your Bank or Building Society to pay by Direct Debit		DIRECT DEBIT
Please complete and send to: Freepost RLZS-ETGT-BCZR, Dennis Publishing Ltd, 800 Guillat Ave, Kent Science Park, Sittingbourne ME9 8GU		
Name and full postal address of your Bank or Building Society		
To the manager: Bank name	Originator's Identification Number	
Address	7 2 4 6 8 0	
Postcode	Ref no. to be completed by Dennis Publishing	
Account in the name(s) of	Instructions to your Bank or Building Society	
Branch sort code	Please pay (Dennis Publishing) Ltd Direct Debits from the account detailed in this instruction subject to the safeguards secured by the Direct Debit Guarantee. I understand that this instruction may remain with Dennis Publishing Ltd and, if so, details will be passed electronically to my Bank/Building Society.	
Bank/Building Society account number	Signature(s)	Date
	Banks and building societies may not accept Direct Debit instructions for some types of account	

Return to: **FREEPOST RLZS-ETGT-BCZR, evo Subscriptions, 800 Guillat Ave, Kent Science Park, Sittingbourne ME9 8GU**

(No stamp required when posting within the UK)

Gifts limited to the first 100 subscribers. Please allow 28 days for delivery. Gift available to UK subscribers only.

Dennis Publishing (UK) Ltd uses a layered Privacy Notice, giving you brief details about how we would like to use your personal information. For full details please visit our website www.dennis.co.uk/privacy/ or call us on **0844 844 0053**. If you have any questions please ask as submitting your details indicates your consent, until you choose otherwise, that we and our partners may contact you about products and services that will be of relevance to you via, direct mail, phone, e-mail and SMS. You can opt-out at ANY time via www.subsinfo.co.uk or privacy@dennis.co.uk or **0844 844 0053**.

Offer code: D1013

evoSUBSCRIPTION
OFFER

GET 3 TRIAL ISSUES OF evo

PLUS FREE Maglite® Solitaire®



YOUR **FREE** GIFT MAGLITE® SOLITAIRE®

If you decide to take up this great offer, we'll send you a fantastic Maglite® Solitaire® ABSOLUTELY FREE. This high-intensity adjustable beam torch is boxed complete with battery and spare bulb.



CLAIM YOUR 3 TRIAL ISSUES TODAY CALL NOW **0844 844 0039**

or order online at www.dennismags.co.uk/evo quoting **D1013**

or return the form opposite

AUDI RS5 v BMW M3 COMPETITION
v LEXUS IS-F v MERCEDES C63 AMG



Words **John Barker**
Pictures **Matt Howell**



Natural selection

Audi's storming new RS5 has a naturally aspirated V8 engine, just like its rivals. What sets it apart is four-wheel drive. So does it leave them trailing in its wake? We find out, on road and track

AUDI RS5 v BMW M3 COMPETITION
v LEXUS IS-F v MERCEDES C63 AMG





If you were to describe the BMW M3's worst nightmare, the Audi RS5 would be it. Take the much-admired RS4 saloon – a bona fide BMW frightener – blend it with the S5 coupe and then take everything to a higher level. The RS5 is equipped with a 444bhp version of the high-revving 4.2-litre V8 and drives through the revised quattro drivetrain with less mass ahead of the front axle and a 'sport' centre differential that can send up to 85 per cent of torque to the rear axle. It promises the sure-footedness of the RS4 with even greater agility, and a tailor-made ride too, thanks to the standard fitment on UK cars of Dynamic Ride Control.

As soon as the RS5 arrived at the office we were all out in the car park for a good look. Just like the quietly handsome S5 coupe, it's a subtle thing... until you clock those enormous (and optional) 20in alloys. 'They make it look like it's just leapt straight off the drawing pad of a man wearing a polo-neck sweater and edgy-looking spectacles,' says Henry Catchpole. They're irresistibly alluring, those five-spokes, while another desirable option fitted to this car is carbon-ceramic front brakes. There's plenty more kit too – including 'bucket' seats, 'dynamic steering', and a raised, 174mph speed limiter – helping lift this car's list price from a fraction under £57K to just under £75K.

On the pretext of going to get some lunch, four of us climb in, confirming that it's a useable four-seater. It's a handsome, high quality cabin too, though the first hint that things might not go quite to script occurs within yards of setting off. Swinging out of the car park, the steering draws attention to itself, being too light and unnatural in feel. And where's the voice of this mighty, naturally aspirated V8? In the passenger seat, Catchpole busies himself with the car's menus and crafts a 'maximum attack' configuration that can be summoned via the 'individual' button on the fascia. He's ticked the boxes for 'dynamic' everything: steering, engine/gearbox, differential and ride. Then, without warning, he pushes the button and the RS5 leaps forward with a snarl, pulling slight left as if hungry for pedestrians. Gave me a bit of a fright, I can tell you. But while the car feels sharper, more

responsive and pleasingly loud, in some respects it's over-alert. And so begins the hunt for the optimum settings...

The Audi will need them if it's to vanquish the opposition we've lined up for it. It's led, of course, by the M3, here in Competition trim with its slightly lowered suspension, and with the optional M-DCCT gearbox. That means all four contenders have naturally aspirated V8s and automatic gearboxes, the Audi's and BMW's being new-tech seven-speed dual-clutch jobs. Those of the Mercedes C63 AMG and Lexus IS-F are traditional torque converters, though the Japanese car's has eight ratios. Both of these compact four-doors are improved by the fitment of a limited-slip differential, now standard on the 417bhp Lexus and a must-have option for the keen driver on the Merc, especially if the 'Performance Package Plus' is fitted, as here, lifting power from 451 to 480bhp.

And so to Millbrook for the performance tests. The smart money was on the RS5 out-pointing the rear-drivers: the thump of 444bhp, the traction of four-wheel drive and the swiftness of the S-Tronic dual-clutch auto looked a winning combo. First up, though, was the 6.2-litre Mercedes. When last tested it turned in a creditable 4.7sec to 60mph and 10.3 to 100, but we did better this time, nailing 60 in 4.4sec and 100 in a stonking 9.7sec. The Lexus, now with an LSD, managed 4.7 and 10.9sec, which is impressive given the comparative shortfall of horsepower from its 5-litre V8 and the fact that its eight-speed 'box shifts into third just before 60mph. Into three figures, the superior power of the C63 really tells, and its muscularity is clear to see in the in-gear times too (see page 126).

As expected, the Audi bests its 60mph time, but only just. The RS5 doesn't make the super-sharp getaway you feel it ought to; there is launch control, but although it dialled in plenty of revs, the slip-free, four-wheel-drive take-off caused the V8 to sound a little bogged-down for a moment. Just a moment, but you could sense a tenth or two dropped, though who would grumble at a 60mph time of 4.3sec?

Imagine our shock when the M3 matched it. Granted, it wasn't easy, a fluke almost, even though we used launch control. Trouble was, the M3 wanted to creep as soon as the revs rose,

'In the acceleration tests, the smart money was on the four-wheel-drive Audi'



AUDI RS5 v BMW M3 COMPETITION v LEXUS IS-F v MERCEDES C63 AMG



but touching the brake or handbrake to hold it steady cancelled launch control. Frustrated, we gave it one last go and activated the system perfectly, releasing the gear lever to trigger the launch the moment the revs had settled. The V8 roared, the rear wheels over-spiced by just the right amount and the M3 nailed that 4.3sec, while a series of super-crisp, double-clutch shifts (and the lowest kerb weight) helped it to 100mph in 10.3sec.

Impressive stuff. What's slightly surprising is that in everyday driving the BMW isn't the sort of car that likes to play at every corner because although its M Power V8 is terrifically potent, its chassis and clever M-diff generate strong grip. The Lexus and Mercedes are rather different, I reflect, as we make our way across country to pick up the A1 which will deliver us to the North York Moors. I'm in the IS-F, Catchpole is ahead in the RS5 and Richard Meaden is behind in the C63. The Audi is tidy and effective but in give-and-take driving it has nothing over the Lexus, and, with the stability control switched off, the IS-F can entertain with a little oversteer at every sharp turn. It's simple stuff, the rear grip easily overcome by the torque of the V8, which is docile and quiet below 4000rpm and then gets growly and ramps up its delivery above that. And I know that every time the Lexus jinks its tail wide, in the mirror the Meaden-piloted Merc will be wider for longer, riding a bigger wave of torque and power. And it is.

We stop for fuel and I bag the Audi for the rest of the run north. It's quite a contrast with the Lexus, which feels like a hotted-up luxury saloon compared with the other three. The IS-F's sportiness comes almost on demand; it's happy to mooch around, V8 subdued, 'box self-shifting gently, ride a little sharp vertically but soft in roll. That's something like the character the RS5 seems to want to achieve with its

'comfort' setting, which stands everything down, response-wise. Yet the ride remains curiously choppy and the steering is unpleasantly light. This isn't too obvious on this now roundabout-free stretch of the Great North Road, but a diversion at Thirsk takes us onto trickier roads.

By the time we emerge at Helmsley, ten minutes later, I have cycled through all the RS5's settings – comfort, auto, dynamic and individual – and failed to find a set-up that works with these typically British back-roads. There's no more steering feel on any of the settings, just more or less weight, while the ride is never settled, which is a great disappointment because the damping of the RS4 was probably its most outstanding feature.

Perhaps things will look better in the morning on open moors roads, I ponder, as we pull up at our hotel in the unbelievably scenic village of Hutton Le Hole, where the sheep roam free and the locals tread carefully. Over dinner Catchpole describes going through the same process in the RS5, hunting for a set-up suited to the roads, and not finding one. 'It's odd that,' chips in Meaden, 'because the S5 was really pretty good – all they had to do was give it a bit more power and focus.' The Merc he likes a lot: 'I love the way it j-u-s-t copes with the grunt, then you explore the final 30 per cent of the throttle's travel and it really gets squirmy! It's just how you'd hope a small saloon with a ruddy great V8 should feel. Only the 'box's reluctance to give downshifts spoils the experience.'

Next morning, the fast, mottled and occasionally lumpy moors road between Hutton and Castleton beckons. It's a well-trodden **evo** route and we know it offers a stern test of composure. Meaden has bagged the Audi; I'm leading in the BMW. This M3 is my long-term and it doesn't often get to shine on my daily drive but this early-morning 'commute' is



Top: this RS5 has optional 20in alloys and ceramic front discs. Together they hike the price by around £8K. BMW's sexy-looking alloys are part of the £3315 Competition pack, which also includes electronic dampers





‘The RS5’s ride never feels settled, which is a disappointment because the damping of the RS4 was its outstanding feature’

somewhat different. It’s soon warmed through and into a comfortable groove, tacking calmly into the sequences of fast, lumpy sweeps. Little braking is required, a gentle pull on the left-hand paddle initiating a swift, smooth downshift to give just the right amount of overrun braking, while the chassis settles into the turns, balanced, gripping hard as the bumps patter beneath the wheels and the engine climbs beyond 6000rpm again, its bark tight, pure, determined. It’s very satisfying making fantastic progress with only subtle, measured inputs.

There’s a couple of sharp crests along here and as the BMW goes light over the first and lands sweetly, I glance in the rear-view mirror where the RS5’s strings of day-running lights have been dancing. The Audi’s nose lifts, and keeps lifting, showing off lots of wheel, and then lands heavily, front splitter nearly skimming the asphalt. I can almost imagine the tongue-biting compression. ‘I was bloody determined to keep up with you,’ says Meaden when we reach our destination, ‘and it felt better at the limit than it has done up until now. But it’s the wrong



Top: Audi has the most impressive cabin, with neat piano black and carbonfibre detailing. Merc, left, also has an appealing ambience. Lexus (above left) is rather uninspired by comparison and BMW lacks the cohesive design of M3s past



‘The Merc’s appeal is enhanced by steering that has a clarity and directness unmatched here’

way around. Audis are usually great in general driving and not so good at the limit.’

I’m keen to have a go in the C63 that Catchpole has pulled up in. It sounds brilliant from the outside, like a big vee-twin motorbike when it throttles off, and I’m interested to know if it has enough composure over this sort of road with that big V8 in the nose. Even for slimline me it’s a squeeze to get in past the deep seat side bolsters, despite the steering wheel whirring up out of the way, but, once you’re in, the seat holds you brilliantly and the car feels small, snug. The cockpit gives best to the Audi with

its carbonfibre and piano black detailing, but it’s more cohesive and better trimmed than the BMW’s and more expensive-looking than the Lexus’s rather plain effort, while the suede-rimmed, ovoid wheel feels great in your hands.

The Merc looks under-wheeled and under-tyred, despite having 19in rims and rear tyres almost as wide as the M3’s, and you can sense occasionally that its bodyshell isn’t as rigid as those of the two-door Audi and BMW, but it works very well. Its appeal is unquestionably enhanced by steering that has a clarity and directness unmatched here; the C63 is far from

the blunt instrument it could have been. You’re acutely aware that there’s a monster of an engine up front, but mainly because it gives the rear tyres such a hard time. Ultimately, the front end isn’t as responsive as the BMW’s, or indeed that of the Lexus, but it is faithful at speed and, anyhow, you can steer with the throttle into and through tighter corners.

The Lexus raises its game on these roads, too. Its steering is the sharpest of the lot and its poise and balance on opposite-lock make it easy to play with, but more impressive is the way the chassis feels composed over the faster moorland



All four V8s are normally aspirated (enjoy them while you can). 4.2-litre Audi (left) and 4-litre BMW (below) both rev to well over 8000rpm. 6.2-litre Merc (above left) and 5-litre Lexus (above right) major on torque



AUDI RS5 v BMW M3 COMPETITION
v LEXUS IS-F v MERCEDES C63 AMG



Above: Barker and Catchpole take a break from opposite-lockery (Troy Queef not pictured). Below: not recommended as a holiday destination



roads. There's no adaptive damping but that sharp vertical control at moderate speeds seems perfectly pitched over this fast, difficult surface, and then I remember that the IS-F spent a lot of development time at the Nurburgring... You can enhance the feel by pressing the 'sport' button, which makes the gearbox quicker-shifting and more willing to take high-rev downshifts, and this gives it the edge over the Merc's 'box, which feels a little ponderous and occasionally reluctant.

Catchpole has just returned from a blat in the M3, and he's smiling. 'It's easy to forget how good it is, isn't it? You sort of take it for granted when you're pottering around at everyday speeds, not really venturing above 5000rpm, but that engine is a stunning piece of engineering. And unlike the Merc, it wants you to work for the rewards of playing near the limit – you can't just poke it sideways on the exit of a corner if you haven't committed on the way in.'

Getting back into the RS5 is immensely frustrating. It looks great as you walk up to it; it looks great as you get comfortable behind the wheel, and then you get it moving and it just doesn't satisfy. It has a great engine, as muscular as the M3's with a similar, thrilling top-end delivery, and each upshift is punctuated by an appealing tailpipe *bwarp*, but, but... there are so many buts. What these rear-drivers throw into acute relief is the RS5's quality of steering, or lack of it. It never feels right, in rate, response or weight. Exiting corners, it occasionally tugs like it's a torque-steering front-driver, and just as significantly the ride is never right, either; never

AUDI RS5 v BMW M3 COMPETITION v LEXUS IS-F v MERCEDES C63 AMG

settled, never in rhythm with the road. The fact that the handling remains inert when you attack an inviting corner while the others offer options and entertainment doesn't have any bearing on its final place.

When it's time to debate the finishing order we find that, unusually, there is an absolute consensus. In last place is the RS5. 'It's incredibly hard to like, which I found amazing given how warm and generous the old V8 S5 was,' says Meaden.

'Its chassis marks a return to the bad old days of fast Audis: too hard with zero steering feel. Dynamically it's as though they've forgotten they ever made the RS4 and R8. Big shame.'

We're all agreed that it's probably the best built, has the highest quality interior and a terrific engine, but dynamically it simply never gels. 'The RS5 is all that's bad about adjustable set-ups – lots of options but not one combination that really feels like it works on the road,' says Catchpole. It's last, by a long way.

Third place goes to the Lexus. 'The addition of a limited-slip diff has certainly improved the handling and the appeal of the IS-F. It's a

capable and entertaining hi-po saloon, happy to play with the traction control off, relaxed and comfortable when you just want to soak up big miles. 'Feels the biggest and least focused of the quartet,' says Meaden. 'Not as satisfying to hustle as the M3 and not as naturally playful as the Merc but still more entertaining than the Audi, and much better at simply being comfortable, swift and refined.' Surprisingly, considering its luxury brand status, its interior was criticised for being rather low-rent. 'It feels the cheapest and most synthetic of the four and those fake tail-pipes still annoy me – but it's fantastic fun to drive!' says Catchpole.



SPECIFICATIONS

	AUDI RS5	BMW M3 COMPETITION	LEXUS IS-F	MERCEDES C63 AMG
Engine	V8, 4163cc	V8, 3999cc	V8, 4969cc	V8, 6208cc
Location	Front, longitudinal	Front, longitudinal	Front, longitudinal	Front, longitudinal
Power	444bhp @ 8250rpm	414bhp @ 8300rpm	417bhp @ 6600rpm	480bhp @ 6800rpm
Torque	317lb ft @ 4000rpm	295lb ft @ 3900rpm	372lb ft @ 5200rpm	442lb ft @ 5000rpm
Transmission	Seven-speed DCT with paddleshift, four-wheel drive, centre diff, ESP	Seven-speed DCT with paddleshift, rear-wheel drive, M diff, DSC+T	Eight-speed automatic gearbox, rear-wheel drive, limited-slip diff, VDIM	Seven-speed automatic gearbox, rear-wheel drive, limited-slip differential, ESP
Front suspension	Double wishbones, coil springs, electronic dampers, anti-roll bar, DRC	Multi-link, coil springs, electronic dampers, anti-roll bar	Double wishbones, coil springs, gas dampers, anti-roll bar	Three-link, coil springs, gas dampers, anti-roll bar
Rear suspension	Multi-link, coil springs, electronic dampers, anti-roll bar, DRC	Multi-link, coil springs, electronic dampers, anti-roll bar	Multi-link, coil springs, gas dampers, anti-roll bar	Multi-link, coil springs, gas dampers, anti-roll bar
Brakes	Ventilated, cross-drilled discs (carbon front), 380mm fr, 324mm rr; ABS, EBD	Ventilated and cross-drilled discs, 360mm front, 350mm rear; ABS, CBC	Ventilated discs, 360mm front, 345mm rear; ABS, EBD, BA	Ventilated and cross-drilled discs, 360mm front, 330mm rear; ABS, BA
Wheels	9 x 20in front, 9 x 20in rear	9 x 19in front, 10 x 19in rear	8 x 19in front, 9 x 19in rear	8 x 19in front, 9 x 19in rear
Tyres	265/30 ZR19 front, 265/30 ZR19 rear; Bridgestone Potenza S001	245/35 ZR19 front, 265/35 ZR19 rear; Continental Sport Contact 3	225/40 ZR19 front, 255/35 ZR19 rear; Bridgestone Potenza RE050A	235/35 ZR19 front, 255/30 ZR19 rear; Continental Sport Contact 3
Weight (kerb)	1725kg (1827kg as tested)	1655kg (1654kg as tested)	1714kg (1732kg as tested)	1730kg (1827kg as tested)
Power-to-weight	261bhp/ton	254bhp/ton	247bhp/ton	282bhp/ton
0-60mph	4.3sec	4.3sec	4.7sec	4.4sec
Top speed	174mph (limited)	155mph (limited)	155mph (limited)	155mph (limited)
Basic price	£57,480	£53,275	£56,540	£52,435
Key options	Ceramic brakes £6250 Top speed limiter raised £1480 20in 'rotor design' alloys £1800 Dynamic steering £710	Competition package £3315 DCT gearbox £2590 Frozen Grey paint £1755 Black Carbon leather £335	No optional extras fitted	Performance pack £4995 Limited slip diff £1560 19in AMG wheels £600 Multi-media system £1930
Price as tested	£74,510	£64,885	£56,540	£64,025

EVO RATING ★★★★★

★★★★★

★★★★★

★★★★★

The Mercedes does it better, though. It could be just a drag-racer, the C63, but it's not. Not by a long chalk. Catchpole again: 'Although you can light the tyres up with a half-prod of throttle it's still exploitable and enjoyable, because it's small and has probably the best steering feel of the group.' Indeed, the combination of so much power and a very able and rewarding rear-drive chassis holds immense appeal. 'Brilliant at mooching and extremely capable and engaging right up to and over the limit,' says Meaden. 'Not as sharply focused as the M3, but this arguably makes it the warmer and more rewarding car in all but the most extreme driving. Love it!'

