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## Editorial

Telephone 020 7907 6310 Fax 01933 667309  
Email [eds@evo.co.uk](mailto:eds@evo.co.uk)  
Website [www.evo.co.uk](http://www.evo.co.uk)  
5 Tower Court, Irchester Road, Wollaston,  
Wellingborough, Northants NN29 7PJ, United Kingdom

Editorial director Harrison Metcalfe

Editor Nick Trott  
Motoring editor Mike Duff  
Art director Rob Gould  
Features editor Henry Catchpole  
Production editor Ian Eveleigh  
Senior designer Adam Shorrocks  
Staff photographer Dean Smith  
Film-maker Sam Riley  
Staff writer Stephen Dobie  
Sub editor Dan McCalla  
Designer Will Beaumont

Contributing editor Jethro Bovingdon  
Contributing editor Richard Meaden  
Contributing editor Tiff Needell  
Road test contributor David Vivian  
Columnist Richard Porter  
Columnist Dario Franchitti  
Office administrator Jane Townsend-Emms

### Contributors (words)

Kim Adams, Simon de Burton, Simon George, Matthew Hayward,  
Shane O'Donoghue, Peter Tomalin, David Yu

### Contributors (pictures)

Gus Gregory, Malcolm Griffiths, Matt Howell

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Peter Dietsch, Grahame Downer at Elms Cambridge Mini,  
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## Advertising & Promotions

Telephone 020 7907 6773 Fax 020 7907 6601  
ISDN 020 7580 0297  
email [ads.evo@dennis.co.uk](mailto:ads.evo@dennis.co.uk)  
30 Cleveland Street, London W1T 4JD

MD of advertising Julian Lloyd-Evans  
Advertising director Sarah Perks  
Advertising manager Tim Deeks  
Business development manager Shaza Agabani  
Senior advertising executive Neale Salt  
Advertising executive Abdul Ahad  
Lifestyle director Sophie Kochan  
Group advertising manager digital Elaine de la Cruz  
Production executive Michael Hills  
Marketing & events co-ordinator Traci McLean  
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## Licensing & syndication

International director Ian Bedwell  
Syndication senior manager Anj Dosaj-Halai  
Licensing manager Carlotta Serantoni  
Licensing & syndication assistant Nicole Adams

## evo Cars for Sale

Telephone 0207 907 6660 email [chris@motormutt.com](mailto:chris@motormutt.com)  
Commercial director Chris Wood

## Publishing

Publishing director Geoff Love

## Dennis Publishing Ltd

Group managing director Ian Westwood  
Chief financial officer Brett Reynolds  
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# Ed Speak

'To say my nerves were frazzled at the end of the week would be an understatement'

T

THE TIME IS AROUND MIDDAY ON A SUNDAY. I'M AT home, but my mind is 1300 miles away. I'm awaiting news on the cover shoot from Harry, who has somehow managed to pull off a world exclusive by getting together a Bugatti Veyron and a Pagani Huayra. It has taken months and months of effort to get to this point but finally, at last, Jethro and Harry, plus videographer and photographer, are in Italy ready to experience the wildest of wild

hypercar shootouts. The phone rings. It's Harry...

'It's raining.'

'How bad?'

'Biblical. We can't see the cars, let alone shoot them.'

'Aw crap.'

This has never happened before. Generally you can rescue something from a shoot, or the rain finally subsides and you get a window of opportunity. But not this time. The team returned with nothing. Not a single image. We were committed to the story, so we set about trying to make it happen again the following weekend – just seven days to arrange something that had originally taken months to organise...

As you'll see on page 78, we pulled off the near impossible – thanks to Bugatti agreeing to release a car during a customer event in the south of France, and a very, very generous UK Huayra owner agreeing to immediately put his car on a transporter to meet the Veyron in France. To say my nerves were frazzled at the end of this week would be an understatement. Then, a week later, Jethro phoned me from the three-car spiders shoot in Wales. 'How's it going?' I asked.

'Well, one of the cars is fine...'

'Um, what about the other two?'

Tyres on both the Audi and McLaren had suffered sudden, explosive decompressions, and my frazzled nerves were about to do the same. Stressed, I jumped in my new Porsche 911 (more next month) and went for a drive. I didn't know where I was going; I just needed to drive.

An hour later I returned, relaxed, refreshed. We talk a lot about the thrill of driving, but that day I needed the catharsis of driving more than anything else. And it delivered.

Nick

Nick Trott Editor



## Across the evo universe this month

### iPAD EDITION

evo's interactive iPad edition features videos and extra photos to bring you closer to the action. See more at [evo.co.uk/ipad](http://evo.co.uk/ipad)

### EVO MERCHANDISE

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### EVO TOURS

evo has joined forces with Petrolhead Nirvana to offer some fantastic driving tour deals. See p174 for more details

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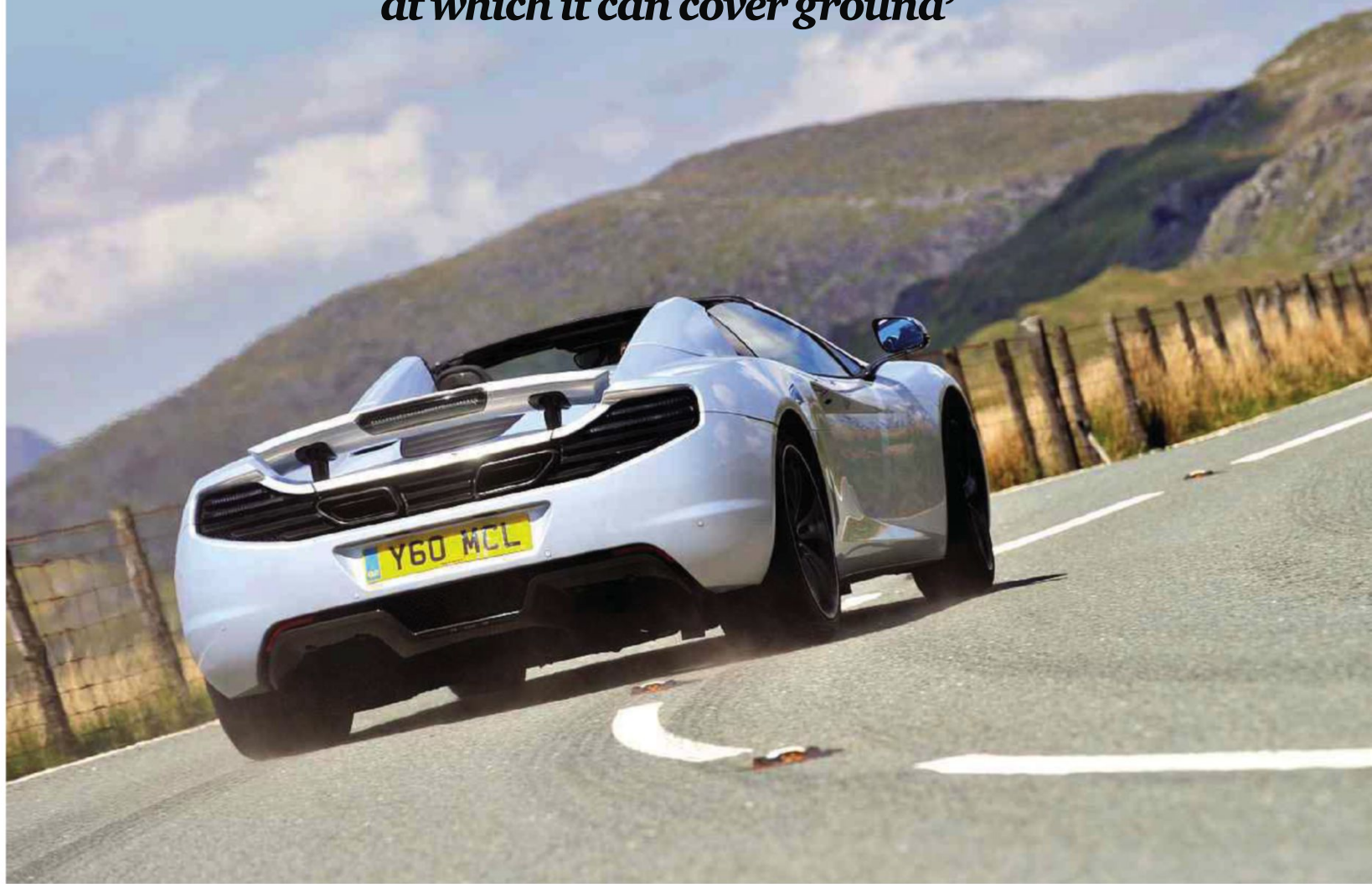
# evo

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*'After an hour driving the 12C, I'm overwhelmed by the speed at which it can cover ground'*



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In the 14-year history of *evo*, Ferrari's flat-12 monster has never undergone a proper road test. Henry Catchpole redresses that omission on road and on track in South Wales

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## This month

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375bhp e-tron impresses in tests – but won't make production



### p16 VANTAGE JOINS THE BIG BOYS

Aston boosts V12 S model to 565bhp and 205mph top speed



# Baby Aventador set for 2014

**First look**

The low-down on a star car of the future

Gallardo replacement to get sharper styling, over 600bhp and a platform shared with Audi's R8 successor.

Geneva reveal planned **Words:** Harry Metcalfe **Rendering:** Jan Kamenistiak



**Y**OU ONLY HAVE to see the amount of new building work taking place at the Lamborghini factory in Sant'Agata at the moment to realise something big is brewing. There are a number of new models currently being worked on in the short- and long-term, and the first to arrive will be the long-awaited Gallardo replacement, which will get its official public unveiling at the Geneva motor show next March.

The Gallardo replacement has been a long time coming. Lamborghini began work on its own project some time ago, but the firm's owners, VW Group, then decided

it would be better if Lamborghini merged its development with that of the car replacing Audi's R8. The reason behind this major change of tack is the sales success of the

development project. It's also why the Gallardo, first introduced in 2006, has remained on sale for longer than originally planned.

Complicating matters even further

## 'The Gallardo replacement will not have the all-carbon monocoque construction developed for the Aventador'

R8, which is now VW's biggest selling mid-engined supercar, easily outselling the Gallardo in all the important markets. This is why the R8 replacement (due in 2015) is the senior partner in this joint

is Porsche, newly purchased by VW and considering introducing its own mid-engined car, positioned above the 911 but below the 918 hybrid-supercar in the company's ballooning range. If this exciting

project does get the go-ahead then **evo** understands it would share the same underpinnings as the Gallardo/R8 replacement, thanks to VW's new policy of introducing 'mega-platforms' for vehicles of similar sizes and mechanical layouts across its different brands.

What all this means is that the next Gallardo will not have the all-carbon monocoque construction Lamborghini developed for the Aventador, but a shared aluminium platform instead. Carbonfibre-reinforced plastic bodywork will help keep weight as low as possible.

As for the mechanical layout, **evo** understands the current Gallardo's V10 engine will continue to be



**p18 BUILDING  
FUTURE FOR  
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Design house plans to make limited-run cars like 458-based Sergio



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Heading to La Sarthe? Check out our guide to the big highlights



used in the new car, for which it will be tweaked to produce at least 600bhp for the first version. Lamborghini will use its proven four-wheel-drive layout but it will be driven through a new seven-speed dual-clutch transmission, rather than a development of the Aventador's unique seven-speed single-plate gearbox. We also understand that there are no plans to offer the new car with a manual transmission, which is a real shame, especially for anyone who has experienced the excellent Gallardo LP550-2 in manual form.

As for the styling, insiders say the new car will look very much like a baby version of the Aventador,

sharing a similar 'edgy' design language that seems to be working very well for Lamborghini right now. The new car has been designed in-house by Lamborghini Centro Stile, headed up by design director Filippo Perini. Our rendering shows what we think it will look like.

The new car will not be called Gallardo, however. Its name won't be announced until the official unveil at Geneva, but rumours on several websites suggest the moniker Cabrera is a possibility.

On top of all this, **evo** has learned that renowned supercar chassis engineer Loris Biccocchi (Veyron, Koenigsegg, Zonda) has been employed by Lamborghini to help

define the new car's handling set-up. It represents a welcome return to Lamborghini for Biccocchi, whose very first job was with the company, where he started as an apprentice to legendary test driver Valentino Balboni.

Meanwhile, progress is continuing apace on other new Lamborghinis being prepared for future release. At the firm's lavish 50th Anniversary Gala dinner in May, Audi CEO Rupert Stadler announced Lamborghini's high-performance SUV, the Urus, is to go into production after all. It's only been shown in concept form so far (including at the dinner itself). The Urus is unlikely to hit the showrooms until 2017. **X**

**Lambo's latest**



**Urus**

Concept for a Cayenne rival with stand-out Lambo styling. Now set for 2017 launch



**Egoista**

Insane 592bhp V10 is a one-off, not-for-sale concept to mark 50 years of Lamborghini



# Audi pulls the plug on its electric R8

All-electric e-tron prototype produces 375bhp and 604lb ft – but production run has been cancelled at the last minute

**Words:** Mike Duff **Pictures:** Audi



**I**T'S ALWAYS strange when a manufacturer invites you to drive a car that was destined for production but then axed at the last moment. In the case of the Audi e-tron, the electric version of the R8, the company was almost literally set to bring the car to market.

Audi has built ten e-trons as prototype test beds, both to help with the development of electric powertrains – the company will be launching the considerably less exciting A3 e-tron later this year – and to show off some of the tech we can anticipate seeing on the next R8 (and Gallardo – see page 12).

The R8 e-tron looks very similar to the petrol R8, but it is radically different – and not just because of

its ion-fed powertrain. The only parts shared with the standard R8 are the doors, windows and sills.

The body features an aluminium spaceframe clad in carbonfibre panels. The whole car weighs 1780kg – impressive when you consider the 530-cell battery pack is 577kg alone. This pack occupies both a 'spine' down the centre of the car – the casing of which acts as a structural member – and the space where you would normally find an R8's V8 or V10 engine. Total battery capacity is 48.6kWh, slightly less than a Tesla Roadster's, and is claimed to be good for a range of up to 130 miles.

Drive is delivered to the rear wheels by two 140kW electric motors, which produce 375bhp and 604lb ft in total, and each turns a rear wheel via a single-speed planetary reduction







**Above:** battery pack accounts for a third of the e-tron's 1780kg kerb weight. **Below:** it may look familiar, but most of the e-tron's body panels are carbonfibre, rather than aluminium, to further reduce weight. **Bottom:** each electric motor uses a planetary reduction gearbox



gearbox. There's no differential – software makes sure the two motors spin at appropriate speeds according to whether the car is cornering or not and how much grip each tyre has. The wheels can also torque-vector to reduce understeer. However, unlike Mercedes' four-wheel-drive SLS AMG Electric Drive, or the standard R8, the e-tron's front wheels are unpowered, making it a very rare performance Audi without quattro.

Other bits of clever tech, which will be seen on production cars soon, include carbonfibre wound springs and anti-roll bars. There's also a rear-view camera instead of a mirror as the battery pack eliminates any rear view.

We got to drive an e-tron on a tight and twisty cone course at the disused Tempelhof airport in Berlin, giving us the chance to experience its

impressive off-the-line performance, if not its full dynamic repertoire. Like the production Lexus IS300h (page 48), the R8 drives with a strange synthesised engine-like noise, something we suspect we'll have to get used to in years to come. Acceleration is linear and barely diminished up to the 70mph or so allowed on the track, while the 4.2sec 0-62mph time is identical to the R8 V8's. The car corners well, the battery pack's low centre of gravity helping to hide the car's mass and the torque management keeping it on line.

The e-tron is impressive, but apart from the zero-emissions bit, it doesn't do anything that a petrol-powered R8 can't. And with the prototypes valued at €1million (£850,000) each, it's hard not to conclude that Audi was right to can the project. ❌

## Why Audi canned the e-tron

### Wolfgang Dürheimer Head of technical development, Audi



AUDI TOOK THE decision to cancel the production e-tron earlier this year after, in the words of engineering boss Wolfgang Dürheimer, 'doing the sums and realising that they didn't add up.'

Audi had based projections for the e-tron's viability around mistaken assumptions on battery technology. To make it work, Dürheimer says that battery cost, density and weight would all have needed to improve by about 50 per cent: 'We are not prepared to ask our customers to subsidise

by a belief that legislation will soon create zero-emission zones in the centres of many towns and cities, forcing any car wanting to enter them to run at least a part-electric powertrain.

Different parts of the group also share technology with each other: Audi will be able to benefit from the work that Porsche has done with the 918 and hybrid Panamera (page 24), while Porsche will be able to draw on the lessons Audi learned with the e-tron. The fact that Dürheimer used to be

## 'Audi had based projections for the e-tron's viability around mistaken assumptions on battery technology'

a project like this... I think the shareholders will be very happy that we don't produce too many of these.' The clear implication is that he thinks both BMW and Mercedes are effectively underwriting their own electric sports cars, the i8 and SLS Electric Drive respectively, for marketing reasons.

Audi and VW Group do remain committed to an electric future, though. This is being driven in part

Porsche's chief engineer certainly helps the exchange process.

The only areas of electric development that are ring-fenced are Audi and Porsche's respective Le Mans development programmes. Next year, Porsche's petrol-electric hybrid will go head-to-head with Audi's diesel hybrid. 'Everybody wants to win,' says Dürheimer. 'That means we can be friends but also rivals.'



# Vantage enters supercar territory

Aston's V12-engined starlet boosted to 565bhp and 205mph **Words:** Stephen Dobie

**I**GNORE THE ONE-77 for a second, and this new V12 Vantage S is the fastest Aston Martin road car yet. That might have seemed implausible when the Vantage launched as a prospective Porsche 911 rival in V8 form in 2005, but it can now be ordered as the joint-most-powerful series-production Aston, sharing honours with the Vanquish.

Lying beneath its garishly slatted bonnet is a 5.9-litre V12 engine that produces the same 565bhp and 457lb ft peaks as the Vanquish's, but which has a different engine code – 'AM28' – thanks to a new Bosch engine management system. Aston has aimed to 'flatten and fatten' the torque curve, with 376lb ft – over 80

per cent of the total output – available from just 1000rpm.

Where the V12 S trumps the Vanquish is in claimed top speed – by 22mph. Its 205mph peak betters many of the baby supercars it rivals and surpasses the now-defunct standard V12 Vantage by 15mph, thanks to an extra 55bhp and a new gearbox.

Gone is the six-speed manual of the outgoing V12, replaced by the latest iteration of Aston's seven-speed automated manual transmission, dubbed 'Sportshift III'. It's a Graziano unit, 25kg lighter than the stick-shift it replaces, more than contributing to an overall 15kg drop to 1665kg. No 0-60mph time has been confirmed for, but around 4.0sec is likely.

Other new tech includes ZF

## 'ASTON HAS AIMED TO FLATTEN AND FATTEN THE TORQUE CURVE'



Servotronic power steering with a quicker ratio, and three-stage adaptive damping, both technologies adjustable through Normal, Sport and Track modes. A Sport button also sharpens the throttle response, quickens the gearshift speed and accentuates the note of the new One-77-derived exhaust system.

The S is visually set apart from its predecessor by new 19in forged alloys, a carbonfibre grille (the first visual change to drip down from the CC100 speedster concept) and an optional graphics pack.

Order books open later this year. A price of 'around £138,000' is promised, which would mark a marginal rise over the outgoing £136,085 V12 Vantage given the extra potency. ✕

## Vanquish loses its top



THE NEW VANQUISH Volante uses the same engine as the V12 Vantage S. Aston's first all-carbonfibre-bodied convertible is its quickest accelerating, too, hitting 62mph in 4.1sec on its way to a 183mph top speed.

Its triple-skin fabric roof folds in 14sec at driving speeds up to 30mph, while Aston brags of a 279-litre boot – that's 50 per cent larger than its DBS Volante forebear's.

Under the skin there are retuned



springs and dampers compared to the coupe, while it's 13 per cent stiffer torsionally than the drop-top DBS. At £199,995, it's up £9k on the coupe and the most expensive Aston on sale.



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# 458-based 'Sergio' points to Pininfarina's future

Italian design house looking to specialise in building ultra-exclusive, limited-run models

Words: Mike Duff

**P**

PININFARINA WANTS TO return to building cars, although on a far smaller scale than before.

The Italian design and engineering company shut down its construction division, which produced cars like the Volvo C70 and Alfa Brera, in 2010. But now the firm wants to start designing and building ultra-exclusive models on behalf of other manufacturers, and its first project could be a limited run of the stunning Ferrari 458-based 'Sergio' concept that premiered at this year's Geneva motor show.

The company believes it will be able to use its expertise to both design and make small runs of uniquely bodied cars. 'There is definitely a



potential need for these very exclusive limited-edition cars,' Fabio Filippini, Pininfarina's vice president of design, told us. 'We believe a brand like Pininfarina has the legitimacy to offer this. It goes back to our roots after all.' The Sergio concept was created

to commemorate the life of Sergio Pininfarina, who died last year. Sergio was a chairman of the company and son of its founder, Battista Farina. But the car is also a showcase for Pininfarina's ability to productionise limited-run cars of this kind. The concept is based around the chassis and powertrain of the 458 Spider, with new bodywork and an interior designed using cutting-edge 3D visualisation software from French company Dassault Systèmes.

The final virtual version was so accurate that it enabled bodywork tooling to be created straight from the digital files, helping the entire project to be completed in just five months. The images you see here are the final

rendering and the physical concept. The two are effectively identical. The concept doesn't drive, but it's been designed for production reality.

If the Sergio does get the green light it will be produced in conjunction with Ferrari. Maranello has already allowed the company to produce the one-off 458-based SP12 for Eric Clapton last year. Filippini says any production Sergio would be limited to 'no more than six' examples. 'We want it to be a very exclusive object,' he says, 'one that will stay in car history like a true collector's item... But to make it we have to be sure that the business case works.'

Despite the Sergio's underpinnings, the new direction also indicates that Pininfarina is looking to a post-Ferrari future. The LaFerrari was the first road-going Ferrari since 1973 not to be designed by Pininfarina, and Maranello has indicated it will be taking styling in-house from now on. It's no coincidence that Pininfarina also revealed the Gran Lusso Coupe concept – basically a pitch for a BMW '9-series' – this month. We'll find out whether the Sergio gets the go-ahead in the next couple of months. ☒

**'THE SERGIO IS A  
SHOWCASE FOR  
PININFARINA'S  
ABILITY TO  
PRODUCTIONISE  
CARS OF  
THIS KIND'**



**Below:** digital rendering of the Pininfarina Sergio. **Top:** ...and the identical show car. **Above:** BMW Gran Lusso Coupe concept







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Official fuel consumption figures in mpg (l/100km) for the Ford Fiesta ST 1.6 EcoBoost (182PS): urban 35.8 (7.9), extra urban 58.9 (4.8), combined 47.9 (5.9). Official CO<sub>2</sub> emissions 138g/km. Vehicle shown is the Ford Fiesta ST2 in Molten Orange with ST Style Pack (colour and Pack available at additional cost).



**Go Further**



# Renault plots rear-engined RS Twingo

Company chief suggests paddle-shifts and Gordini revival will lead Renaultsport's future

Words: Stephen Dobie



**S** 'SPORTS CARS AND motorsport are in the DNA of the company,' Renault COO Carlos Tavares implored as we spoke to him at the Monaco Grand Prix about the new TwinRun. It provided the V6-engined concept with some much-needed context.

Its main role was to preview the third-generation Twingo, which goes on sale in 2014. The TwinRun follows the electric TwinZ concept, which more accurately previewed the next Twingo's five-door-only body. While the TwinRun's mid-engined race car underpinnings are pure concept car, a 316bhp 3.5-litre V6 overwhelming the rear tyres shows Renault hasn't forgotten its madcap hot hatch past.

Twinned with the next Smart, the new Twingo will switch to a



**Above:** electric Twin-Z concept hints at next Twingo's five-door-only body



## 'TAVARES DISPELLED RUMOURS THAT THE CURRENT RS TWINGO WILL BE THE LAST'

rear-engine, rear-drive layout, a point the punchy TwinRun only too happily emphasises. And Tavares was quick to dispel rumours that the current Renaultsport Twingo will be the last. 'I can imagine that for A-, B- and C-segment cars, we have RS variations,' he told us, suggesting the Twingo, Clio and Mégane will continue at the core of Renaultsport.

More twin-clutch gearboxes seem likely, too. 'I think paddle-shifts are something that are going to stay,' Tavares told us. 'The gearchange is so quick, it does not destabilise the car as much when you're going quickly.' When

asked whether RS models other than the new Clio would get paddle-shift, he added: 'Of course, it's possible.'