The M3 won't be denied, though. It doesn't offer the instant gratification of the C63 or the IS-F but it will saunter comfortably and when you work it hard it reveals an unmatched depth of quality and ability. Like the Audi it has buttons for adjusting damping force, gearshift speed and engine response, but here they work because they merely tailor a set-up that's intrinsically right. Meaden: 'I drove this after I'd driven the others and it really does feel a league above them for pure sporting driving. Firmer, sharper and more direct, it feels like a sports car that's had practicality thrust upon it rather than the other way round. It's the genuine item.'

'When it's time to debate the finishing order we find that, unusually, there is absolute consensus'



GROUP TEST TRACK BATTLE

We know how the RS5 performed against its rivals on the road. But which will be quickest – and which the most fun – around the Bedford Autodrome's West Circuit? **Roger Green** finds out

So the road test team returned disenchanted with the RS5's performance on the road, but now it has a shot at redemption. Track-work requires a different skill-set and it's not uncommon for a car to excel at one but not the other. Steering feel, for example, can be less of an issue on a smooth racetrack, provided the chassis keys itself into the tarmac and gives you everything you need through the seat of your pants. On a track, large, ride-destroying wheels offer greater grip from braking zone to corner exit, while a snappy double-clutch transmission will save precious fractions of a second with every flick of the paddle.

The Audi has its work cut out, though. The M3 Competition is arguably a slight favourite on paper thanks to its weight advantage (a regular M3 has previously posted a very fast time, too), but the others all have

superior firepower. The C63 AMG has the most grunt of all (with a soundtrack to match), though its likely that its bulk and old-school gearbox will work against it. The Lexus IS-F could be the dark horse. Developed at the Fuji Speedway as well as the Nürburgring, we expect it to comfortably mix it with this gaggle of uber-performance Germans.

There's no time to lose. The popularity of the PalmerSport days at Bedford means the only chance we've got to lap all four is while the corporate guests are enjoying their posh lunch.

I take the RS5 first, eager to see how it



TRACK BATTLE:
RS5 v M3 v IS-F v C63



**WATCH THE
TRACK BATTLE
AT EVO.CO.UK**

Above: 6.2 litres of V8 and rear-wheel drive equals lots of smokey sideways action in the C63. It's not the quickest way round Bedford, but it might just be the most fun. Right: M3 leads RS5, but which is quicker?



TRACK BATTLE:
RS5 v M3 v IS-F v C63

ACCELERATION

	RS5	M3	IS-F	C63
0-30	1.7	1.8	1.9	2.1
0-40	2.5	2.5	2.7	2.8
0-50	3.3	3.3	3.6	3.5
0-60	4.3	4.3	4.7	4.4
0-70	5.5	5.4	6.0	5.5
0-80	7.0	6.9	7.4	6.7
0-90	8.6	8.5	9.0	8.0
0-100	10.6	10.3	10.9	9.7
0-110	12.9	12.5	13.1	11.5
0-120	15.6	15.1	15.9	13.4
0-130	19.1	18.3	19.2	15.9
0-140	23.6	22.0	23.6	19.1
0-150	--	27.2	29.6	22.8

1/4 MILE

sec	12.8	12.8	13.0	12.7
speed	109.8mph	111.2mph	109.7mph	116.2mph

2ND GEAR

20-40	2.0	1.9	2.0	1.7
30-50	2.0	1.9	1.9	1.6
40-60	2.0	2.0	2.0	1.6

3RD GEAR

20-40	2.9	2.9	2.8	2.7
30-50	2.7	2.7	2.9	2.5
40-60	2.7	2.7	2.9	2.4
50-70	2.8	2.8	2.7	2.3
60-80	2.9	2.8	2.6	2.3
70-90	3.1	2.9	2.9	2.6

4TH GEAR

30-50	3.8	3.7	4.0	3.8
40-60	3.7	3.5	3.8	3.7
50-70	3.6	3.5	3.8	3.5
60-80	3.8	3.7	3.7	3.4
70-90	4.0	3.8	3.6	3.5
80-100	4.0	3.9	3.7	3.5
90-110	4.4	4.1	4.0	3.6
100-120	5.1	4.5	--	--

5TH GEAR

30-50	5.3	4.7	5.2	3.7
40-60	5.2	4.5	4.8	3.6
50-70	5.1	4.3	4.6	3.5
60-80	5.0	4.4	4.6	3.4
70-90	5.2	4.8	4.6	3.4
80-100	5.5	4.9	4.7	3.4
90-110	5.9	5.2	4.9	3.5
100-120	6.4	5.5	5.2	3.8
110-130	7.0	6.0	5.9	4.3
120-140	8.2	6.8	--	--

6TH GEAR

40-60	7.0	5.4	6.2	5.4
50-70	7.1	5.3	6.1	5.4
60-80	7.4	5.3	6.2	5.3
70-90	7.5	5.6	6.3	5.2
80-100	7.6	6.0	6.5	5.2
90-110	8.0	6.4	6.6	5.3
100-120	9.0	6.8	6.8	5.6
110-130	--	8.6	7.3	5.9

7TH GEAR (7TH/8TH FOR ISF)

50-70	9.2	7.0	6.6/11.1	7.1
60-80	9.6	6.8	7.4/11.5	7.2
70-90	10.5	7.0	8.3/12.5	7.2
80-100	11.0	7.4	9.3/13.7	7.5
90-110	11.6	7.9	10.2/15.1	7.7
90-110	--	9.1	11.0/--	8.0

BRAKING

100-0	4.2sec	4.3sec	4.4sec	4.5sec
distance	285ft	300ft	312ft	321ft

fares and, as we always perform our test two-up, Dickie Meaden is encouraged into the passenger seat. First impressions? Efficiency, particularly where the brakes are concerned – they're powerful, with instant, effective bite, though they're also over-assisted, so finessing them and accurately judging braking points requires a little acclimatisation. The gearbox is simplicity itself – in fact during a timed lap you only need use the left-hand paddle as the RS5 automatically upshifts at 8500rpm – complete with a bassy *pop* as the cogs hand on the drivetrain baton. The interruption in torque is practically negligible.

Chassis-wise it's a triumph of lateral grip and traction over poise and fluidity, and looking at the data traces (p128) at the end of the day reinforces the in-car sensations. The RS5 is the fastest of all through the final two high-speed turns and through the transitions of Pif-Paf and Bank, the mechanical diff and electronic torque-vectoring nullifying the understeer. But that only tells part of the story; the RS5 still doesn't allow the sort of throttle adjustability that you can enjoy in the the rear-drivers, and at the hairpins it records the lowest minimum speeds of all, struggling to turn the heavy and over-burdened nose into the apex. The steering is over-assisted and unresponsive, but the outstanding level of traction afforded by all that hardware does allow you to nail the throttle harder and earlier from the apex than is possible in any of the other cars here.

Those pluses and minuses of the RS5 are most notably demonstrated through the Palmer Curves – it is the slowest through the first right, but from that point onwards you can mash the throttle into the floor through the left section where the other three require

subtle modulation. A lap time of 1.26.9 is extremely impressive.

Appearances suggest the Lexus IS-F isn't going to be as track-focused as the rest of the group – it lacks a little visual aggression – but it definitely shouldn't be overlooked. For a start it demonstrates that with a sorted chassis you don't need four-wheel drive to contain this level of power – the IS-F delivers a neat and clean lap. It turns in crisply everywhere, but not so hard that the rear end can't follow faithfully through the first stage of the turn. Squeeze the power on and you discover impressive levels of traction – not RS5 levels admittedly, but without any of the time-wasting oversteer you might expect with a thumping V8 working the rear axle. Riding the limit of grip is easy because as long as you don't get greedy and you employ smooth technique it answers your bidding. Just over a second down on the RS5 at 1.28.1 is no disgrace, for what it loses against the stopwatch it more than makes up for by being far more engaging.

The wild child was always likely to be the C63 AMG, being the most powerful and the keenest to smoke a pair of rear tyres. And so it proves, though my main concern, with time for only two flying laps, is getting the best from the old-fashioned auto gearbox. You have to plan and anticipate every shift. Flick the paddle to go up and the delay before it reacts to your demands feels like whole seconds. Leave it too long and you'll slam it into the limiter. And it's just as awkward going down the gears in the braking phases – you could almost be turning-in before it gives you the required ratio.

Suss all that out, though, and the C63 serves up a generous helping of tail-led

IS-F delivers a clean lap and a very respectable time. Also does 'lairy' on demand





‘You can nail the Audi’s throttle harder and earlier from the apex than in any of the other cars here’



entertainment – admittedly not the most technically proficient way of circulating Bedford but it sure puts a smile on your face. On track it has the least amount of rear-end grip, falling into oversteer on turn-in if you work it hard enough, and ultimately that means you have to slow the AMG more than perhaps you really want to. But even from a lower starting point than both the M3 and IS-F, it still comfortably nailed the highest peak speed (109.1mph). Mind you, this couldn’t prevent it from recording the slowest time of the bunch, 1.28.8.

And so we come to the winner from the road test, the M3 Competition. With the power button thumbed, the DCT gearbox wound up to its fastest setting and the suspension to its stiffest option, we head onto the tarmac with little time left, but at least it’s a car I’m familiar with. The lap effectively begins with the final and fastest corner on the circuit – Tower – as it dictates your speed over the flying start, and the M3 feels mighty through here. The balance is just so and with the best

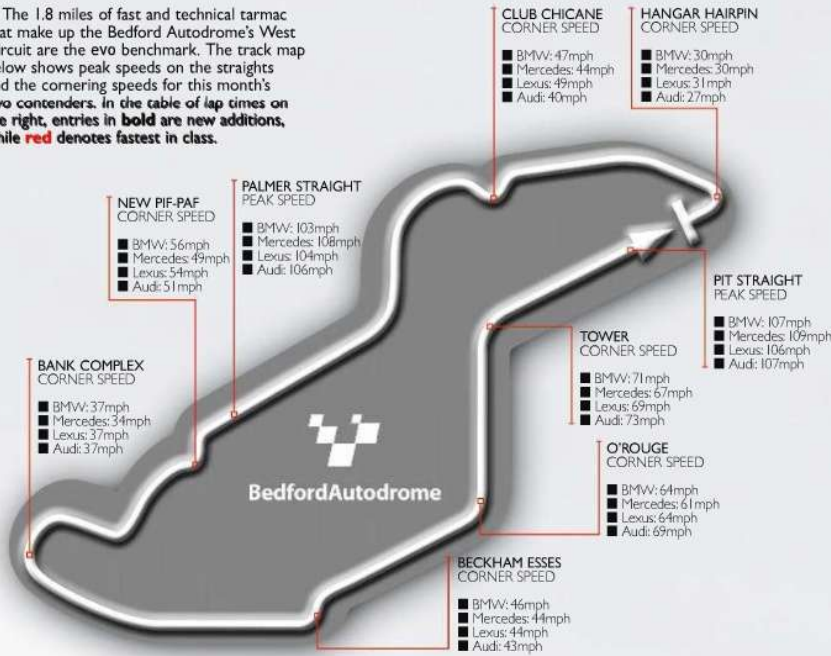
steering of the bunch you’re able to hustle the M3 right on the limit, with the throttle playing just as big a part in the cornering process as the wheel. Slow corners are equally impressive; the Competition has a communicative, tarmac-grasping front end that means you never need miss an apex.

The BMW’s Achilles heel, as ever, is the brakes, a trait exaggerated here by this being our heavily used long-termer. They begin to fade on the very first flying lap, and perhaps because of this I make a small mistake through Palmer Curves, asking too much of the rear tyres too early, and have to back off a little when I should be hard on it. Unfortunately there’s no time to stop and cool them and try again, but even so the M3 ends up only a tenth behind the RS5 on 1.27.0. We’ll rerun the laps as soon as we can get the car fettle, but there’s no doubt a fresh example would be fastest of the group. What’s more, it was unquestionably the most exploitable and fulfilling from the driving seat. Subjectively, the M3 Competition wins both tests.

Above: weighing the cars before the circuit laps. The M3 came in at 1654kg and the IS-F at 1732kg, both virtually as claimed. Audi and Merc each topped a portly 1800kg. Turn the page for the full lap data

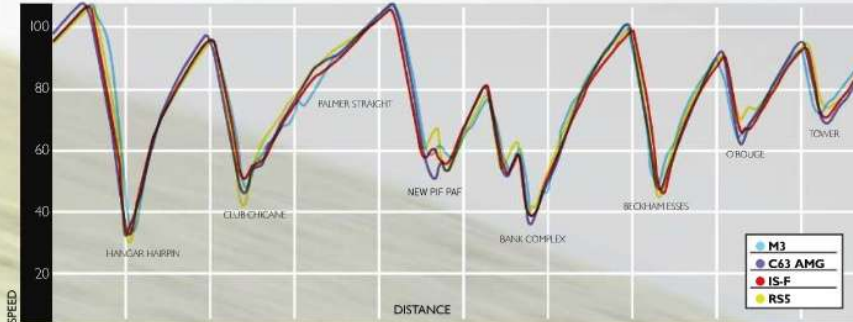
HOW FAST?

■ The 1.8 miles of fast and technical tarmac that make up the Bedford Autodrome's West Circuit are the Evo benchmark. The track map below shows peak speeds on the straights and the cornering speeds for this month's two contenders. In the table of lap times on the right, entries in bold are new additions, while red denotes fastest in class.



WHICH WAS FASTER?

RS5 lmin 26.9sec (peak 106.8mph) M3 COMPETITION lmin 27.0sec (peak 107.2mph)
IS-F lmin 28.1sec (peak 106.4mph) C63 AMG lmin 28.8sec (peak 109.1mph)



▲ Traces (above) show the four cars are well-matched for large parts of the lap, but closer observation reveals some critical differences. The RS5 is notably slower in the tighter turns like Hangar Hairpin and Club Chicane but, conversely, substantially quicker through the faster corners at O'Rouge and Tower

THE LEADERBOARD

	LAP TIME	PEAK
Radical SR8LM (fastest car)	1.13.6	127.8
Caparo T1 (fastest supercar)	1.14.8	130.9
Gumpert Apollo S	1.19.4	120.4
Caterham Levante V8	1.19.6	118.6
Lotus 2-Eleven GT4	1.20.1	113.2
Caterham Superlight R500	1.20.2	115.7
Ferrari 458 Italia	1.20.3	117.0
Lamborghini Murciélago LP670-4 SV	1.21.3	121.1
Ariel Atom 3 Supercharged	1.21.5	113.6
KTM X-Bow (300bhp)	1.21.5	112.7
Ferrari 430 Scuderia	1.21.7	117.2
Porsche 997.2 GT3 RS (fastest coupe)	1.21.9	116.8
Lamborghini Gallardo LP560-4	1.22.5	119.1
Brooke Double R	1.22.5	113.2
Lamborghini Murciélago LP640	1.22.9	116.7
Porsche Carrera GT	1.23.3	115.2
Porsche 997.2 GT3	1.23.3	114.5
Lamborghini Gallardo LP550-2 Valentino Balboni	1.23.4	116.8
Porsche 997 GT2	1.23.5	115.1
Nissan GT-R	1.23.6	113.1
Porsche 997 Turbo	1.24.1	113.5
Lotus 340R (190bhp)	1.24.2	110.0
Caterham Superlight R300	1.24.3	101.5
Ferrari California	1.25.0	111.8
KTM X-Bow	1.25.0	105.0
Mercedes SL65 AMG Black	1.25.2	108.6
BMW E92 M3 Coupe	1.25.9	108.8
Mitsubishi Evo X FQ-400 (fastest saloon)	1.25.9	107.5
BMW E90 M3 Saloon	1.26.2	108.2
Audi TT RS	1.26.3	107.2
Aston Martin DBS	1.26.4	109.5
Audi R8	1.26.5	112.0
Porsche Panamera Turbo	1.26.5	109.2
Jaguar XJ220	1.26.7	111.7
Audi RS5	1.26.9	106.8
Lotus Evora	1.27.1	104.2
Lotus Elise SC	1.27.7	104.6
Vauxhall VXR8 Bathurst S	1.27.8	106.1
Renaultsport Mégane R26.R (fastest hot hatch)	1.27.8	103.3
Audi RS6 Avant (fastest estate)	1.27.9	111.0
Jaguar XFR	1.27.9	108.1
Honda Civic Type-R Mugen	1.28.0	104.4
Porsche Boxster S	1.28.1	105.4
Jaguar XJ Supersport	1.28.4	106.6
Lexus IS-F	1.28.1	106.4
TVR Griffith	1.28.5	101.4
Ford Shelby GT500	1.28.6	106.5
Nissan 370Z	1.28.7	103.7
Mercedes-Benz C63 AMG	1.28.8	109.1
Bentley Continental Supersports	1.29.2	105.8
Maserati Quattroporte S	1.29.5	105.0
BMW 335i Coupe	1.29.9	104.9
Nissan 350Z	1.30.0	101.4
Honda NSX	1.30.1	101.3
Subaru Impreza WRX STI	1.30.2	103.4
Ford Focus RS (Mk2)	1.30.8	101.8
Mercedes SLK350	1.31.1	101.3
Lotus Carlton	1.31.2	102.7
Honda Civic Type-R Championship White	1.31.8	97.9
Renaultsport Clio 200 Cup	1.31.9	97.2
VW Golf GTI (Mk6)	1.32.4	99.3
VW Scirocco 2.0 TSI	1.32.4	98.6
BMW E30 M3	1.33.3	94.0
Renaultsport Clio 172 Cup	1.33.4	96.1
Renaultsport Clio Trophy	1.34.0	96.5

'You're able to hustle the M3 right on the limit'



EMOTIONALLY DRIVEN.
EXPERTLY FINANCED.



ASTON MARTIN FINANCIAL SERVICES



ASTON MARTIN

34 monthly payments	£995.00
On the road cash price*	£93,177.32
Deposit or part exchange	£29,995.00
Amount of credit	£63,182.32
First monthly payment (inc. acceptance fee of £175)	£1,170.00
Optional final payment	£42,562.31
Total amount payable	£107,557.31
Total Contract Mileage 18,000	
Excess Mileage Charge 17.44 pence per mile	

Typical 9.4% APR

Experience driving the
V8 Vantage with individually
tailored finance packages.

For more information visit
www.finance.astonmartin.com

Finance example is based on a 36 month PCP agreement for the model featured, an Aston Martin V8 Vantage with optional Bluetooth Telephone Preparation and Satellite Navigation System. Vehicle condition charges may apply. * On the road cash price includes 12 months road fund licence, first vehicle registration free, delivery, number plates and VAT. Figures are correct at time of going to print and are subject to change without notice. All finance is subject to status and available to over 18's in the UK only. (Excluding the Channel Islands). Guarantees and indemnities may be required. Aston Martin Financial Services is a trading style of Aston Martin Lagonda Ltd. Finance is provided by ALPHERA Financial Services, Europa House, Bartley Way, Hook, Hampshire RG27 9UF. Registered company number 01288537. Official government fuel consumption figures in mpg (litres/100km) for the Aston Martin V8 Vantage: urban 14.2 (19.9); extra-urban 27.3 (10.4); combined 20.4 (13.9). CO₂ emissions 328 g/km (manual).

Fast Fleet

||| LONG-TERM TESTS

Nick Trott looks back at four glorious months with the Aston V8 Vantage Roadster. Meanwhile, Chris Harris bags a Jaguar XKR Speed Pack, Harry Metcalfe buys a Countach, and Simon George takes to the air...