Criticism of the Clio 200 Turbo's soft demeanour, which led to its defeat by key rivals in our recent group test (evo 184), could be countered by the Gordini name returning on extreme low-volume versions of RS models. Tavares conceded the 'trim 'n' stickers' specials of three years ago were mistakes that won't be repeated. 'What is forbidden is that we use the Gordini label on anything other than extreme versions,' he stressed. 'More horsepower, specific chassis, specific

brakes. Perhaps it's lighter. Some of them may be road-legal, but it's not a must. To be frank, I don't care how many we will make. For me this is a pure brand-builder.'

And what of Alpine, the firm's other performance arm? Renault design chief Laurens van den Acker told us of building a brand on the foundations of its first model, being developed with Caterham: 'I feel we need to create the 911 of Alpine. If we have done that properly then we can do Panamera and Cayman. What we're trying to do is create the foundation of Alpine. We need to start with a new A110.' ❧

## Williams on – and off

evo also talked with Tavares about the return of the Williams name to Renault hot hatches, and more specifically a reborn Clio Williams, which had been an on-off affair since the companies rejoined forces in F1 in 2011. 'There are several plans for that and we are very open and eager to do specific Williams versions,' Tavares told us. 'There's fantastic history and heritage. There was a Clio Williams in the past, so of course that's an obvious candidate.' However, six days after this interview, Mercedes nabbed the Williams team's engine supply deal for 2014, and while Renault couldn't confirm either way, it would seem the Willy's comeback is off again – for now...







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Dr Wolfgang Ullrich, head of Audi Motorsport, June 2011.



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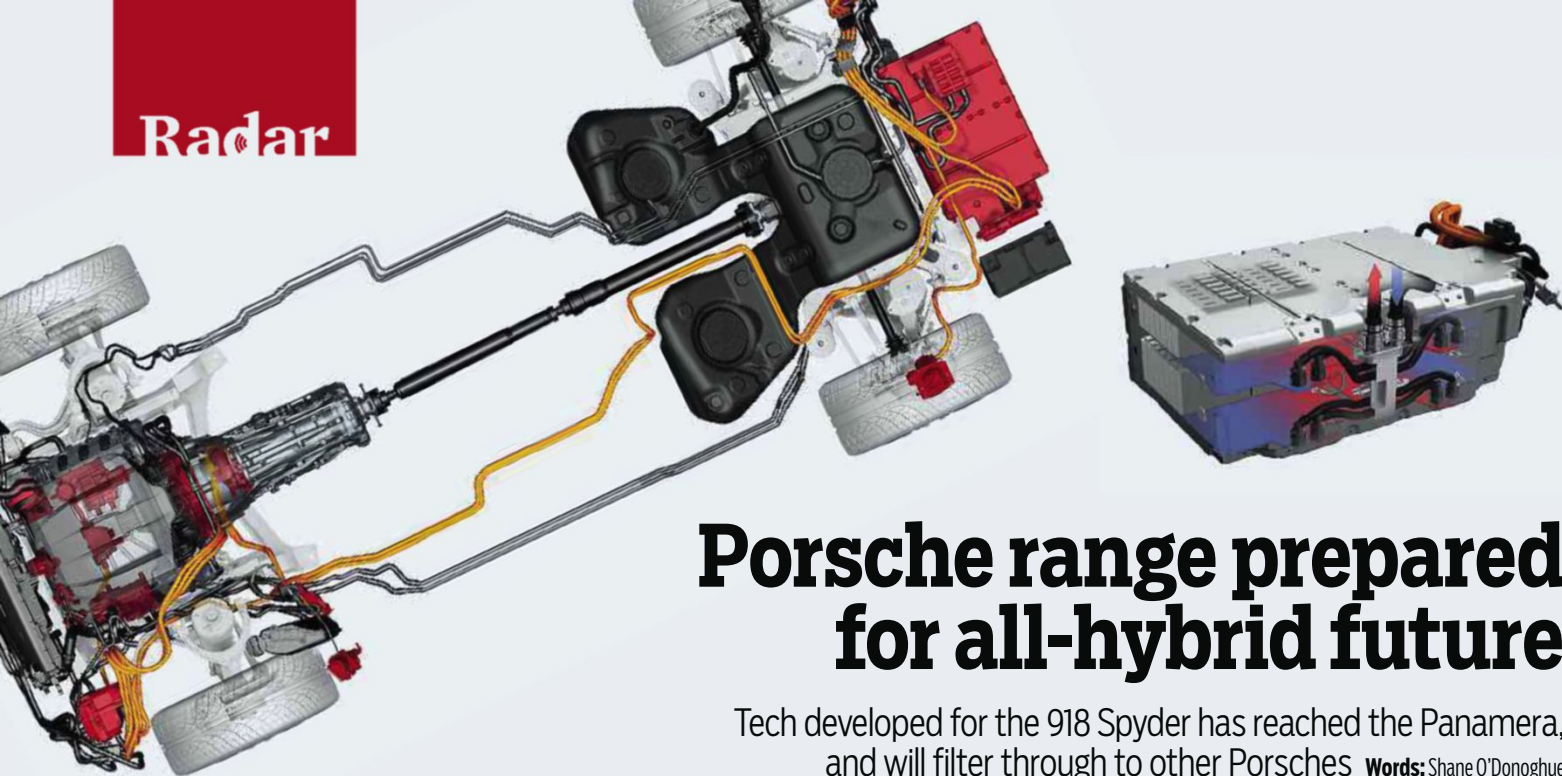
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# Porsche range prepared for all-hybrid future

Tech developed for the 918 Spyder has reached the Panamera, and will filter through to other Porsches **Words:** Shane O'Donoghue

**T**'HE 918 SPYDER is the gene pool of Porsche sports cars of the future.' With those words, Dr Gernot Döllner, Porsche's director of the Panamera product line and 918 project leader, introduced a technical presentation of the new plug-in Panamera S E-Hybrid, part of Porsche's plans to transfer the plug-in hybrid technology from the 918 Spyder to the rest of the company's models.

Although the new hybrid Panamera has up to 410bhp and 425lb ft of torque at its disposal (and a 0-62mph time of just 5.5sec), this two-tonne car is subject to minimal taxation thanks to its 71g/km emissions rating – a figure that also exempts it from the London Congestion Charge. However, even though this car won't arrive in the UK until the summer, its hybrid componentry is already ostensibly out of date, as Porsche has a much-improved electric motor ready.

The Panamera's electric motor produces over 90bhp, but the next-gen unit will put out closer to 130bhp, as well as 300lb ft of torque from a standing start. Given that the Panamera S E-Hybrid can, on electric power alone, accelerate to 30mph in

5.1sec and cruise at 84mph, this bodes well for future models. The next-generation system, as used in the 918, features both water and air cooling to help enhance its performance while minimising weight gains.

Weight is still an issue for electric propulsion, though, and it'll play a bigger part in the smaller models this hybrid technology could reach. Porsche engineers admit that in the short-term it'll be difficult to reduce the weight of electric motors or batteries while maintaining performance and range targets, so the wiring harness and other car

components are being scrutinised for savings instead. The distribution of that weight is just as important; the 918 Spyder was designed around its powertrain, but that may not be possible with other models as conventional engines will remain the bigger sellers for some time yet.

Porsche also used the introduction of the hybrid Panamera to present its new measure of efficiency: engine revolutions per kilometre. In effect, the fewer revs needed at any given moment, the better. That admittedly doesn't sound like a recipe for **evo** cars, but Porsche is keen to stress that this

development should not come at the expense of emotion or performance.

Plug-in hybrid technology significantly reduces the engine revolutions per kilometre quotient, but the next step holds a glimmer of hope for driving thrill-seekers. Porsche intends to use GPS data, including the radius of bends and the elevation of hills, to help cars automatically choose the most efficient driving mode. This data isn't likely to reach the mass market for four years, but there's no reason why this information couldn't also be used to enhance the driving experience, too. **X**

**'WEIGHT IS STILL AN ISSUE FOR ELECTRIC PROPULSION, AND IT'LL PLAY A BIGGER PART IN SMALLER MODELS'**



**Left:** 918's green tech brings weight penalty. **Right:** E-Hybrid runs 328bhp 3-litre V6 and 90bhp electric motor







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\* Official fuel economy figures for the Porsche Panamera S E-Hybrid in mpg (l/100 km): Urban 0.0 (0), Extra Urban 38.2 (7.4), Combined 91.1 (3.1). CO<sub>2</sub> emissions: 71 g/km. The mpg and CO<sub>2</sub> figures quoted are sourced from official EU-regulated test results, are provided for comparability purposes and may not reflect your actual driving experience. Electric range is dependent on driving conditions. Power output and performance obtained in combined hybrid power train mode.



## News in brief



### BMW M5 facelift

Only the most eager headlight spotters will eye the visual tweaks on this updated M5, but a new Competition Package option is bigger news. It boosts the 4.4-litre V8 by 15bhp to 567bhp and adds stiffer, 10mm-lower suspension, a sports exhaust and quicker steering. It costs an extra £6700 and is also available on the M6.



### V6-engined Exige S goes topless

The fastest-ever Lotus convertible is the new Exige S Roadster, which loses the coupe's rear wing and front splitter but gains a soft-top. The supercharged 3.5-litre V6 supplies its usual 345bhp, though top speed drops 25mph to 145mph. It costs £52,900, the same as the coupe. We drive it next month.



### New 370Z Nismo

Nissan's latest 370Z Nismo has an extra 13bhp over the regular 370Z – taking the total to 339bhp – plus sharper suspension, stronger brakes, a sports exhaust and a body kit. It costs £36,995. The regular Zed also gets an update, with a fresh look and a £26,995 price that puts it up against the GT86/BRZ, but with 129bhp more...



# More thunder from Down Under

VXR8 gets upgrade to an M5-beating 576bhp **Words:** Stephen Dobie

**M** MEET THE MOST powerful Australian car ever. With a new generation of HSV-tuned Holden Commodores comes a new Vauxhall VXR8, and it packs gob-smacking power – with 576bhp and 545lb ft, it beats the Audi RS6 and BMW M5, and is just 1bhp shy of the Mercedes E63 AMG S.

Its 6.2-litre V8 engine is a new 'LSA' block, with a supercharger endowing it with an additional 150bhp and 139lb ft of torque over the outgoing VXR8. Power is delivered to the rear wheels via a standard six-speed manual gearbox – something those Germans can't offer – while an auto is optional. The car is expected to weigh around the same as the 1831kg VXR8 GTS it replaces, and should snare a 0-60mph time of around 4.5sec, while top speed is likely to stay limited at 155mph.

Among the more sophisticated equipment is stability control-based torque vectoring, launch control and an upgraded magnetic ride control system, which is now standard-fit and includes Touring, Sport and Track modes. Also standard is a gamut of luxury tech including blind-spot alert, self-parking and a head-up display.

It's more of a heavy facelift than an all-new car, though, with the

same platform at heart but revised componentry, including larger brakes with six-piston calipers. The styling has been wound a bit further round the 'unsuitable' dial too, some of this apparently dictated by the new engine, which requires 75 per cent more cooling, hence the bolder grilles.

Vauxhall boasts that the new VXR8 is just £5000 pricier than the less muscular and lowlier-equipped car it replaces, and that it's the cheapest way to pass 500bhp. (It's nearly £30k less than that 577bhp E63.) But this is still a £55k Vauxhall and a

far cry from the first rebadged Holden, the Monaro of 2004, which had 329bhp and cost £28,650, so expectations for UK demand are suitably modest. While the outgoing VXR8 averaged around 100 sales annually, forecasts for its replacement are pegged at 20-30 cars. Pickup and estate versions will arrive further down the line. **X**



**Above:** huge front grilles help cool 576bhp 6.2-litre V8. **Below:** interior gets more tech than old model







**Right:** bare shell with roll-cage installed.  
**Above and below:** Brembo braking system and Öhlins dampers will be fitted



## Bentley racer gets V8 power

Continental GT3 shuns W12 in favour of smaller 4-litre twin-turbo powerplant – but debut race appearance remains unconfirmed **Words:** Jethro Bovingdon

**B**ENTLEY'S NEW Continental GT3 race car will run a V8 engine, as predicted by *evo* – but six months after the project was first made public, the Crewe marque still hasn't confirmed when the M-Sport-prepared racer will hit the track.

When Bentley chose rally specialist M-Sport as technical partner last December to help develop its Continental GT3 racer, eyebrows were raised. Sure, M-Sport's trophy cabinet groans under the vast weight of silverware, but it was all won on craggy, tree-lined rally stages. Could it really replicate that success on well-groomed race circuits?

I'd asked myself the very same question several times and was still pondering it on the long drive up to M-Sport's base in Cumbria. Then I arrived and the almost F1-level set-up of the company's Dovenby Hall base dispelled my fears. A former psychiatric hospital near Cockermouth, Dovenby's old manor house remains, but behind it sits a huge, state-of-the-art development and manufacturing facility. For example, M-Sport has its own engine dynos (including one with hydraulic rams that can be programmed to replicate different stages and climates) and its own CNC manufacturing capabilities.

We're at M-Sport to meet the men

behind the Continental GT3 and to see how the project is progressing. Judging by the look on the face of Brian Gush, Bentley's director of chassis, powertrain and motorsport, the answer is 'not fast enough'. However, Gush remains bullish. 'It's going to be tight, but it was always going to be tight,' he says with a grin. 'I'm confident in the team at Crewe, and M-Sport know what they're doing.'

He's right. The M-Sport crew, led by technical director Christian Loriaux (whose former projects have included Richard Burns' title-winning Subaru Impreza, the original Focus WRC machine and the latest Fiesta WRC) is more relaxed. 'It'll be ready – this is what it's always like,' says the Belgian. 'We know when every single component will arrive and there's a bit of room if a supplier lets us down.'

The big question, though, is ready for what? Bentley still insists it will race this year, but hasn't said when.

As we're ushered in to see the GT3, the firm does reveal that, as we predicted in *evo* 180, the car will be powered by Bentley's 4-litre twin-turbo V8 instead of the W12 of the concept. It's been moved right back in the engine bay and will drive through a six-speed Xtrac 'box. There's also a Brembo braking system and Öhlins dampers.

Alongside Loriaux is race car designer and engineer Graham Humphrys, who was hired by Bentley last year to conduct a feasibility study into transforming the GT3 into a race car. Now his team is embedded into

M-Sport and working hard to pull the pieces of the puzzle together. Humphrys has pedigree – he designed the Le Mans-winning BMW LMR V12 – and although he initially had reservations about the Conti, they quickly vanished. 'I wasn't sure if this would even be possible,' he explains. 'But the further we looked in the GT3 regulations, the more convinced I was that we could build something to fit the rules. And to be a potential winner.'

With Loriaux and Humphrys involved, the GT3 class looks set to get another competitive entrant.

**'BENTLEY STILL HASN'T ANNOUNCED WHEN THE CAR WILL MAKE ITS DEBUT, BUT INSISTS IT WILL RACE THIS YEAR'**



**Left (from left to right):** *evo*'s Jethro Bovingdon, Bentley's Brian Gush and M-Sport's Christian Loriaux.  
**Above:** Bentley's Graham Humphrys





***LET THERE BE LIGHT...***

CRÉATIVE TECHNOLOGIE







# 5

## REASONS TO GET EXCITED ABOUT LE MANS

With a titanic fight for overall victory likely, a galaxy of ex-F1 stars and some new marques on the block, the 2013 24 Hours is set to be a classic **Words:** Stephen Dobie

### 1 Porsche's 911 RSR debuts

Porsche returns to Le Mans proper in 2014, fighting for outright honours with an LMP1 sports prototype rumoured to have 'Webber' among the names stuck to its sides. Two factory 911s will also race, both of them RSR versions of the latest 911-generation car, each packing a 454bhp 4-litre flat-six engine and a six-speed paddle-shift sequential gearbox. To celebrate the company's half-century, the two 911s will be branded in the 50th-birthday livery you can see here.

And there's some stocky talent to help the new RSR's bite match its bark on June 22-23, with a previous overall Le Mans victor in each car. Timo Bernhard and Romain Dumas will be giving cars 91 and 92 a healthy chance of GTE class honours in an extremely tough category (see right).

There are five privateer RSRs to keep tabs on, too. Car 77 features Patrick Dempsey – of *Grey's Anatomy* fame – on the driving roster, in a team he jointly owns with Italian football legend Alessandro del Piero.

### 2 Caterham v Alpine

The headline road car partners of 2016 go head-to-head at Le Mans this year, as their PR machines are wound up to full power. Both will compete in the LMP2 class using Nissan engines.

The Alpine (pictured) is run by the Signatech team and driven by an

all-French line-up, while the Caterham livery is applied to a Zytek-Nissan, with British sportscar specialist Tom Kimber-Smith among its three pilots.

The Alpine A450 has some history to live up to, the French firm having won Le Mans in 1978. Caterham's debut appearance is less billboard, a team of its engineers joining British outfit Greaves Motorsport.



### 3 LM GTE Pro class

For the fair-weather motorsport fan who dodges the *gendarmierie* on the way to la Sarthe and soaks up the beer during race weekend rather than poring over 'Balance of Performance' sheets, what's more exciting: a bunch of spaceship-like hybrids, or the cars you can actually see on the road, but boosted by thundering exhausts and huge rear wings?

GTE Pro boasts the best soundtracks and, as detailed in point four, potentially the best battles. Viper, 'Vette, Vantage, 458 and 911 are the key nameplates, and with a mixture of talent levels on display (split into Pro and Amateur classes), GTE catalyses the most vivid daydreams of piling through Dunlop Curves during a blindingly sunny daybreak.



### 4 Spot the ex-F1 driver

This year there are 18 drivers with a 'Formula 1' section on their CV, eight of them in the front-running Audis and Toyotas. But it's further down the field, in the GTE Pro cars, where drama should await. Bruno Senna (pictured) and Kamui Kobayashi showed promise in recent F1 seasons without fully delivering. Now it's time to shine.



### 5 Jann Mardenborough

The second Greaves Motorsport Zytek will be Nissan-branded and driven by a couple of relative amateurs. Little over two years ago, Jann Mardenborough was a Cardiff kid playing *Gran Turismo* in his bedroom (see *evo* 177). Now he's driving an LMP2 car in the world's most famous endurance race thanks to the unconventional GT Academy programme. He's joined by fellow Academy winner Lucas Ordoñez and ex-Audi works driver Michael Krumm.



### Will Audi win again?

You want us to scream 'No! Audi's dropped the ball!' don't you? Alas, in the first two rounds of the World Endurance Championship, at Silverstone and Spa, Audi

finished one-two, with Toyota hanging on to its coat-tails.

But Toyota has yet to play its full hand: it fielded 2012-spec cars at Silverstone, and just one 2013

version at Spa, which led before retiring with drivetrain problems. So Toyota has a chance, but fielding two cars to Audi's three may work against it.





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Official Government Fuel Consumption Figures (litres per 100km/mpg) and CO<sub>2</sub> Emissions (g/km). Highest: DS3 Cabrio THP 155 6-speed manual: Urban 8.0/35.3, Extra Urban 4.8/58.9, Combined 5.9/47.9, 137 CO<sub>2</sub>. Lowest: DS3 Cabrio VTi 82 manual: Urban 5.8/48.7, Extra Urban 4.3/65.7, Combined 4.9/57.6, 112 CO<sub>2</sub>.



Every new *evo* car that matters, rated  
***This month***

**BENTLEY FLYING SPUR**

Mighty 616bhp superlimo gets major upgrade

p32



**MERCEDES A45 AMG**

First-ever Stuttgart hot hatch arrives in the UK

p36



**MASERATI GRANCABRIO MC**

Stylish V8 convertible is upgraded to 454bhp

p40



**PORSCHE CAYENNE S DIESEL**

V8 oil-burner with colossal 627lb ft of torque

p45



**JAGUAR F-TYPE V6**

Entry-level version of new Brit roadster

p47



**LEXUS IS300h**

Redesigned Japanese saloon goes hybrid

p48



**AUDI TT RS PLUS**

Five-pot engine is boosted to 355bhp in hottest TT yet

p50



**BAMFORD ROSE V8 VANTAGE S**

Ex-Aston Martin engineers upgrade venerable coupe

p52



**STANDARD HEROES**

The best cars you can buy in basic specifications

p55



***The test team***

*evo*'s road testers have driven the world's greatest cars, but they're all proud of their roots. This month, the team reveals the best British cars they've ever tested:



**HARRY METCALFE**  
Editorial director

'The 750bhp Aston One-77. As stunning to look at as it was challenging to drive. I loved everything about it.'



**NICK TROTT**  
Editor

'McLaren F1 just pips One-77. Both V12s, extreme, carbon and hugely significant. Sounds like a great twin test...'



**MIKE DUFF**  
Motoring editor

'In terms of pure smiles per mile I'd say Caterham R500. The grenade-spec one. That or a Land Rover Defender.'



**HENRY CATCHPOLE**  
Features editor

'It doesn't get more British than an ex-Mike Hawthorn Jaguar D-type. From the modern pantheon, a Lotus 340R.'



**JETHRO BOVINGDON**  
Contributing editor

'My Caterham Academy car. Never had so much fun – wins, spins, wheel-to-wheel action and some great road drives.'



**RICHARD MEADEN**  
Contributing editor

'The Noble M600. Ballistic, brilliantly sorted and totally analogue. Hard to think of a more exciting British car.'



**DAVID VIVIAN**  
Contributing road tester

'Nic Mann's 550bhp turbocharged and nitrous V8 Morris Minor. It did 0-100mph in 6.9sec at Millbrook and ate F40s alive.'

**Driven**

Test location: Beijing, China GPS: 39.91403, 116.40752

***Bentley  
Flying Spur***

Eight years after the release of the initial version, the second-gen Flying Spur marks an extra step up in luxury. But has it retained dynamic appeal?





**Y**OU KNOW YOU'VE BEEN in this game for a while when you attend the launch of a new model that replaces a car you also went to the launch of. So it is for me here with Bentley's new Flying Spur.

I wasn't much more than a fresh-faced youth when I drove the original back in 2005 (*evo* 080), and yes, the intervening years have been kinder to the Spur than they have to me. But

not for the reasons that Bentley imagined back when it told us it had created a new bit of the market, in the then-virgin territory between a top-spec Merc S600 and a Rolls-Royce Phantom or Bentley Arnage. My notes tell me that the plan was to build 3500 Flying Spurs a year. It didn't even get close; indeed, it's taken eight years to sell 5500. And if it hadn't been for the developing markets of the Far East, where the affluent prefer to be driven rather than drive

themselves, the Flying Spur would probably have been quietly axed a few years back. But as China got richer and demand for luxury cars took off, so it found its niche: 1100 were sold there last year, versus just 125 in Britain.

Which is presumably why Bentley went to the considerable trouble and expense of shipping a batch of the new Spurs from the UK to China, and then flying a load of scuzzy journos there to drive them. Because this is the future of the





**Above:** Duff finds the Flying Spur feels all of its size on the country roads of northern China. **Below left:** glassfibre bootlid offers weight saving. **Below right:** 21in wheels are an option



## Specification

<b>Engine</b>	W12, 5998cc, twin-turbo
<b>CO2</b>	343g/km
<b>Power</b>	616bhp @ 6000rpm
<b>Torque</b>	590lb ft @ 2000rpm
<b>0-62mph</b>	4.6sec (claimed)
<b>Top speed</b>	200mph (claimed)
<b>Basic price</b>	£140,900



luxury car market: the second Flying Spur is a car very much designed around Chinese tastes.

Although every bit of the exterior bodywork you look at is different, the new Spur is a very heavy facelift rather than an all-new car. It sits on the same floorpan as its predecessor, a slightly stretched version of the one that underpins the Continental GT coupe, and it's powered by a version of the familiar and venerable twin-turbocharged 6-litre W12. But the redesign has been near-total, with the new Spur getting a far more purposeful back end than the original's generic Conti-with-a-boot look, and far more muscle to the rear haunches. Bentley execs acknowledge that the visual changes made to the Continental last year didn't go far enough, hence the sweeping visual makeover given to the Spur. There have also been some material changes, including a glassfibre reinforced plastic bootlid, but the new Spur still weighs in at a hefty 2475kg.

The cabin has been freshened up, too, with the most obvious change being the arrival of

the new dashboard given to the Continental last year. This features a bigger (and better) central display screen, with separate heating and ventilation controls in place of the old touchscreen interface. As before, every surface not covered in wood is swathed in leather.