END-OF-TERM



Vantage would happily play the calming cruiser or the thrilling sports car, depending on your mood

There was one question I thought long and hard about before I took delivery of 'my' Aston; a question that's

almost impossible to answer. That is, what is the special 'it' that seems to envelop everything Aston Martin?

Driving enthusiasts are drawn to the muscle, the engine note and the speed. But what about those who enjoy these dynamic elements but need something more – an essential *rightness*? That's the intangible I'm talking about here. I was hoping my four months with an Aston V8 Vantage Roadster would provide the answer.

The relationship got off to a good start. I was invited to spec my car at the factory – a thoroughly enjoyable day of dithering and deliberating over trim, leather, hood and paint

combinations. Among the many options I chose, one was conspicuous by its absence: the Sports Pack suspension. As the car was unlikely to see much track action, I looked at specifying the best compromise for road use. This meant ticking the box for the killer B&O hi-fi (£4750) and looking closely at the paint/roof interior options for maximum visual impact.

In the end I went for a classy but subtle Lightning Silver metallic exterior with Blue Haze leather trim and a set of 20-inch alloys in a glorious diamond-turned/graphite contrast finish. Overall, including Bluetooth, N400 sills, sat-nav and a bunch of other goodies, I somehow took my Roadster from £96,995 to £107,899. Oops.

Then came the wait. The long, dreaded wait as Aston built my car. A couple of months ago, friend-of-evo

This month: Aston V8 Vantage Roadster SEAT Leon Cupra R Audi TT RS Renault Clio V6 Porsche 964 RS Renault Mégane 250 Cup Infiniti G37S Ford Capri V8 Lamborghini Countach Nissan GT-R Aston DBS Hiller 12E4 Jaguar XKR Speed Pack Citroën DS3 Renault Clio Williams Vauxhall Insignia VXR Ford Fiesta Zetec S Peugeot 306 Rallye Mazda 3 MPS BMW M3



ASTON V8 VANTAGE ROADSTER

Date acquired	May 2010
Duration of test	4 months
Total test mileage	6560
Average mpg	20.6
Costs	£1140 (Aston driver course)
Purchase price	£107,899 including options (£96,995 basic)
Trade-in value	£85,000
Depreciation	£22,899



Far left: Nick collected his Aston from the factory. Left: fixed backs of the sports seats were frustrating. Right: softer ride of the standard suspension proved perfect for road use



Lord Mexborough described to me how he waited patiently for two years from deposit to delivery of his Porsche 959. I don't know how he did it – my wait of just a few months for the Aston was excruciating...

On the day I collected the car from Gaydon, I was offered a factory tour. It was clearly a strategic move – to show me the quiet calm of the factory, to meet the people who stitched my dash and fitted my engine. Then, as I

stepped outside afterwards, my car was waiting under a silk sheet. I'm pretty sure Aston had arranged the weather too, because as I slipped off the sheet and the sun beat down on the flickering metallic finish, I was left momentarily gobsmacked. It also meant I could lower the roof, fit the wind deflector and drive home in full Roadster mode. It was one of the best drives of my life, and so began four months with an Aston Martin.

My regular commute includes a bit of motorway, a bit of fast, twisty, bumpy B-road and a slow A-road blighted by 40mph trucks and with blink-and-you'll-miss-it overtaking opportunities – good fodder for a sports car, then. Whatever the road, I never failed to be impressed by the V8's ride. Fluid and composed, with decent wheel-travel, the Aston had a knack of making me feel like I was gliding a couple of inches above the road surface.

Of course, this is the last thing you want to feel when you are pressing on, but the Aston also had a knack of involving the driver when you switched your brain to 'sporty' mode. Then it truly rolled up its sleeves and got stuck in. It was something I loved about the car: roof-down smooth cruiser one moment, exhaust-barking V8-growling road-burner the next. And I never, ever tired of the epic sound of that 4.7-litre, 420bhp V8 on



Nick watches his Aston leave the evo car park for the last time – he'll miss it

full re-heat. A truly tectonic noise.

I regretted optioning the fixed-back sports seats, though. I'm a bit of a stickler for finding the optimum driving position and while I got close (low seating, steering wheel extended, legs straight) I needed a little more recline to feel perfectly comfortable. Other grumbles? The Bluetooth hands-free link to my phone rarely telegraphed a clear voice to callers, and while the sat-nav was efficient enough, the functionality and visuals were too low-tech for it to be a £1795 option.

Memorable drives include a thorough whupping of an E92 M3 on wet roads – the M3 skipping around on its axles while the comparatively lazily sprung Aston used all its (non-Sports Pack) suspension compliance to dig in and extend a gap on the white-knuckled M3 driver. I also enjoyed a few long commutes into London, and the frequent cheery 'after you' waves from other motorists at tricky junctions – never had that in a Ferrari.

And reliability? The Vantage didn't require a drop of oil, never skipped a beat. Nothing rattled, broke or fell off, and if anything the V8 was just starting to feel properly powerful and loose when I gave the car back with over 6500 hard miles on the clock. Fuel consumption averaged just over 20mpg, which is thoroughly acceptable, but depreciation was a big downer – had I paid for the car myself I would've been looking at a £22,899 hit if I'd sold privately. Thing is, I wouldn't have sold it. My relationship with the Aston was only just beginning; the bond we were developing was unlike anything I've experienced in motoring.

So, did I discover what the special Aston 'it' is? I think I was getting close to an answer – an excess of character, beauty and pace matched to everyday driveability. A car to covet for a long time, then. Waving goodbye was hard. I miss 'my' Aston like hell.

Nick Trott

NEW ARRIVAL

The more observant amongst you will notice that I have swapped cars. With just three doors and a boot that wouldn't suffice for a family day out including pushchair, the Zetec Fiesta didn't quite fit my family lifestyle. I needed something bigger, and as luck would have it, SEAT offered us the chance to run a Leon Cupra R.

The first thing you notice about our latest arrival is the paint. Crono

Yellow is SEAT's signature colour, and while it isn't to everyone's taste, I really like it. Look more closely at the car and you might notice the tweaks that have been applied to the UK-market Cupra R. The rear diffuser and central twin-exhaust set-up is unique to these shores, as are the black-tipped roof spoiler and gloss black seat-backs – subtle touches, but they let you know that you have something a bit special.

It may not be as aggressive-looking as a Focus RS, but to my eyes the Cupra R is more purposeful than either a Golf GTI or a Mégane RS 250. All four of these hatches went

head-to-head in a recent evo group test (issue 139), where the SEAT got a slight kicking from a certain Ollie Marriage. But a long-term test is a marathon, not a sprint, so hopefully the R will now get its chance to shine.

Open the door and you're greeted by the standard-fit sports seats. Wide and tall with white-stitched quilted black leather, they give you a gentle squeeze rather than holding you so tight you need forceps to get out. The leather steering wheel feels good to grip, the dials are clear and well laid out and there's a well-sized screen for the sat-nav. All in all it's not a bad place to sit, but there's nothing to



RS's small footprint and four-wheel drive made it the perfect partner for enjoying narrow Highland roads





Above: twin central exhaust pipes and glossy rear diffuser help mark out the 'R' Cupra, and are only fitted to the UK version of the car. Above right: Bentley-esque quilted seats lift the interior ambience

make you feel spoilt. It's not a patch on the Mini JCW that I ran recently, for example – every time I got in that car I would notice something new.

On the driving side, first impressions are very positive. I'm not on the ragged edge (I'll get John Barker to give his verdict in a future issue), but the R inspires confidence, makes the right noises and is fast. The 1984cc turbocharged engine has 261bhp and 258lb ft, which is more than enough to make a JCW feel slow. The SEAT doesn't suffer from the Mini's torque-steer madness either.

The list price for the Cupra R is £25,205, and most of what you see

here is standard. The only option box we ticked was the £1375 Technology Pack, which adds an upgraded stereo, Bluetooth, bi-xenon headlights and front parking sensors. But even with a total price of £26,580 this car appears very good value for money. A similarly specced Golf GTI costs around £5000 more but is 54bhp less powerful; go for the Golf R, which has comparable power, and you can make that £10,000 (although that car does have four-wheel drive). A Focus RS, meanwhile, starts at £27,895 before options.

All said and done, it's a good start for the Spaniard.

Paul Lang

'A SIMILARLY SPECCED GOLF GTI COSTS AROUND £5000 MORE BUT IS 54BHP LESS POWERFUL'



SEAT LEON CUPRA R

Date acquired	September 2010
Total mileage	3237
Mileage this month	1505
Costs this month	£0
mpg this month	26.0

Last month I reported on the astonishing wet-weather ability of the TT RS, and this is something I can now fully confirm after taking it on holiday to Scotland. The Audi turned out to be the perfect tool for the job for other reasons, too; it easily swallowed a week's luggage for two, effortlessly blitzed the seven-hour motorway slog, and when we were finally surrounded by the mountains of Glen Coe, a press

AUDI TT RS

Date acquired	May 2010
Total mileage	11,819
Mileage this month	1976
Costs this month	£0
mpg this month	24.5

of the Sport button revealed the other side of the car's dual personality.

The more I drove the RS along the narrow, twisting passes, the more it began to feel as if it had been designed

for this environment. Its diminutive size instils nimbleness, while the instant punch meant overtaking people who drive wearing hats required no more than a twist of the wrists and a little flexing of the right foot.

In fact the TT felt pretty invincible, and I reckon that thanks to its four-wheel drive the feeling will continue deep into the winter months. Perhaps I'll go back for Hogmanay to find out.

Roger Green

'THE R.S. FELT AS IF IT HAD BEEN DESIGNED FOR THIS ENVIRONMENT. ITS DIMINUTIVE SIZE INSTILLS NIMBLENESS'

Fast Fleet

||| LONG-TERM TESTS

RENAULT CLIO V6

Date acquired	January 2010
Total mileage	14,377
Mileage this month	379
Costs this month	£0
mpg this month	22.1



After nine months with the V6, Nick reckons it's ready for a bit of TLC

Uh oh. I've got a bad feeling that some big bills are coming my way. My Clio V6 and I have enjoyed around 4000 spirited miles together since I bought it in January and it's starting to feel like it needs a good service, if you get my drift. However, the car is five years old, so despite its low mileage the engine belts will need changing very soon. And the brakes have pretty much given up. And there's a nasty squeak from the right-front corner on full lock that needs investigating. And the tyres will need replacing soon. And... and...

'I RECKON I'M LOOKING AT A BILL OF AROUND £1750'

The Clio V6's service intervals are set at a reasonable 12,000 miles or two years, but I'm one of those cautious types who prefers an annual service and oil change. I'll aim to get the belts and brakes done at the same time as the service. All in all, I reckon I'm looking at around £1750, but then I can console myself that this year's bill is unlikely to be repeated for another five years, and the overall cost reflects the V6's status as a mini-exotic. At least that's what I keep telling myself. And my bank manager...

Nick Trott

Confession time. When I learned that not only was I going to be running a Mégane 250 Cup but I'd be able to

spec it as well, the temptation to have a black Renaultsport to go with my black Renn Sport 911 was too great to resist. Vain? Quite possibly, but I have always been a sucker for black paintwork, even if it is a nightmare to keep clean.

Comparing the two RSs is a pretty graphic illustration of how performance cars have changed in the last two decades. In its day the Porsche was a specialist £60K machine: scarce in number and unapologetic in its hardcore delivery.

Powered by a blueprinted 3.6-litre air-cooled flat-six, the 964 RS made do with a scant 10bhp more than its cooking Carrera sibling, official figures quoting 260bhp.

Fast forward to 2010 and that figure looks a little undernourished even in the hot hatch segment. Then again, much like the 964 RS, the £25K, 247bhp Mégane 250 Cup isn't about headline-grabbing power outputs. Renault prefers to leave that game to Ford's RS Focus. Still, it's funny to look at these two side-by-side and think they have similar firepower.

Whenever I see the RSs together I can't believe how low and small the Porsche looks, and conversely how tall and bulky the Renault looks, but despite the obvious differences there

are some strong similarities that bond these two cars. The main one is ride quality, for the ultimate point-to-point pace of both is limited by their inability to cope with lumpy roads.

Oddly, it doesn't bother me so much in the Porsche, for it's often only nudgety little B-roads that exhibit the worst surface quality and, to be honest, I don't think they are an RS 911's true domain. However, the Mégane's rough ride does vex me, because a hot hatch should have the

RS MÉGANE 250 CUP

Date acquired	September 2009
Total mileage	7971
Mileage this month	1501
Costs this month	£0
mpg this month	27.8

'THE TWO RSs ILLUSTRATE HOW PERFORMANCE



Below: Renaultsport Mégane's turbocharged 2-litre four-cylinder engine serves up 247bhp. Right: interior has sporty and supportive optional Recaro seats, but there's no shortage of luxuries



measure of minor roads.

Where the Porsche pounds and skips and sometimes parts company with the tarmac altogether, the Renault remains more resolutely locked to the road, but the edges of the ride are harsh and it can pull and tug through the steering, especially under power.

What makes it worse is that I'm afraid/ashamed to say the reason for the hobbled ride is my choice of 19in wheels. I picked them partly because I

wanted to see what effect they would have on the dynamics (I thought I should be the guinea pig so that you didn't have to be) and partly because I think they make the Mégane look, er, mega. However, having recently tried a 250 Cup on 18s, I have to say the more modest-looking version is by far the nicer car to drive. Shame.

The rock-hard ride also makes both cars rather unpleasant for passengers. That's only to be expected in such driver-focused machines, and isn't such a big deal with a high-days-and-holidays car like the 911, but it's something to bear in mind if you're considering a Mégane 250 Cup as your family wheels. If you are, I'd definitely recommend trying a non-Cup model as well.

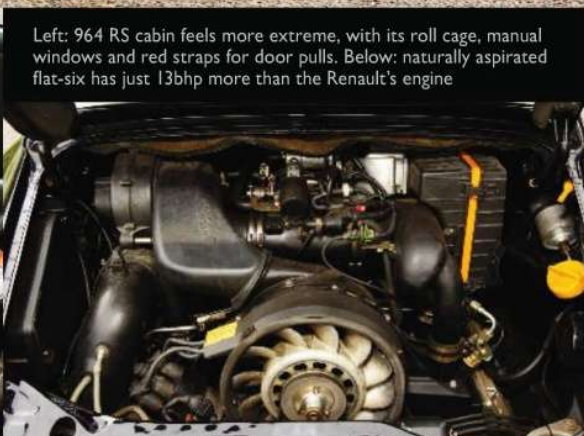
Which is quickest? Well, that's a surprisingly tough question to answer. The Porsche certainly *feels* the quickest, mainly due to its lower weight and more immediate throttle response. It sounds magnificent too, which always helps. The Renault's delivery is more spiky, thanks to the lunges of turbo boost in each gear. It also places big demands on the front tyres and their ability to find traction, something the Porsche never, ever struggles with. Honestly, all-out I don't think there'd be much in it at all, whether you're on the road or on a track. That's quite an achievement for Renault, but no shame on the 18-year-old Porsche. Either way it's a win-win for jammey old me.

Richard Meaden

PORSCHE 964 RS

Date acquired	July 2006
Total mileage	60,468
Mileage this month	191
Costs this month	£0
mpg this month	25.6

CARS HAVE CHANGED IN THE LAST TWO DECADES'



Left: 964 RS cabin feels more extreme, with its roll cage, manual windows and red straps for door pulls. Below: naturally aspirated flat-six has just 13bhp more than the Renault's engine

INFINITI G37S COUPE

Date acquired	July 2010
Total mileage	6135
Mileage this month	1689
Costs this month	£0
mpg this month	27.6



Infiniti feels quite agile in the dry, but can struggle for traction in the wet

I mentioned last month how the Infiniti's slippery diff and ESP coped well with keeping the car's 265lb ft in check on the greasy passes of the Lake District. Well, with autumn now in full swing, I've discovered that it's not just slow, tight, uphill hairpins that have GG10 EVO trying to spin-up its rear Bridgestones – attempt to push on through pretty much *any* wet corner and you'll soon feel the car's back end nudging wide, far more easily than in any similarly powered rear-drive car I can think of, in fact. Perhaps it's the price you pay for the nimble, light-on-its-feet feeling

'YOU SOON FEEL THE INFINITI'S BACK END NUDGING WIDE'

the G37S has in the dry, a product, no doubt, of its quick rack and four-wheel steering system.

It's not really a problem, though, as the ESP is always on top of things (amusingly, on certain surfaces you can keep its light flickering well beyond 60mph), but I do wonder if, as the gloomier months continue, I might eventually tire of having to be quite so careful with my right foot. Then again, if I get the chance to take the Infiniti out on a wet track for some ESP-off laughs, I'm sure you won't hear me complaining.

Ian Eveleigh

Fast Fleet

|| LONG-TERM TESTS

NEW ARRIVAL

There's a bright red Lamborghini tucked up in the garage at home and it feels good. It's also a bit of a relief, as the Countach has always been a hero car of mine and the idea of owning one had been nagging away for too long.

Until recently there were plenty of reasons why I hadn't taken the plunge: only drivers smaller than Tom Cruise

need apply, they're not very quick, the handling's rubbish – that sort of thing. But once I started to look into Countaches seriously, I discovered most of this is tosh generated by people who a) had never been anywhere near a Countach in their life, or b) were regurgitating nonsense from various internet forums.

The first big surprise was that the cabin is actually a very nice place to be, even though, at 6ft 2in, I'm considerably taller than old Top Gun himself. I don't even have the seat

on its last stop, while the steering wheel is so adjustable it's easy to get comfortable. The only issue is the low roof, but if you're my height or less and you avoid the rare electric 'comfort' seats fitted in a few Anniversary models, then you're fine.

The next shock was how quick a good QV feels. The Countach's reputation for not being as rapid as Lamborghini claimed was corrected when the 5000 QV arrived in 1985, complete with its 455bhp 5.2-litre *quattrovalvole* (four valves per cylinder)

V12. *Fast Lane* magazine recorded 10sec to 100mph and a top speed of 190mph with a wingless example in Italy, and that feels about right from the examples I tried.

Two things finally triggered me reaching for the chequebook. One was watching Jay Leno's excellent video of living with his QV and the other was the realisation that Countaches were starting to creep up in value. Collectors are squirreling away early LP400S versions at the moment, paying up to £250,000 a pop, but the Countach I really wanted, the QV, can still be found hiding in the classifieds for around £65,000-75,000. That looked like ridiculously good value to me, so the hunt was on.

One thing I didn't want was a 'chavvy' colour like white or yellow, but as always happens when you start looking, that was all I could find being advertised. The later Anniversary model seemed to be far more plentiful,



Above, from left: cabin is surprisingly comfortable; Harry seals the deal with seller Paul Burt (left); the QV arrives at Evo Towers

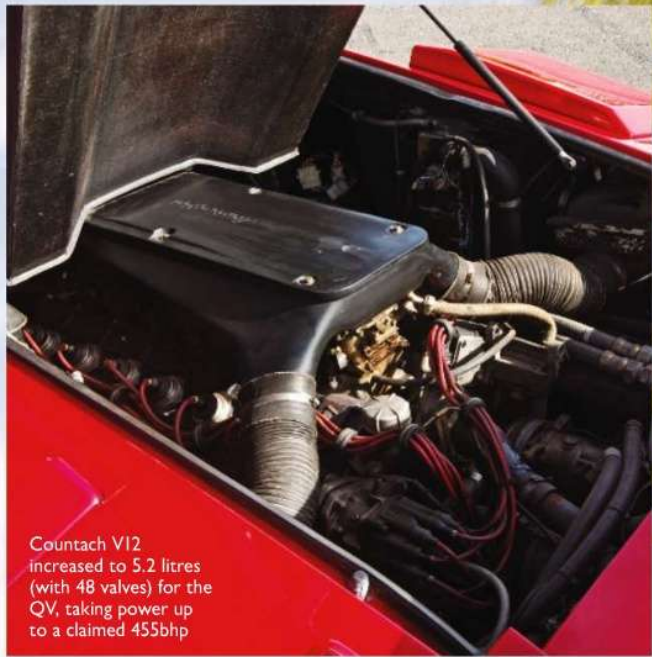


but if I was going to own a Countach, it had to be a 5000 QV.

Then, flicking through an old classic car mag one day, I noticed a really nice red QV up for auction. The auction had been back in July, so I gave the auctioneers a call to see what the car had fetched, only to discover that it hadn't actually sold. To cut a long story short, I ended up viewing and then agreeing to pay £67,000 for this very tidy 1987 example, with just 31,000 miles on the clock.

Over 1000 miles in and I'm more in love now than I was before it arrived. There are a few things to sort, like the heavy throttle and poor hot starting, but first, that wing has got to go. It dominates the looks far too much and was never an official option either. I'll explain more next month. In the meantime, if you'd like to get a taste of what riding in a QV is like, check out the video at evo.co.uk

Harry Metcalfe



Countach V12 increased to 5.2 litres (with 48 valves) for the QV, taking power up to a claimed 455bhp

LAMBO COUNTACH 5000 QV

Date acquired	September 2010
Total mileage	32,100
Mileage this month	1100
Costs this month	£0
mpg this month	I don't want to know!



'OVER 1000 MILES IN AND I'M MORE IN LOVE NOW THAN I WAS BEFORE IT ARRIVED'

FORD CAPRI V8

Date acquired	October 2001
Total mileage	876
Mileage this month	0
Costs this month	£0
mpg this month	n/a



Above: traces of silicone inside the V8's sump were not a welcome find

Things rarely go as smoothly as you hope with project cars. QPrep has made good progress solving the airlock problem in the cooling system, raising the header tank and taking the feed to it from the highest point of the top hose. The gauges read correctly, too, now that there are Ford sender units bolted into the Rover V8, and a calibrated check of the oil pressure brought more good news. There have been less good finds, though...

The leaky sump showed a lot of silicone sealant and when Quentin dropped the sump-pan he was concerned to find some silicone in the bottom and, at the front of the engine, the timing cover gasket inside the cover. His main worry is that the noisy hydraulic tappet might be because silicone has circulated the engine. There may be further dismantling to come.

Ending on a bright note, Pipercross has built and supplied an air filter with enough surface area to feed enough slow-moving air to a 500bhp engine, and QPrep is in the process of finishing a neat mount-cum-duct that will feed it cool air from just ahead of the radiator. It looks great.

John Barker



New Pipercross filter will keep the 5.2-litre V8 motor fed with cool air

Fast Fleet || LONG-TERM TESTS

NISSAN GT-R

Date acquired	April 2009
Total mileage	14,532
Mileage this month	517
Costs this month	£723 (Performance Friction PF-01 brake pads)
mpg this month	15.2



Took part in the Wilton House Supercar Day, joining an eye-popping convoy of 130-odd supercars at Fleet Services and driving on to Thruxton race circuit, where we were allowed a few fun laps on the damp track. I was thrilled to be chasing a stunning McLaren F1 GTR – and keeping up – although we were understandably driving rather tentatively (you can see the video on evo.co.uk).

From there it was a rather chaotic convoy to Lord Pembroke's family pad, Wilton House, near Salisbury, where the public was charged a modest fee to peruse the supercars whilst we had a splendid lunch amongst the tapestries. All in all, a great day out, and it raised a substantial amount for the local children's hospital.

I'd been looking for some decent track-capable brake pads – the EBC Yellow Stuffs were worn and didn't really offer the bite or retardation the heavy GT-R needs. I went for some Performance Friction PF-01s. With a very sharp bite, these take delicate footwork on the road, but on the recent *evo* trackday finale at Silverstone National, they proved tirelessly powerful, even when trying to keep in touch with Monkey Harris's borrowed GT3...

David Yu



At Thruxton, P Zilla found itself with another GTR (of the F1 variety)



Press most petrolheads and I'm willing to bet they will confess to at least a passing interest in most things mechanical, whether it be boats, bikes, planes... or helicopters.

My particular interest was sparked in 1977, the year United Artists released *The Spy Who Loved Me*. For a short-trousered yours truly it was memorable not just because of the lovely Lotus Esprit SI but for the scene where the gorgeous Caroline Munro pilots the villain Stromberg's Bell Jet Ranger and strafes the Esprit in the process. That for me sparked the passion for choppers as well as supercars.

Fast-forward to earlier this year and the hunt was on for a helicopter instructor to take me through the process of acquiring the 45 hours required to hold a PPL (private pilot's licence) as well as some advanced tuition – mistakes are not something you want to make in a chopper.

A fair bit of networking later, the chap whose name kept coming up was by happy coincidence the owner of the classic Hiller 12E4 whirlybird that appeared in the 1963 Bond film, *Goldfinger*. Enter Rob Hields of Hields Aviation based at Sherburn-in-Elmet, near Leeds. (By further coincidence, by the time you read this the Hiller will have been auctioned with the famous Aston DB5 from the same film.)

The Hiller has carried such famous passengers as Honor Blackman, Elizabeth Taylor and Richard Burton, and Rob's face was a picture when I asked if I could have a lesson in this E-type of the chopper world instead of the usual ubiquitous Robinson R44. Fortunately the Hiller also has dual controls, which is a good job since, to a



ASTON MARTIN DB5

Date acquired	January 2009
Total mileage	26,734
Mileage this month	1552
Costs this month	£188 (oil & filter change)
mpg this month	13.5

student pilot, the cyclic control – which governs the forwards, backwards and sideways movement of a chopper – has about as much feel as a spoon in thick porridge. According to Rob, the Hiller is a real man's helicopter. As well as a collective – a handbrake-like device located to the left of the pilot that controls the upward and downward movement of the aircraft – it also has a twist-grip throttle which, unlike most helicopters, requires one to manually feed in the correct amount of power to enable it to lift. It's a fair old amount to take in at first, especially when you throw in the anti-torque pedals, which control the direction the chopper is facing – but not necessarily the direction it's travelling! I'll keep you posted on how things progress...

As for my own 'Bond car', I'm coming to the conclusion it's going to need some money throwing at it before the end of the year. The last nine months have seen it being hammered repeatedly round circuits up and down the UK and if I'm honest it doesn't feel quite as taut around the twisties as it once did. That said, despite its hard life it hasn't given a moment of bother, while the interior is holding up very well indeed.

It sounds especially sublime with fuse 22 removed since this allows the exhaust valves to open throughout the rev-range rather than just above 4500rpm. Well worth the couple of minutes it takes and a nice two-finger salute to the noise police.

Simon George



Above: Simon fulfils a long-held ambition. Right: Hiller chopper as seen in *Goldfinger*. Left: like the DB5, it has a V12 engine





SKODA YETI 1.8 TSI

Date acquired	July 2010
Total mileage	8423
Mileage this month	2224
Costs this month	£0
mpg this month	277

I know, I'm meant to be telling you about how the Yeti got on in its quest to be not-the-slowest-thing-ever around Bedford on its trackday tyres. No such luck I'm afraid – trying to find a time in the last month when Bedford, the Yeti, a photographer, me and the weather have all been aligned has proved impossible so far.

I want to get it done soon, because much though I hate to admit it, I am looking forward to taking the Dunlop Direzzas off. With high wear-rates I know I'm wasting them just commuting between home and office, while the constant drone does get to me.

There's plenty more to talk about – not much of it good, though. For starters the windscreen's cracked. Since no-one could remember a stone strike, suspicion fell on the grippy tyres putting excessive strain on the bodyshell, the additional flex causing the damage.

Happily that's not the case – close inspection revealing a tiny impact crater at the base of the screen. I've circled the end of the crack to see how fast it's expanding.

And someone's nicked the aerial. It's a damn sight easier to thief than the last thing I had nabbed – the Jaguar XFR's boot badge – just unscrew and you're away, but it has properly upset the radio's ability to hold a signal as you drive along. Hissing static meets tyre hum. Oh the joy.

Ollie Marriage



'IT WAS A BOND FILM THAT SPARKED MY PASSION FOR CHOPPERS AS WELL AS SUPERCARS'



Yeti's windscreen has been stoned, and someone's half-inched the radio aerial

Fast Fleet

||| LONG-TERM TESTS

NEW ARRIVAL

won't lie: currently, this isn't the best relationship. Our new Jaguar XKR Speed Pack should be outside my door right now, waiting to whisk me in great comfort and with great speed to a meeting this afternoon. But it's not there. It's back with the menders.

I think it's a gearbox fault, but with everything now controlled by little electronic brains, it's hard to tell. What I can say is that if you hold a high gear at low revs, the car won't run smoothly, as if it isn't fuelling properly. This is the first powertrain fault I've had on a new car in ten years.

While I hadn't anticipated such a problem, this was always going to be

a pretty stern test of the XKR's powertrain, because the Jag was coming to live with a very spoilt brat: me. Since April 2009, my everyday car has been fitted with AMG's superb 6.2-litre V8 and the clever seven-speed Speedtronic gearbox – first in an SL63 and latterly an E63.

On paper, the £78,995 Jaguar stacks up well: its V8 displaces far less than the one found in the Mercs, but its supercharger plumps the numbers nicely, giving 503bhp and 461lb ft. Both of these figures are slightly down on the Mercs' vast 518bhp and 465lb ft, but the AMG motor doesn't give maximum torque until 5200rpm, whereas the Jag delivers its between 2500 and 5500rpm.

In practice, I haven't yet gelled with the XKR's engine and gearbox, finding

JAGUAR XKR SPEED PACK

Date acquired	September 2010
Total mileage	4811
Mileage this month	1301
Costs this month	£0
mpg this month	19.4

it very difficult to judge small throttle openings, especially exiting uphill T-junctions. The calibration of engine and gearbox just isn't as slick as either Merc's: the car gets caught in the wrong gear quite frequently, although with so much torque it isn't the issue it might be. The ZF 'box offers manual shifts with paddles, and blips on downshifts, but again, it isn't a patch on the Merc 'box for speed, even if it is slightly smoother in auto mode.

And then there's the styling. While I commend Jaguar for aiming at a

younger audience, to my eyes the bodykit is a step too far.

The Speed Pack adds £3500 to the price of the XKR and brings all the styling changes, a de-limit to 174mph and a re-tuned LSD. Chassis wise, it's still very much comfort-orientated – not a bad thing, but it's looser than I'd hoped – and I'm surprised how numb the steering is after the E63.

But perhaps the biggest problem for me is that I've now driven the XKR 75 (evo 150), which rights all of this car's wrongs. It is faster, sharper, better damped and, in graphite, rather more discreet. In fact, it's the best sporting GT I've driven in ages, whereas the Speed Pack is so far a disappointment – which goes to show how much devil there really is in the detail.

Chris Harris

'THIS IS THE FIRST POWERTRAIN FAULT I'VE HAD ON A NEW CAR IN TEN YEARS'



The DS3 is really confusing me at the moment. After more than a month with the car, I can't nail down exactly what I think about it.

When my friends ask, 'Is it good?' I reply, 'Yes, it's good, but it's not great.' Thing is, they expect it to be great, especially given its cracking looks and fancy paint job – and the good things that have been written about the DS3 in this magazine and others.

CITROËN DS3 1.6 DSPORT

Date acquired	August 2010
Total mileage	6261
Mileage this month	1959
Costs this month	£0
mpg this month	41.0

The ride on less than perfectly surfaced B-roads is the main issue here. The first DS3s we drove had a supple ride that just soaked up the

bumps and lumps, allowing the car to really glide over the ground. As far as we know there have been no specification changes, but as featured Henry Catchpole says, 'This one seems a lot stiffer, so it doesn't flow in quite the same way.' Meanwhile, the turbocharged engine thumps you down the road and the traction-control light flickers constantly when introducing power out of corners. In

other words, it feels like a lot of other hot hatches, and the fluid feel that set those early road-test DS3s apart from the pack seems to have been lost somewhere. It's a puzzle.

On the other hand, on an A-road, dual carriageway or motorway, it's an accomplished cruiser. The turbo may not respond instantly, but once it kicks in it treats you to a smooth, linear power delivery and gets you up



Old car ownership is proving to be an increasingly absorbing thing. Excusing conspicuous flaws as 'character' is a petrolhead trait that's always grinded on me, yet the continual discovery of new rattles or imperfect components on the Williams is a perversely intriguing one.

They really do give the car an almost human touch: the air vent that's always open, the irritating above-25mph rattle that appears when there's no passenger, and conversely, the disquieting hum north of 3000rpm that's only present when showing the car off to friends and family.

It all adds up to an experience more involving than that offered by my long-term Fiesta, which the Willy is drawing my attention away from a little too much at the moment.

Still, the impending winter weather should ensure the Renault stays tucked up in bed more frequently. While fairly stable (and good fun) in the wet, the lack of ABS and traction control is a minor weight on both my and co-owner Adam Shorrock's shoulders, as is the thought of rain, snow and council salt and grit destroying the sweet condition of the Clio's chassis and wheelarches.

A Waxoyl treatment beckons to help combat the latter, joining a job list that includes treating the paintwork's scratches and chips, a refurb for the alloys and a stereo fitting – hopefully a simplistic, none-too-flash item that sits well with a '90s dashboard.

Anyone with suggestions for the above – or fellow Williams owners wishing to share their experiences – email stephend@evo.co.uk

Stephen Dobie

RENAULT CLIO WILLIAMS

Date acquired	September 2010
Total mileage	84,482
Mileage this month	759
Costs this month	£0
mpg this month	34.3



Above: Clio's slightly archaic dash awaits a new stereo. Top: wet weather means the Williams will soon be used less often



to speed nicely. And the fuel economy is exemplary – at the end of a recent 250-mile round trip, the tank was still over a quarter full, with the on-board computer showing a 41mpg average.

It's a shame it isn't as adept on smaller roads, especially as these are often the ones that are more satisfying. I guess this is one of the things that can separate a good car and a great one.

Adam Shorrock

VAUXHALL INSIGNIA VXR

Electric parking brakes. Doncha just love them? The Insignia has one of these irritating little switches instead of a conventional handbrake. It's supposed to disengage automatically when you drive off. It doesn't. You have to press the brake pedal to disengage it, which is a fag. Then there's 'hill start assist', which is supposed to stop the car rolling back – except on slight gradients it doesn't. Handbrake turns? Forget it. What, I wonder, are the advantages?

Peter Tomalin

FORD FIESTA ZETEC S

Motorway miles aren't the Fiesta's forte. While a comfy enough place to spend time (the seats are mega), at typical cruising speeds the Zetec S feels fidgety, the ride unsettled and the direct steering almost too sharp. In the absence of a sixth gear, 80mph is more than halfway round the rev-range, so fuel economy is a tad disappointing too – around 34mpg is the motorway norm.

Stephen Dobie

PEUGEOT 306 RALLYE

I'm starting to get frustrated. How hard can it be to buy a pair of Cyclone wheels to replace the two damaged rims on my Rallye? Nigh on impossible if my experience of being let down by eBay sellers, small ads and other outlets is anything to go by. My mood wasn't improved by the £205 road tax renewal this month, either.

Ollie Marriage

WV SCIROCCO 2.0 TSI

It's been a quiet month for the Scirocco, what with the Mazda 3 taking over as my daily drive (see page 143). It's hard to ignore the stylish little bright green coupe in the car park and take the Mazda, but after nearly 12 months and over 33,000 miles of almost trouble-free motoring, it's about to leave us. If you've got one, we'd love to hear from you (see below).

Chris Rutter

fastfleet@evo.co.uk

Got one of the models featured on our fleet? We'd love to hear about your experiences.

More than 4 pints last night?

17,800 people lose their licences each year for morning after drink driving, after drinking as little as four pints the night before. AlcoSense quickly and accurately tells you your blood alcohol level, so you don't become one of them.



AlcoSense ONE Only £24.99 Basic Personal Breathalyse

- Basic breathalyser
- Accurate to +/-0.02%BAC at the drink drive limit
- Max reading of 0.12%BAC (1.5x legal drink drive limit)
- Recommended waiting time between tests: 1 hour



AlcoSense Lite Only £34.99

- Recommended waiting time between tests: 5 minutes
- Max reading of 0.12%BAC (1.5x legal drink drive limit)
- "Don't Drive" alert if user is close to or over the limit
- Tube system for more accurate sampling



AlcoSense Elite Only £59.99

- Highly accurate blow samples with air pressure sensor
- Accurate to 0.02%BAC across entire reading range
- Max reading of 0.15%BAC (twice the limit)
- Screen changes red when close to or over the drink drive limit
- Auto cleans after every test for increased long term accuracy
- Recommended waiting between tests: 20 seconds
- Suitable for testing multiple people

✓ Accurate ✓ Quick ✓ Easy



"I wouldn't drive the morning after, neither would I let my family, without first checking ourselves with Alcosense."
Sir Stirling Moss OBE
Motor Racing Legend



alcoSense®

DIGITAL BREATHALYSER

Available from all large Halfords stores

halfords
We go the extra mile

Online Only
at Boots.com



Order by phone or online!
Quote advert ref: ALC0338
0800 195 0088
www.alcosense.co.uk

TVR GRIFFITH

The Griff is finally ready to pick up after its engine rebuild. It's taken a while, as a new block had to be sourced and then machined to Griff 500 spec. While all that was being done, I had the exhaust manifolds powder-coated by Woof, who are based in Bradford, and the results are spectacular, as you'll see next month.

Harry Metcalfe

BMW M3 COMPETITION



It's been an expensive month, with the M3 needing a litre of synthetic oil that's champagne-pricey and as hard to find as Lord Lucan, plus four new tyres and a replacement can of tyre sealant. There'd been a slow puncture in a rear Michelin, but happily we'd had the wear out of them. The sealant remains liquid, though, and it made a right mess of Tyres Northampton's kit (above).

John Barker

PEUGEOT 106 RALLYE

Ironically, I've barely driven the Rallye since its successful visit to Superchips last month. A busy schedule is partly to blame, as are some good drives in my 911. I've also bought another car. It's Italian, was made in 1966 and is very sweet. To paraphrase Rolf Harris, can you guess what it is yet?

Richard Meaden

LAMBORGHINI LP640

Spent half an hour the other day going over every one of the big Lambo's panels trying to decide which ones needed repainting, given its hard time on track this year. Gave up in the end and have booked it in around Christmas for a top-to-toe repaint. Might even give it the SV look with matt black lower panels. Decisions...

Simon George

fastfleet@evo.co.uk

Got one of the models featured on our fleet? We'd love to hear about your experiences.

MAZDA 3 MPS

Date acquired	May 2010
Total mileage	5850
Mileage this month	1683
Costs this month	£0
mpg this month	28.4

With sub editor Ian Eveleigh taking on our new Infiniti, and the Scirocco due to leave us in the next month, I've adopted the Mazda 3 and will be running it for the remainder of its time with evo. As a photographer's car, it won't be getting an easy ride though. It will need to accommodate all of my kit and cover some substantial distances in total comfort. Perhaps most importantly, as I love a decent drive as much as anyone, it'll need to entertain as well as be practical.

The Mazda has already been on one holiday in the hands of art director Paul Lang, and now it's been on a

second, as I decided that a week in Wales would be a great opportunity to get acquainted with my new long-termer. With only two people to transport, there wasn't loads of luggage to accommodate and the Mazda's boot easily dealt with our bags and some basic camera kit. But I'll have plenty of time to discover how good a load-lugger the MPS is; I was far more interested in finding out how this 256bhp hatch drives.

The engine dominates your first impressions. At lower revs it does feel a little flat until the turbo gets going, but as long as you keep the revs above 3000 it's a punchy and powerful unit with a slightly offbeat exhaust note. From inside the car, the noise is muted, but by coincidence I heard and then saw another 3 MPS accelerating enthusiastically on the road outside the cottage we were staying in and it sounded pretty good.