The original Spur felt short on rear-seat toys considering its likely role transporting bored plutocrats, and that lesson has been learned. Now there's an optional rear-seat entertainment package with screens on the backs of the front seats and more loudspeakers than a multiplex. The audio, video and climate can all be controlled by a neat wireless touchscreen device that looks like an iPad mini, or you can use an app on a paired iOS or Android device.

So it's stylish and clever, but dynamically the Spur's priorities have clearly shifted. It's been softened off considerably compared to the original, a tacit admission that buyers are looking for comfort first. The major suspension components are all carried over, with twin wishbones at the front, a multi-link

arrangement at the back and air springs on all four corners. Spring rates, anti-roll bars and bushes are all softer, by 25 per cent in the case of the latter. Adaptive dampers are fitted as standard, and these have a greater range of adjustment than before and are quicker to react. The Spur also sticks with proper, old-fashioned hydraulic power steering – a rarity these days.

Under the bonnet, the W12 engine is pretty much unchanged. Power has been boosted to the levels of the new Conti GT, meaning 616bhp accompanied by an equally immense 590lb ft of torque. Drive is delivered to all four wheels via the Conti's new eight-speed automatic transmission. For a measure of the Spur's sheer disdain for the laws of classical physics, consider just two statistics: this two-and-a-half-ton barge can blast its way from rest to 100mph in just 9.5sec, on its way to a claimed 200mph top speed. And bear in mind that even quicker versions will follow. Retuning the engine has given a marginal improvement to fuel economy, too – although the combined 19.2mpg is worse





**Above:** with its twin-turbo 6-litre W12 engine now producing 616bhp and 590lb ft – increases of 64bhp and 111lb ft on the old car's – the second-gen Flying Spur can reach 62mph in 4.6sec

than the Rolls-Royce Ghost manages. But then, when it comes to fuelling a Bentley, if you need to ask, you definitely can't afford it.

On the road (initially the traffic-clogged streets of Beijing) the new Spur feels reassuringly familiar. The W12 engine remains the car's defining feature, with effortless urge throughout the rev range. Yes, the new transmission changes gear a bit more often, but at everyday speeds you're hard-pressed to notice any substantive difference. The ride is definitely softer, with Beijing's enthusiasm for traffic calming giving it the chance to pillow away speed bumps with deferential compliance.

We've been warned about Chinese driving before we set off, and it's fair to say that the local drivers don't have much lane discipline. The highway that takes us north is a merry dance of overtaking and undertaking, with the need to make it through narrowing gaps – or to avoid the odd overloaded truck trundling at 50kph in the outside lane – giving engine and brakes a workout.

The performance is towering, but the W12 doesn't sound any better than before. The new Spur gets a super-snug underbody acoustic shield to reduce wind and road noise, and this works extremely well – at cruising speeds the loudest noise in the cabin is the blower fan. But the relative silence also illustrates the W12's lack of aural character, with merely a breathless shuffling noise at speed, plus noticeable induction roar on full throttle. The 4-litre V8 that's just been introduced in the Continental sounds better and pulls nearly as hard, but it

## 'It's stylish and clever, but dynamically the Spur's priorities have clearly shifted'

won't be in the Spur until at least next year.

One big surprise is that China offers some great driving roads. Within a couple of hours of downtown Beijing we're on what feel like quiet Alpine passes, with decent tarmac and a variety of challenging corners. The Spur copes better than you might expect given the chassis has been softened; the air springs handle the rough stuff well, despite our test car riding on the optional 21in wheels instead of the standard 19s, but even in their softest setting the adaptive dampers keep the body in reasonable check. The Spur leans a fair bit when cornering hard, but doesn't feel any less precise than the old car.

It doesn't feel any sharper, either. The steering is low-g geared, with a slight dead spot around the straight-ahead – doubtless to aid stability when

you sneeze at 200mph. Feedback is muted and distant, and although grip levels are high, it's always the front that starts to slip first. Lifting off slightly brings everything back into line, but there's no hint of throttle steerability, despite the prodigious output. It's composed, safe and sensible, and you can drive it down a tight, twisty road at an impressive pace. But it's fair to say the Spur is never one of those cars that shrinks around you. It's a shame that previous Bentley boss Wolfgang Dürheimer's plans to reintroduce some two-wheel-drive models fell by the wayside: a rear-driven Flying Spur would be a supreme hooligan.

The new 'box seems to work best when left to its own devices. There's more than enough torque for whichever ratio 'Drive' selects, and kickdowns are delivered rapidly and accurately. But when you take control and try to request gears through the paddles behind the steering wheel there's an irritating half-second delay, and the gearbox's brain can also get confused by requests for multiple downshifts. Full credit to the brakes, though – the vast 405mm front, 335mm rear discs shrug off a pasting.

The original Flying Spur was an impressive piece of engineering, but never really an **evo** car. The new one is more impressive in almost every regard, but has moved further away from the qualities we value. It certainly works extremely well in China, but its appeal here will always be limited by the fact that it's a saloon in a part of the market that prefers coupes, cabrios and increasingly SUVs. Now there's an idea... ❌

**Mike Duff**

### Verdict

- ✚ Handsome looks, great tech overhaul
  - ✚ Feels big and heavy, engine sounds dull
- evo rating:** ★★★★★



 **Test location:** B660, Cambridgeshire, UK **GPS:** 52.25139, -0.42469

# Mercedes-Benz A45 AMG

Stuttgart's first-ever hot hatch has well and truly broken the AMG mould. But does it offer serious opposition to the class benchmark, BMW's M135i?

**P**ICTURE AN AMG IN YOUR mind and I'll bet the image you conjure is a big saloon with a thundering V8, wheels spinning furiously and acrid smoke billowing from its rear wheelarches. And you love them for it. No petrolhead couldn't love a performance division so devoted to such un-PC endeavours as bent-eight engines, burnouts and oversteer, so to call this new A45 AMG a radical departure from the AMG formula is something of an understatement.

It's a transverse-engined hatchback that directs its power to the front wheels by default and then sends up to 50 per cent of its torque to the rear axle when necessary. Furthermore, its engine is a 2-litre in-line four with a single twin-scroll turbocharger – the very epitome of a modern, downsized power unit. This AMG even does 40.9mpg.

Perhaps that's why the press kit talks ad nauseam about 'fascinating AMG DNA' and the car's close relationship to the SLS AMG in terms of gearbox tuning and engine cooling. Certainly there are plenty of signs that this new super-A-class might just be a real hoot, a serious little weapon and a properly naughty AMG. For example, that 2-litre engine is hand-built by one man, just like the 6.2-litre V8 in an SLS Black Series or the 5.5-litre twin-turbo V8 in an E63. It produces an astonishing 355bhp at 6000rpm and 332lb ft from 2250 to 5000rpm, and drives through the seven-speed AMG Speedshift dual-clutch gearbox. With the help of a launch control system dubbed 'Race Start',

## Specification

<b>Engine</b>	In-line 4-cyl, 1991cc, turbo
<b>CO2</b>	161g/km
<b>Power</b>	355bhp @ 6000rpm
<b>Torque</b>	332lb ft @ 2250-5000rpm
<b>0-62mph</b>	4.6sec (claimed)
<b>Top speed</b>	155mph (limited)
<b>Basic price</b>	£37,845

the A45 scrabbles to 62mph in 4.6sec, despite a chunky kerb weight of 1555kg, some 160kg more than an Audi S3. And if you're prepared to pay £1940 for the AMG Driver's Package, it'll hurtle all the way to 168mph before the electronic limiter cuts in. That's a whole heap of performance even when you take its £37,845 asking price into account.

The engine's 178.3bhp-per-litre specific output suggests a wild fairground-ride delivery and hence edgy dynamics, but when you climb into the A45 the overwhelming sense is of a car of deep polish. The hard-backed sports seats, with red detailing and cut outs for harnesses, are really firm but give you an immediate tingle of excitement. The steering wheel is relatively big but the Alcantara grips feel delicious, and the carbon-effect leather dash, the red-ringed air vents, the inner rings of carbonfibre set into the speedo and rev counter dials and the tablet-style satnav unit are all executed beautifully. The environment is high on quality and even higher on feel-good factor.

Then you start the engine and it booms





'To call this new A45 AMG a radical departure  
from the AMG formula is something of an  
understatement'





**Right:** carbonfibre and red details help make the A45 feel like more than a £38k car. **Below:** sports seats have cut-outs for racing harnesses. **Far right:** pictured wheels are optional 19-inch items, but 18s are standard



into life and settles into an oddly flat idle that could only be a four-cylinder engine droning through large-diameter exhaust pipes. It's ugly but somehow exciting and unapologetically workmanlike. You just know it's ready to deliver a big brawny punch to your kidneys.

They won't be the only organs that might get bruised by the A45, however, because the ride is seriously stiff, jiggling and jolting at low speeds so badly that even a Renaultsport Mégane Cup owner would balk at the discomfort. Incredibly, there's an AMG Performance suspension option that we presume is even stiffer. Needless to say, don't take it.

But if the bucking ride quality is initially off-putting, the drivetrain is anything but. The twin-scroll turbocharger ensures that the engine isn't particularly laggy and there's real fun to be had extending it beyond the richly torquey mid-range, for it seems to gain renewed energy over 5000rpm, and howls to 6500rpm with the ferocity you'd expect from 355bhp. Even better is the ignition cut that

causes a mighty *crack!* every time you hit the upshift paddle, and the pops and bangs that spew from the exhaust as you slow down. In terms of sheer sense of occasion and a wicked sense of humour, the Mercedes has that other rival, the M135i, beaten hands-down. It feels like an AMG, on the surface at least...

As you dig a little deeper, though, some frustrations start to creep in. Funnily enough, many of them are shared with other AMG products and centre on the seven-speed dual-clutch gearbox. Upshifts are great: fast and punchy and with that gratifying soundtrack. Yet the gearbox is reluctant to allow you to change down on the way into corners, even when you'd land plum back in the best part of the rev range. The A45 has the torque to pull you out of most turns a gear higher than you'd imagine, but it's still intensely frustrating when you want to use its full fury and have to ask twice for a lower ratio.

In more mundane situations, the Comfort mode for the gearbox is just incredibly lazy

and must help account for that extraordinary economy figure. And in common with many VW Group cars with similar gearboxes, there's an annoying delay when you want to pull out at roundabouts and junctions. However, Sport mode is better and doesn't seem quite as aggressive as it does on more lowly A-class models, allowing you to drive smoothly around town but then upping its game as you start to drive more freely, punching in timely up-and-downshifts.

Like the gearbox, the ESP system is a three-stage affair – On, AMG Sport and Off. The A45 also features ESP Curve Dynamic Assist, which acts as a kind of torque-vectoring system, braking the inside wheels even when you decide to drive without electronically enforced limits. Should you touch the brakes mid-corner, ESP will re-activate as it assumes you're panicking and/or out of control. As I discover, this is highly unlikely because the A45's Hallex 4matic system offers superb traction, excellent stability and (disappointingly if you like your





**'In terms of sheer sense of occasion and a wicked sense of humour, the Mercedes has the M135i beaten hands-down'**

AMGs to have a hooligan streak) little in the way of adjustability.

At speed, the ride smoothes out probably just enough to be acceptable, but sharp dips still send the car bouncing around slightly alarmingly, although body control is pretty good and only over big crests do you sense the weight of the car getting out of phase with the suspension. The balance is predominantly mild understeer even when you select AMG Sport, which in theory makes the four-wheel-drive system keener to send power rearwards. In low- and medium-speed corners you won't notice, and it feels like a front-driver with strong traction but without the sense of agility of the best. It's more exciting through quicker turns, where you can feel the tail start to come into play.

Of course, it'd make sense to trade some of the lower-speed stability with the higher-speed friskiness to make the A45 feel more accessible and more fun at sane velocities – perhaps it will shine brighter on track. Certainly the brakes

feel strong enough to cope, even if the pedal is set very high in comparison to the throttle.

Our time with the A45 AMG was limited and we're keen to drive it for longer, on more varied roads and with some key rivals on hand. However, there's no doubt it's got some real AMG attitude, especially in its drivetrain. Yet there's also no doubt that it lacks some of the expressiveness so beloved of AMGs, while the slightly heavy, mute steering and the often sterile balance don't appear to capture the same spirit of indulgence and excitement as the £7500 cheaper but admittedly less special-feeling BMW M135i. To be continued... ❌

**Jethro Bovingdon** (@JethroBovingdon)

### Verdict

- ⊕ Strong performance, no-nonsense engine
  - ⊖ Gearbox response, ride quality
- evo rating:** ★★★★★





Test location: Mottarone, Italy GPS: 45.88265, 8.45638

## Maserati GranCabrio MC

The V8 convertible takes another step forward in performance, but is it enough to keep it ahead of the lighter, cheaper F-type?

**T**HE BEST CAR LAUNCHES need a few elements to come together: good roads, fine weather, scenic backdrops for the snappers and, of course, plenty of quality time behind the wheel. So the most welcome sight of all, if you've just landed somewhere offering all of the above, is your test car parked by the pavement outside the airport's exit doors and someone to drop the keys into your hand as you walk towards it. At least it is if it's a Maserati GranCabrio MC, the sun is shining and you're in Italy.

Cunning. Rather than have us rush headlong via a press conference into the big news of the launch – the V6-engined 'S' version of the new Quattroporte limo, featured in *evo* last month – the PR plan was transparently tummy-tickling. Instil a Maserati state of mind with the coolest

### Specification

Engine	V8, 4691cc
CO2	337g/km
Power	454bhp @ 7000rpm
Torque	383lb ft @ 4750rpm
0-62mph	4.9sec (claimed)
Top speed	179mph (claimed)
Basic price	£111,710

model in the range, now toting sexier bumpers and more power, and allow the mood to set over the course of a lazy afternoon in the hills. Did we feel good by the time we returned to the hotel in the evening? Yes, we did. The charm offensive worked, and maybe that's all you need to know. But seductive as the combo of cabrio charisma, clement climate and twirly roads

was, we did bring our notebooks along.

This 4.7-litre V8-engined GranCabrio MC is, believe it or not, the seventh iteration of the undeniably handsome GranTurismo coupe launched in 2007, the model generally regarded as a game-changer for Maserati. It also restores symmetry to the company's sports car line-up by adopting the more aggressive 'Maserati Corse' aesthetic trimmings, additional power and 'track-honed' bits and bobs of the top-tier GranTurismo MC Stradale coupe, itself a domesticated version of Maserati's Trofeo and GT4 racers. And, of course, it retains the regular GranCabrio's back seats. This would have made it the first MC-badged car capable of carrying four people, had it not been for the reintroduction of rear pews in the MC Stradale coupe after pressure from customers.

So now there are three GranCabrios to choose





from: the original 434bhp model launched in 2010 (now £98,000), the £104k, 444bhp Sport, and this, the MC, with 454bhp and a price tag of £111,710, which flies comfortably north of the £80k Jaguar wants for its recently launched F-type V8 S.

All right, the F doesn't have four seats, but it does have 488bhp and a comparatively trim 1665kg to push around. It doesn't seem to matter what Maserati does or how many 'race-developed' claims it bestows on its fastest cars, its power figures always lag behind the curve. Not that the MC isn't decently quick: the factory claims 0-62mph in 4.9sec and a top speed of 179mph. But I can't help thinking that if your best high-performance convertible weighs nearly two tonnes and you're not prepared to do anything about it, you'd want to give it at least 500bhp so it can be properly fast.

It's also a little hard to take seriously Maserati's assertion that the GranCabrio MC follows the harder-core lead of its coupe sibling when the only transmission available is a slick and silky six-speed ZF auto. The MC Stradale comes with a six-speed Cambiocorsa automated manual, which admittedly can be a little clunky around town, but it's plenty fast and furious when it needs to be and goes a long way towards defining the performance personality of the car. We had a Stradale for company up in the hills, so it was possible to deduce that its shift was definitely the more exciting one.

We also did quite a lot of appreciative staring. These are still very good looking cars and although Maserati appears to have taken a Halloween pumpkin scooper to the nose, the result is certainly racier. Of the two shapes, I think the soft top edges it for elegance, though

the Stradale, with its optional carbon bonnet and rear spoiler (also available on the Cabrio), looks a bit harder. The 'MC' identifiers comprise a blade-like front splitter, bi-xenon headlights with daylight running LEDs, bonnet louvres, a refashioned rear bumper and lightweight 20in alloys. Apart from improved aero, the MC's nose and tail jobs add 48mm to the GranCabrio's already ample length. Inside there are fab new torso-hugging leather and Alcantara seats and a whole range of punchy trim options, including carbonfibre (depending on your love of the grey weave, either cool or OTT if you've also optioned the carbon bonnet and rear spoiler).

From a respectable distance the quotient of eye candy seems barely diminished. Up close and personal, however, the picture isn't quite so enticing. In a nutshell, with two years still to go before a major overhaul, the GranCabrio



is showing its age. You see and feel it in the cumbersome steering wheel, the scattered switchgear, the compromised accommodation and the iffy quality in places. Ignoring the fascia's hard, Alcantara-wrapped plastic and its ergonomic foibles, it's possible as the driver to get comfy and low enough to feel secure and ready to rumble, but your rear-seat passengers won't be feeling the love as, even sitting virtually bolt upright, knee room is modest at best; but for the scooped-out backs of the front seats, it'd be a challenge. The bracing bars in the boot, necessary to beef up the bodyshell's rigidity, take up what could be a few extra inches of interior. Rear headroom is pretty tight if you put the roof up, and the motorised folding mechanism takes a fair old while by the latest standards.

There is better news. Suspension damping duties shift from adaptive to well-calibrated single-rate passive, further sharpening the sporting focus, and while the power hike over the GranCabrio Sport might be modest, it's massaged by a louder, ruder sports exhaust. The V8's sonic repertoire is endlessly enjoyable and goes all the way from a woofling whisper to a belligerent bellow with varied ballistic stylings on the overrun.

If maximum-attack acceleration doesn't quite peel the moisture from your eyeballs, the MC does feel effortlessly rapid, the swift and slick ministration of the ZF auto making the most of the big, naturally aspirated V8's broad powerband and healthy appetite for revs. Moreover, paddle response is alert enough to make the faster-shifting Sport mode a realistic

**Right:** cabin materials and ergonomics are starting to feel dated.

**Below:** 4.7-litre V8 produces 454bhp, but has to propel 1973kg.

**Bottom:** GranCabrio looks great top down, but rear headroom is compromised roof up



and rewarding alternative to letting the auto do its own, largely empathetic thing.

So the GranCabrio MC does sound and fury in some style, with only mild buffeting in the cabin at speed, but motor up the hood, switch out of Sport mode, hit the autostrada and everything calms down to a genuinely relaxing degree, with only the faintest rustle of wind noise from the fabric top. You can really pack away the miles in this car.

And those twisty hillside roads? The MC's body control, structural integrity and generally responsive dynamic demeanour may come as a pleasant surprise to anyone who's driven the original 2010 model with its fussy adaptive dampers and rather wobbly body. The MC feels much more sure of itself, with hardly any scuttle shake on broken surfaces, a firm yet supple ride that never lets the car's two-tonne bulk get the

better of it, a mildly nose-led balance that can be fine-tuned with the throttle, and all the grip you could reasonably wish for. The steel brakes have good pedal feel but were prone to slight fading after some heavy use during the run back downhill.

It may be showing a few grey hairs but, in the round, the GranCabrio MC's style, soundtrack, V8 push and general glamour are hard to resist. All in all, it's rather good. ✕

**David Vivian**

## Verdict

✚ Style, sound, well-sorted chassis

✚ Ergonomics, rear-seat space

**evo rating:** ★★★★★





# GTi IS BACK



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\*The V40 Challenge is only applicable on Volvo V40 D2 R-Design versus Mercedes A-Class A 180 CDI BlueEFFICIENCY Sport from 3rd June to 31st July 2013 and must be customer ordered from 3rd June to 31st July 2013 and UK registered by 30th September 2013. Any claim for the 1st month's payment is limited to a **maximum** payment of £299. Only applicable to private purchases, offer not available for business purchases. At participating UK Volvo dealers only. All claims must be made by 31st October 2013. For full terms & conditions go to [www.v40challenge.co.uk](http://www.v40challenge.co.uk)



# Porsche Cayenne S Diesel

Oil-burning V8 in new 'S' model delivers huge torque and mighty acceleration

Photography: Dean Smith



**T**WO NUMBERS STRIKE you from the spec for the Porsche Cayenne S Diesel. The first is 627 – its peak torque figure in lb ft. The second is the price: £59,053. That works out at just £94 per lb ft. Excluding the Veyron and Huayra, only four cars on sale today deliver more torque: the twin-turbo V12 Mercedes CL, S and SL trio, and the mighty Bentley Mulsanne. The Mercs will cost you around £165k apiece, the Bentley £225k.

Of course, there's a reason for all the Porsche's torque – its 2195kg kerb weight. This means the 377bhp twin-turbocharged 4.1-litre V8 engine needs all of its 627lb ft for this Cayenne to deliver on the sporty promise of its 'S' badge. And to a certain degree, it does: the S Diesel is well balanced, fast and pleasant to hustle.

The engine is smooth and responsive, and the eight-speed automatic 'box ensures you're always surfing the fattest part of the torque curve (2000-2750rpm). Control the gears yourself and you experience a muted but growly V8 throb – enjoyable and very undiesel-like. The S Diesel is frighteningly quick off the line (0-62mph in 5.7sec) and explosive in its mid-range urge (50-75mph in 3.8sec). The in-gear pace and elevated driving position make it a great overtaker, and its width makes it a top blocker too...

But while Porsche claims 34mpg combined, we struggled to exceed 26mpg. Fill the 100-litre tank from empty and you'll spend about £134 and be able to cover around 570 miles – well above the range of a comparable V8 petrol Cayenne.

## Specification

Engine	V8, 4134cc, turbodiesel
CO2	218g/km
Power	377bhp @ 3750rpm
Torque	627lb ft @ 2000-2750rpm
0-62mph	5.7sec (claimed)
Top speed	156mph (claimed)
Basic price	£59,053

The four-wheel-drive system and colossal 21in wheels and tyres offer obscene grip, and while Porsche would have you believe the car has rear-wheel-drive characteristics, it doesn't. However, the S Diesel is neutral and composed when cornering and the optional PTV Plus torque vectoring increases its overall agility.

The optional self-levelling PASM active suspension, as fitted to our test car, rewrites the laws of physics and contains the Cayenne's weight remarkably well. The wheel control and damping are excellent, and you rarely tinker with the three modes. Sport is fine on smooth roads, but too harsh on most surfaces, Comfort provides a wafty, decoupled ride, while Normal is the best compromise, even for sporty driving.

Being a Porsche, the control weights are fine and measured, and while the steering can't offer genuine feel, it is at least accurate and linear. Likewise, brake and throttle response are great, but then Porsche is a master in this area.

The S Diesel's performance is mighty, as is its comfort and build quality, but you rarely feel



**Above:** 4.1-litre turbodiesel packs 377bhp and 627lb ft

inclined to indulge the car's dynamic side, aside from the odd overtaking squirt. Not only that, but the 'sporting features' (21in wheels, PASM, PTV Plus) add £6430, while Bluetooth, the latest Porsche infotainment system, iPod connectivity and DAB require a further £3242. Add metallic paint and a full leather interior and you're looking at a £70k car – the same as a Cayenne GTS with a few key options and standard 20in wheels.

So the S Diesel is a niche car. It offers GTS pace (if not handling acuity) but with more favourable residuals and lower running costs. But it's a car you buy with your head and not your heart: the true drivers' SUV remains the V8 petrol GTS. ✕

**Nick Trott** (@evoNickTrott)

## Verdict

- ⊕ Torque, range, all-round performance
  - ⊖ Price with options, GTS drives better
- evo rating:** ★★★★★





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SEAT recommends Castrol EDGE Professional



# Jaguar F-type V6



Test location: B526, Northamptonshire, UK GPS: 52.20171, -0.80200

The entry-level F-type comes in £9000 cheaper than the V6 S, but is it a worthy cut-price alternative?

Photography: Malcolm Griffiths

**J**UST AFTER MIDNIGHT, roof down, exhaust brrapping loudly in the chilly air on upshifts and then crackling on the overrun, the F-type is a good place to be. The interior is at its radiant best in the darkness, too; cool turquoise lights subtly accent the cabin and when you pull back the small lever to activate Dynamic mode, the dials burn red. Jaguar isn't the first to do this kind of adaptive luminescence, but it does it very well nonetheless.