As Ev found out, the handling

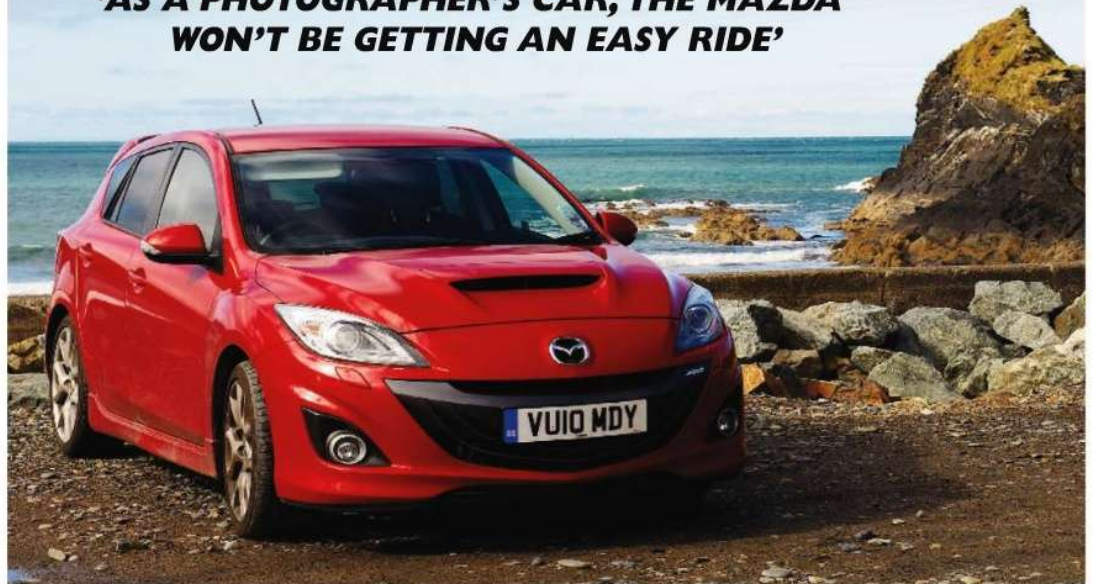
and traction are good on smooth roads, but venturing onto some of the bumpy single-track ones around the Pembrokeshire coast it soon became apparent that the MPS's front wheels have a tendency to scabble for grip, and the steering isn't the most communicative either, especially around the straight-ahead.

The same roads also showed up how firm the suspension set-up is. It's not that it's uncomfortable, and it doesn't crash over large potholes, but bumps and imperfections are transmitted into the car and through the steering, making it feel more frantic and fidgety than it could be.

So I'm still not sure how well the Mazda will deal with my day-to-day needs, but the slightly old-school power delivery of the turbocharged engine certainly has the ability to put a smile on my face, which has to be a good thing.

Chris Rutter

'AS A PHOTOGRAPHER'S CAR, THE MAZDA WON'T BE GETTING AN EASY RIDE'



Our resident Welshman with a video camera, Dafydd 'Dai' Davies, has been dashing between jobs for evo.co.uk in my Swift for the last month. So I gave him a call to find out how he'd been getting on.

'Well, boyo,' he began, 'the locking thing [I think he means the keyless entry system] has been well annoying. I know what he means – if you unlock the boot, you then have to lock

it again before the car will let you open either of the doors.

But what did he think about the way the Swift drives? 'It was a bit of a grind on the M4,' Dai revealed, 'but as soon as you get it on a valley road, it's brilliant, and I'll tell you for why – it's because the engine is really urgent. It just likes to be revved as hard as possible. When I got in the wife's Cooper S afterwards it didn't feel nearly so enthusiastic.'

SUZUKI SWIFT SPORT

Date acquired	February 2010
Total mileage	11,390
Mileage this month	1311
Costs this month	£0
mpg this month	35.1

So it seems as though the Swift Sport's *joie de vivre* has found another fan. Dai summed up the car in a single word: 'Tidy.'

Henry Catchpole

AT ORACLE WE'VE SPECIALISED IN CAR FINANCE FOR OVER 10 YEARS.

If you are considering financing ANY new or used car
and buying from ANY UK motor dealer CALL US or
VISIT US ONLINE for a free finance quotation.



Range Rover Sport TDV6 2011
Deposit of £15,000
48 months @ **£599**pm
+ Final Payment



Ferrari 458
Deposit of £55,000
36 months @ **£2,699**pm
+ Final Payment



Bentley GT Supersports
Deposit of £12,000
48 months @ **£2,089**pm
+ Final Payment



Aston Martin V8
Deposit of £15,000
36 months @ **£599**pm
+ Final Payment



Range Rover Vogue 3.6 TDV8
Deposit of £8,000
48 months @ **£689**pm
+ Final Payment



Audi R8 Spyder
Deposit of £35,000
36 months @ **£1,199**pm
+ Final Payment

OUR REPUTATION CONTINUES TO GROW BY RECOMMENDATION ALONE AND WE HAVE ACCESS TO ALL OF THE BEST UK LENDERS FOR:

- Low rate finance - (lending from £20,000 to £3million)
- Flexible packages - allowing you to change cars as little or as often as you like
 - Guaranteed future value options and leasing available
- Multi vehicle pre-approved credit lines - available up to £250,000
 - Expert advice and discreet confidential personal service
- Balloon/final payment re-finance available to save you money

Also Ask About Safeguarding Your Car Investment With **OracleProtect**

BALANCED PAYMENTS PLAN | LEASE PURCHASE | HIRE PURCHASE | PERSONAL CONTRACT PURCHASE | CONTRACT HIRE & LEASING | VEHICLE SUPPLY | ASSET FINANCE

www.oraclefinance.co.uk

08450 944 997

info@oraclefinance.co.uk

THESE FINANCE EXAMPLES ARE FOR ILLUSTRATION PURPOSES ONLY SPECIFICALLY FOR LIMITED COMPANIES AND/OR BUSINESS USERS
The above quotations are assumed on a selection of new and used car prices. These examples are for illustration purposes only and do not constitute an offer committing you or us. Finance & terms are subject to status of which Oracle Finance reserve the right to withdraw these quotations without prior notification. UK residents only. Oracle Asset Finance Ltd is an appointed representative of ITC Compliance Ltd, which is authorised and regulated by the Financial Services Authority.

evo Showroom

- Cars for sale
- Buying guides
- New car data
- Ask the Experts
- Driving the Ads
- Trackdays
- Tuning
- Insurance
- Supercar hire
- Driver training

THE CLASSIFIEDS SECTION
The best cars on sale today



BUYING GUIDE

FIAT PANDA 100HP Our favourite Italian supermini for under £5K
Fun, funky and economical, this fabulous little Fiat is also an absolute bargain secondhand. We help you find a good example

JUST LOOKING p151



CARS FOR SALE

We all love browsing the classifieds, but what are the cars actually like to drive? This month we try a familiar-looking GT3 and a bargain-priced GT-R

THE KNOWLEDGE p167



PAST MASTERS

Our listings not only have all the new-car data, they also include the vital stats on the best secondhand buys, including past masters like the VX220 Turbo

ASK THE EXPERTS p171



YOU ASK, WE ANSWER

Which cars to buy for road and track, and what's the best way for a youngster to get into motorsport? Our experts have all the answers

F i a t Panda 100HP

The Fiat Panda 100HP may be small but it punches well above its weight. Here's what to look for if you want some affordable Italian fun

I t's a given that when it comes to building cars with heart and soul, the Italians are unsurpassed, and while they're certainly not the only car-building nation to implant high-performance engines into mundane models, they do tend to do so with a passion and flair that is unique.

Cast your mind back to models such as the Fiat Strada

Abarth and Uno Turbo and the Lancia Delta HF Turbo – everyday runabouts with levels of performance that seemed pretty outrageous at the time, yet simultaneously practical and rewarding to drive. However, they weren't always a good secondhand buy, with an often well-deserved reputation for poor build quality and dubious reliability that would frequently lead to an early demise...



'It embodies everything we love about small Italian performance cars'

Thankfully the Fiat Panda 100HP does not suffer like its predecessors, yet otherwise it follows a similar formula. Here is a largely uninspiring city car endowed with a 99bhp 1.4-litre engine, a 6500rpm red line and a six-speed gearbox to make the most of it. Body styling is from the best school of stick-on addenda, with black plastic wheelarch extensions, revised front and back bumpers, darkened 'privacy' glass at the rear and fatter 15in rims giving the baby Fiat some degree of presence.

It goes without saying that the chassis is a significant step ahead of the base Panda, with lowered and tightened suspension and the addition of a 'Sport' button in the dashboard, replacing the more familiar 'City' version. While the City mode gave even more assistance to the steering for tight, urban roads, the Sport version removes it, firming the feel and giving better feedback to the driver. It also sharpens the throttle response, which is something of a double-edged sword – great on the open road but annoying if left on around town.

You can't help but smile, though. Responsive and willing,

in a car that weighs less than a ton, the 1.4 delivers all the performance you need to ensure the warm (you could never genuinely describe it as 'hot') Panda is nothing but fun on a good B-road. Sure, motorways are never going to be a relaxed experience in something so small, firmly sprung and raw, but that's not what the Panda's about. Point it at some twisty tarmac and it comes alive.

The key to getting the most from the 100HP is to use only the right-hand pedal and avoid the middle one at all costs. Keep the speed up entering a corner, let the suspension dig in, the tyres bite, and drive it through. Understeer makes fewer appearances than you'd expect and the chassis remains remarkably composed and predictable. The Panda's limits are not only a lot further away than you'd imagine, there is also plenty of warning as you begin to approach them.

The result is a grin-inducing drive that truly embodies everything we love about small Italian performance cars. Oh, and did we mention this can all be had for the same price as a reasonable family holiday?



SPECIFICATION

Engine	In-line 4-cyl 1368cc
Max power	99bhp @ 5800rpm
Max torque	97lb ft @ 4250rpm
Transmission	Six-speed manual, front-wheel drive
Tyres	195/45x15 front and rear
Weight (kerb)	975kg
Power-to-weight	103bhp/ton
0-62mph	9.5sec (claimed)
Top speed	115mph (claimed)
Price new	£11,005 (today)

PARTS PRICES

(Supplied by FAST, Stockton. Tyre prices from blackcircles.com. Prices include VAT at 17.5%)

Tyres (each)	£77.27 (Goodyear Eagle F1, fitted)
Brake pads (front)	£58.50
Brake discs (front, each)	£88.04
Clutch, complete	£85.82
Flywheel	£182.90
Oil filter	£10.82
Air filter	£17.80
Spark plugs (set of four)	£34.92
Exhaust system	£324.58

SERVICING

(Prices supplied by FAST, Stockton)

Minor service (12K miles/annual)	£80
Major service (24K miles/2 years)	£160
Cambelt change (72K miles/3-5 years)	£140

WHAT TO PAY

The Panda 100HP has never been an expensive car. Today a new one lists at £11,005, but you can easily find just-registered examples with delivery miles for less than £10,000. A 12-month-old car with low miles is likely to be priced under £8000, and if you go another year older you should be looking around the £6000 mark, particularly through a private seller. The earliest 100HPs, from either very late 2006 or early 2007, can be picked up for less than £5000. That's a lot of fun for your money.

IN THE CLASSIFIEDS



2007
73,000 miles
FSH, new tyres,
Bluetooth

£4500



2007
25,000 miles
FSH, panoramic glass
roof, stereo upgrade

£5200



2009
4500 miles
One owner, full spec,
New Orleans Blue

£7995

Marlow Cars

Supplier and buyer of Aston Martin, Bentley, Mercedes and Porsche



Telephone: 01628 822259 Fax: 01628 822280 Email: sales@marlowcars.co.uk www.marlowcars.co.uk



FERRARI 599 GTB F1 LHD 07/07
GRIGIO SILVER WITH LIGHT GREY LEATHER, 8000 MILES
£140,000



BENTLEY BROOKLANDS COUPE 2009 MODEL
ANTHRACITE WITH TAN, GIANT SPEC, 5000 MILES.
£150,000



BENTLEY CONTINENTAL GT COUPES
CHOICE OF 10 CARS FROM
£42,000



BENTLEY CONTINENTAL R/T COUPE
CHOICE OF CARS AVAILABLE



ASTON MARTIN DB9 COUPE/VOLANTE
CHOICE OF CARS, FROM
£48,000



MASERATI QUATTROPORTE GT SPORT
07/07 4.2 AUTO, BLUE/MAGNOLIA,
£36,999



PORSCHE 997 TURBO TIP
08/08 ONLY 3,000 MILES PFSH. GT SILVER
£75,000



PORSCHE CAYENNE TURBO
09/09 ONLY 4,000 MILES PFSH BIG SPEC
£65,000



MASERATI GRANTURISMO MC SPORT SHIFT 4.7 V8 AUTO
09/59, 4,300 MILES,
£75,000



BENTLEY GTC CONVERTIBLES
FROM
£80,000



ROLLS ROYCE PHANTOM DROPHEAD 2008
ONLY 12,000 MILES, JUBILEE SILVER, BLACK LEATHER, BIG SPEC.
£215,000



LAMBORGHINI DIABLO ROADSTER
1999 28,300 MILES
£80,000



BENTLEY CONTINENTAL FLYING SPUR
CHOICE OF CARS FROM
£52,999



BENTLEY ARNAGE
CHOICE OF 7 CARS FROM
£30,000



BENTLEY AZURE'S
CHOICE OF 4 CARS, FROM
£69,999

THIS IS JUST A FRACTION OF OUR STOCK PLEASE VIEW WEB SITE

Viewings strictly by appointment only. Jct 8/9 M4, or M40 Jct 4. Similar cars wanted immediately. Call: 07831 123911

Choice of over 60 RHD/LHD cars available and wanted. Please check website for continually changing stock



As part of the measures to keep the Panda's price low, its paint is relatively thin, so stone chips that go down to the metal are common

CHECKPOINTS

We spoke to Paul Brunskill at Fiat Auto Specialist Team (FAST) and Paul Wright at F for FIAT, who highlighted the known issues so far, bearing in mind that most 100HPs won't even have had their first MOT yet.

● Engine

The 1368cc 'FIRE' unit is reasonably robust but, according to Paul Wright, the coolant needs looking after. 'The anti-freeze concentration and coolant levels must be kept up to date, otherwise the engine has a habit of head gasket failure.'

Paul Brunskill adds that the timing belt tension should be checked at the third service (at 36,000 miles) and if it requires re-tensioning, then replacement is the preferred option.

● Transmission

There are no known major issues with the transmission, although the Panda, like much of the Fiat range, does tend to go through clutches more quickly than cars from other manufacturers.

Brunskill says that most Fiat gearboxes leak slightly where the sections of the casing are joined. As a rule, slight leaks don't cause problems, but be wary of heavy leaks here.

● Suspension, brakes, etc

Many owners report wheel alignment problems with the Panda, and according to Paul Wright it isn't the only Fiat with this issue. 'The tolerances for the tracking tend to be quite loose compared with some other brands,' he says. Front tyres can wear unevenly even when the tracking is within the stated tolerances, so a check and a re-set to take it close to the centre of the allowed range tends to be the usual cure.

Wright says that leaking dampers can be a problem, too. 'There is a weld in the damper that tends to rust and fail, causing the seals to leak. This could be an MOT failure, as well as affecting the ride quality.'

The Panda's rear suspension bumpstops are poorly attached from new so tend to fall off regularly. Again, this could be an MOT failure if they come loose, but it's a straightforward fix.

One of the biggest criticisms of the 100HP is the electrically assisted steering and the degree of assistance provided. Many believe there isn't enough steering feel, even in Sport mode. Worse, the technology involved can also give rise to problems. Paul Brunskill explains:

'The steering column is surrounded by the motor that provides the assistance, as well as the position sensor and the ECU for the system. Any of the three can fail.'

Brakes can also be quite noisy, particularly when reversing. However, a quick and easy fix is to add some copper grease to the back of the pads when re-fitting them. A set of modified pads from a Punto can also cure the problem.

● Bodywork

The quality and quantity of paint on the Panda leaves something to be desired, so stones that might ordinarily bounce off the bodywork can easily chip down to bare metal.

● Interior

Driver seats can show signs of wear quickly, particularly in the lumbar region. There's a padded metal bar running across the seat back and if the padding becomes loose, the bar can pierce the seat covering.

There are also some issues with the electrics (for example, one known fault is where the headlights switch off when the indicators are used), so check everything works.



Above: engine is generally strong. Left: electrics can be troublesome; Sport button (inset) adds weight to steering

I BOUGHT ONE



JOE ALEXANDER

Joe bought his Panda 100HP brand new two years ago and explains the attraction.

'I'd been driving a Fiat Brava that I "acquired" from my mum when I passed my test, but with 140,000 miles on the clock it was on its last legs. I was looking for something that was fun but on a relatively tight budget. I tested a 100HP and was sold instantly.'

'I managed to get a fantastic deal from the dealer – the car was listed at just over £10,000 and I got mine for exactly £8000 in early 2008.'

'You don't use the brakes or even lift'

'I love everything about it – the way it looks, the handling and the engine. My work commute takes 30 minutes and I always, without fail, go cross-country. The car's OK on the motorway but if there's a route that avoids them or dual carriageways, I'll choose that – it's what it's made for.'

'I love using the engine, right up to the red line. It's great in first, second and third, but after that, it's a bit rubbish. Round the lanes, though, that's all you need. With the Panda's chassis, you don't use the brakes or even lift – you keep the speed up and throw it around. Brilliant fun...'

USEFUL CONTACTS

www.fiatalspecialist.co.uk (specialist)

www.fforfiat.co.uk (specialist)

www.fiatforum.com (owners' forum)

www.fiatmotorclubgb.com (owners' club)

www.pistonheads.com (cars for sale)

Europe's Leading Ferrari F-car Specialist.



F40 ENZO GTO F50

DK Engineering have executed over 100 sales of the original iconic super car, the F40. Our workshops have maintained approximately 75 different examples at various points in their life since 1988.

DK F40 bespoke upgrades include, ceramic brake conversions (whilst retaining original wheels), aluminium replacement fuel cells, cockpit modifications for the taller driver, competition clutch conversions, turbo conversions, suspension conversions, height adjust front suspension, LM spec accessories (including rear wings & Venturi ducts) and custom sports exhausts.

Our knowledge of Ferrari F-cars does not stop with F40's. Over 60 examples of 288 GTO, F50 and Enzo have been supplied (some from new) by DK or at least maintained by DK for their discerning owners certifying the fact that we are generally acknowledged as the leading F-car specialist in Europe.

Highlights of DK's F-car history include the total restoration of Chris Evans' 288 GTO for the famous 'White Collection', the total restoration of Jeff Dix's multi concours winning (Autoglym champion of champions) F40 and the maintenance of an original F40 LM.

DK are the first and most suitable port of call regarding an F-car whether it's buying, selling or maintenance you are interested in. Our unparalleled knowledge extends as far as active commitment to the marque for 34 years and an intimate knowledge of individual examples amassed as a result of recent experience and extensive archives.

www.dkeng.co.uk

For F-car sales, servicing and consultancy contact Jeremy or James Cottingham
Little Green Street Farm, Green Street, Chorleywood, HERTS, WD3 6EA ENGLAND
T +44 (0) 1923 287 687 F +44 (0) 1923 286 274 E info@dkeng.co.uk

DK
Engineering

Just looking...

PORSCHE 911 (996) GT3

- Price £39,995 ■ Year 1999 ■ Mileage 37,255
- Vendor Paul Stephens, Essex (www.paul-stephens.com) ■ Engine Flat 6-cyl, 3600cc
- Max power 360bhp @7200rpm ■ Max torque 273lb ft @ 5000rpm
- 0-60mph 4.5sec ■ Top speed 187mph (claimed)

Ah, this brings back good memories. Back in 1999, this was *evo's* Car of the Year. And I don't mean the model, I mean this actual car, registration T670 CBL. Some of you may even recall shots of a youthful-looking Meaden sliding it around a damp and slithersome Knockhill. The 996 GT3 mkI was the first of the GT3 line, and, in the opinion of some, the best of the lot.

I recall some mild disappointment that it wasn't properly lightweight, but you only had to glimpse its track-spec brakes and lowered ride height, feel and hear the extra edge of its motorsport-bred 360bhp 3.6-litre water-cooled flat-six (up 60bhp on a regular Carrera) to know it was made of special stuff. T670 CBL, currently for sale at Porsche specialists Paul Stephens, was built to 'Club Sport' spec, so it has the cloth-covered Recaro buckets and the half-cage, but this one

was also ordered with air-con and stereo to keep namby-pamby journos happy, so it's everyday useable.