I've been looking forward to driving an F-type again, and although this base V6 (without an S, but still with a supercharger) isn't quite the best of the bunch for reasons I'll get to in a moment, it's reassuring that our excitement for Jaguar's new sports car doesn't seem to be waning with a little more familiarity. Of course, it should seem special, because despite being the lowest rung on the F-type ladder, the V6 still comes in at a healthy £58,520. With £10k of options, this particular one is more than a basic V6 S, but after careful perusal I reckon the only really desirable options are heated seats (£350), the switchable active sports exhaust (£1630), 19in wheels (£1000), a wind deflector (£250) and keyless entry (£450), which adds up to £3680.

Specped-up as this car is, the V6 is initially only subtly different to the S to drive. Jaguar has piled most of the throttle response near the top of the pedal's travel, giving the car a very spritely feeling, and you only start to notice the 39bhp and 7lb ft deficits to the S when you start

## Specification

Engine	V6, 2995cc, supercharged
CO2	209g/km
Power	335bhp @ 6500rpm
Torque	332lb ft @ 3500-5000rpm
0-62mph	5.3sec (claimed)
Top speed	161mph (claimed)
Basic price	£58,520

to press on. If anything, the slight drop in pace is as much down to the lesser car's slightly taller final drive ratio, and the performance figures show that it's only 0.4sec slower to 62mph, with a time of 5.3sec, and the top speed is reduced by just 10mph to 161mph.

Dynamically it's a little softer in the corners. It feels quite nice to begin with as the steering is a touch calmer and the nose doesn't twitch into turns as quickly, but very soon you crave the added precision and sharpness that the more resilient adaptive dampers of the S give. Because the F-type feels like a car that you need to drive through corners on the throttle, you also notice the absence of any kind of limited-slip diff, as you're possessed of less control over the rear axle when it's doing the steering.

At first, I thought you didn't get paddles on a standard V6 (you do, they're just black rather than copper-coloured) so I tried shifting with the stick, and it was actually rather fun. With your left hand permanently flashing back and forth from lever to wheel, it highlights how



**Above:** basic F-type still more than capable of turning heads.  
**Left:** sequential shifter fun to use

often you swap ratios in the eight-speed 'box, but the lever is correctly orientated (forward to go down, back to go up) and responsive, so it's worth playing with if you get the chance.

As you've probably gathered, there is a lot to like about the standard F-type. Just opening the doors with the handles that slide out from flush to greet you (push them flush again to lock) is entertaining. But although it looks gorgeous and sounds great on a deserted road after midnight, even with the exhaust in its quiet setting, from a driving perspective it's definitely worth trying to find the extra money for the crisper, more involving S. ✖

Henry Catchpole (@HenryCatchpole)

## Verdict

✚ Beautiful, enjoyable, responsive

✚ Noticeably junior to the V6 S

evo rating: ★★★★★





Test location: Near Vienna, Austria GPS: 48.26856, 16.20026

## Lexus IS300h F-sport

Japanese 3-series rival returns, with sharp new looks and a hybrid powertrain

**L**EXUS HAS ALWAYS DONE things differently, and never more so than with the new, third-generation IS. Because while every other manufacturer struggles to produce diesels with ever-lower CO2 numbers, Lexus has decided to do away with compression ignition altogether. Instead it will offer a petrol-electric hybrid that's claimed to be able to match both the performance and economy of its oil-burning rivals.

The IS300h has both a 2.5-litre four-cylinder petrol engine and an electric motor. The engine features efficiency-improving Atkinson-cycle timing, produces 179bhp and 163lb ft of torque, and channels its drive through a constantly variable transmission (CVT). The 105kW (141bhp) electric motor augments this when required, and the combined total output is 220bhp – or 39bhp more than the similarly priced BMW 320d M Sport auto. CO2 emissions are just 109g/km for the 18in-wheeled F-sport tested here (99g/km for the entry-level SE on 16s) and the combined economy figure is a scarcely credible 60.1mpg (65.7 for the SE).

It looks great on paper, but it's far less good on the road. The CVT transmission is the big problem, slurring as if you're dragging the clutch, and setting the engine racing when asked to deliver acceleration. The gearbox does have a Sport mode with some 'virtual' ratios, which you can then choose between using either the gear selector or some flimsy-feeling paddles, but this is barely any better,

### Specification

<b>Engine</b>	In-line 4-cyl, 2494cc, plus 105kW electric motor
<b>CO2</b>	109g/km
<b>Power</b>	220bhp (combined) @ 6000rpm
<b>Torque</b>	163lb ft (petrol), 221lb ft (electric)
<b>0-62mph</b>	8.3sec (claimed)
<b>Top speed</b>	124mph (claimed)
<b>Basic price</b>	£33,495

the gearing sliding around as you throttle on or off. To add insult to injury, there's also an active sound system that creates a synthesised V6 noise that's tied to road speed rather than engine speed, so your ears and your backside are frequently telling you completely different things. Thankfully, you can turn it off.

The 300h's other problem is that it's just not very quick, despite the claim of instantaneous electrical boost. There's a noticeable lag between pressing the throttle and feeling a response as the CVT tweaks its ratios, and the leccy motor doesn't do enough to fill this gap. There can be few 220bhp automatics this bad at short-notice overtaking.

But behind the hybrid gubbins, there's a good car in here. The new IS was developed via extensive Nordschleife lappery, and it shows in the way the car drives, with a compliant ride and excellent damping. The steering is particularly good, despite the inevitable electrical assistance, with spot-on accuracy, linear responses and a nice weight. There's even



**Above:** F-sport gets 18in alloys and 'tuned' suspension

a decent measure of feedback, and although the 300h's front end always seems to run out of grip first, it feels agile and light on its feet.

You certainly get a huge amount of technology and standard kit for your money, but we'd be surprised if the 300h gets anywhere close to its official economy figures in real-world driving. We managed just 31mpg over a combination of an 80mph motorway cruise and traffic-filled country roads. You can thrash a 320d all day and it will still do 40mpg plus...

Fundamentally the new Lexus IS feels like a decent car, but it deserves a better powertrain than this. ✕

**Mike Duff**

### Verdict

- ⊕ Promising chassis
- ⊖ Lacklustre drivetrain
- evo rating:** ★★★★★





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Test location: B4026, Oxfordshire, UK GPS: 51.90959, -1.48802

## Audi TT RS Plus

Hottest TT gets 355bhp and higher top speed. 0-62mph in 4.1sec possible

Photography: Dean Smith

**D** **DRIVING THIS NEW 'PLUS'** version of the Audi TT RS is something of an eye-opener. The last time I drove an Audi with a five-pot engine in its nose and an RS badge on its rump was two years ago, when we pitched the then-new Audi RS3 against Nick Mason's Ferrari Enzo in the south of France (*evo* 156). The conclusion was as predictable as it was painful for the RS3, but I've got a feeling that this latest hot Audi might have fared rather better. Here's why.

Order your TT RS in Plus spec and the characterful, transversely mounted 2.5-litre five-cylinder engine gets an extra dollop of power, peaking at 355bhp (up 20bhp compared to the regular TT RS) and accompanied by a thumping 343lb ft of torque (up 11lb ft). The speed limiter is also raised from 155mph to 174. The extra power cuts 0.2sec from the 0-62mph dash, resulting in a time of 4.3sec for the six-speed manual car, or 4.1sec with the optional seven-speed S-tronic dual-clutch transmission, as fitted to our test car. That latter figure is even more impressive when you discover that second gear peaks at 59mph – if it stretched a few mph further, then I'm sure this TT would get to 62mph in three point something seconds, which is mightily impressive.

The Plus feels properly rapid on the road, all that power having just 1475kg to propel (25kg less in the manual car). Being four-wheel drive, traction is never an issue, either. The S-tronic 'box offers lightning-fast changes with a delicious *thrap* on upshifts when you're

### Specification

Engine	In-line 5-cyl, 2480cc, turbo
CO2	209g/km
Power	355bhp @ 5500-6700rpm
Torque	343lb ft @ 1650-5400rpm
0-62mph	4.3sec (claimed)
Top speed	174mph (limited)
Basic price	£49,245

gunning it. Add in the constantly warbling motor and this RS teases your aural senses like no other TT.

Our test car is also fitted with 'Audi Magnetic Ride' adaptive dampers (£970), which have two driver-selectable settings: Normal and Sport. However, the latter mode is so annoyingly firm that I soon find myself avoiding it altogether. Best to stick with Normal, where the ride quality is taut but just about bearable.

Less good is the steering. The electrically assisted set-up is horribly light when you set off, feeling completely at odds with the sporting pretence of this car. As you build up speed, the assistance reduces, but at no point do you get a real sense of what the front wheels are doing; the steering wheel is simply a device to guide the car down the road with, rather than something to glean information from.

Thankfully, this car grips so well, cornering speed is mainly governed by your conscience rather than front-end grip, making the TT RS searingly fast cross-country. Dig even deeper, though, and mild understeer is the eventual



outcome, with the chassis never really offering anything in the way of adjustability.

The TT RS Plus is a surprisingly likeable thing, mainly because of its shocking pace. The trouble comes when you consider what it has to compete with: at £49,245 basic, the Plus goes head to head with the talented new Porsche Cayman S (£48,783). The TT's problem is that – unlike the Cayman – no one perceives it as a £50k car, but then no one expects a TT to be this ridiculously rapid either, and that simple fact adds massively to its appeal. Think of the TT RS Plus as a junior Lamborghini Gallardo and you wouldn't be far wrong. Put that way, the £50k list price doesn't seem so bad, does it? ❌

Harry Metcalfe (@harrym\_evo)

### Verdict

- ⚡ Shockingly fast cross-country
  - 💰 Shockingly expensive for an Audi TT
- evo rating:** ★★★★★



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# Bamford Rose V8 Vantage S

Chassis and engine upgrades bring new life to ageing Aston Martin coupe



**I**

**IT'S 2011 AND YOU'VE HAD** a great year. You fancy treating yourself and as if by magic Aston Martin launches the Vantage S. OK, so £102,500 is a lot of money

but this is a special car, you reason. The day that you collect it from the factory at Gaydon you feel a trillion dollars. Come the summer of 2013 and the sparkle hasn't dimmed, but you fancy a change. Maybe a V12 Vantage. Everything is on track until the dealer offers you £60,000 for your 15,000-mile, two-year-old pride and joy. Suddenly a new V12 Vantage doesn't seem like quite such a good idea...

Step forward Bamford Rose. A group of former Aston senior engineers turned renegade, BR offers a range of upgrades to make your Vantage – V8 or V12 – feel all-new again. Today we're in a V8 Vantage S with nearly the full works: induction and exhaust system, 200-cell cats and electronic control of the active valves, reprogrammed engine management, a twin-plate clutch and lightweight flywheel to improve the paddle-shift gearbox, and adjustable Bilstein suspension replacing the usual fixed-rate set-up.

It takes seconds to realise the quality of the work here. The clutch/flywheel combo are superbly effective in speeding and smoothing the sometimes awkward changes of the Sportshift 'box, the more supple damper setting is genuinely soothing and it's actually quite nice to leave the exhaust valves shut and enjoy quiet progress (they open at 5500rpm to reduce back

## Specification

Engine	V8, 4735cc
CO2	299g/km
Power	461bhp @ 7450rpm
Torque	361lb ft @ 5450rpm
0-60mph	4.3sec (estimated)
Top speed	190mph (estimated)
Basic price	See text

pressure even in stealth mode). On the same dyno this S went from 420bhp and 346lb ft (against a claimed 430bhp and 361lb ft) to 461bhp and 361lb ft, and it certainly feels more muscular and more responsive, from idle to the rampant higher reaches of the rev range. The difference isn't vast but it's always noticeable and the throttle response seems sharper, too.

At full noise, this car is loud. A rich V8 burble escalates into a shattering, almost scarily hard-edged howl. Former TVR owners will love it. I reckon it's a bit too loud personally, but BR does offer a quieter option. When you're extending the engine it's also a good time to use the the OE-style glass button to select the firmer damper setting, which isn't too far removed from the standard Vantage S set-up, but with greater wheel travel. It works really well.

What's really impressive is how seamless all the upgrades feel from the driver's seat. It really is OEM quality and this could very well be a hotter Vantage S direct from the factory. I love the added muscle and the even sharper body



**Above:** tweaked exhaust is loud – if you want it to be

control, and the extra power makes the balance of the Vantage S shine even brighter. It really is a wonderfully sorted and exploitable front-engined/rear drive machine.

So Bamford Rose can soften the blow of the money you've lost... but only by charging you a whole chunk more. The full exhaust system is £5998.80 fitted, the suspension another £4680 and the clutch/flywheel and remap for the Sportshift is £4200. There's much more they can offer, too. Fancy a 5-litre conversion with well over 500bhp? No problem. How far you might go just depends on how good a 2013 you're having... ☒

**Jethro Bovingdon** (@JethroBovingdon)

## Verdict

⚙ Performance, quality of upgrades

💰 Quality comes at a price

**evo rating:** ★★★★★



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# Driven special: Back-to-basics heroes

It's always tempting to stretch your budget to get a more powerful engine or bigger wheels, but in some cases such 'upgrades' don't bring dynamic benefits...

**Words:** Henry Catchpole **Photography:** Dean Smith

**F**ilm critics, I imagine, spend a lot of time in those slightly Woody Allen-esque black plastic glasses watching movies in 3D. If the studio has gone to the trouble of shooting its latest blockbuster in an extra dimension, then it'll want to show it off in all its slightly trippy, reach-out-and-touch-it glory. Similarly, when motoring journalists go to the launch of a new model, the fleet of shiny cars lined up and available to test drive are usually plucked from the top of the range. Not only will they have the most powerful engine and most numerically superior gearbox, they will also be specced-up to within an inch of their arches and bristling with more buttons than a Chesterfield sofa.

But what if the 3D actually just obfuscates

what's otherwise a ripping plot and some splendid acting? For every *Avatar* or *Life of Pi* there are plenty of films where you'd be just as well served (not to mention better off financially) watching it in plain old 2D. And sometimes it's the same with cars, particularly if your primary concern is how they drive.

Take the Mini, for example. It's always tempting to look to the top of the tree at the S and JCW models. However, there is actually a very strong argument that the pick of the range is a basic Cooper. And not even a Cooper with strategic options, just a boggo car with little 15in wheels. There's not even any need to bother with sports seats as they offer very little extra support over the standard ones.

Look in the classifieds and it's hard to find a Mini that hasn't been specced with 16in or even







17in rims. But they are out there. After a bit of scouring I found the black car you can see here at a dealer near Cambridge, and driving it on its little 15in telephone-dial alloys is something of a revelation. The taller sidewalls of the 175/65 tyres soak up the bumps and improve the notoriously choppy ride of the Mini beyond belief. Down a B-road it suddenly takes on a much more fluid demeanour, which in turn allows you to attack the road and engage with

the fantastic chassis more easily.

On smaller wheels the Cooper's more modest power is also matched perfectly to the grip available, and you even get some understeer to nudge up against and work with, which is refreshing in a Mini, as on larger wheels they can feel almost over-pointy at times.

The Mini principle applies to Porsche too. Last month we drove a 'basic' 2.7 Cayman. However, it came on 20in wheels and had a PDK gearbox,

torque vectoring and PASM suspension. On the surface this added technology made it a more desirable car, but in reality all the extra gubbins not only inflated the tempting £39k list price to something more out of reach, but also served to dilute the driving experience.

For a start, the standard six-speed manual 'box is about as much fun as you can have with three pedals and a lever, so there's no need for PDK. Then, as with the Mini, there is the



Specification	MINI COOPER	PORSCHE CAYMAN	BENTLEY CONTI GT V8	CATERHAM 7 SUPERSPORT
Engine	In-line 4-cyl, 1598cc	Flat-six, 2706cc	V8, 3997cc, twin-turbo	In-line 4-cyl, 1598cc
CO2	127g/km	192g/km	246g/km	n/a
Power	120bhp @ 6000rpm	271bhp @ 7400rpm	500bhp @ 6000rpm	140bhp @ 6900rpm
Torque	118lb ft @ 4250rpm	214lb ft @ 4500-6500rpm	487lb ft @ 1700rpm	120lb ft @ 5790rpm
0-62mph	9.1sec (claimed)	5.7sec (claimed)	4.8sec (claimed)	4.9sec (claimed, 0-60mph)
Top speed	126mph (claimed)	165mph (claimed)	188mph (claimed)	138mph (claimed)
Basic price	£14,900	£39,694	£123,850	£24,495



matter of wheels. Adding two inches to their standard diameter does the car a disservice in every area other than looks. This Guards Red car (a standard no-cost paint option and better looking than most of the metallics) is about as basic as press cars come and yet when you get in, the un-optioned interior still oozes quality, the standard seats squeeze you in all the right places and you don't miss the extra leather.

With more demure 19in wheels, this car has taller sidewalls than the 20in-shod car we tried before (though you could still go a size smaller to 18in) and as with the Mini you get more deformation, more movement, more interaction and a more natural grip-to-power ratio.

If money were no object then we admittedly would still plump for the more powerful Cayman S, but adding an 'S' isn't something we'd recommend in the current 911 range. The most engaging, natural and rear-engined-feeling 991 is actually a standard Carrera on 19in wheels with passive dampers and no clever chassis trickery. It will leave you with quite a few blank buttons on the transmission tunnel, but it's worth it. The fact that the smaller 3.4-litre flat-six also feels sweeter and more enjoyably enthusiastic than the 3.8-litre engine simply seals the deal.

All of which leads us on to the Bentley Continental. I realise that talking about a Bentley in the context of a feature about 'the cheaper option' and 'getting down to brass tacks' might seem slightly absurd, a bit like Waitrose deciding to include vermicelli nests and Brussels Pâté in its budget Essentials range, but bear with me. If you are buying a new Continental GT with reasoning that involves anything other than showing off or a pathological fear of the number eight (octophobia, since you ask) then the £13k-cheaper, smaller-engined V8 model – like the car we have here – is the one to buy.

The 4-litre V8's performance feels every bit as mighty as the W12 in a straight line and the accompanying soundtrack is, if anything, better. But it's the lighter nose of the V8 car that is the real clincher. Because there's less weight slung out ahead of you on the front axle, the car suddenly comes alive down an A- or even B-road in a way you simply wouldn't expect if you've been used to the W12. You can genuinely hustle the V8 because although the steering remains quite light, the car also feels perfectly balanced and easy to place, with turn-in no longer giving you the ponderous sensation of trying to swish a sledgehammer from side to side.

Bentley isn't the only glamorous car company to hide its best variant at the bottom of the range, either. At times it feels like Lamborghini doesn't want to admit the existence of the basic Gallardo LP550-2, yet it is certainly the most fun iteration to drive. All the potential criticisms of a Gallardo can be wiped away by buying the



**'The most engaging, natural and rear-engined-feeling 991 is actually a standard Carrera'**



uncomplicated base model. Four-wheel drive feels a bit understeery at times? The standard car is rear-drive – problem solved. E-gear 'box a bit clunky and irritating? The LP550-2 has a beautiful, slick, open-gated manual. Carbon brakes snatchy and hard to modulate? Stick to standard steel. You can apply most of the Gallardo philosophy to the Audi R8 too – passive dampers, a manual gearbox and the V8 engine are all you need until you reach V10 Plus levels (although that's on passive dampers too).

The final category of car in our rundown of cheap thrills is The Lightweight, represented here by a Caterham 7 Supersport, but equally ably demonstrated by the stripped out 1.6-litre, Elise Club Racer. As any racing driver will tell you, more power is always a good thing, and we're not about to claim that an R500 isn't a huge amount of adrenalin-fuelled fun. However, the refreshing truth is that with

lightweights you can have just as much, and on the road sometimes *more* enjoyment in a car with the same magical handling balance but which costs half the price. Rather like the Mini, there's a purity to the experience when an engine and its power output aren't dominating proceedings, plus there's the bonus that any drive down a good piece of road will actually last longer when you're not going as quickly.

Rather like the 991 conundrum, Caterham's smaller Sigma engine is also arguably a sweeter motor to use than the torquier Duratec found in the more expensive models. You could actually go even further down the Seven scale to a Roadsport 125 or an Academy car, both of which decrease the bhp and lb ft figures further but restore chassis equilibrium by attempting to scavenge grip from glorified trailer tyres. Both 125 and Academy cars are huge amounts of fun as a result and rumour has it that no one is





more aware of this back-to-basics formula than Caterham itself, with reports of the launch later this year of an even cheaper entry-level Seven...

Getting back to basics is not a new phenomenon – I think the E46 M3 was the first car I can remember *evo* suggesting was better on smaller wheels, and I still get quite excited when I see one on 18in rims rather than the more common 19s. However, in the last decade there seems to have been an exponential increase in power outputs, wheel sizes and the proliferation of technology in performance

cars. Better numbers of one form or another are generally the result, but look beyond the figures (or fashion in the case of wheels) and the equally tangible but less quantifiable facets of ride and handling can sometimes be found to be suffering. As this Mini, Cayman, Bentley and Caterham all show, paying more doesn't always mean you get more. ❌

■ Thanks to Elms Cambridge Mini for the loan of the Cooper, which it is currently offering for sale. Visit [www.elmscambridgemini.co.uk](http://www.elmscambridgemini.co.uk)

## Verdict

### MINI COOPER

- ⊕ Delightful ride and composure
  - ⊖ Finding a boggo one if you're buying used
- evo rating:** ★★★★★

### PORSCHE CAYMAN

- ⊕ Very enticing for the money in basic spec
  - ⊖ You might still want the power of the 'S'
- evo rating:** ★★★★★

### BENTLEY CONTINENTAL GT V8

- ⊕ A proper drivers' Bentley
  - ⊖ It still costs £123k
- evo rating:** ★★★★★

### CATERHAM 7 SUPERSPORT

- ⊕ One of the best Caterhams you can buy
  - ⊖ Not the last word in practicality
- evo rating:** ★★★★★



**Left:** 15in wheels transform the Mini's ride and handling.  
**Above:** Cayman works better on smaller wheels too





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# Watches

This month, a chronograph with F1 and WRC links, a reborn '70s rarity and a Lamborghini-inspired curio

**Words:** Simon de Burton

## 1 Certina DS Eagle

**Price:** £950 **From:** certina.com

Certina watches were once big sellers in the UK before its products ceased to become available here in 2002. Now it's back with a line-up that includes a range of driver-orientated pieces inspired by the 125-year-old brand's roles as the sponsor of the Sauber F1 team and the official timing partner of the WRC. One of the best models is the latest version of the DS Eagle chronograph, which contains a high-quality quartz movement with GMT function and 12-hour, 60-minute and 60-second subdials. There's a tachymeter scale on the inner bezel, while red highlights add a sporting touch.

## 2 Omega Seamaster Bullhead

**Price:** £6070 **From:** omegawatches.com

It's Omega's Speedmaster models that are most usually associated with automotive exploits, but the just re-issued Seamaster 'Bullhead' deserves a mention here because of its driver-friendly, top-mounted chronograph buttons – and because of its retro-cool looks. The original was launched in 1970 and has become highly sought-after among collectors. This 21st-century reincarnation is almost identical in looks (even down to the secondary crown at six o'clock for adjusting the inner bezel) but comes with the added benefit of the latest Co-Axial movement and modern build quality.

## 3 MB&F HM05 'On the Road Again'

**Price:** c£39,800 **From:** marcuswatches.co.uk

Maximilian Büsser's high-end MB&F brand is as interested in watches being regarded as innovative mechanical art forms as instruments for telling the time, which is why every model in the range looks totally off the wall. Few classic Lamborghini lovers could resist the HM05, however – based on the Amida Dagitrend drivers' watch of the 1970s, its zirconium case features louvres inspired by a Miura rear window, which open to allow light to recharge the luminous coating on the digital display. The self-winding movement, meanwhile, is protected by a separate, waterproof inner case.

## Watch tech

### Ceramic cases



The properties of engineering ceramics (as opposed to the ceramics your dinner plates are made from) have been well tested in the automotive industry, most notably in brake discs. But versions of the material are also used for a variety of other applications, from the blades of kitchen knives to armoured vehicles and, extensively of late, watch cases.

The benefits are considerable. Firstly, the fact that ceramic starts out in powder form means it can be placed in moulds in order to create intricate shapes. The material is also very light (a ceramic watch case can weigh as little as 25 per cent of its steel equivalent), highly scratch resistant, immune to corrosion and hypo-allergenic.

Ceramic does, however, have its downsides. Although the raw materials are cheap, the process of creating it is not, as the powder has to be subjected to massive pressure and intense heat in order to sinter. And while it is superbly strong under compression – which gives it its high degree of scratch resistance – it is decidedly weak under tension. In other words, brush your watch against a brick wall and it will probably emerge unscathed, but hit it hard against the same wall and it could well shatter.

As a result, many brands have so far only used ceramic for certain parts of their watches, such as pushpieces and bezel inserts. But other makers, including Chanel, Omega, IWC and Rado (which introduced the first ceramic watch case in 1986), have invested heavily in making full ceramic cases.

## Now & Then



### NOW Luminox TK Racing Chrono Worn by: Tony Kanaan

This is the fourth Luminox watch to be made in conjunction with – and to be worn by – 2013 Indy 500 winner Tony Kanaan. The Brazilian racer's national colours of green and yellow are incorporated into the design, along with his racing number, 11. The latest TK model is limited to 999 examples.



### THEN Mido Bugatti Worn by: René Dreyfus

Pre-war Grand Prix star René Dreyfus was well known for his success in Bugattis, and he sometimes demonstrated his allegiance to the marque by wearing one of Mido's radiator-shaped Bugatti watches. An example that belonged to 1928 Targa Florio winner Albert Divo recently sold for €35,700 (c£30,500).







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*Michelin advertorial*

*Performance tyres are constantly evolving – and Michelin has consistently been at the forefront of their development, using lessons learned in motorsport to make its road tyres a natural choice for the keen driver*

# Reinventing the wheel







T

**THE INVENTION OF THE** pneumatic tyre in 1887 was, of course, revolutionary. Michelin didn't have a hand in that. But when two brothers who owned a rubber factory in Clermont-Ferrand, France, immediately set out to make a better pneumatic tyre – one that didn't have to be glued to a bicycle wheel's rim and could be easily removed and replaced – they initiated an evolutionary chain of events that, over time, would become synonymous with their family name. They were Édouard and André Michelin.

The Michelin tyre company was founded on 28th May, 1888. In 1891, it filed its first patent (for the removable pneumatic bicycle tyre) and, in the same year, early adopter Charles Torront used a pair to win the world's first long-distance bicycle race from Paris to Brest and back to Paris. It was a sign of things to come, the beginning of a journey that, for the rest of the century and beyond, would see Michelin dominate at the highest level in motorsport on two and four wheels, supply the tyres for the record-breaking Bugatti Veyron and Shelby SSC Ultimate Aero, the fastest road cars the world has ever seen, and even blast into space. When NASA's Atlantis orbiter landed for the final time at the Kennedy Space Center in 2011, bringing the Space Shuttle programme to an end, it touched down safely with Michelin-made rubber.

The first removable tyre, the first run-flat tyre, the first radial tyre, the first radial tyre in Formula 1, an unmatched record in sports car endurance racing, the pioneer and foremost producer of fuel-saving, low rolling resistance green tyres, and trusted by NASA to land the most complex machine ever made – for 125 years Michelin has been setting the pace for tyre technology innovation, design and development in every sphere of usage. That deceptively simple circle of rubber has come a long way.

**'For 125 years  
Michelin has  
been setting  
the pace for  
tyre technology  
innovation'**

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### **WHAT GOES AROUND**

Keen drivers and lovers of high performance cars are, statistically, a rare breed. Unlike many motorists, who pay scant attention to the hidden complexities and sophisticated elements of the humble-looking tyre, the enthusiastic minority are acutely tuned in to its characteristics and the important dynamic contribution it makes to a car's performance and safety. Just like a car, a tyre is a fusion of technologies that begins with research and includes thousands of miles on road or test track before it can be signed off.

It might appear to be obvious that tyres provide grip, transmit acceleration and braking forces while, at the same time, working in concert with the suspension to cushion impacts from the road and acting upon even the subtlest of steering inputs. Less appreciated

are the myriad conflicts – grip and endurance, driving accuracy and comfort – that have to be resolved. And, at Michelin, that never means compromise.

So it's perhaps slightly less surprising that something as seemingly simple and homogenous as a tyre is actually made up of more than 200 components. Some of these play a vital role in safety and performance. Others make your car roll along with less resistance and thus travel further on each litre of fuel, reducing its carbon footprint. Not such a big deal? On the contrary, rolling resistance accounts for up to 20 per cent of a car's fuel consumption – and that's a big deal whether you drive a supermini or a supercar.

As is tyre life. A leading car fleet operator recently revealed that over a six-year period it

had found Michelin's tyres lasted consistently longer than rival brands: an average of 27,036 miles for front tyres, which was up to 8000 miles better than its competitors.

But Michelin's implementation of the latest technology has even more far-reaching implications. The partial substitution of carbon black by silica in the rubber compound in 1992 was instrumental in allowing Michelin to launch its first-generation green tyre. Since then – and with the new generation Energy Saver+ tyres having a 100 per cent silica-based rubber compound – Michelin has sold 570 million green tyres all over the world, saving 12 billion litres of fuel and helping to prevent the emission of 30 million tonnes of CO<sub>2</sub>, while providing a more immediately tangible benefit in its excellent wet-weather performance.

## **‘Motorsport of all types has provided an essential proving**







## ground for the development of Michelin's tyre technology'

Naturally, high performance cars introduce additional, more extreme, demands on their tyres and it's here that the old adage 'racing improves the breed' finds a rich resonance with Michelin's exceptional track record in endurance racing. There's more on this in the following sections, but suffice to say here that the road-going benefactor, the Michelin Pilot Sport 3, uses a host of race-bred technologies to enhance safety on wet roads and steering precision on dry roads while delivering a long tread life.

To achieve this desirable balance, the tyre has been built around three core technologies – Green Power Compound, Anti Surf System and Programmed Distortion tyre structure.

The design targets for the Green Power Compound were excellent wet road grip, prolonged tyre life and, building on the achievements of Michelin's Energy Saver tyres, reduced fuel consumption. Numerous victories at the world's toughest endurance race, the

Le Mans 24-Hours, including many in a row, allowed Michelin to collect a wealth of valuable eco-technology data to feed into the design and meet the brief, point for point. As well as performing well in wet conditions – a property further enhanced by the Anti Surf System's specially-shaped tyre shoulders that evacuate large volumes of water and substantially reduce aquaplaning – the high silica particle content of the compound was also found to be extremely effective at resisting heat build-up in the dry conditions with a high ambient temperature.

Inevitably, however, steering precision and responsiveness are closely related to the rubber's temperature and its resulting deformations. The third of Michelin's proprietary technologies, the Programmed Distortion tyre structure, seeks to maintain the tyre at an optimal temperature. At low speeds, the tread heats up quickly to attain the level of flexibility required for good grip and traction, but at high speeds it stiffens to prevent

excessive temperature build-up.

The Pilot Sport 3 – and the new range-topping Pilot Super Sport, developed in conjunction with Porsche, Ferrari and BMW M – clearly demonstrate that it is possible to reconcile the competing demands of safety, driving enjoyment, energy efficiency and environmental responsibility.

### GOING THE DISTANCE

It's no coincidence that Michelin's outstanding record in endurance racing has a direct bearing on the performance and life of its road car tyres. Motorsport of all types has provided an essential proving ground for the development of Michelin's tyre technology and it has acquired valuable insights, as well as a sense of perspective, from its years in the hyper-volatile world of Formula 1.

Michelin's gift to the sport was radial tyre technology in 1977 but, by 2005, despite being the dominant manufacturer at the

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## Michelin advertorial

time, it announced that it would not extend its involvement beyond 2006, the year in which it took its second consecutive Constructors' and Drivers' Championship titles. Talk about going out on a high! And that's not forgetting the world titles it had won in 1979, 1983 and 1984.

In fact Michelin's motorsport emphasis had shifted substantially away from the inherent short-termism of Formula 1 to the challenges of the vastly broader remit required by endurance racing.

The change of direction was understandable. F1 tyre technology has very little relevance to the real world because it must operate within such a narrow and exotic envelope, dictated by the regulations. By contrast, the regulations that govern world endurance racing's premier class feature very few restrictions, so tyre companies are free to propose solutions that are tailored to meet the specific needs of these technologically advanced cars. The chief constraint is the maximum size of tyres – 16 inches wide and 28.5 inches in diameter. Michelin has also introduced a self-imposed limit on the number of tyre types it makes available – three types of slick (for different temperature ranges), one 'hybrid' intermediate slick, and two rain tyres (for different amounts of water). The range is

designed to cover all the circuits visited in the course of the season, based on the development work that takes place during the winter break's private testing programme.

Endurance racing requires that only slightly inferior cornering and braking performance markers and vastly higher top speeds are sustained with consistency far beyond the point where an F1 tyre would have disintegrated completely. As a result, there is genuine technology transfer potential for road users.

And where better to make the point than Le Mans, host to arguably the greatest motor race in the world. As a supplier of tyres to its partner teams – including Audi, Aston Martin, Porsche and Toyota – Michelin has won the 24-Hours 21 times and for the past 15 years consecutively. In 2011, the victorious Audi R18 completed 466 miles (the equivalent of five driver stints) on just one set of tyres and at an average speed in excess of 137mph.


Michelin's endurance racing record directly informs its Total Performance ethos and commitment to explore new ways in which to improve the longevity, performance and consistency of its tyres without compromising safety. 'Technology transfers from track to road tyres are increasingly evident,' explains

Serge Grisin, manager of Michelin's car racing programmes. 'That's because we're committed to enhancing longevity, lowering rolling resistance and reducing tyre weight.'

In 2012, Michelin took the concept to extremes by designing the narrow, lightweight tyres for the extraordinary Nissan DeltaWing racer using simulation tools alone, a technique that allowed it to acquire valuable technical expertise in the tyre size/performance equation. It's using the same methodology this year as it develops its endurance racing tyre range for 2014 when the endurance racing rules are substantially revised and are expected to mark a significant shift of emphasis in the realms of car design and tyre development.

This new technological challenge mirrors a global one: optimising performance for a given quantity of energy. Tyres play a vital role. Not only must they support the weight of the car, they must also be able to handle colossal aerodynamic downforce – up to three times the car's own weight – along with the extremely high levels of lateral and longitudinal acceleration.

Success hinges on Michelin's developers being able to design solutions capable of delivering high performance over long



**'Not only must the tyres support the weight of the car, they must also be able to handle colossal aerodynamic downforce – up to three times the car's own weight – along with extremely high levels of lateral and longitudinal acceleration'**





periods of time. Durability and performance are often viewed as conflicting qualities, but they can be reconciled through technology and this approach lies at the very heart of Michelin's research and development strategy, which is known as the Michelin Total Performance concept.

### **MOTORSPORT MAKES A BETTER TYRE**

The FIA's World Endurance Championship, which includes a round of the American Le Mans Series (ALMS), has become a design and development crucible for Michelin. In addition to providing its partner teams with advice concerning tyre choices, Michelin's technical advisors supervise every aspect of a tyre's application, right down to recommending tyre pressures and suspension settings with a view to optimising tyre efficiency and longevity. Their work also involves working closely with the drivers and engineers to analyse tyre performance.

One Michelin technical advisor, Christian,

explains how he analyses tyre performance by dividing circuits into different sections, and also splitting each corner into four zones: 'We produce a detailed analysis of the way our tyres perform through different portions of the track. We begin by dividing the circuit into sections as a function of their profile and surface type. We then produce an objective analysis, which is based on the data collected by the car's on-board logging systems, as well as a subjective analysis, which is based on the feedback we get from the drivers. Indeed, you could say that all the drivers are Michelin test drivers.'

'We split each corner into four parts, too. We analyse the way the tyre performs into the turn, during the turn to the apex, after the apex and then as the car accelerates hard out of the corner. We also dial in the temperatures we record when the car returns to the pits, while a visual and tactile inspection of the extent and form of wear provides us with an indication of the areas in which we need to work, and this feedback and data are passed on to Michelin Motorsport's technical department.'

But it doesn't stop there. Michelin's Director of Motorsport, Pascal Couasnon: 'Michelin's strong commitment to motorsport necessitates the development of innovative technologies and competitive tyres. Tyre life, safety, energy efficiency and the notion of driving pleasure are all factors that are taken on board in the work of the motorsport division.'

'Racing plays a vital role when it comes to developing our road tyres, too. The products we test, and which prove satisfactory on the track, go on to become available to the motoring public. It is quite possible, for example, to find a motorcycle racer and a bike fan who run on tyres with identical characteristics.'

The transition from track to road is just as clear on four wheels. The performance edge that Michelin's tyres give its racers makes every drive on a great road safer and more rewarding.

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# Insider

by HARRY METCALFE



The carbonfibre look is prevalent in modern supercars, but Harry reckons we've lost sight of why it's there

**I** **I'M AMAZED AT HOW MANY DESIRABLE** objects are created out of carbonfibre these days. Once the exclusive preserve of ultra exotic machinery like F1 cars and hypercars, today the distinctive weave can be found almost everywhere you look. Take the carbonfibre pen (courtesy of Koenigsegg) sitting on my desk in front of me, or my iPhone case, which has a sliver of the stuff running along its spine. Both look ace but neither has been functionally enhanced in any way by being fabricated out of carbonfibre.

Using carbonfibre in road cars didn't really kick off until the Ferrari F40 arrived back in 1987, and thanks to that car's stripped-out nature, the carbon weave was visible throughout the cabin, making it feel deeply special. While the F40 looks like it was constructed totally out of carbon, there is in fact a steel tubular chassis hiding underneath that does much of the work (and the condition of which is very hard to determine without a complete strip-down).

The world had to wait until the arrival of the über-exclusive McLaren F1 in 1992 before we got a fully carbon car. The F1 had body panels and a passenger tub made purely out of bonded layers of woven carbonfibre, without any sort of metal hiding underneath. But because the F1 was so beautifully trimmed inside, owners didn't get to enjoy the distinctive carbon weave, and it wasn't until the stripped-out race cars appeared a few years later that the F1's beautiful carbonfibre construction could be fully appreciated in all its glory.

From then on, carbonfibre became the must-have material for all supercars, and its use reached another milestone when the Pagani Zonda was launched in 1998. It could be said that Pagani was the first to use carbonfibre in an artistic way, and when the Huayra and Aston One-77 hit the roads in 2011, we reached a new peak in the art of carbonfibre construction, which would have been unimaginable back in the late '80s.

Today, full carbonfibre construction is beginning to percolate down the food-chain to cars like the Lamborghini Aventador and McLaren 12C, but the really big news is its appearance in cars like the £50,000 Alfa 4C. Few people realise the 4C's carbon tub is created using a near-identical manufacturing process (and at the same factory) as the carbon tub in the LaFerrari. Yet nearly all of the pre-launch chatter on the baby Alfa centres around its four-cylinder turbo engine and whether it's worthy of powering a £50,000 car. There's hardly anything said about the fact it has a beautifully constructed carbonfibre tub with bare (polished) carbon sills, which make it look like a baby Zonda from the inside,

as well as offering a new level of chassis stiffness and safety unheard-of in this class of car.

I'm sure it's because car buyers today value carbonfibre more for its sexy appearance than for its structural properties. How else do you explain the ludicrous spend by Ferrari customers on overpriced carbon trim when, in most cases, all it does is add weight? Scan the options list for a Ferrari 458 Italia and you'll find the cost of the carbon options is off the scale. Fancy some carbon-backed seats? That'll be £4961. Carbon engine covers? £4651. Rear diffuser in shiny carbon, rather than GRP? £5168. How about some carbon sill covers that'll scratch at the merest hint of a scuffed heel? £5063. Or a carbon dash and vents (or 'Sports Package' in Ferrari-speak)? £8277.

It's madness, especially when the main reason customers go

**'It's as if we've all forgotten why we used carbonfibre in the first place. Rather than using it for strength and lightness, it's become a material simply for decoration'**

for all this carbon trim is vanity and dealer-encouraged concern over future residual values should certain options not be ticked. At no point does the extra strength or the weight saved get a mention, unlike today's carbonfibre-dominated cycle accessory market, where saved grams are everything. It's reached the point where the last Ferrari 458 Italia we tested had £90,000 of extras on it, the vast majority of which was for extra carbon trim that'll make zero difference to the driving experience.

It's as if we've all forgotten why we used carbonfibre in the first place. Rather than using it for its inherent qualities of strength and lightness, it's become a material simply for decoration. So the next time you're ordering some carbonfibre trim, think about whether it's going to make any difference to the way the car drives. If it doesn't, then don't get mugged and use your money for something that will make a difference. Now, where's my (carbon) pen...? ☒

@harrym\_evo

Harry is **evo's** editorial director and a serial supercar buyer



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# Petrolhead

by RICHARD PORTER



Porter puts forward his conspiracy theory on one of Britain's biggest high-street stores

**T**HESE ARE DANGEROUS TIMES FOR THE male driver. Summer is here (or at least a rough approximation of it) and that means only one thing: scantily clad women, dandering up and down the nation's pavements waiting to lure us into a moment of distraction, followed swiftly by the unmistakable sensation of a low-speed impact. In the warmer months, the strappy top and the short skirt pose a constant menace, threatening at any moment to steal the attention of the heterosexual male driver. And possibly lesbians. Since men don't tend to be scantily clad, and if they do they look stupid, I'm guessing women and gay men are spared the spectre of lustful thoughts followed by loss of no-claims bonus.

The only thing that spares us from this very real problem is the capricious British weather and its inability to sustain heat and sunshine, forcing ladies to cower inside cardigans and maybe some kind of trouser. It must be a much bigger problem in more reliable climates. It's no surprise, therefore, that one of the first affordable cars available with radar-activated low-speed auto-braking is the very Italian Fiat Panda, since downtown Turin must be an almost constant series of sub-10mph accidents from about May to September.

In Britain, our erratic climate makes things safer. Or it would, but for one lethal factor that exists whatever the weather: Marks & Spencer. Don't get me wrong, I like M&S. I wouldn't buy my socks from anywhere else. But its summertime devotion to advertising swimsuits and low-cut dresses on massive billboards next to roads is downright dangerous. You'd think it would have a better understanding of the male mind after all these years, but no. This great bastion of the British high street has no comprehension of the basic fact that men can't not look at boobs. As a result, Marks & Spencer is inadvertently putting thousands of male drivers at risk every year.

But is it inadvertent? Or is there some darker conspiracy going on here? Because I've just thought of something else. At least two petrol stations I frequent contain small M&S supermarkets. They don't do clothes, which at least removes the chance of spotting some smashing knockers on a poster and accidentally reversing into a petrol pump, but they do sell a wide range of sweets.

Have you tried Marks & Spencer sweets? They're ruddy excellent. The Percy Pig range alone is a spectacular collection of gelatinous excellence, whether it's the agreeably chewy micro-swine or the variation containing Percy's so-called 'pals', which boasts an especially decent cola cow. If you'd prefer a more old-school treat, the Wine Gums are terrific, or you could go really retro with the fabulously sugary Mint Crumbles, which are a particular favourite of *evo's* own Henry Catchpole. Probably because, like everything

in Henry's life, they appear to be from the 1930s.

If you want a road sweet, forget Mr Haribo and his various gummy temptations: there really is nothing to match the pure sugar rush of the M&S creations. But have you ever tried opening a bag of Marks & Spencer sweets whilst driving? It's almost completely impossible. Even at a standstill, getting the crackly plastic sack to rent asunder is a challenge that requires you to modulate the force applied with great care, lest the damn thing suddenly ruptures and sprays sweets across the car's entire interior. And if that happens, at best you'll be finding Percy Pigs under the rear seat squab six months down the line. At worst, it'll be a bag of Mint Crumbles that explodes, covering your seats, dash and face in a fine white powder that later leads to erroneous arrest by the drug squad at Tibshelf services.

Attempting to open one of these bags on the move is so dangerous that being caught attempting it should earn you a fine and three points on your licence. The only safe way to access a

## 'Turin must be a constant series of sub-10mph accidents from about May to September'

faux porcine treat on the move is either to carry a pair of special car scissors in the door bin or to put one corner of the packet in your mouth and gnaw your way in. I've never experienced packaging so bloody-mindedly protective of its contents.

Why has M&S done this? Why has it made its otherwise splendid bags of sweets so sodding difficult to open? Normally I'd let it pass, but put it in the context of those ridiculously distracting roadside ads and you can come to only one conclusion: Marks & Spencer hates the motorist and wants us to have a minor accident.

I can't imagine why this might be, unless it's bought up a chain of bodywork repair centres and wants to increase trade. But I think that would have made the papers. In order to find out more, I emailed M&S directly and asked to know what the flipping blimey is going on. At the time of writing I've heard nothing back, but I won't rest until I have got to the bottom of why a beloved retail chain wants the drivers of Britain to come to harm.

Until then, I will be buying my socks elsewhere. ✖

@sniffpetrol

Richard is *evo's* longest-serving columnist and the keyboard behind sniffpetrol.com





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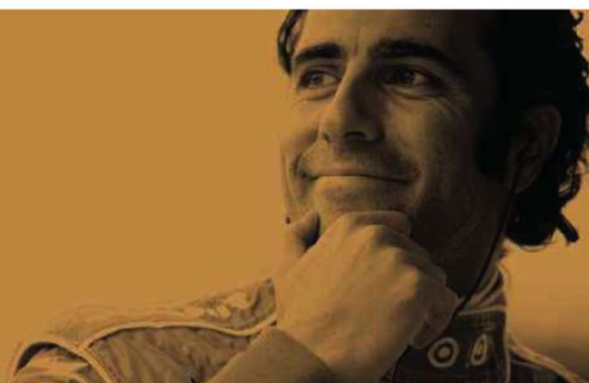
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SPEED MATTERS

# Champ

by DARIO FRANCHITTI



Dario explains that it's easier to like the idea of a some cars more than the reality

**T**HOSE WHO HAVE A VERY CLEAR VIEW on what a car should be – a classic or a modern or a Porsche or a Ferrari, and nothing else – are shutting the door on a million new and potentially rewarding motoring experiences. You simply can't be closed-minded when it comes to cars because you'll miss out on something you weren't expecting.

I was thinking about this recently in relation to MGBs and the small-capacity British stuff. These sorts of cars don't exactly float my boat but if I see someone driving one and I see the size of their smile, I think 'that's my loss'. They've found something out about the experience that I don't know, and good on them.

The funny thing is, you can never really be sure what type of experience a car will deliver until you've driven it. You can't second-guess that kind of thing. Take the Ferrari 599. I really wanted a V12 Ferrari; the sound of the engine, the speed and the excitement that a V12 Ferrari should have appealed to me, but I hated it. In fact, I still hate it and I don't own it any more! Don't get me wrong, it's a very fast car, but there's nothing special about it, to me at least. I loved the idea of it more than the reality. The biggest mistake I made is that I bought it before I drove it. I was just about to say that I'll never make that mistake again, but then I've just ordered a 991 GT3 and I haven't driven that! For some reason, I just trust Porsche to deliver...

To me, two of the Ferraris that deliver the V12 idea are the 550 Barchetta and the F50. I've bought a 550 Barchetta and it's completely impractical, but the engine is all of a sudden what I feel a Ferrari V12 should be like. I've got a thing for F50s too, although I've probably left it ten years and several hundred thousand pounds too late!

The opposite happened with the Mercedes SLS. I read all the road tests on it when it was new and I wasn't sure I liked the idea of it. Then I drove one down to Goodwood and it was mega – not the fastest or the best-handling car I've ever driven, but it was an event. It felt exactly like an old Gullwing: if you hit a bump, it was unsettled. I appreciate what I'm saying here, that sometimes you can enjoy the weaknesses in cars, but you can't be prejudiced or form an opinion before you've had the chance to absorb the whole experience. And this often takes some time.

The Porsche 911 Turbo LE is a good example. If I'm honest, it feels fairly crap when you jump in it after a while away: the lack of grip, the turbo lag, the amount of movement in the suspension. The feedback is so different to almost every other car I've got. But then you start to slot into a different mindset, you drive to its strengths, your opinion changes and all the fun and enjoyment

comes flooding back. I love that – it feels like you have a two-way relationship with the car, as opposed to just operating it.

You've got to be careful about making decisions from the passenger seat, too. Some cars just don't reveal their talents unless you're plugged into them as a driver. The Porsche Carrera GT is a good example. My mate and fellow IndyCar driver Tony Kanaan took me for a ride in his and I thought 'this isn't very good'. Then I drove one myself about four years later and fell in love with it – and missed out on four years of having a car as mega as the Carrera GT in my garage! I've said it before in this column, but I love my Carrera GT: it's such an exciting car.

Speaking of relationships with cars, I love going through the history of a car. It makes you feel even closer to it. For instance, I've got a McRae Subaru that I'm going to restore. It's not an ex-works car or anything like that – it's one of the last 'Series McRae'

**'I don't need to own the fastest car in the world any more... it's more about the driving experience'**

special-edition road cars – but it came with literally a briefcase full of history. To see the passion that the previous owners had for the car is brilliant: the history tells the story of not just the car but also somebody's life. Crackin'.