It always rode incredibly low, the 18in alloys pushed well up into the arches, but on a typical B-road today there's more compliance than you'd imagine and it never feels crashy. It also feels structurally immensely tight. There's a more exaggerated bobbing of the nose than in the current car, and lighter – and even more feelsome – steering too. The engine is just epic. Get it in the higher reaches of the rev-range, above about 5000rpm, and it makes a real lunge for the red line, the note turning all feral. The gearbox is slightly balkier than I remember, requiring deliberate precision, and the brakes take a bit of warming up. But then this is a serious driving machine. It was in 1999, and it still is today.

PT



SUMMARY

● EXTERIOR

Original and unmolested. Arctic silver paint still excellent, ditto the split-rim 18in alloys

● INTERIOR

Cloth-covered Recaro buckets, half-cage... just as it should be. Air-con and hi-fi, too

● MECHANICALS

Engine pulls beautifully at high revs; no nasty clonks or vibrations. Warranty available

● SHOULD I BUY IT?

If you want a truly great drivers' car (and a piece of *evo* history to boot), emphatically yes

● **FOR:** Fabulous to drive, everyday-useable, and a potential investment too

● **AGAINST:** 996 wasn't the greatest looking 911. Not everyone wants an ex-press car...

SPECIALIST CARS OF MALTON LTD

APPROVED MOTOR CARS

revo
Official Distributor

WANTED

356 SPEEDSTER
2.7 RS
2.8 RS
3.0 RS
3.2 SPEEDSTER
959
964 RS
964 TURBO
964 CUP CAR
964 SPEEDSTER

993 CARRERA 2
993 CARRERA 4
993 CARRERA S
993 CARRERA 4S
993 TURBO
993 GT2
993 GT2 Evo
993 RS
993 CUP CAR
GT1

996 GT3
996 GT3 RS
996 CUP CAR
996 RSR
996 GT3R
997 CUP CAR
997 GT3
997 GT3 RS
FORMULA ONE CARS
LE MANS CARS

Any other interesting or rare Porsches RHD OR LHD

Telephone: 0844 7000 997 • 0844 7000 993 • 07794 911 911 (after hours) Fax: 0844 7000 959
Visit our award winning site – www.specialistcarsltd.co.uk 22 York Road Business Park, Malton YO17 6AX
Part of Specialist Car Group of companies

Simon Furlonger

SPECIALIST CARS



Ferrari 599 GTB Fiorano

£129,990

2006, 17,580 Miles, Nero Daytona

A stunning example with full Ferrari service history, finished in Nero Daytona with Daytona seats in Nero with Giallo stitching this 599 GTB has a massive specification full details can be seen online. Also fitted is a HGTC style sports exhaust and an upgraded sound system.



Ferrari 575 Superamerica F1

£124,990

2006, 14,015 Miles, Grigio Silverstone

Grigio Silverstone finish with Beige interior. One of 57 UK right hand drive F1 examples this Ferrari has a full main dealer service history. This phenomenal machine is still in perfect condition, and with a total production number of 559 cars world wide will keep appreciating.

Chart Enterprise Park, Dencora Way, Ashford, Kent TN23 4FL

Tel: 01233 646328 www.simonfurlonger.co.uk



550 Barchetta
2001, 10,000 miles
£129,990



Stradale
2004, 3,047 miles
£109,990



Dino 246 GTS
1972, 61,478 miles
£149,990

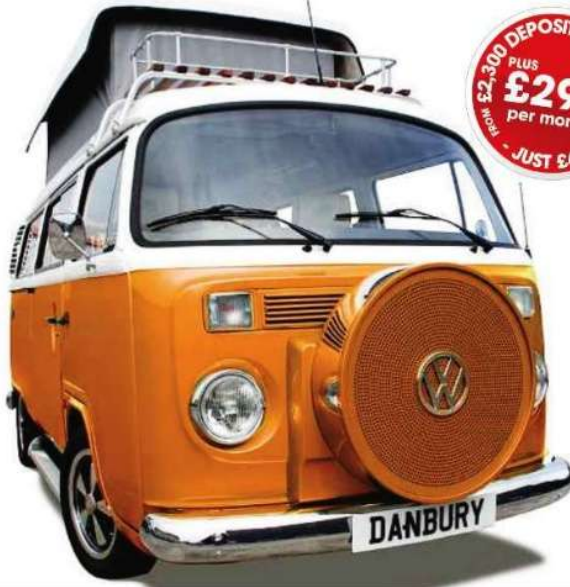


360 Spider
2002, 14,300 miles
£54,990



328 GTS
1989, 7,967 miles
£49,990

BRAND NEW VW T2 CAMPERVANS



£2,300 DEPOSIT
PLUS
£299
per month*
- JUST £69 / WEEK!

Driven by generations. And bio-fuel


OK OK! We know the reason you'll buy one of our brand new VW T2's isn't just because it's modern VW engine runs on bio-fuel - it runs on bog standard unleaded too! You'll buy one because you'll fall in love with it. And then you'll probably give it a name. Like Hilda, or Vince. But its not just the name that you'll have to choose. Our VW T2 campers and vans are custom built to your specification. With a full range of options now including power steering, designing your own camper will be just as much fun as driving it. Well... almost! For more information on our exclusive range of custom built new VW T2s, go to DanburyMotorcaravans.com or visit our showroom. **Campervans from just £22,999, vans & people carriers from £19,999.**



For virtual tours and to download a brochure, visit...

www.DanburyMotorcaravans.com

facebook : search for Danbury Motorcaravans

 THE BIGGEST VW CAMPERVAN CONVERSION SUPPLIER IN THE UK

DANBURY MotorCaravans

Telephone: **01454 310 000**

Vehicle shown with cost options. Open by appointment Mon to Fri 9am-5pm & 1st and 3rd Sat of the month 10am-3pm. *Finance example: cash price £24249 or less £2300 deposit. £21949 to borrow. £299 a month x 120. 6.35% fixed flat rate, subject to status. apr 10.74%

Just looking...

NISSAN GT-R BLACK EDITION

- Price £49,950 ■ Year 2009 ■ Mileage 4000
- Vendor Top555 Performance Cars, Oakham, Rutland (www.top555.com / 01572 774830)
- Engine V6, 3799cc, twin-turbocharged ■ Max power 478bhp @ 6400rpm
- Max torque 433lb ft @ 3200rpm ■ 0-60mph 3.9sec ■ Top speed 193mph

From one *evo* Car of the Year victor to another. Ten eCotys separate the Porsche 911 GT3 on page 151 and this nearly-new Nissan GT-R, yet just £10,000 splits them on price. And both are seriously tempting propositions.

As second-hand GT-Rs come, this has to be one of the most desirable. With 4000 miles, it's just nicely run-in, while it's been serviced twice, including its mandatory 1200-mile check-up.

It's a well-equipped GT-R Black Edition and comes in Ultimate Silver, which is a pretty stunning colour up close, and well complemented by the smart 20in smoked alloys. The interior boasts black leather and suede seats with red trim, a touch that lifts a cabin not exactly dripping in character. Everything is in factory-fresh condition inside and out.

And it's absolutely belting to drive.

While that's no surprise for such a clean example of a car known for its crushing capability, I was still taken aback. It feels like another GT-R with rather more than the claimed 478bhp, while the fitment of a Milltek exhaust gives the twin-turbo V6 a much throatier war-cry than standard, without sounding tastelessly aftermarket.

Top555 have sold a number of Nissan GT-Rs, reporting that many of their enthusiast customers have one alongside their Ferraris and Porsches. With a lot of owners having fulfilled their need and now wanting to move on, though, the used market is starting to fill up.

A saving of over ten grand on current new prices takes this car well below BMW M3 money, and with similar space and practicality mated to so much extra pace and four-wheel-drive all-weather ability, it's a very tempting alternative. **SD**



SUMMARY

EXTERIOR

Absolutely spotless, and with a great colour/alloy wheel combination

INTERIOR

As new, and with the ambience lifted by the Black Edition's great seats and red trim

MECHANICALS

Feels even more powerful than Nissan claims, while the Milltek exhaust adds character

SHOULD I BUY IT?

If a ballistically quick all-weather sports coupe's what you're after, yes

● **FOR:** Nearly-new supercar-killer for less than new M3 money

● **AGAINST:** Might lack personality for some...





Ferrari 599 GTB
£129,995



2006 Bugatti Veyron
£725,000

Based in Guildford, Surrey we service all Modern/Classic Ferrari & Maserati

Sales:
01483 200275

www.smdg.co.uk

Service:
01483 275455

Car Warranty Expired?

Protecting yourself against expensive garage repairs can cost less than you think...



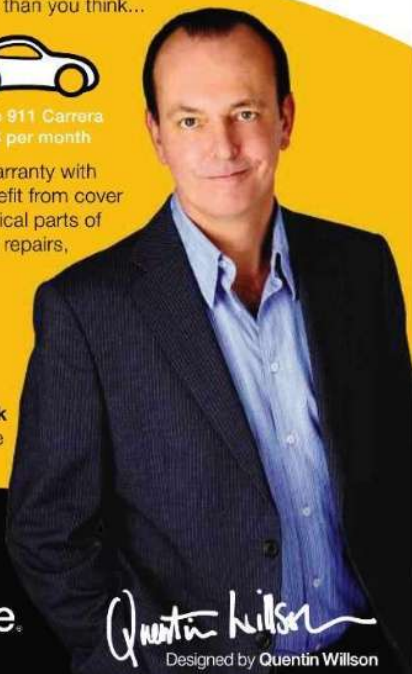
Mini Cooper S
£27.41 per month



Porsche 911 Carrera
£63.33 per month

Take out an extended car warranty with Warrantywise and you'll benefit from cover for all mechanical & all electrical parts of your car as well as unlimited repairs, no excess to pay, cover for wear & tear and recovery expenses as standard.

Call us on 0800 001 4465
or go online for a quotation
at www.warrantywise.co.uk
Peace of mind doesn't come
any more comprehensive.



Warrantywise
Wise about warranties

Quentin Willson
Designed by Quentin Willson

Warrantywise are Authorised & Regulated by the Financial Services Authority. Cover available for vehicles up to 10 years old and 100,000 miles at warranty inception. No quibble 30 day money back guarantee included on all cover. Terms & Conditions & Repair limits apply. Prices advertised relate to vehicles registered in 2006 with 50,000 miles with wear & tear cover, no excess and unlimited claims. Monthly payment quoted is continuous until you decide to cancel. The first monthly payment will have an additional set up charge of £35. Additions added onto the cover may increase the monthly payments. Prices correct as of 23/09/2010 and include the Eve Special Offer Discount - Please quote EV2010.



Our high quality t-shirts make the perfect Christmas gift, just put a ring around your favourite, leave it out for your loved ones to see, then sit back and wait for Santa.
(or drop a BIG HINT from our website)



See us at the Classic Car Show (13th, 14th & 15th Nov) & enter FREE PRIZE DRAW to win a Silverstone Track Day, £100 of car care products and 5 free t-shirts, or enter online at

www.petrolthreads.co.uk

Fuel consumption figures for the Saab 9-3 Aero Carlsson range in mpg (litres/100km): Urban 15.7 (18.0), Extra-urban 38.2 (7.4), Combined 25.0 (11.3). CO₂ emissions 269g/km. Model shown Saab 9-3 Aero Carlsson 2.8 V6 (280PS) automatic 6 speed at £26,495 Man. Rec. OTR. Limited stock available.

From one legend to another.

Introducing the special edition Saab 9-3 Aero Carlsson.

It's been half a century since Erik Carlsson's remarkable feat of winning three back-to-back RAC Rally championships in 1960, 1961 and 1962 in the Saab 96. To celebrate, we're launching a brand new, limited edition Saab 9-3 Aero in his name. This special edition Saab 9-3 Aero Carlsson boasts an extensive array of features including our class-leading cross wheel drive (XWD) system, 2.8 V6 turbocharged engine, Ultra sports chassis, TX Design Pack, DVD Satellite Navigation, BOSE Surround Sound and much more. What's more, production of this XWD is strictly limited to, quite fittingly, 96.

Own one of 96 for £26,495.
Call us today to book your test drive.



SAAB
move your mind™

Saab City London
www.saabcity.co.uk 0207 480 7540

Saab Fulham London
www.saabfulham.co.uk 0207 610 2900

NISSAN GT-R PERFORMANCE SERVICES

Power Upgrades:

STAGE 1 - CPR-530HP - £649.00

"WARRANTY FRIENDLY & FANTASTIC VALUE/POWER INCREASE"

STAGE 2 - CPR-550HP - £1949.00

"UP TO 70HP INCREASE FROM FULL EXHAUST, Y-PIPE AND FILTERS"

STAGE 3 - CPR-580HP - £2695.00

"INCREDIBLE EXHAUST TONE AND STAGGERING PERFORMANCE."

"WHAT MORE COULD YOU WANT?"

STAGE 4 - CPR-600HP - £3485.00

"OUR BEST SELLER, 600HP/600LBFT, PHENOMENAL PERFORMANCE"

STAGE 5 - CPR-630HP - £5695.00

"THIS CAR IS A LAMBORGHINI LP640 DESTROYER."

STAGE 6 - CPR-700HP - £12155.00

"SHEER ORGAN BRUIING ACCELERATION, EVEN PAST 190MPH IT STILL PULLS!"

STAGE 7 - CPR-750HP - £17495.00

"THIS IS COMPUTER GAME QUICK, NOT FOR THE FAINT-HEARTED!"

STAGE 8 - CPR-850HP - £35460.00

"THE ULTIMATE GT-R, QUITE EASILY VEYRON BEATING PERFORMANCE"

Transmission Upgrades:

OPTION 1 - £1330.00

FRONT CIRCLIP RETAINER UPGRADE

OPTION 2 - £2420.00

FRONT + REAR CIRCLIP RETAINER UPGRADE

OPTION 3 - £3295.00

FRONT CIRCLIP RETAINER UPGRADE

CLUTCH A + B BASKET + SEAL KITS

OPTION 4 - £4385.00

FRONT + REAR CIRCLIP RETAINER UPGRADE

CLUTCH A + B BASKET + SEAL KITS

OPTION 5 - BOMBPROOF TRANS - £5735.00

OPTION 4 + 850HP RATED CLUTCH PLATES

CPR-460HP CONVERSION: £3999.99
EVOLVE RS EXHAUST SYSTEM

READY TO GO HANUKKAWEST FIRST EXHAUST WITH TITANUM TIPS CATALYSTS (TITANIUM TIPS)

EVOLVE CUSTOM ECU UPGRADE WITH V-MAX

PERFORMED ON DYNO DYNAMICS ROLLING ROAD PRODUCING UP TO 460HP/340LBFT

BMC SPORTS PANEL FILTERS

HANDLING & BRAKING UPGRADES: Please call
SPORTS, TRACK & RACING SETUPS ARE OUR SPECIALTY

PERFORMANCE PACKAGES ALSO FOR:

MS MG Z4M

+ 335i / Diesel / Mini: Please call

BMW M3 E92 PERFORMANCE SERVICES



MERCEDES 63 AMG PERFORMANCE SERVICES KLEEMANN



63 AMG STAGE 1 - CPR-535HP - £1295.00

KLEEMANN ECU UPGRADE AWAKENS V6, HIKING OUTPUT TO 535HP/481LBFT

63 AMG STAGE 2 - CPR-560HP - £4195.00

KLEEMANN HEADERS UNLOCK HUGE PERFORMANCE, FANCY 560HP/500LBFT

55K AMG STAGE 1 - CPR-550HP - £2190.00

550HP/555LBFT EFFORTLESSLY ACHIEVED FROM KLEEMANN REMAP & PULLEY SWAP

55K AMG STAGE 2 - CPR-570HP - £3795.00

STAGE 1 + KLEEMANN HEADERS + 3DE-CATS HELP THE V6 SING - 570HP/578LBFT

55K AMG STAGE 3 - CPR-600HP - £6095.00

STAGE 2 + KLEEMANN SPORTS CAMSHAFTS TO AID TOP END PULL - 600HP/616LBFT

55K AMG STAGE 4 - CPR-620HP - £7995.00

THE ULTIMATE 55K PACKAGE WITH KLEEMANN THROTTLE BODY - 620HP/664LBFT

TWIN TURBO UPGRADES - £2195.00

65 AMG BLACK SERIES - 700HP/853LBFT

600 AMG - 600HP/815LBFT

All Prices Include Fitting / Exclude VAT



TUNERS OF BRITAIN'S QUICKEST PERFORMANCE CARS

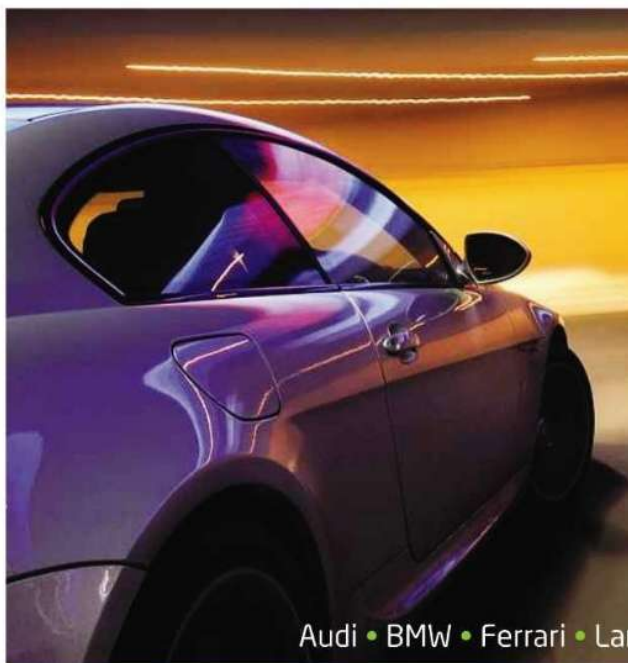
MOTORSPORT - ECU UPGRADES - EXHAUSTS - HANDLING - BRAKING - AESTHETICS

CAR PLANET RACING UK, UNIT 2 FARRELL ST, WARRINGTON, CHESHIRE, WA1 2EE

T: +44(0)1925 414199

www.carplanetracing.com

BECOME A
BLACK CODE
TECHNICIAN



UNLEASH ITS TRUE POTENTIAL



INCREASE POWER & TORQUE



INCREASE FUEL EFFICIENCY



LOWER YOUR CARBON FOOT PRINT

Audi • BMW • Ferrari • Lamborghini • Mercedes • Porsche • VW

UK | Ireland | Europe • 0845 643 6898
www.black-code.co.uk

black codeTM
vehicle re-mapping specialists

CLUBGT Performance & Supercar Club



2 Supercars, 2 Weekends and 500 Thrilling miles for only £999+vat

Enjoy two full 3 day weekends with **both** the stunning **Ferrari F355 GTB** and the awesome all weather **Porsche 911 Turbo** each with 250 miles for just **£999+VAT**. There is nothing else to pay and you will also get to attend our *Performance Road Driving Day* to help you extract the most out of the cars. Call **020 7935 8485** or email evooffer@clubgt.co.uk to book. www.clubgt.co.uk