A lot of people don't get the idea of the new generation of hypercars, like the McLaren P1, the LaFerrari and the Porsche 918. They interest me (the LaFerrari, in particular), but I didn't go down that route. With Ferrari they make you jump through a lot of hoops. They want you to buy this, that and the other beforehand and I'm not really interested in jumping through hoops, so...

The other thing is that I don't need to own the fastest car in the world any more. When I was 21 and got my Testarossa I wanted something with a load of horsepower. I don't feel the need to do that now. It's more about the driving experience.

If there's one thing I'm really struggling to 'get' – and I'm not sure I ever will get – it's that new Pagani Zonda Revolucion. £2.2million for a track car! I mean, what's the point? Just go and buy a Rothmans Porsche 956 or 962 – buy a Le Mans winner. I don't quite understand that thing – perhaps I need to drive it...

@dariofranchitti

Dario is a three-time Indy 500 winner and four-time IndyCar champ



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996 TURBO/GT2 » 600+ BHP  
997 CARRERA GTS » 439+ BHP  
997 CARRERA S PDK » 400+ BHP  
997 CARRERA S » 376+ BHP  
997 CARRERA » 348 BHP  
997 CARRERA PDK » 368 BHP  
997 GT3 3.6 » 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 3.0T » 600+ BHP  
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SL65 AMG » 680 BHP & DE-LIMIT  
AMG 55 KOMPRESSOR » 600+ BHP  
C63 AMG » 530+ BHP & DE-LIMIT  
SL63 AMG » 560+ BHP & DE-LIMIT  
RE-MAP AND LOWER ABC SUSPENSION  
CL600 BI-TURBO » 580+ BHP  
S500 2008 » 411+ BHP  
SLK55 AMG » 389 BHP & DELIMIT  
SLK 350 » 328 BHP  
200K » 205+BHP  
C220 CDI (W204) » 210 BHP  
280 /300 CDI V6 » 257 BHP  
320 CDI V6 » 274 BHP  
350 CDI V6 » 312 BHP  
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F10 535I » 370+ BHP  
F10 DIESEL MODELS » PLEASE CALL  
335I/135I/ X6 » 378+ BHP & DE-LIMIT  
123D » 252 BHP  
330D E90 » 296+ BHP  
325D E90 » 285 BHP  
320D E90 » 209 BHP  
330D E46 » 260+ BHP  
730D » 290+ BHP  
X5 4.0D / 740D » 358 BHP  
X5 3.0D » 278 BHP  
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X5 SD » 344 BHP

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FERRARI 599 » 660+ BHP  
FERRARI 430 » 525 BHP  
GALLARDO » 546 BHP  
LP560 » 608+ BHP  
LP640 » 707 BHP  
MURCIELAGO LP670SV » 715 BHP  
MASERATI GRANTURISMO/QPORT » 438 BHP  
GRANTURISMO S / MC » 479+ BHP  
AUDI RS6 V10 » 700+BHP & DE-LIMIT  
AUDI R8 V10 » 602+BHP  
AUDI B7 RS4/ R8 » 439 BHP & DE-LIMIT  
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RANGE ROVER 3.6 TDV8 » 338 BHP  
R ROVER SPORT 3.0D INC2012 » 305 BHP  
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# Inbox

*What's busted your dam this month?*



**Letter of the Month**

## 991 is number one

Am I the only person that regards the new 991 version of the Porsche 911 as far superior to the 997 for real-world owners?

The main argument against this view seems to be journalistic nostalgia for all the 997's flaws. My 991 is now a year old, having replaced a similarly specced 997, and I feel no nostalgia for the headache-inducing tyre roar of the 997, for the understeering, imprecise front end, or for the drab, old-fashioned cabin. Whether I am chasing M5s down the Autobahn, lapping the Ring or bumbling about enjoying the classy new cabin, the 991 is a far better proposition.

I can only afford one special car, and I want it to cover all the bases. The F-type has no boot, making it useless for touring, the R8 is fat and thirsty, however well it may drive at the limit, and the Boxster has a tiny cabin and a much narrower breadth of capability. The 911 is still the best bet as an all-round proposition, and the 991 is the best version ever.  
**N.C. Dawson**



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## Clio crisis

After it became increasingly diplomatic to do so, I recently sold my MX-5 in order to buy something that could carry more than two people and a box of teabags. Cue one happy missus. Having never owned one, I decided to scratch the hot hatch itch, but I was torn between the new Renaultsport Clio Turbo and the Fiesta ST. Should I go for the Clio despite its controversial changes? Or should I stick with the cheaper and more conventional recipe of the Ford?

Neither of my local dealerships had a demonstrator, and at that point you hadn't delivered your verdict on UK roads either. I'm glad I waited – the group test in *evo* 184 made for some interesting reading and it sounds like Renaultsport has got a bit of work to do to retake the crown. To me, the problem with the Clio is that it just isn't special enough for the money. Where are the Recaro seats, the flared arches, the four-pot Brembos? Where is the attitude?

In the end, I bought my mate's old-spec Clio 200 Cup, and just driving to work in the morning leaves me shaking with adrenalin. It has so much pace, poise, communication and character. With the endless march towards greener driving and pointless electronic baubles, I really do feel like I'm driving one of the last truly great drivers cars of its boisterous era. I can see why you rated it so highly.

**Alex Merrill**

## Here comes the Sunbeam

Sunbeam Lotus... yes please. I want one now more than ever. It definitely deserved five stars (*evo* 184), especially when you gave the ridiculous BMW M6 Gran Coupe a



**Above:** Peter Garforth felt the classic Talbot Sunbeam Lotus deserved five stars

Sunbeam-matching four. Think about it: for the same money you could have the better, less expensive and less vulgar M5 and a pristine Sunbeam, with enough money left over to buy some petrol for both.

**Peter Garforth**

## Geared to thrill

I found Harry's column in *evo* 184 interesting. I'm pleased Jaguar and Ferrari have got their cars' gearing right for an exciting on-road experience, and I agree regarding manufacturers placing too much emphasis on Nordschleife lap times and top speed.

But I think Porsche may have an additional agenda. Are the high top speeds for the Boxster and Cayman (164 and 165mph respectively for the new base models) to allow easy cruising at 120-140mph along Autobahns? Another reason for the high gearing, especially of these particular Porsches, may be to ensure they don't accelerate quicker than their 911 stablemates.

I know you'd probably consider it sacrilege (and it would never happen), but a possible solution could be for Porsche to offer its junior models with the eight-speed automatic gearbox from the Cayenne Turbo S. A more practical solution for a real enthusiast with an older Boxster or Cayman is to have the rear differential final drive replaced to lower the overall gearing. Then it could be geared to hit something like 155mph with a resulting quicker 0-60mph time. Second gear may then run to a more practical speed, instead of 82mph.

**Peter Hassett**

## Torque tweaks

I enjoyed Harry Metcalfe's column on gearing. Motorcyclists have had this



**Above:** Alex Merrill reckons the new RS Clio is lacking compared to its forebear





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**Above:** Klaas De Waele thinks F1's new engine spec is the least of its problems



**Above:** the courageous story of Dean Stoneman was a hit with Pete Carbery

issue for some time – on many big sports bikes, first gear especially is so tall as to require clutch slipping below 30mph, and one has to stay in third to ride positively and remain within the law. My solution for all my bikes has been to fit a larger rear and a smaller front sprocket, but I imagine this might not be quite so easy on a Porsche Cayman S.

My own car is a 2010 Boxster S, and a bunch of intake and exhaust alterations plus a remap have worked wonders in shifting the torque curve.

**Josh Raymond**

### Worth the effort

I think Gert Schroeder-Finckh has missed the point. He criticises the manual GT2 RS for being more difficult to drive than a PDK 997 C4 GTS because of their respective transmissions (Inbox, *evo* 184), but what people need to understand is that something that is difficult to master is ultimately more rewarding in the long run, whether that be golfing, skiing, or being able to heel-and-toe for every downchange.

I too cannot wait for the 991 GT3 to be launched, not because it has PDK, electric steering or ('90s Japanese spec) four-wheel steering to hide its mass, but because my recently acquired 996.2 GT3, which has none of these driver aids, is difficult to master and will probably go up in value.

Although ultimately I shall only know it's appreciating if Harry adds one to his stable...

**Martin Sweeney**

### Auto fears

Being a massive car nut even before a certain Thomas Magnum used to light up my Sunday evenings in his beautiful 308, for me the centrepiece to any Ferrari was the open-gate gearchange. It always seemed to me to be a challenging, engaging, rewarding experience, and was one of the reasons that, when I learned to drive in the early '90s, I took the harder manual option.

A few friends of mine never really grasped the concept of driving and could only pass their test in an auto – yet now their world is open to drive Bugattis, Ferraris, Porsches and Lambos with automatic gearboxes.

Surely if someone who cannot even master a manual shift can legally drive

these cars, our current driving test needs looking at.

**Scott Black**

### Concentrate...

In response to Mr Schroeder-Finckh's letter regarding transmissions, I would like to offer the following advice: if concentrating on the car's controls distracts so much from driving on a track, especially in an edgy car like a 911 GT2 RS, the writer should consider another hobby (or another car)...

**Marnix van Deijk, The Netherlands**

### F1 needs change

After reading the article about the new F1 engines in *evo* 184, I thought that 4mpg is incredible for the current cars. Try throwing a 458 around a racetrack at full pelt – you won't make much more. As for saying they therefore consume ten times more petrol than any city car, again, try to smash one of those around a track with the pedal to the floor.

As for Bernie Ecclestone's comments that spectators pretty much enjoy 'everything' about a race... He gave F1 the physics of a '90s computer game, where the cars in front have less power and you can use a 'nitro' button. F1 should ban anything that isn't beneficial to real-world everyday-affordable sports cars or energy optimisation. Please get rid of DRS, make teams create spoilers from one single sheet of plywood and give them regular tyres, with pit stops limited to one per race. That should make things more slippery and we'd see some exciting stuff!

**Klaas De Waele, Zele, Belgium**

### Super Stoneman

Spending the weekend lying in a hospital bed following a daft injury caused by me trying to play football at the age of 42, when I clearly couldn't play at 21, gave me some quality time with *evo* 184.

The article on Dean Stoneman struck me for two differing reasons. Firstly because of the great dedication Dean has shown to come through the last few years and still pursue his desires to succeed at the top. And secondly, all credit to *evo* for a quality real-world motoring story with a blend of racing and human focus.

**Pete Carbery, Birmingham**



From the forums: [community.evo.co.uk](http://community.evo.co.uk)

## Thread of the Month

**CRAZY-IVAN**

### 'Guilty pleasures'

Which cars would you secretly love to own? My top three would be a Reliant Scimitar (it's a Reliant), a Ferrari 612 (most consider it ugly but I think it's striking) and a Rover SD1 (I don't think I even need to give an explanation!)

**SCOTTA**

An F40 and a diesel Golf.

**STEVE H**

Guilt works differently for different people as I'm picking up a Scimitar on Saturday. I do have a secret hankering for a mk1 XR2 or possibly an MG Maestro Turbo, but I don't think I could actually pull the purchasing trigger on either.

**DJCHOCICE**

The Honda CRX del Sol is a cracking little car, never deserved the bad rep it got IMO. I can also add the Peugeot 406 V6, Renault Laguna V6 and Vectra GSi.

**XFACTOR**

I would like a Renault Avantime. Think they look amazing. But most of them are diesels and rather expensive.

**ERIC PISCH**

I'm sick to hell of getting taxed to death on a car – just paid £280 for RFL – so a Vauxhall Ampera. Nowhere to plug it in, will dump more money than it saves and will probably be dull to drive. But I'm

getting very miserly in my old age.

**PHUT**

I don't mind the Maybach. I think it looks sort of anonymously pricey.

**SIMONGARDNER**

Fiat X1/9. I know it would be terrible, but there used to be one down my street when I was a kid and I thought it was the coolest thing ever at the time.

**ACTION JACK84**

Spotted a Renault Kangoo Trekka 4x4 yesterday and thought it was quite cool.

**N**

Rover 800 Coupe. Lovely.

**MUZZER**

Mk4 Escort/Orion.

**MARK BT52**

I could find reasons for almost any car appearing in this thread. I may not agree with them personally but I would understand that people might have them. But a mk4 Escort/Orion...



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## Thread of the Month wins a Jorg Gray chronograph

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E

**'EVEN THE ARCHBISHOP OF CANTERBURY WOULD,'** says Harry.

'Quite,' I say, as I settle onto a low stone wall looking out towards Marseille and the shimmering Med beyond. 'He could be nine years, 364 days into a ten-year vow of silence and I bet he would still splutter an expletive.'

You simply can't help it, you see. The first time the delicate red needle on the rev counter points directly heavenwards towards 4000rpm and the four turbos lump air into the 16 cylinders, the explosion of accelerative G is so deeply troubling that, no matter how polite you are, you will swear. I did. It's an involuntary reaction, like your hand springing back from something scalding. If you're the one in the driving seat when the detonation occurs then your right foot will probably leap off the accelerator exactly like the hand snatched from the hot hob, spurred by similar primeval levels of instinctive self-preservation. The Bugatti Veyron, more

WORDS by HENRY CATCHPOLE

PHOTOGRAPHY by DEAN SMITH

# GIANTS

*They're the ultimate hypercars, but they've never gone head-to-head – until now. In an evo world exclusive, 254mph Bugatti Veyron Grand Sport Vitesse meets 720bhp Pagani Huayra*







## Bugatti Veyron Vitesse v Pagani Huayra

**Below:** Catchpole gets an overview of the Vitesse's main features from the car's chaperone. **Far right:** twisting tarmac should expose the strengths and weaknesses of these two hypercars



**Above, from left:** Huayra arrives from the UK on a trailer; this very Vitesse set the world speed record for an open-top car; it'll be a profitable day for this petrol station...

than ever in ultimate near-1200bhp guise, is eye-poppingly fast.

But fast doesn't necessarily equal fun and there is another car parked up here at the side of the road that might just teach the Veyron a lesson or two. For a start it is one of the handful of hypercars that you would think might be able to keep up with the Bugatti. Its acceleration has been likened to the feeling of a Boeing hurtling down a runway and it has been known to make a McLaren 12C weep into a sheet of lap times. The Pagani Huayra might be endowed with a mere 720bhp but, importantly, it also has around 500kg less to propel. What's more, as our current (joint) car of the year, the Huayra is arguably the modern hypercar benchmark. I say arguably, because until today it has never met a Veyron Grand Sport Vitesse. In fact no hypercar has ever been tested against a Vitesse, so this is what you might call 'a bit of a coup'.

Just organising this meeting was a bit of

a headache – even by **evo** standards. It was meant to take place in Italy a week ago, but after months spent convincing both manufacturers that it was a terrific idea, the weather decided to get involved at the last moment and laid on the sort of torrential rain and hail that I imagine is sent down to punish swearing archbishops. All Jethro Bovingdon, Harry Metcalfe and Dean Smith could do last weekend was sit and watch the water pour down, powerless to do anything. After two days they left without so much as a photo and all seemed lost. But the Metcalfe is a creature not easily beaten and, after spending three days with his phone clamped to his shell-like, we rather incredibly find ourselves in the south of France with a different Vitesse, a different Huayra, an amazing road and, most importantly, some sunshine.

Harry and I are currently waiting for Dean to catch up in his mighty SEAT Alhambra hire car, and although the sun is very much out, there's

also a biting wind whipping off the coast, so I retreat back to the relative cocoon of the Vitesse. Opening the door you're immediately reminded of this car's capabilities, because this is the world record car that achieved 254mph at Ehra-Lessien (see Radar, **evo** 183) and its kick plate has been signed in silver ink by Anthony Liu, the driver that day.

Step over the sill, settle into the orange seat and you find yourself in an interior that, from the pictures, probably looks quite dull. But when you're actually in it, your surroundings suddenly seem worth the £1.7million. It makes a brand-new Audi A8 feel shoddy by comparison. There are no touchscreens or ephemeral gadgets, just a perfection that permeates every facet, with shut-lines and surfaces all exuding a devastatingly deep luxury. It's incredibly tactile too – run your fingers over the boss of the steering wheel and the aluminium is like silk. Hold the steering





Route



**'The Huayra is one of the handful of hypercars that might be able to keep up with the Bugatti'**



**'The world blurs and your head swims as everything arrives in one massive hit'**

wheel rim and the sensation from the material covering it is extraordinary – something between the finest piece of suede you've ever touched and neoprene.

Despite the Jaffa highlights, the same sense of smooth subtlety applies to the exterior of the Veyron too, and the Huayra parked behind it looks even more outrageous as a result. I understand why some people don't like the Veyron's apparent sobriety and why the Pagani's rocket ship cluster of exhausts and Cleopatra mirrors on stalks look more appealing, but when you're in the presence

of the Bugatti it has a mysterious ability to fascinate and mesmerise every bit as much as other supercars. It's like the ability of an almost inaudible Alan Rickman to hold your attention every bit as much as a bellowing Brian Blessed.

Anyway, snapper Smith and the asthmatic Alhambra eventually arrive and he is understandably cock-a-hoop about the road we've ended up on. We needed somewhere relatively close to the Circuit du Castellet (otherwise known as Paul Ricard) as the Bugatti (which has over 6000km on the clock) is also on customer demonstration duties while









## Bugatti Veyron Vitesse v Pagani Huayra



**Above:** D2 in the south of France provides an idyllic playground. **Right:** quad-turbo W16 puts out 1183bhp in the Vitesse, up from the regular Veyron's 1000bhp

it's out here (in the hands of Andy Wallace, no less) and needs to pop back to the circuit for a few hours this afternoon. The road we've picked is the D2 east of Gémenos, and as you can probably tell from the photos, it resembles a Scalextric track writ large across an Eden-like hillside. Dean needs both cars to go up and down the road several times for the first batch of photos, and as areas where it's easy to turn around with limited steering lock are fairly infrequent it means that Harry and I get to do a decent amount of driving back and forth for the next hour or so.

Below 3500rpm the Vitesse is a doddle to drive. According to the power meter, it's possible to leave well over 1000bhp in reserve and still potter quickly up and down the road quite happily with the car never straining or feeling in the least bit unruly. The ride is similarly polished and the steering is clean and even more accurate than I remember in the

standard Grand Sport. It is this calm civility that makes the eruption when you venture beyond the turbo lag so utterly shocking. Floor the throttle below 3000rpm in second gear and the Veyron punches forwards hard, but you know there's more – the firework is merely fizzling. Keep your foot buried, watch the needle swing past 3500rpm, feel the dormant turbos waking, then 3750rpm arrives, the hurricane draws a big breath and **BAM!** The world blurs and your head swims as everything seems to arrive in one massive 1106lb ft hit that you feel most disconcertingly in your chest just behind your sternum. It's a sustained rush too, one that keeps you pinned to the seat, draining the blood from your extremities all the way to the next upchange. As I said earlier, you'll also swear the first time it happens, but only once the acceleration has stopped.

On a road with lots of corners like this, there isn't much room to accelerate for long, but if

anything this only intensifies things because you're experiencing the accelerative haymaker over and over again. Every few seconds there's another corner so you wipe off the chunks of speed you've just accumulated, then as soon as you're past the apex you're fired out of the cannon again. The acceleration never seems to get any less impressive either; if anything it just gets increasingly addictive.

While the Veyron doesn't have a problem getting its mass moving, under braking it can't shrug off its kilos quite so effortlessly. You will most likely be panicking ever so slightly as you jump on the left-hand pedal, because for those of us that don't drive an F1 car every day, assessing how much speed you're piling on and the ever-decreasing braking distance left to wipe it off again is taken to a whole new level. Once you're pushing hard on the brake pedal you can feel the Vitesse leaning heavily on its front tyres as it struggles to halt the



**‘There is something  
fascinating about  
sitting in the middle  
of a cacophony of  
compressed air’**











momentum of the mighty W16 engine behind you, and there are little nibbles of ABS fluttering back through the ball of your foot. It's not that the brakes aren't up to the task, far from it, but you just know that you're pulling on the reins of nearly two tons of hard-charging material.

All too soon we've got to get back to Le Castellet for the Veyron's afternoon appointment, so I hop into the Pagani for the journey there. Curiously, although the Veyron is the one without the roof, the Huayra is by far the lighter and airier of the two cars. You sit in a much racier position than in the almost upright Bugatti, the Huayra's seat reclined slightly so that you're aware of the glass panels in the roof

above you, flooding sunshine into the cockpit that is then bounced around by the brilliantly bling instrument binnacle.

Twist the key and the bi-turbo V12 takes its time to catch. Pull back on the right-hand paddle and the gearbox seems to spend a couple of seconds considering your request for first gear before acquiescing. You need quite a few revs to get the electronics to let in the single clutch, but then we're away and as I look across through the windscreen (not the side window) I can see the Veyron in the wing mirror pulling out behind.

Immediately you notice the heavy steering in the Huayra. There's also very little self-centring, and because the flat-bottomed, leather-clad,



## Bugatti Veyron Vitesse v Pagani Huayra



**Top left:** Veyron's power meter. **Top middle:** Huayra's interior couldn't be more different to the Bugatti's sober affair (previous spread). **Above:** unlucky skid marks not ours

button-festooned piece of sculpture in your hands takes real effort to turn, tighter corners in particular can feel like a wrestling match, which is a bit unexpected. It's something that Jethro had to contend with when he first drove a Huayra at the time of its launch (*evo* 172), but the car we had on eCoty (177) was much more delicate in its helm, which is strange.

There is also a disconcerting bit of dead travel at the top of both pedals, so it feels like there's quite a delay between coming off the throttle and into any meaningful braking bite. It's alleviated somewhat by left-foot braking (not exactly everyone's cup of tea, I know) and thankfully the pedals are much better positioned for this than the Veyron's (which are shoved slightly awkwardly towards the centre of the car because of the front wheelarch). Once you're through the dead spot, however, there is a delicious depth of progression and feel through the brake pedal, which seems to communicate

precisely how hard pads are squeezing discs.

As we descend back towards the small town of Gémenos the road unfurls a little and it's here that the Huayra starts to feel more at home, getting into a flowing rhythm. Compared to the Veyron there's much more suspension travel and suppleness to the way it rides, and you feel it settle onto the outside front wheel as you pour it into a corner. Once you've looked past the weight in the steering there is a real sense of how the front Pirellis are loading and unloading too, but as Harry says, 'The steering's heaviness is like a fog, which you've got to try to look through to find its feel.'

However, the biggest shock (and I can't quite believe I'm going to write this, but here goes) is that the Huayra doesn't feel particularly fast. I know that sounds crazy, but after you've been smashed in the back by the Bugatti's 1183bhp, the Pagani's more linear surge simply doesn't feel anywhere near as visceral. It doesn't feel

quite as laggy as the Veyron, but that means the power delivery is a bit like turning the lights in a room all the way up to full power with a dimmer switch, as opposed to the Veyron, which pauses... and then floods the room in a blinding flash. As Harry clammers out of the Vitesse he's as astonished as I am by the apparent difference in pace between the two cars.

We have four hours to wait until we can head back to our asphalt paradise in the hills and it seems like an eternity, but eventually the Veyron re-emerges, along with Peter Reid, the extremely generous owner of this Huayra (the only right-hand-drive UK example in existence, incidentally), who has flown out to have a go in the Bugatti and see what we're up to.

I hop into the Veyron for the drive back and all its controls feel even more harmoniously polished after experiencing the Huayra. The twin-clutch gearbox in particular is simply incredible. There is the occasional chunter of





## 'In the blink of an eye, I'm suddenly very sideways in someone else's £1m hypercar'

discontent at very low manoeuvring speeds, but once you're above walking pace it shifts so smoothly that you'd think it was dealing with a fraction of the loadings that you know it's being asked to handle. Even dropping back to first for hairpins is executed so cleanly that you don't feel so much as a jolt, joggle or nudge.

We reach the bottom of the D2 and the swathes of colourful wild flowers in the verges either side start to appear, as do the numerous tyre marks on the road (not all of which end well!), which make it look like a rally stage, official or otherwise. Preparing for what's to come I hunker down slightly in readiness as the maelstrom builds behind my shoulders. It was one of the early criticisms of the Veyron that it didn't really tickle eardrums, but with no roof panel above, the noises tumble into the cabin. A low, cavernous growl from the 8-litre powerplant dominates at first, but then as the turbos kick in, the two carbon

intakes above your head overlay an almost deafening *wooshhh* that I eventually pin down to sounding exactly like a huge wave crashing onto a shingle beach. Strange but true.