A 3 day weekend runs from midday on Friday to midday on Monday

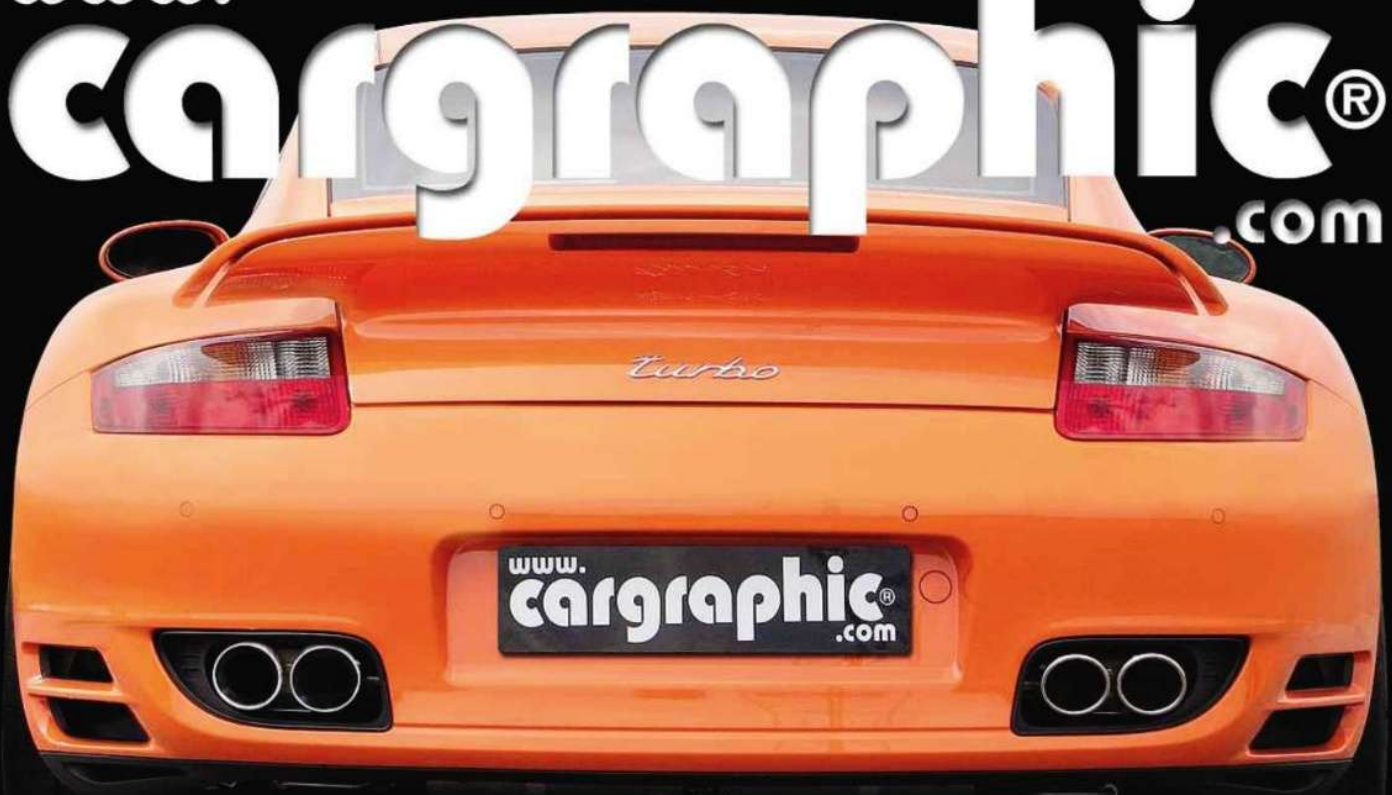
250 miles are included in each trip, additional miles will be charged at £1/mile + VAT

Weekends can be booked anytime within the next 12 months

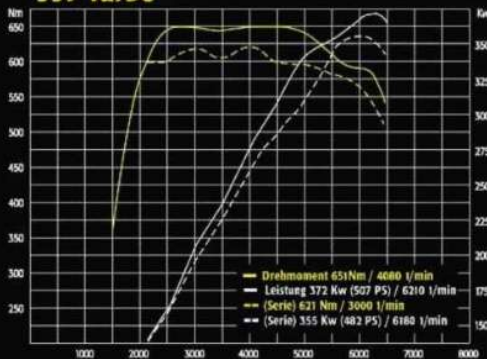
www.

cargraphic®

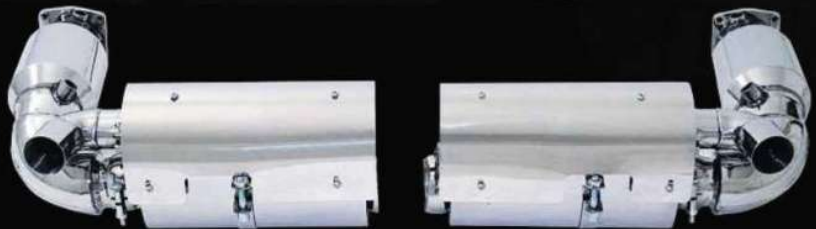
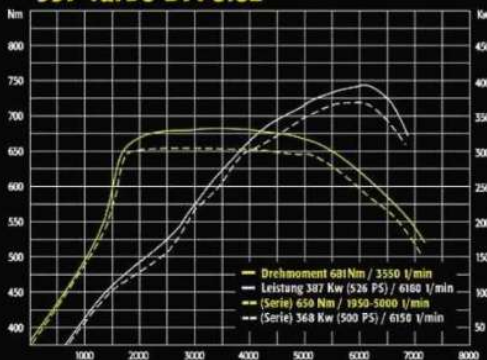
.com



997 Turbo



997 Turbo DFI 3.8L



These TÜV approved and certified sportexhaustsystems from turbochargers backwards have been developed on the dyno. Part of the systems are special large 130mm highflow trimetal HD catalysers which are fully OBD2 compliant.

Pipework is mandrel bent, systems are developed for maximum flow and achieve a power-/torque increase with a reduced backpressure of nearly 50% combined with a weight reduction. 3 sound levels available also with flap controlled version.

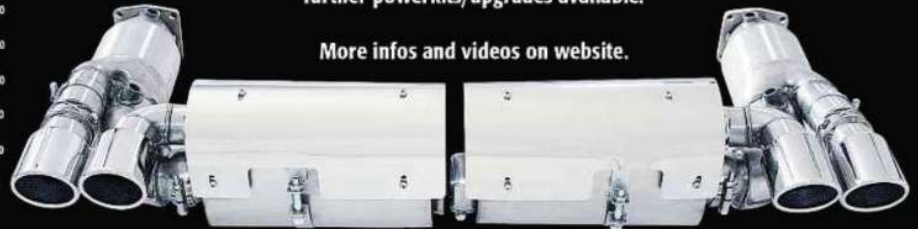


OE oval tailpipes will fit or two 4 pipe versions available:
4 x 89mm round (shown LH) or
4 x 88 x 77mm oval (shown RH on car above).



Flap controlled system also available for 997 GT2; further powerkits/upgrades available.

More infos and videos on website.



Cargraphic are looking for distributors and dealers in Europe, UK, USA and ROW.

please contact ++49 / 6341 88088 • English spoken • or e-mail us on info@cargraphic.de

For the full range of parts and upgrades from "The performance company" please visit website: www.cargraphic.com

DTUK
DIESEL TUNING UK LTD



CARS • VANS • TRACTORS • MOTORHOMES

Performance Gains AND Improved Fuel Economy



DTUK[®] CRD2+ Multimap System

with a DTUK[®] CRD2+ Multimap Power Digital Diesel Tuning System

Using enhanced ignition control technology the CRD2+ Multimap Power offers:

- Up to 40% increases in power and torque
- 10%-20% savings of fuel consumption are possible**
- 28 different power settings

Improve your Fuel Economy and reduce your carbon footprint



DTUK[®] Green ECO 3 Maximum Economy

with a DTUK[®] Green ECO 3 Digital Diesel Tuning System*

In recent tests the DTUK[®] Green ECO 3 showed the following improvements:**

- Urban Driving 20% Improvement
- Driving between 30-50mph - 10% Improvement
- Driving between 50-60mph - 10% Improvement

- Upto 40% more BHP and Torque
- Upto 20% improved fuel economy
- Adjustable Plug and Play systems
- 10 Minute average fitting time
- TuV approved Digital Technology
- 24/7 Aftersales support
- 14 day money back guarantee
- Next day delivery (UK only)

for further information contact Sales:
0844 357 4913
email: sales@diesel-performance.co.uk
landline: 01207 299538

EXCLUSIVE READER OFFER

£50.00 off

the top on all DTUK Systems (use the code DTUK50) or give us a call!

www.diesel-performance.co.uk

*DTUK[®] GREEN ECO 3 system is suitable for the majority of common rail diesel engines
**these results are an average of feedback from customers, you may see higher or lower results depending on driving style

Put one on your Xmas list today!



These and plenty more designs to choose from at:
slickattire.com

Slick

LITCHFIELD

MILLTEK SPORT

Performance Y Pipe

£399 Fitted Inc. VAT

STAGE 1

550BHP

£899 Fitted Inc. VAT

STAGE 2

575BHP

£2,461 Fitted Inc. VAT



• Exhaust systems
 • ECU programming
 • Fuel performance ECU
 • Intercoolers
 • Intake systems
 • Turbochargers
 • Brake upgrades

+44 (0)1684 850999
www.litchfieldimports.co.uk

See our detailed GTR website pages for more information










TRANSPORT OFFER Buy one get one free* **NEED FOR SPEED** Race day vouchers - spot prizes worth £2,000

Things just got a whole lot quicker!

2 lanes, 400 cars, under 3 hours

Manheim Auctions Colchester - Monday 15th November 2010 at 10.30am

 Lex Autolease



100 hot hatches

- Premium used cars
- Representation on the rostrum
- Images and vehicle condition reports available online
- Vehicles to suit all budgets
- Open to the public

*with MOT - delivery within UK Mainland or nearest port

**Registered account holders only

Watch the action on both lanes via Simulcast**

Manheim Auctions Colchester - Europe's 1st & only 4 lane Auction Centre
Colchester Road, Frating, Colchester, Essex CO7 7DX
Tel: 0844 856 4603
www.manheimremarketing.co.uk/colchester

MANHEIM
Auctions



Place your car in the hands of a Winning Team...



Main dealer and Motorsport trained technicians



State-of-the-art facilities and equipment

**Superflow 4WD rolling Road
Approved bodyshop with chassis alignment jig**



We are the complete one-stop-shop for servicing, repair, performance tuning and parts, for ALL cars. We have fully equipped workshops, engine building services, machine shop, bodyshop (offering All paint finishes and simple repairs to complete car restoration), Hunter 4-wheel alignment and latest Superflow 4WD rolling road all under one roof. For all your vehicle requirements, from Road to Race.

Demonstrators available for our tuning packages for R35 GTR and Evo X...

Sumo Power GT, part of the JRM Group, are the only British Team in the 2010 FIA GT1 World Championship, a 10-round series which visits 10 countries and four continents. Running a pair of GT1 Nissan R35 GT-R's, the team is supported by NISMO and is based in state-of-the-art premises in East Sussex.



Servicing • Full diagnostics • Tuning • Track-day preparation • Race support • Special Projects

Tel: 01797 222281 sales@sumopower.com
Sumo Power Ltd Harbour Road Rye East Sussex TN31 7TE



Nissan Toyota Lexus Mitsubishi Subaru Jaguar Aston Martin BMW Ford Honda Mercedes Audi Porsche Ferrari

Paul Matty Sports Cars

TELEPHONE 01527 835656

The UK's largest Lotus parts stockist.
Please call us for all your part requirements.

12 Old Birmingham Road, Bromsgrove,
Worcestershire B60 1DE. Fax: 01528 575172
Email: enquiries@paulmattysportscars.co.uk
www.paulmattysportscars.co.uk



LOTUS ELISE R TOURING
56/06 (M.Y. 07) Only 23,800 miles. Magnetic Blue with white stripes and black leather interior. A very high spec car in excellent condition. £19,250



LOTUS ELISE S1
1998/R reg. 35,900 miles only. British Racing Green metallic with black leather interior. Radio/CD, sports exhaust, Yokohama tyres. A nice clean car with an excellent service history. £10,250



LOTUS ELISE S1
16,000 miles only. British Racing Green metallic with Magnolia leather interior with radio/CD. Lovely original car. £11,995



LOTUS ELISE S2 SPORTS TOURER
02/02. 25,000 miles only. Ruby Red Metallic with cream leather interior and colour coded hood. Radio/CD, Cat 1 Alarm. A fine example. £12,995



LOTUS ELISE SPORTS TOURER
03/53 in Mica Blue with full sand leather interior. Electric windows, central locking, removable steering wheel. Previously supplied by PMSC. Excellent example. £13,500



LOTUS ESPRIT S4S
N Reg with just 53,000 miles in Azure Blue and re-conditioned blue leather interior, refurbished OZ wheels and good history. A nice example of a rare Esprit. £17,950



LOTUS EXIGE S
10th Anniversary Celebration Ltd Edition. Chassis number 1 of just 2 constructed. Just 1,000 miles from new. £38,950



LOTUS 15
Black V8 3.5ltr. Well known stunning brute. Totally sorted over the last two years and professionally maintained by the last enthusiastic owner. £180,000



LOTUS ELAN +2 130/5
M Reg in Pacific Blue with oatmeal interior. This vehicle has been the subject of a total restoration. Must be viewed. £19,950



LOTUS ELAN SE TURBO
1991. Just 38,000 miles from new. Excellent Pacific Blue paint with superb original hood. Lots of tasteful extras. Not the normal damp, smelly example. £8,995



LOTUS ELISE 111R
06/06 in Storm Titanium with black leather interior. Electric windows, central locking, CD/radio and Cat 1 alarm. Just 1 owner from new. Only 48,000 with F&H with the supplying dealer. £16,995



LOTUS ELAN +2 'S'
Well known spirited climb car. Has just won the PMSC Championship AGAIN this year! All steel dry sumped Smartwate engine. Fully sorted, ready to go at a fraction of the build cost. POA

LOTUS CARS URGENTLY REQUIRED!

Please try us for an immediate, courteous quote – Nationwide collection service.

SECOND TIME ROUND (020) 7499 7442

Specializing in Rolex for 20 years!

Grays, 58 Davies St. London W1K 5LP



Daytona



GMT Master II



Datejust



Date

Audemars Piguet * Bvlgari * Cartier * Franck Muller * Hublot * Jaeger LeCoultre * Patek Philippe
* Piaget * Rolex * Vacheron et Constantin and all fine wristwatches...

WWW.SECONDTIMEROUND.COM

Bought, Sold & Exchanged

Supercar Driving Experiences

At Two Different Circuits



THRUXTON MOTORSPORT CENTRE

CROFT

Photo: © Steve Edman

New for 2011
 The brilliant Ferrari 458 Italia and Lamborghini Gallardo join: Lamborghini LP670-4 SV, Audi R8, Aston Martin V8 Vantage, Porsche Cayman, Ferrari F355, Lotus Exige, Mazda3 MPS, MX-5 and Formula Renault racing cars

thrxtonracing.co.uk croftcircuit.co.uk
T: 01264 882222 **T: 01325 721815**

All of the latest Supercars are available at both circuits.

Car Limits

High Performance Driver Training

- Airfield Driver Training Days
- Corporate Experience Days
- Circuit Driver Training
- One to One Tuition
- Under 17 Tuition
- Gift Vouchers

'Power is nothing without control'

www.carlimits.com **01279 874797**



t.torque.co.uk



t-shirts



hoodies



polo shirts

automotive fashion
 customised car t-shirts
 forum and club affiliates
 free t-shirt giveaway

canvas art

10% discount for evo readers until end of 2010. just enter evo10 at checkout



YOUR INITIALS FROM £99

Over 33million available online - we have your perfect number from **£99!**

www.PrimoRegistrations.co.uk
 0800 0484 769

FUN	NAMES	RUDE	PREMIUM
W4VER W4VER W4 VER £1,499	M9RY P MARY P M9 RYP £1,599	F6CKA F6CKA F6 CKA £1,099	911 VF 911 VF £12,999
WOB881E WOB881E WOB 881E £1,499	PGJ 508 PGJ 508 £2,099	F8CKK F8CKK F8 CKK £1,099	ORAI76E ORANGE ORA176E £12,999
L4600N LAGOON L46 00N £1,999	SIX SB SIX SB S1 XSB £2,299	V181GRA VIAGRA V181 GRA £1,499	V EVIL VERY EVIL VEV 1L £17,999
F4B ME F4B ME F4 BME £2,299	ROLLIIS ROLLS/ROLLIS £3,299	P99RNO PORNO P99 RNO £1,599	BR10GET BRIDGET BR10 GET £18,999
BUL113T BULLET BUL 113T £2,499	TA 375 TA 375 £4,999	X124TED X RATED X124 TED £2,499	I AHT 1 AHT £22,999
P8SHO POSHO P8 SHO £2,499	POW111S POWIS POW 111S £5,999	OR56ASM ORGASM OR56 ASM £2,499	TEASE TEASE TEA 5E £23,999
V12 WTF V12 WTF £2,499	BDS 9 BDS 9 £6,499	LOV3 53X LOVE SEX LOV 353X £2,499	6ED GED 6 ED £26,999
TUF 80Y TUF BOY TUF 80Y £2,999	35 NJ 35 NJ £6,499	R9NDY RANDY R9 RNDY £4,499	4 SPY A SPY 4 SPY £37,999
DEV11 X DEVIL X DEV 11X £3,299	13 DD 13 DD £6,999	HOT 56X HOT SEX HOT 56X £5,999	VI4GRA VIAGRA V14 GRA £49,999

THE ABOVE ARE JUST A SMALL SELECTION FROM OUR WEBSITE. PLEASE GO TO WWW.PRIMOREGISTRATIONS.CO.UK TO VIEW HUNDREDS MORE!

****ALWAYS THE CHEAPEST PRICE GUARANTEE****
WE BUY QUALITY REGISTRATIONS OUTRIGHT

All subject to our terms, conditions and availability. All prices include transfer fees, vat, a fully managed transfer service and a set of quality number plates delivered direct to your door. We accept all major credit/debit cards. Primo Registrations sell registrations owned by clients, DVLA registrations and our own stock. Open 9am to 10pm daily.

As not seen on all the best bonnets.

(and wings, bumpers, skirts, spoilers...)

Keeping your car bodywork looking its best has never been easy or cheap. You could spend a small fortune on endless 'smart repair' services or make the damage look even worse with a traditional touch-up kit. But now there is a real alternative & one that actually works. Custom made to match your vehicle, ChipEx uses a unique 3 stage process of painting, blending and polishing to make the stone-chips vanish from your vehicle. It's so easy to use & the results are really amazing. - just visit our website today.

www.chipex.co.uk

EVERYTHING YOU NEED IN ONE BOX! FOR ONLY £49.99
 (+£4.99 COURIER DELIVERY)

CHIPEX®

Stone Chip Repair System

Ask the experts

Every issue we put your questions to our panel of experts

BUYING CARS

Q I am about to give up my motorbike for a car due to work and health reasons. The challenge is to find something exciting within my budget of £12,000-£17,000.

I need to be able to use it for commuting, I don't want it to be stupidly expensive to run, practicality is not much of an issue (ten years of GSXR 1000 have rendered me resourceful) but reliability needs to be good.

I want to keep up with my brother's 57-reg Nissan 350Z, and my 54-inch chest means I won't fit in something Elise or VX220-like. My thoughts include Mégane 250 Cup, Audi S3, Focus ST Mountune, Golf R32 or simply a 350Z. Please help! – David Fort

A Your brother's Nissan 350Z gives about 200bhp per ton so you'll need to match that to keep up in a straight line. As you say, you could also get a 350Z, and that would be good fun; it's got a great rear-drive chassis, and the later the model the better, because the power went up each time the car was revised.

But what of the other cars on your shortlist? They're all hot hatches, but I have a couple of rear-drive suggestions that we'll get to later.

The mk5 Golf R32 is a lovely car with a characterful 3.2-litre VR6 under the

bonnet and four-wheel drive, but it's a touch uninspiring chassis-wise, and in terms of outright pace it isn't going to cut it: 246bhp and 1510kg leaves it a bit short.

The Audi S3, also four-wheel drive, is neater dynamically and with 261bhp and less weight it has the grunt too, but it's efficient rather than effusive and some find it hard to warm to. In character, the Focus ST is more like the R32, and with the Mountune upgrade it's usefully faster, but I think it would fall just short of the Nissan's pace.