Dean wants the cars run around a corner for the benefit of his Nikon and so Harry and I swap again and I head back down the hill to turn around. In the closed Huayra you get a lot less intake huffing and puffing than in the *al fresco* Vitesse, but if you pull the toggle switch behind the handbrake (not the one on the door...) to drop the window by your side you suddenly get the most incredible, almost shrill sucking noise from the intake on the rear arch. Neither car has a soundtrack to tingle the spine like a Carrera GT or a Zonda, but there is something fascinating about sitting in the middle of a cacophony of compressed air.

I'm aware that Peter, the owner, has wandered down to the corner with Dean to watch and take some of his own photos, and as I approach

the uphill right-hander in second gear I'm being relatively cautious. The car's loaded up nicely, leaning into that outside front, everything's under control and I'm just squееееееzing the power on, revs rising and noise building until, in the blink of an eye, the rear tyres fizz behind me and I'm suddenly very sideways in someone else's low-mileage £1million hypercar. And that someone is watching. Thankfully I catch it relatively cleanly, but as I pull into the lay-by a hundred yards up the road, Dean's voice crackles over the radio saying that one run is probably enough.

My heart is pounding and as I send the door arcing skywards I have images of Peter storming up the road demanding (quite reasonably) to know what the hell I think I'm playing at. Mercifully he's smiling as I apologise profusely. 'Don't worry, they're not my tyres. You can do that all day long if you like!' he says with a grin. Personally I was more worried about a



## Bugatti Veyron Vitesse v Pagani Huayra

carbonfibre/rock interfacing scenario, but I'm very relieved that he's so relaxed.

To be fair, the more I drive the Pagani, the more I realise that if you're going to get close to exploring its full performance then you need to be aware of and even comfortable with it lighting up its rear tyres and shimmying around – even in a straight line if there's some camber. You simply don't have the precise control that you get with a naturally aspirated engine, so torque is transmitted in lumps and it's up to you to hold on to the result. Thankfully, although the wheels can lose traction in the blink of an eye, the Huayra's wheelbase is actually quite long, so it doesn't snap viciously out of line and you can ride out the wheelspin to some extent once you're used to it. Which is fun.

By comparison, the corners are the easy bit in the Veyron. They're not dull, it's just that the steering is so precise and the car so easy to place that there's very little to worry about. Even when you feel like you've got the Veyron up on its toes, shifting attitude slightly under

power in that distinctive four-wheel-drive fashion, squatting at the rear and driving hard from early in a bend, the corners still feel like a respite between the insanity of what happens on the straights.

In some ways, both cars are characterised by their traction; the Pagani is dominated by constantly being on the edge of a loss of traction, the Veyron is defined by its almost total traction. Following Harry in the Pagani it is very clear how much faster down a twisting piece of road the Bugatti is, simply because of what happens between apex and exit in a corner. Where the Huayra (and I suspect it would be the same in a Venom or an Agera) has to wait and wait to transmit its power to the road, driver teasing the throttle as steering lock is wound off, the Veyron simply reaches the apex and then deploys its power through all four wheels with minimal fuss and maximal effect. Occasionally you'll see the yellow ESP light flickering, but spookily you don't ever feel it intervening.

On a straight stretch of road, Harry and I

conduct an unscientific but very revealing drag race from a rolling start in second gear. With warm tyres the Pagani still wriggles its rear as I floor the accelerator but gets good traction nonetheless, and it manages to hold on to the Bugatti surprisingly well. Later on, however, we do the same thing on slightly colder tyres and although the Pagani only struggles a fraction for traction, in the moment it takes to find total purchase the Veyron has disappeared up the road, putting car lengths between us with devastating authority.

As the sun sets behind Marseille and Dean packs away his cameras, Harry offers me the choice of cars for the drive back to our hotel. And right there we have the crux of the test, really: given the choice, which should you take? The spectacular Huayra is mightily tempting. On a big, sweeping road it gets into a wonderful flow and if you're brave you can revel in trying to tame 720bhp through the rear wheels. The trouble is that because that power is produced through turbocharging it's difficult to meter it out and use all of it. And, especially





in this company, you want to use all of it.

People tend to get hung up on the Veyron's top speed. Yet I did no more than 150mph during our time with the Vitesse and I didn't feel like I'd missed out in the slightest by not adding another 100mph to that number. To be honest you can keep the speed in double figures and still feel like you've experienced the best bits of the Vitesse, because what makes it such a special, addictive experience is that it's not just a car for long, open straights. The ability to access that breathtaking sucker-punch of second-gear acceleration again and again as you thunder down a twisting road like the D2, with drops, rocks and zero room for error, is an experience like no other. It makes fast equal fun. So, an uninterrupted drive back through the night, in a Huayra or a Grand Sport Vitesse? Perhaps unexpectedly, it's the Veyron every time. ✕

*Huge thanks to The Virginia Water Motor Company for the safe transport of the Pagani (www.virginiawater.com) and Peter Reid.*

## Specifications

### BUGATTI VEYRON VITESSE

**Engine** W16, 7993cc, quad-turbo  
**Power** 1183bhp @ 6400rpm  
**Torque** 1106lb ft @ 3000-5000rpm  
**Transmission** Seven-speed dual-clutch transmission, four-wheel drive, ESP  
**Front suspension** Double wishbones, coil springs, active dampers, anti-roll bar  
**Rear suspension** Double wishbones, coil springs, active dampers, anti-roll bar  
**Brakes** Vented cross-drilled carbon-ceramic discs, 400mm front, 380mm rear, ABS  
**Wheels** 20in front and rear  
**Tyres** 265/680 ZR500A fr, 365/710 ZR540A rear  
**Weight (kerb)** 1990kg  
**Power-to-weight** 604bhp/ton  
**0-62mph** 2.6sec (claimed)  
**Top speed** 254mph  
**Basic price** c£1.7million  
**On sale** Now

**evo rating:** ★★★★★

### PAGANI HUAYRA

**Engine** V12, 5980cc, twin-turbo  
**Power** 720bhp @ 5800rpm  
**Torque** 737lb ft @ 2250-4500rpm  
**Transmission** Seven-speed automated manual, rear-wheel drive, LSD, ESP  
**Front suspension** Double wishbones, coil springs, active dampers, anti-roll bar  
**Rear suspension** Double wishbones, coil springs, active dampers, anti-roll bar  
**Brakes** Vented cross-drilled carbon-ceramic discs, 380mm front and rear, ABS  
**Wheels** 19in front, 20in rear  
**Tyres** 255/35 ZR19 front, 335/30 ZR20 rear  
**Weight (dry)** 1350kg  
**Power-to-weight (dry)** 542bhp/ton  
**0-62mph** 3.3sec (claimed)  
**Top speed** 224mph (claimed)  
**Basic price** c£820,000  
**On sale** Now

**evo rating:** ★★★★★



**'You can keep the speed in double figures and still feel like you've experienced the best bits of the Vitesse'**

**VIDEO**  
See the Huayra and Veyron Grand Sport Vitesse in action online  
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*Ferrari Testarossa*







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#### LEAF THROUGH THE PREVIOUS 184 ISSUES

of *evo* and you won't find a drive in a Ferrari Testarossa. I know that some of you will now be itching to get up from the sofa, out of bed or run dripping from your bath (or wherever you settle down to read the mag) and tear through your carefully preserved library of magazines. But please, trust me and stay comfy. There has been no

Testarossa test in *evo*. I've looked.

At first this seems like a huge oversight because, in the Athena poster stakes, the Testarossa was probably only beaten by the Countach for the sheer number of bedroom walls it occupied. It is an icon, of that there is no question. So, why the *evo* no-show? Well, the truth is that *evo* is meant to be all about the driving experience, and certainly by reputation, the Testarossa isn't. When Gordon Murray was writing his column for *evo* he described it as 'dreadful' (the Ferrari, not his column), and a quick Google of 'Testarossa handling' doesn't paint a picture of sublime dynamics.

But just one glance at it pointing down the road, looking for all the world like the pixelated clock's about to begin counting down on *Out Run*, and it's clear that the Testarossa is a glaring omission from the pages of *evo*. (Interestingly, the Sega game featured a roofless car, but only one official factory Testarossa

# Testarossa!

*One of Ferrari's biggest-selling cars doesn't come with a stellar dynamic reputation. We revisit the classic flat-12 brute to find out if that reputation is deserved*

WORDS by  
HENRY CATCHPOLE

PHOTOGRAPHY by  
DEAN SMITH





Spider was ever produced, in Grigio, for Gianni Agnelli, the then-head of Fiat.) That omission is now about to be rectified, but is the Testarossa's handling reputation justified, or, nearly 30 years after it first appeared at the 1984 Paris motor show, does it deserve more appreciation? With the help of the roads of south Wales and the Llandow circuit, we're about to find out...

The car you see here has been owned by Peter Dietsch for the last ten years and he says he will never sell it. It's an '86 car and is immediately identifiable as an early example because of its high single mirror. The wheels also give it away, as later cars had five-stud wheels rather than the single knock-on nuts. Peter bought this car in Switzerland and at various points over the years has used it for his daily commute. There are a couple of non-standard tweaks, the most obvious being the painted lower sections that were originally black, but these undoubtedly look better matching the rest of the bodywork (like they did on the later 512 TR).

Look under the huge rear bonnet and you'll not only see the crackle-finished red cylinder heads that give the Testarossa its name lurking down the sides, but also a huge carbon Gruppe M intake system on top, which Peter freely admits probably adds nothing to the performance, but looks fantastic. The other non-standard touch you can't help but notice in the engine bay is the sheet of reflective gold foil (just like on a McLaren F1), which was supplied by a Formula 1 team Peter used to work for.

We're setting off from the glamorous surroundings of a Premier Inn on the M4 (photographer Dean Smith and I having travelled down from this issue's spiders test in North Wales the night before) and after locating the door handle hidden under the top side strake, I hop into the passenger seat of the Ferrari for the short journey up into the hills.

The first thing that strikes you is how much room there is inside the Testarossa. With the black leather-covered dashboard set right back

against the bottom of the windscreen, it feels remarkably airy and the visibility is clearly extremely good too. Peter twists the key and immediately, without any lengthy supercar histrionics from the starter motor, the 385bhp, 361lb ft flat-12 bursts into life, revealing to most of Cardiff, Newport and Bristol the one final modification that Peter has made to his car – it's on straight-through Larini pipes.

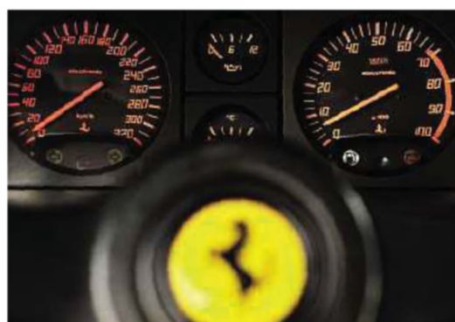
We need to go one stop along the motorway and after the initial eruption from the exhausts, the Testarossa actually proves very civilised on the M4, where it cruises with relatively few revs and a lovely supple ride. Off the multi-lane stuff and heading through a few villages with cars parked on either side of the road, I start to feel slightly more apprehensive about my turn in the driver's seat, because those straked yellow flanks suddenly seem very broad indeed.

'You just have to remember that the rear's wider than the front,' says Peter. 'Apart from that, she's a pussycat to drive.'





'I START TO FEEL APPREHENSIVE ABOUT MY TURN DRIVING, BECAUSE THOSE STRAKED YELLOW FLANKS SUDDENLY SEEM VERY BROAD INDEED'



**Above:** single wing mirror was scrapped after 1986 model year. **Above left:** interior is pure '80s supercar. **Far left:** five-speed open-gate manual is a joy





I don't think I've seen a better day in Wales. There's hardly a cloud in the sky and there's just enough breeze to ensure that none of us realise how sunburnt we're getting. Parked up in our allotted lay-by, the Pininfarina lines look incredible from the rear. The black grille spread across the whole expanse of the car certainly accentuates the huge breadth, but at 1976mm the Testarossa is wider than any current Ferrari.

Other angles don't look quite as good; the single mirror is very cool, but also looks very odd at times, and the single intake (servicing an oil cooler) underneath the headlight on the same side only accentuates the imbalance. In profile you notice the almost disproportionately huge front overhang too, but when Peter drives off down the hill to have a gander at the road we're going to be using for photography, any awkwardness just melts away. In motion, particularly slicing past the jagged rock and lush grass of the Welsh hillsides, it remains every bit as jaw-droppingly dramatic as it did in the '80s.

Once Dean's got the first few shots in the bag, I take the Testarossa off for a bit of a run. Open the door and there seems to be a lot of stuff between you and the seat, with two silver releases and the handbrake to clamber across. The temperature of the black leather interior has been gently escalating as the sun rises ever higher in the sky, but with its elongated headrest the seat is comfy and surprisingly supportive.

Although there's much more room than in a Countach, the actual driving position is similarly awkward, with the pedals well spaced but offset to the right on this left-hand-drive car and the top of the steering wheel tilted tantalisingly away from you. The beautiful lever for the dog-leg five-speed gearbox falls instantly to hand, however, the black ball (slightly smaller than a golfball) nestling perfectly into your palm.

Twist the key and the engine fires reassuringly quickly, as it has done all morning. You hardly need to push the slender, floor-hinged accelerator at all; just tickle the revs

above idle and bring the nicely weighted clutch up to a gentle biting point and you'll crawl away on a wave of torque. The unassisted steering is arm-strainingly heavy when manoeuvring, but as soon as you're above walking pace it attains a blissful lightness that makes it feel like it's suddenly gained some assistance. The rim itself is beautifully thin, although slightly curious to hold in that the back is rounded but the front is flat, creating a noticeable edge where it settles into the crook between thumb and forefinger.

Second gear can be sticky and obstructive on some Ferrari open gates, but it yields quite nicely in Peter's car, while third, fourth and fifth are as slick as you like. Visibility is fantastic, although you can't see anything of that long nose in front of you and I'm very conscious of what Peter said about the width of the rear. I can certainly see why Ferrari added a second mirror after 1986, because you feel surprisingly naked without anything on the passenger side; every so often I have to drift right slightly and use the drumming





**Below:** flat-12 is topped by an aftermarket intake system in this car; engine cover is also lined in gold foil, McLaren F1-style...

**Below left:** oversteering on track at Llandow



**'I'VE HEARD SOME LOUD CARS IN MY TIME, BUT NO ROAD CAR GETS CLOSE TO THE PHYSICALITY OF AN UNSILENCED TESTAROSSA'**

of the catseyes to reassure me of where I am on the road. The ride is the next thing to get used to, because although the primary ride feels soft, the car is actually surprisingly well controlled through dips and crests, never once catching its long nose, despite my fears.

The star of the show is undoubtedly the engine: it's magnificent. It's so tractable, with a deep well of thrust that builds and builds down a long straight, piling on speed in the most wonderful crescendo to 6500rpm. The engine is also what defines the Testarossa in the corners. The little 16-inch wheels with their 50-profile sidewalls play their part, but it's the first time you feel the weight of those 12 cylinders start to swing a little and affect the balance behind you that sticks in the mind.

The trouble is that the longitudinal, Colombo flat-12 (it's not a boxer as the cylinders don't have individual crankpins – it's actually a 180-degree V) is mounted on top of the gearbox and diff, which as you can imagine makes for a

centre of gravity akin to a hippo on a bird table. So the best thing to do on the road is relax, not push too hard and just enjoy the theatre of the Testarossa. Then it feels like one of the best places in the world to be.

Sitting at traffic lights en route to Llandow, the lumpy *ba-dum ba-dum ba-dum* idle sounds for all the world like a CanAm car that has just been fired up in the paddock at Goodwood. Then I make the mistake of putting the window down as we go through a tunnel. With the car being a left-hooker, I'm sitting so close to the tunnel wall that I get the full force of the decibels as they reverberate around the concrete cavern. Quite honestly, it's painful. I've heard some loud cars in my time, but no road car gets close to the physicality of an unsilenced Testarossa. The resonances it triggers deep inside my left ear feel like there is a tuning fork in my head about to explode.

As we roll into the empty paddock at Llandow and park up, my ears are still humming.

'I heard you coming,' says the track's owner. 'Sorry?' I reply.

Llandow is only a small track but it's deceptively quick, with the defining corners being two fast right-handers leading onto the pit and back straights. There's not a lot of run-off, but it's still a significantly better place for exploring the handling characteristics of a Testarossa than a remote road. I can't remember the last time I inched up so cautiously towards the limits of a car, gradually pushing the tyres and chassis a little further each time round. Initially there's more push at the front than I was expecting, and more grip from the wide tracks of each axle, but then I notice I'm pouring the car into the corners and squeezing on the power so as not to unsettle it.

As speeds increase, it's those long, faster corners that are the most nerve-wracking. Load up the front, then get on the power early and drive through the corner with the car transitioning from subtle understeer to very



## Ferrari Testarossa

subtle oversteer on the exit as the weight behind you pushes round. The steering feels heavier now that there's more load going through the wheels, and although there's some feel, it's still remarkably vague thanks to the combination of those tall sidewalls and a huge amount of roll.

The brakes are not built for track work, so you need to slow the 1506kg Testarossa early and gently if you want to do more than a handful of laps, but as braking hard and deep into the corners is a sure-fire way to unsettle it, that's perhaps no bad thing. Thankfully Llandow is flatter than the Testarossa's engine, because what the Ferrari would be like heading through a corner with adverse camber or a crest is not something I'd like to find out in a hurry. If you carry too much speed into a corner and need to lift even here then you have to be right on top of the car, because that high, rearward centre of gravity will swing round with an inexorable momentum as you pitch the weight onto the already loaded outside rear wheel.

There are two things that make it just about manageable, the first being that the engine is naturally aspirated, so the power delivery is beautifully linear and workable. The second is the amount of steering lock available. When the

momentum does take over and the huge rear deck rolls into oversteer behind your shoulders, you need to work that thin-rimmed steering wheel very fast indeed, not only adding the corrective lock to catch it but then anticipating when to start taking the lock off again as the car regains grip and the momentum rolls back the other way. Get it right and it feels heroic and heart-stopping in equal measures – perhaps there's a reason why you didn't see many shots of oversteering Testarossas back in the day.

Parked up in the paddock, yellow bodywork glinting, I can't help staring at it for a few minutes longer before Peter has to head back towards the Severn Crossing. After one day driving it, I feel like a bigger fan of the Testarossa than I ever was as a child (it was always the 288 GTO for me) and part of me is trying to work out where it'd fit into my dream garage.

I can see why it did so well in America, which isn't the insult some might think. It's not trying to be part-track weapon, part-continent crusher like an F12, because although it was absorbing trying to tame it on the circuit, it is first and foremost a road car for long journeys and big roads. Its handling might well be intimidating, but it certainly deserves its place in **evo**. ☒

## Specification

### FERRARI TESTAROSSA

Engine Flat-12, 4942cc

Power 385bhp @ 6300rpm

Torque 361lb ft @ 4500rpm

Transmission Five-speed manual, rear-wheel drive, limited-slip differential

Front suspension Double wishbones,

coil springs, dampers, anti-roll bar

Rear suspension Double wishbones, coil springs, dampers, anti-roll bar

Brakes Ventilated discs, 309mm front, 310mm rear, ABS

Wheels 8 x 16in front, 10 x 16in rear

Tyres 225/50 VR16 front, 255/50 VR16 rear

Weight (kerb) 1506kg

Power-to-weight 260bhp/ton

0-62mph 5.8sec (claimed)

Top speed 171mph (claimed)

Price new £62,666 (1984)

Value today £50-70,000

**evo** rating: ★★★★★

'AFTER ONE DAY DRIVING IT, I FEEL LIKE A BIGGER FAN OF THE TESTAROSSA THAN I EVER WAS AS A CHILD'





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# CLIMB DANCER

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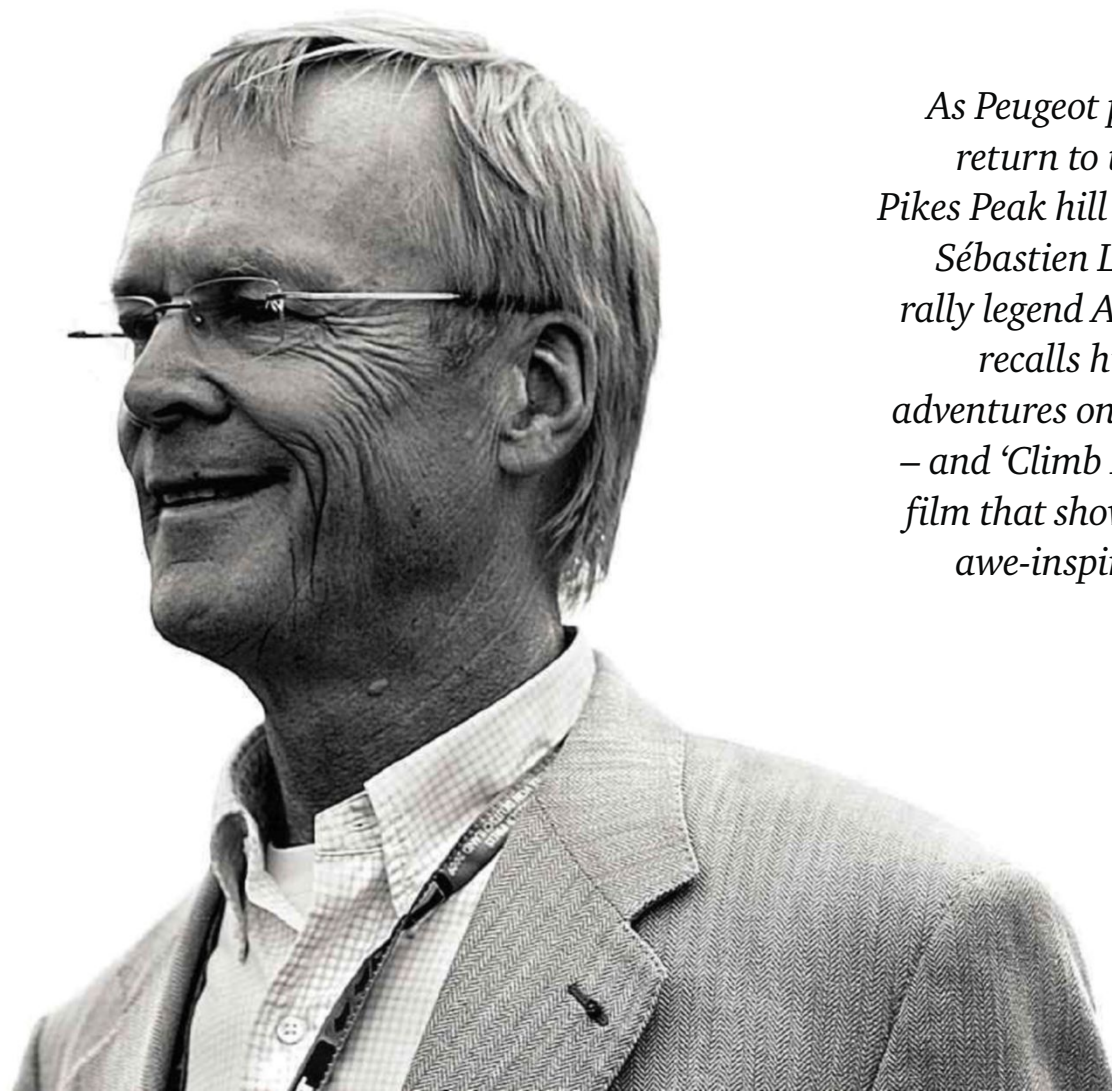
by MIKE DUFF

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CAR PROFILES by STEPHEN DOBIE

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*As Peugeot prepares to return to the famous Pikes Peak hill climb with Sébastien Loeb, fellow rally legend Ari Vatanen recalls his own Pug adventures on the course – and ‘Climb Dance’, the film that showed him in awe-inspiring action*





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**FEW PEOPLE IN ANY WALK OF LIFE HAVE ENJOYED AS MANY** highlights as Ari Vatanen. His career as a top-flight rally driver took him from rear-drive Escorts and Asconas all the way through to the World Rally Car era. World champion in a privateer Escort in 1981, he drove his Peugeot 205 T16 to five WRC victories at the height of the notorious Group B regulations. He then went on to win the Paris-Dakar four times (and would almost certainly have added another if his car hadn't been stolen while he was leading in 1988). After motorsport, he served a term as a member of the European

Parliament for his adopted French homeland, and then very nearly became president of the FIA.

Yet he admits that one of the shortest events he ever competed in – the 12-mile Pikes Peak hill climb, at which he made three attempts – remains one of the pinnacles of his stellar career.

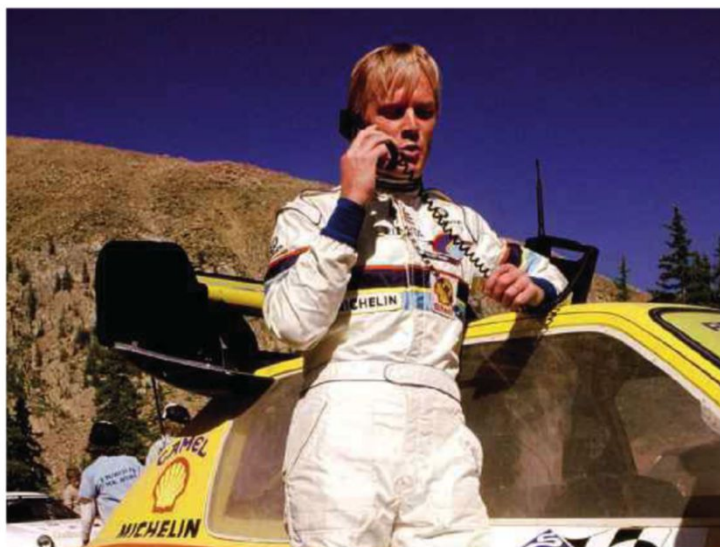
'In terms of pure sport, I think maybe it was the ultimate,' says the Finn, speaking to me from his farm in southern France. 'If the Paris-Dakar is a marathon, then Pikes Peak is less than a 100-metre sprint. I happened to be at least occasionally good in both. It's such a place, a unique place. It stands out from anything else I did.'

Peugeot's return to Pikes Peak on June 30, with Sébastien Loeb driving the new 208 T16, has refocused attention on the famous Colorado hill climb. But in European minds, it's Vatanen who will likely always remain most associated with the place, thanks to Peugeot's inspired decision to commission a film of his efforts in 1988. The result was *Climb Dance*, a five-minute short of Vatanen driving the mighty 405 T16 up what was at the time an all-gravel course. It featured helicopter tracking that clearly showed the vertiginous drops of the upper reaches, and also in-car driving shots of Vatanen wrestling the 651bhp car up the hill. The most memorable bit comes towards the end as, facing low sun, he takes one hand off the steering wheel to shield his eyes and continues at undiminished pace (you can see for yourself online at [goo.gl/rwlUT](http://goo.gl/rwlUT)).

'When you look at *Climb Dance* and see what we did, it wouldn't have become such a popular film if it wasn't so spectacular,' says Vatanen. 'I don't know exactly what it was that touched people, but it did. In France nearly every day some stranger comes up to me and says, "Are you Ari?" Yes. "Oh, *Climb Dance*, Pikes Peak!" – although they often say "Peaks Pake" or some such. And although they don't remember the name, they always remember the moment when I raised my arm because there were no sun visors. And then they do it, like a salute.'

**'PEUGEOT'S RETURN HAS  
REFOCUSED ATTENTION  
ON PIKES PEAK, BUT IT'S  
VATANEN WHO IS MOST  
ASSOCIATED WITH IT IN  
EUROPEAN MINDS'**

**Below:** the 1987 Pikes Peak event marked a comeback for Vatanen, who had competed in just one WRC rally since a near-fatal accident on Rally Argentina two years previously



Peugeot's first entry at Pikes Peak was in 1987, using a development of the 205 T16 Group B car that had been banned from world championship rallying at the end of the previous year. The event had a personal significance for Vatanen as the conclusion of a long and painful recuperation from a horrendous crash on Rally Argentina in July 1985 that had nearly killed him.

'It was very emotional for me,' he recalls. 'In qualifying we'd been slower than Walter Röhrl, who was there with Audi, all the time. I thought maybe I'm not myself any more, maybe my brain has lost some of its capacity. But overnight the team worked and put a second rear spoiler on the car – there was no testing, nothing – and when I drove it the next day, after just two corners I knew the car was transformed, and that I was transformed also. When the car really goes, you bring yourself to another level, you find the confidence and you find the extra speed within yourself. And suddenly I was four or five seconds quicker than Walter; I came to qualifying and saw my time and I had tears in my eyes. I knew at that point I was still intact as a human being. Pikes Peak gave me that.'

Although quick in qualifying, the 205 failed in the event itself when one of its turbo pipes split, leaving Röhrl's Sport Quattro to take victory. So in 1988 Peugeot came back with a redeveloped car, sharing the 205 T16's running gear and four-wheel-drive system, but with trick four-wheel steering and with its now-longer tubular frame chassis now clad in 405-like bodywork. More importantly, the 2-litre four-cylinder turbo engine was turned up from the 450bhp it produced in the 205 T16 to a dizzying 651bhp. It's this car that features in *Climb Dance*.





'It was an amazing car, just amazing, but it was a challenge to drive, too,' remembers Ari. 'It was just 890kg so the acceleration from zero to 200kph [124mph] was less than ten seconds. If you listen to the film, you'll hear how much the wheels were spinning. Sometimes I play with the clutch to keep the engine on cam and stay in a higher gear – changing down would have meant too much wheelspin.'

The 1988 event was disrupted by a hailstorm, but Vatanen and the 405 posted the fastest time up the mountain, setting a new record in the process. And looking back, he still reckons it was a near-perfect run: 'It must have been. When I did it I was uncertain, because [Juha] Kankkunen was there, and Kankkunen in his heyday was really fast. At the 10km mark, halfway up, he was one or two hundredths faster than me. But in the second 10km you are out in the open – it's so high there are no more trees, and out of the forest was where the mud started, where the hailstones were. And that's where I beat him – by about four seconds. On that muddy bit, that dangerous bit with drops, I managed to improve. So I knew it must have gone well. I was very, very happy when I saw my time. I surprised myself, the run was so good.'

And what about the drops? Did they ever temper his pace? Vatanen is blunt in his response: 'Of course not. You have to have faith. You cannot be fast unless you do. If there's any kind of fear or hesitation or "I'm not sure what this is going to do" then you're

**Above:** Vatanen broke Walter Röhrl's Pikes Peak course record by just 0.63sec in 1988. **Below:** burst turbo pipe wrecked Ari's 1987 Peak debut in a 205 T16





miles off the pace. So that's how it has to be – you forget the drops and everything.

'Driving that car was pure pleasure. I think maybe somebody who plays the violin well gets the same feeling. I'd experienced nothing similar before. It was like having flown jet airliners and then flying a fighter plane. That was my fighter plane. Of course, rationally you know the risks. It's 25km back to Colorado Springs by road, and only about 3km if you miss the braking point for one of the hairpins...'

Vatanen's only near-miss at Pikes Peak came in one of the practice sessions, rather than in the race itself. 'It was during the recce and we were ready to go up, but we didn't know that a lorry had gone to the restaurant at the top to fill the water tank,' he explains. 'For some reason the marshal who had let it go had forgotten about it; the departure marshal let us go up there. It was 7am and there was nobody else there, and I met the lorry 500 metres from the start on a left-hand corner – which was so



## 'THE ENTIRE COURSE IS NOW TARMAC, WHICH IS NOT A DEVELOPMENT VATANEN APPROVES OF'

**Above:** Vatanen (right) and Juha Kankkunen finished first and second in the 1988 race, posing at the summit with the products of their sponsors: Finlandia cheese, Valio milk and Nokia mobile phones

lucky, because I could just squeeze around him. I was flat-out, with my test engineer sitting next to me. If we'd met him further up we'd have gone into him at full speed, no question.'

Peugeot and Vatanen returned in 1989, but his hopes of improving his record ended when he suffered a puncture near the top of the course. 'It was dry in '89 and I was at least 15 seconds below my best time with 3km to go,' he says. 'Sadly, I ran just a little bit wide on one corner – not on the empty side, the side with the drop, but the one with the rock. I touched it and lost the tyre. It was my mistake and I regret it – I got a little bit greedy. I think I could have improved the record by 20 seconds or more, but I've never been there since.'

Of course, Pikes Peak has changed enormously since Vatanen was last there. The entire course is now tarmac, which is not a development he approves of. 'It remains demanding, but in a very different way. For us it was a rally stage, now it's like a racing circuit.' And although Vatanen did talk to Peugeot about having a role in the new effort, unfortunately nothing came of it. But, when pressed, he does still have some advice for Loeb and anyone else competing there.

'The stakes are high, in every sense of the word, particularly now the course is tarmac. Enjoy it, but don't get carried away.' ❌

## Vatanen's Peugeot 405 T16

*Ari Vatanen's Pikes Peak-winning 405 of 1988 was based on the 205 T16 rally car, which had been banned from the WRC at the end of 1986 after a spate of accidents involving Group B cars. Vatanen's then-record time over the 12.42-mile course was 10min 47.22sec, more than a minute slower than the current record, set by Rhys Millen on the now-fully tarmacked course last year.*

## Loeb's Peugeot 208 T16

*Unlike Vatanen's rally-derived 405, Sébastien Loeb's 208 T16 has been created and developed specifically for competition at Pikes Peak. Sitting visibly lower to the ground than its gravel-based predecessor now that Pikes Peak is an all-tarmac affair, Loeb will most likely have to break the ten-minute barrier if he is to beat the likes of Millen's Hyundai PM580T.*





## ENGINE

'T16' signifies 'turbocharged 16-valve', and the 405's 1.9-litre in-line four-cylinder engine gained a whopping Garrett turbo that endowed it with 651bhp at 7500rpm and 505lb ft at 5500rpm, figures which still keep it ahead of all but the maddest of supercars 25 years on. It maxed out at 8500rpm and possessed a specific output of 342bhp/litre. Its top speed was a hill-honed 130mph.

## TRANSMISSION

Far less complex than its 2013 relation, the 405 T16 used a six-speed manual gearbox (though this more archaic set-up benefitted Ari – see main text). Being derived from the Paris-Dakar 405 T16, the Pikes Peak car used a Ferguson four-wheel-drive system with a central differential that allowed the driver to control the amount of power sent to the front and rear wheels.

## SUSPENSION & BRAKES

The suspension set-up was double wishbones and twin springs and dampers all round; with the Pikes Peak course more rough and ready in its gravel days, this was no circuit racer in disguise. The Pikes Peak T16 rode lower than its Dakar base car, though. The braking system consisted of ventilated discs on each corner, while the rack-and-pinion steering was effective on both axles.

## CHASSIS

The oily bits underneath were those of an elongated 205 T16 – the original 205 T16 had been stretched for the 1987 Paris-Dakar. With the extended tubular steel frame designed to house extra fuel tanks for long-distance rally raids, it was modified again for the short Pikes Peak run. The engine was transversely mid-mounted, while a weight of 890kg meant the 405 T16 had 743bhp/ton.

## BODYWORK

With the 205 T16 LWB appearing a little ungainly, the 405's styling had been adopted to give the Peugeot a beefier look. The head and taillights were familiar, but the rest of the body – constructed from carbonfibre and Kevlar – looked far more butch than the standard rep-spec saloon. The huge front splitter and unmistakable wing were new to the Pikes Peak car.



## ENGINE

The 208's engine is sourced from the Pescarolo Le Mans prototype, and while it boasts two turbochargers, its 24 valves mean the 'T16' tag is marketing rather than a reference to mechanics. The 3.2-litre unit offers 875bhp at 7800rpm and 651lb ft at 6200rpm, though it maxes out 700rpm earlier than the 405's 1.9. The new T16 will hit 62mph in 1.8sec and its 149mph peak in 7.0sec.

## TRANSMISSION

The 208 T16's top speed is limited by the gearbox's ratios. It's a longitudinally mounted six-speed sequential paddle-shift transmission located at the back of the car. Its carbon clutch is borrowed from the now-defunct works 908, which won the Le Mans 24 Hours in 2009. There's no central differential, a mechanical ZF diff sitting on each of the four-wheel-drive 208's axles.

## SUSPENSION & BRAKES

Here is where the 208 really raids the 908 parts bin, with the components taken tweaked for the increase in suspension travel and steering angle the Peak demands. Each corner uses double wishbones and pushrod suspension, with anti-roll bars front and rear, while there are vented carbon brake discs (380mm front, 355mm rear), and 18in alloys with bespoke Michelin tyres.

## CHASSIS

Just like its ancestors, the 208 T16 is mid-engined. Its steel tubular chassis is all-new and is one of the few key components that can't trace its roots to endurance racing. The T16's 2680mm wheelbase is 142mm longer than a production 208's, while its track widths are up by almost 300mm at 1780mm. Weighing in at 875kg, the 208 T16 has a power-to-weight figure of 1016bhp/ton.

## BODYWORK

As the specs make clear, this is no warmed-up 208 – it's a racing car with a carbonfibre supermini silhouette. The shape comes from the same people who designed the road car, though with necessary aerodynamic accoutrements, including the wild front splitter and rear diffuser and a two-metre wide rear wing from the 908, whose downforce levels the T16 replicates.









# AIR MAX

*The 458, MP4-12C and R8 V10 are all stunning as coupes, but which comes out on top when the tops come off? We take each spider version to Wales to find out*

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by JETHRO BOVINGDON | PHOTOGRAPHY by DEAN SMITH

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## Spiders group test



**THE MONOTONOUS** run along the M6, the uplifting feeling when heading west on the M56 and then A55, reeling in the spectacular Colwyn Bay and seeing

the massive dark monoliths rising up in the distance, faintly backlit by the dwindling sun. If you happen to work for **evo**, this is as familiar as a businessman's daily commute. Somehow this feels like a fresh start, though. The British winter has dragged on for soooo long that Wales feels like it's been under a blanket of snow and fog for about a decade. But this evening the temperature is stubbornly holding in double figures, and the forecast for tomorrow is unbroken sunshine with barely a breeze. A fresh start.

In quiet moments, McLaren perhaps wishes it could wipe the slate clean with the MP4-12C and have another run at this volume supercar lark. Expectations were sky-high, of course, but there's no question that the 12C hasn't quite redefined the breed as many had predicted. Even reading the spec sheet today makes you wonder how anything can compete – carbonfibre tub, innovative and sophisticated suspension and electronic systems, the sheer power, torque and flexibility of the 3.8-litre V8 twin-turbocharged engine... the 12C melds engineering purity and devastating firepower with a sort of Terminator-spec ruthlessness.

And yet somehow those flaky, chaotic, Lambrusco-for-lunch Italian chaps and chappesses manage to build, in the Ferrari 458 Italia, a car that is simply more engaging, more exciting and just about as fast, even though it



**Above:** luggage space in Ferrari's nose comes in handy. **Clockwise from right:** R8, 12C and 458 get warmed up

shuns turbocharging and is fashioned from that quaint aluminium stuff. Well, at least that was true last year, last month, maybe even yesterday. But McLaren never sits still and the 12C has quietly evolved, the company using its F1 mentality to identify and eliminate faults on a continual basis. Oh, and that carbonfibre MonoCell's incredible rigidity is quite useful when removing a fixed roof. So tomorrow it's 458 Spider versus McLaren 12C Spider. Or it should be, at least on paper.

The problem is that with cars like the Audi R8 around, you really can't take anything for granted – as the coupe versions of the 12C and 458 found recently in the company of the quite magnificent R8 Plus (**evo** 183), which gave the more expensive cars a bloody nose and a couple of black eyes for good measure. However, for the less extreme R8 V10 Spyder to upset McLaren and Ferrari here and now seems unlikely. It's down on power, a chunk heavier and surely not nearly as focused. It's here for some context and to test the theory of diminishing returns. The 518bhp, 1720kg R8 V10 Spyder S-tronic is priced

from £125,360, cheap compared to the £195,500 McLaren and the £198,936 458 Spider. But the Audi is also the car I want to drive first.

### UNUSUALLY, THE FORECAST IS AS GOOD

as its word. In fact, when I throw open the thick curtains in my room at the fabulous Groes Inn, the view is picture-postcard perfection: light blue skies with nary a wisp of cloud; flowing fields and meandering sheep. I pop my head out of the door on the opposite side of the room and there's a 458 Spider already gargling angrily, with the Ice Silver 12C whooping into life right on cue.

That 12C looks as good as it ever has and ever can, and the slick, coolly subdued specification perfectly embodies McLaren's uniquely understated take on the supercar. The head-banging Rosso Corsa Ferrari, all glinting gold wheels, clashing shapes and a rudely blaring exhaust note equally couldn't be anything but a full-on Ferrari. I wonder if a single image of these two specific cars would be enough for many to pin colours to their chosen mast.

The Audi is out there somewhere. Ah yes, there it is, cowering meekly in a dull shade of grey and with an awkward-looking fabric roof instead of the cleanly integrated folding hard-tops of the McLaren and Ferrari. I love the R8, always have, but even I'm beginning to wonder if today we should just send it home for an early bath. Then I remind myself that the Audi has a 5.2-litre V10 engine with 518bhp at 8000rpm and 391lb ft at 4500-6500rpm, a punchy seven-speed dual-clutch gearbox and magnetic dampers (both optional), and that it's capable of 193mph and 0-62mph in 3.8sec. We shouldn't feel too sorry for it, even in this exalted company.







**‘The keys to the R8’s composure are its superbly controlled damping and the most natural-feeling four-wheel-drive system you can imagine’**

God, it sounds good: a rich, deep and honey-smooth noise that makes you smile even as you’re gently bringing everything up to temperature. Sure, the R8 is starting to feel a teensy bit old-fashioned inside these days and this car’s luxury armchairs seem a bit incongruous, but the instant snap of the dual-clutch ’box, that creamy, brawny engine and the deliciously supple and calmly responsive chassis combine to make it feel pretty special in those first ten minutes or so when you’re feeling your way into the car.

However, what’s also clear is that there’s a little more stodge in the steering and more than a few shimmies through the structure. The viscosity to the steering is particularly disappointing, as the R8 coupe’s has a lovely clean feel to it... I wonder if the Ferrari ahead, spewing out a feral V8 noise that’s shocking rather than musical, fares a little better without a fixed roof, or if the McLaren’s carbon construction will be the crucial difference that finally tips the balance in its favour.

The R8’s challenge isn’t done yet, though. After a quick fuel stop, we climb up to one of my

favourite pieces of road, which – as usual – is completely devoid of traffic. With the magnetic dampers in their stiffest setting, Sport mode selected to access the most aggressive gearshift and the ESP fully off, the Spyder really comes to life and is something very special indeed. The added weight and slightly gooey feeling to the steering never evaporates, but the R8 doesn’t do the usual convertible wobble and never kicks back as the surface undulates, and although there’s a shade more understeer than in the coupe version,

the chassis still has a balance and progression to shame all but the very best.

The keys to the R8’s composure are its superbly controlled damping and the most natural-feeling four-wheel-drive system you can imagine. Push through the turn-in understeer phase and the V10 progressively neutralises the chassis and digs you out of the corner with just the smallest suggestion of oversteer. It’s efficient but also incredibly rewarding, and you feel like you’re skilfully riding a knife-edge. Cleverer still is that







**Above:** R8's V10 hits its 518bhp peak at 8000rpm. **Right:** big engine contributes to the Audi giving away around 200kg to the V8-powered 458 and 12C. **Far right:** interior is relatively basic and is starting to feel a little outdated in this company



**Above:** 458 is the only car of the trio to rev past 9000rpm. **Right:** at 4527mm, the Ferrari is the longest car present; test car came in just 12kg heavier than quoted 1530kg kerb weight. **Far right:** cream Alcantara-swathed interior not to all tastes



**Above:** twin-turbocharged 3.8-litre V8 in the 12C achieves peak torque at a lowly 3000rpm. **Right:** test car weighed in at 1791kg – just 17kg more than the quoted weight. **Far right:** IRIS system means the McLaren's interior is enjoyably uncluttered





the fear-laced thrill of it is actually an illusion – the R8 has much more to give and that knife-edge is actually a great expansive plain to play around in at will. To make that discovery, though, takes a little more aggression – a good lift on the way into a corner to snap the front tyres on line and loosen the rears, a jab of throttle to send the tail wide. If that sounds brutal or scary, the grace of the R8 makes it feel nothing of the sort – it smoothes your inputs and yet exaggerates the intention, and pretty soon you're lobbing the R8 around like Colin McRae, even if from the outside it looks more like Sébastien Loeb smoothly dancing on the limit. Yes, it really flatters that much.

The drivetrain is phenomenal too, the engine retaining that inertia-free fizz as it zips to nearly 9000rpm, and the S-tronic 'box is as quick and assured as you'd hope. With the roof down, you're well protected from the slipstream but even closer to the fantastic V10 and the smell of hot brakes, which just heightens the experience. The R8 sucks in this road with incredible speed and also an agility that belies its weight and sets the bar very high indeed.

Every time I jump into a 458, I curse myself for being so completely taken in by the theatre of it all. I know Ferrari is the master of pushing our buttons, but surely after all this time I should be immune to a lipstick-red key, a herd of Prancing Pony badges and a big red boiled sweet on the carbonfibre steering wheel marked 'ENGINE START'? Well, I'm not. And although I could live without the hideous cream Alcantara trim, there's no shred of doubt that the 458 Italia makes the Audi feel about as special as an Iceland party platter. With the engine barking like it's spoiling for a fight, the metal roof whirring back and away under those sharp buttresses and the mountains and heath basked in light dappled by puffy white clouds, I am joyously excited.

After the calm, measured and indulgent Audi, the Ferrari feels deeply, madly and wonderfully insane. The engine is so sharp, the gear changes ferociously fast and the steering and chassis have an almost startling immediacy. It's all a bit overwhelming and the best way to start to enjoy it all is actually to slow down and try to ease yourself into this new level of response and agility. There is one glaring weakness though, and that's the tangible loss of rigidity. The Spider shakes and wobbles quite alarmingly, way more than my memory suggested from a long drive in Europe with it last year. Compared to the Audi it feels marginal, compared to the 12C I fear it may be simply unacceptable. Time will tell. Fortunately, as you start to dial in to the incredibly pointy front end and really exercise the chassis, the scuttle shake somehow dissolves – or rather, things are happening so quickly and there's such intensity to the process that you simply don't have time to think about it.

Wow, this thing is special. The 562bhp 4.5-litre

V8 is wondrous, with the most precise throttle response, an almost turbo-like surge of torque in the mid-range and a raging energy as it passes 9000rpm. You'll want the manettino set to Race or CT Off in these conditions (leaving just the stability control to keep a watchful eye on proceedings) to feel the 458 at the peak of its powers, and you'll also want to be right on top of your game. With no understeer at all and such unfiltered access to the engine, the 458 Spider is a wild car to extract the best from, always on the edge of wheelspin and always demanding tiny but crucial inputs. The steering is so quick that at first you'll snatch at corrections and upset the car horribly, but in time you learn to relax and come to almost pre-empt the chassis by unwinding the lock just a fraction earlier than your instinct says.

So with just a bit of patience it's very easy to really bond with the Ferrari, and when you do it's a shot of pure adrenalin: the rate of response from all the controls, the total lack of a cushion of understeer, the aggressively locking E-Diff, the mind-bending speed of the gearchanges and the noise swirling around you leave you literally breathless. The 458 Spider is just incredibly intense. If I'm honest, I don't much like the incredibly shouty exhaust, and the low-speed shimmy, rattle and shake is surprising and disappointing, but when you ask it to deliver the full supercar experience, the 458 blows your mind. Even the ultra-fast steering, which doesn't quite suit the front-engined F12, works with this car because it has a better balance of traction to power and a lower centre of gravity, making the rate of response more natural. The R8 is forgotten. The 12C has a mighty job on its hands.

The harmonious, minimalist McLaren might not shout like the 458, but smoothly pulling its door up to reveal a thick sill subconsciously makes you nod in appreciation of the carbon chassis, despite the fact it's neatly carpeted. Immediately the car feels very special, as does the simple, carbonfibre-spoked and clutter-free steering wheel and the unrivalled sense of control granted by the uniquely panoramic view through the huge windscreen. There's no better driving environment, even if this car's standard seats are set a little too high and aren't half as supportive as the better-specced pews fitted to Nick's long-term 12C coupe. With the elegant speedboat-shaped and carbonfibre-trimmed 'key' in your pocket, simply depress the engine start button on the slender floating centre console and the 3.8-litre twin-turbocharged motor fires with a deep and menacing vibrato growl. It's not exactly pretty, but it sounds like it means business.

Within barely 50 yards you know it has the Ferrari licked for rigidity. I drove this car on the launch in Spain and felt it indistinguishable from the coupe. So confident is McLaren of the structure that it has even left the suspension rates exactly the same on the Spider. Here in the UK





*Spiders group test*



**‘The 458 Spider is a wild car to extract the best from, always on the**







**edge of wheelspin and always demanding tiny but crucial inputs'**