Not so the new Mégane RS 250, which is clean and capable, dynamically. I'm surprised it's within the price range – I've not seen many for less than £18K – and if I had that much to spend I'd be seriously drawn to the previous-generation R26.R, a truly sublime fast hatch. It's wilfully impractical but worth the sacrifice, I reckon.

The two rear-drivers I'd be drawn to are both BMWs. The last-generation Z4 M Coupe with the classic M Power straight-six has 241bhp per ton, looks seriously good value for money and is super stylish, too. It might be a bit of a squeeze for you, though, so if that is the case I'd suggest the M3 equivalent, the last-of-the-line E46 M3 CS. Not only was this the best looking E46 after the CSL but it also had the best chassis and was available with the manual gearbox. Either would give the Nissan a proper run for its money – **JB**



Z4 M Coupe will have no trouble sticking with a 350Z, and can be picked up for under £17K

THE EXPERTS



JOHN BARKER

– our road test editor has been road-testing and racing since the late

'80s and has driven every significant supercar and performance car since. Want to know which car to buy next? Barker's your man



RALPH HOSIER

– an engineer by profession, with stints at Ford, Bentley and Jaguar

among others, Hosier is passionate about all things automotive. He also campaigns a Triumph GT6 racer – with a V12 engine, naturally



ROGER GREEN

– experienced racer and trackday specialist Green answers all your

questions related to circuit driving. He's also our used car expert, so can tell you exactly what to look for when buying second-hand



COLIN HOAD

– having mastered his craft as a motor industry driver trainer, Hoad is now

chief instructor at CAT Driver Training (catdrivertraining.co.uk) and is ready to help you improve your performance driving skills

IF YOU'VE GOT A QUESTION FOR OUR EXPERTS, E-MAIL: experts@evo.co.uk

GIFT SUBSCRIPTIONS JUST £19.99

*Christmas
All Wrapped Up
From*
evo



**An evo gift subscription
keeps giving long after Christmas day!**

evo is the essential Christmas gift for anyone who is passionate about performance cars. Every issue is devoted exclusively to the world's most exciting drivers' cars, from affordable hot hatches to 200mph supercars. With entertaining, informative writing and the most compelling photography in the business, evo delivers all the latest news, reviews and test drives every month.

Give a gift subscription for just **£19.99** and your lucky recipient will receive:

- * 6 issues of evo (worth £26.40 in shops)
- * Hot-off-the-press magazines
- * FREE delivery of every issue
- * Exclusive subscriber-only covers

**REPLY BY
10th DEC**
and you'll be sent
a gift card which you
can pass on to
the recipient

EVO CHRISTMAS GIFT FORM

To _____

From _____

POSTCODE _____

DAYTIME PHONE _____ YEAR OF BIRTH _____

MOBILE PHONE _____

EMAIL _____

CHEQUE /CREDIT CARD (UK only offer)

£19.99 – 6 issue gift subscription 39.99 – 12 issue gift subscription

1 I enclose a cheque made payable to Dennis Publishing Ltd. (Issue No.) _____

2 Please charge my: Visa AMEX MasterCard Debit/Maestro

CARD NUMBER _____ START DATE _____ EXPIRY DATE _____

SIGNATURE _____ DATE _____

ADDRESS _____

POSTCODE _____

DAYTIME PHONE _____ YEAR OF BIRTH _____

MOBILE PHONE _____

EMAIL _____

Gift subscriptions will start with the first issue of the New Year.

Dennis Publishing (UK) Ltd uses a layered Privacy Notice, giving you brief details about how we would like to use your personal information. For full details please visit our website www.dennis.co.uk/privacy/ or call us on **0844 844 0053**. If you have any questions please ask as submitting your details indicates your consent, until you choose otherwise, that we and our partners may contact you about products and services that will be of relevance to you via, direct mail, phone, e-mail and SMS. You can opt-out at ANY time via www.subsinfo.co.uk or privacy@dennis.co.uk or **0844 844 0053**.





Return to: **FREEPOST RLZS-ETGT-BCZR, Christmas Offer, evo Subscriptions, 800 Guillat Ave, Sittingbourne ME9 8GU** (No stamp required)

CALL 0844 844 0039 OR ORDER ONLINE AT www.dennismags.co.uk/evo
 USING OFFER CODE: **P1013XMAS** OR COMPLETE AND RETURN THE **CHRISTMAS GIFT FORM**

K-TEC RACING

RENAULT PERFORMANCE SPECIALISTS SINCE 2001

THE UK's No.1 RENAULT TUNING SPECIALIST

-  NEW Website Full of Renault Tuning Products
-  Full Workshop Facilities On Site
-  In House Dyno Dynamics Rolling Road
-  Worldwide Mail Order Department



MEGANE KTR26
278BHP
323lb/ft

IN HOUSE REMAPPING FROM £195+VAT



Call us on (01202) 820800 or visit our website
www.k-tecracing.com

AMD

serious about tuning

AmD Technik
Essex



Established 20 years



New 1000bhp 4wd
Rolling Road now open!



Milltek Sport
official fitting
centre

High - performance vehicle tuning

- Engine remapping and performance equipment for normally-aspirated and turbocharged vehicles
- Enhanced braking systems for road and track
- Upgraded and adjustable suspension systems
- Milltek Sport performance exhaust systems
- Workshop, Servicing and Vehicle Diagnostics



www.amdessex.com

AmD Technik (Essex), Unit 6, Cliffside Trade Park, Mothelwell Way,
West Thurrock, Essex RM20 3LE United Kingdom
Telephone: +44 (0) 1708 861827

Fax: +44 (0) 1708 863031

Ask the experts

We answer your
motoring questions

MOTORSPORT

Q I've got a nine-year-old petrolhead boy. He's desperate to get into pretty much any type of motorsport activity. Are there clubs/organisations/training institutions where he can get a regular fix? – Emanuele Follett, London

A There are a few options open to the budding motorsport nut, and it's important to encourage this kind of enthusiasm. The first port of call should be Go Motorsport (www.gomotorsport.net). Set up by the MSA to get as many people as possible involved in motorsport, whatever their age, it includes initiatives to get youngsters out on track.

Karting is the most obvious and most accessible route, as both indoor and outdoor venues run courses for kids and the Go Motorsport organisation has set up a 'Let's Go Karting' scheme that runs taster sessions for just a fiver.

Looking a little further afield, Santa Pod runs junior dragsters that are available to anyone over the age of eight. A day will cost £139 – visit

www.santapod.co.uk for further information.

If your son wants to race a car, then stock cars are where you need to head. Mini Stocks can be raced by anyone over 11, which means you have plenty of time to find your nearest track and check out the current scene before your boy reaches that mark.

For circuit racing he will have to wait until he's 16, but rallycross in 1-litre Minis starts from the age of 14, and you can also rally in the same cars at the same age in the Formula 1000 Rally Championship. Co-driving starts at the same age, but navigating on road rallies can be done from the age of 12. If he likes getting muddy and not going very fast then there is a junior trials category for eight-year-olds, but it's fun rather than glamorous as he'll be using a ride-on mower!

Finally, if being involved rather than taking part will suffice, then the cadet marshals begin at age 11 (www.volunteersinmotorsport.co.uk). We can never have too many marshals, so this is a great way to help the sport while getting close to the action – **RG**



Karting is a great way for youngsters to get into racing

THE EXPERT



ROGER GREEN

– evo road tester, racer and used-car expert, Green will answer your questions on circuit work and buying used

IF YOU'VE GOT A QUESTION FOR OUR EXPERTS, E-MAIL:
experts@evo.co.uk

beautiful, striking, elegant



Keep it that way.

Fully tailored car covers by Specialised Covers. Official suppliers to Audi Worldwide.

T: 01943 864 646

W: specialisedcovers.com



Plug-in Diesel Upgrades

Cars • Vans • Motorhomes • Tractors • Boats

The CHIP Express™ tuning system is without doubt the most advanced plug-in diesel upgrade available. It works in harmony with your engine, retaining all safety functions without needing to interfere with the vehicle's existing on-board computer. It can be self fitted in minutes, adjusted for more performance and removed without trace. It will free your vehicle from its manufacturer's limits.



Power Economy Drivability

Unlock upto 40% extra power and 20% better economy
Easy to self install • Fully digital • 3 year warranty



Visit our website, see your vehicle's true potential, order online.

www.chipexpress.com

email@chipexpress.com

01727 730 956



www.watches.co.uk

where time meets passion

SWISS WATCH COMPANY

We specialise in the acquisition and sale of high quality Swiss watches both modern and vintage, un-worn and pre-owned.

by appointment only:

+44 (0)20 8994 4567

474a Chiswick High Road, Chiswick, London, W4 5TT



- reduces brake dust by up to 75%
- ultimate protection & shine
- no harmful abrasives
- easy on / off

Trade enquiries, T: 01992 466481, E: info@pcs.gb.com

Smartwax UK Limited

Tel. +44 (0)1920 420868

Available at good car accessory shops

www.smartwax.eu

RimWax is amino functional heat resistant wax for all wheels & metal surfaces. Cleans, polishes, shines & protects. Bonds to wheel surfaces, delivering a slippery non-stick surface shield that deflects damaging brake dust and dirt.

the ultimate wax for rims
the ultimate add-on item



smartwax
born in California U.S.A.

PRESTIGE & PERFORMANCE SPECIALISTS

High performance motor insurance at

lower prices

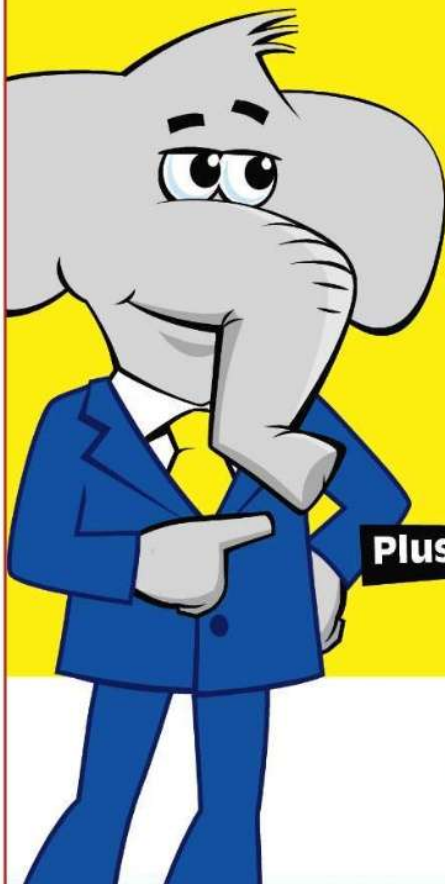
- Limited Mileage
- Agreed Value Policies
- 60% Introductory Bonus
- Immediate Cover
- Monthly Instalments

Call us today on 01785 785035

95 Wolverhampton Road Stafford ST17 4AH Fax: 01785 251966

Email: info@ashleyinsurance.co.uk www.ashleyinsurance.co.uk


ASHLEY
INSURANCE



Serious about car insurance

With an elephant.co.uk comprehensive policy you get loads of great features and benefits as standard.

Guaranteed Courtesy Car, £100,000 Legal Cover, 90 Days European Cover, up to £1,250 Stereo Cover, Windscreen Repair and Personal Injury Cover

Plus! you could even save yourself £150 just like the 11% of respondents who provided a best alternative price between Dec '09-May '10.

elephant.co.uk

0800 118 1644

Seriously good car insurance

You could see savings when you come direct to us



Car insurance

0845 246 3740

- As an extra reward for being a safer driver, you could get up to 65% No Claims Discount
- If you are hit by an uninsured driver we'll cover your excess and your No Claims Discount won't be affected (Comprehensive cover required)

Van insurance

0845 301 2887

(Van drivers must be over 21 (over 22 in NI) and have held a full UK/EU licence for at least 1 year)

- 10% off every extra vehicle you insure with us (Subject to minimum premium. First year only)
- Replacement hire van available for up to 21 days following an accident or claim (If you purchase Guaranteed Hire Vehicle Plus. Comprehensive cover required)

Breakdown cover

0845 246 8809

- Rapid breakdown cover provided by Green Flag with an average national response time of 30 minutes and 86% of breakdowns fixed at the roadside (Data based on 933,758 Green Flag call outs, August 2009 – July 2010)
- If you don't call us out, you can earn a no call out discount
- Plus get 2 for 1 when you buy personal breakdown cover. That covers you and your partner when travelling in any vehicle aged under 16 years old (within the UK)

Direct Line rescue provided by Green Flag and underwritten by Direct Line PLC, both part of the same group



in partnership with  Green Flag



directline.com

A GOOD DEAL BETTER

Admiral MultiCar

Cheaper car insurance for homes with two or more cars



With Admiral MultiCar, you get a MultiCar discount on all your cars. More cars mean bigger discounts!

And each driver keeps their own No Claims Bonus separate.

Call us now on

0800 600 880

or visit **admiral.com**





Megan, Sales Clerk, Adrian Flux.

I'm as passionate about cars as you are, which is why I think you'll love our insurance deals.

Adrian Flux Insurance Services can provide you with a tailor-made insurance quote for your car based on your own personal requirements and driving history.

FREEPHONE 0800 081 8989

Quote line hours: Mon to Fri 9am-7pm | Sat 9am-4pm

adrianflux.co.uk

Authorised and regulated by the Financial Services Authority.



ADRIAN FLUX



**high performance
motor insurance**



08444 935 741

Calls may be monitored for training purposes

www.performanceinsurance.co.uk

e-mail: quotes@performanceinsurance.co.uk

online quote & buy available

Performance
INSURANCE

Member of the Financial Services Authority

Ask the experts

We answer your
motoring questions

TUNING & ENGINEERING

Q My brothers-in-law and I are looking to run a track motor for low money. We thought about a Caterham/Westfield, but concluded that £5K would not get us very far. So how do you rate the E36 BMW M3 as a potential track car for someone looking for a lot of bang for their buck? – Naoise Enright

A The E36 M3 is a superb basis for a track car. Straight out of the box it handles well, is quite swift and is loads of fun to drive on the limit. In short, it's a good choice.

As with any trackday toy, before thrashing it mercilessly all day it will need a bit of work, starting with a very thorough service. Get any worn bushes replaced or upgraded to restore crisp handling, invest in a good performance engine oil and consider race brake fluid to combat fade. Track-biased brake pads will also improve reliability and consistency – two essential ingredients for a successful day.

The most important components are the tyres, so choose the best track

tyres you can afford, and remember that tyre pressures can be adjusted to tune the handling to suit your style.

Once the trackday bug has bitten deep you will no doubt want to improve your car's performance. Lowered and adjustable suspension will firm up the handling very nicely. You might also want to strip out the interior trim and ditch the relatively luxurious seats in favour of some lightweight race items. And of course there will be the temptation to tune the engine with uprated parts...

This is all good stuff, but the parts you will be removing are the very parts that made the M3 different from the lesser 3-series, so it's worth considering starting with a non-M1 car and spending the money you save on performance goodies. This principle applies to any factory special; if you take the base model and fit a tuned engine, track suspension, brakes and interior, you might just end up with a better track car for less cash.

Having said that, you'd have to go a long way to find an engine as sweet and powerful as that M3 lump – **RH**



E36 M3 would make a perfect low-budget trackday car 'as is', but there's plenty of scope for improvement

THE EXPERT



RALPH HOSIER

– engineer and racer Hosier answers your questions about how cars work and how best to tune them

IF YOU'VE GOT A QUESTION FOR OUR EXPERTS, E-MAIL:
experts@evo.co.uk



Chris Bale & his DeLOREAN DMC-12

Chris and his DMC-12. Next year he'll be taking the car on a pilgrimage to its Northern Ireland birthplace

THE BACK TO THE FUTURE FAN WHO MADE HIS CHILDHOOD DREAM CAR A REALITY

When I grow up, I'm going to drive one of those.' I can't imagine how many times during my childhood I must have said those words about the DeLorean DMC-12 as I sat watching Christopher Lloyd explain what makes time travel possible. Nobody really listened to me, though. It was 'a phase' apparently, and all kids my age wanted one. But I wasn't like the rest – I didn't change my mind as soon as *Knight Rider* came on. I meant it, and eventually I made good on my promise.

It's easy to see why the DeLorean appealed to the kid in all of us, what with its unpainted finish and those gullwing doors, even if most of them had to make do without the flashing lights and flux capacitor of the *Back to the Future* car. But what really held my interest was the intriguing story of the car's creation, which would make a movie in its own right – except that with millions of pounds of government cash unaccounted for, an FBI drugs bust and entrapment, it would probably seem too far-fetched.

It was 2007, when I was 23, that I finally had the cash to start looking for a DMC-12. I was less than impressed when the first ad I responded to resulted in me making a seven-hour round trip only to find a note on the seller's door telling me he'd sold the car that morning. So when a few weeks later another 1981 model with the five-speed manual 'box appeared for sale ten miles up the road from my Norwich home, it seem like a godsend,

and I promptly committed the cardinal sin of car-buying, plumping for the first one I saw!

Looking back, it was always going to happen that way. As soon as the garage door rolled up and I laid my eyes on that beautiful, 304-grade stainless steel bodywork, there wasn't a chance that I would settle for going home empty-handed. The car could have burst into flames on the test

drive and I would have just argued that it warranted a discount.

My early experiences of DeLorean ownership were not without complications, including bringing the car home from Donington Park on the back of an AA lorry and, on another occasion, pushing it home when a driveshaft let go half a mile out of the garage. But my enthusiasm was never dented and with a little time and effort, and a lot of help

from Chris Nicholson at DeLorean specialists PJ Grady, days like those seem to be behind me. I intend to put that to the test properly next summer when I (and many other DeLorean owners) will be driving to the factory in Dunmurry, Northern Ireland, to celebrate the car's 30th birthday.

The 130bhp Renault-sourced 2849cc V6 was never going to set the tarmac alight, even in 1981, but the

DeLorean is a comfortable cruiser. For me, though, the car's appeal comes not from its performance but its sheer presence, and from knowing that every mile I travel in it is fulfilment of a childhood dream.

It certainly wouldn't be suited to a shrinking violet or anyone who can't laugh at a *Back to the Future* joke – even if it is the hundredth time they've heard it – but I wouldn't have it any other way. That's all part of what makes it such an icon and why it's a car that everybody seems to love. I rarely stop at the pumps without someone asking questions. When I parked it outside my local Aston dealer one day whilst I went to drool over their latest stock, someone tried to buy it from the rather bewildered saleswoman!

The DeLorean has carved its own little piece of history. In my eyes, there is nothing that could replace it at any time in the future.'

■ To see more pictures of Chris's DeLorean visit www.evo.co.uk. And if you'd like to be featured here with your car, email rogerg@evo.co.uk

AlloyGator[®]

Protect your wheels from kerb damage

21"



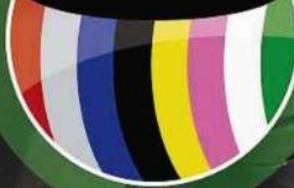
Fits up to and including 21" Alloys

set of 4 gators

£37.50 + VAT



available in various colours*



*colours are for illustrative purposes

order online at

www.alloygator.com

or call us on 08450 707078



Will you be led into temptation?



LEON CUPRA R 2.0 TSI 265 PS PRICE FROM £25,205_{RRP}

Just one look at the SEAT Leon Cupra R should be enough to tempt you. And then you experience its formidable 2.0 TSI engine and its impressive 265PS. You catch a glimpse of the 19" Potenza alloy wheels, the gloss black rear spoiler and the quilted leather bucket seats. You discover this is the sportiest, most advanced SEAT yet. And you realise... resistance is futile.

Tempted? Of course you are.
Visit seat.co.uk to find your local dealer 

seat.co.uk

MEMBER OF THE VOLKSWAGEN GROUP

Model shown is the SEAT Leon Cupra R 2.0 TSI 265PS with optional custom palette paint £550RRP and Bi-xenon headlights £745RRP. Price quoted is correct at time of going to print.

Official fuel consumption for the SEAT Leon Cupra R 2.0 TSI 265PS in mpg (litres per 100km); urban 26.4 (10.7) extra urban 42.8 (6.6) combined 34.9 (8.1) CO₂ emissions 190g/km.