

JUNE  
2017  
ISSUE 659  
£4.70

# New M5 driven

FAST, FUN AND 4WD, BUT WHERE  
DOES IT RANK AMONG THE M5 ICONS?



## GIANT TEST

### Golf GTI: still king?

New GTI vs fierce Peugeot  
308 GTi and feisty Mini JCW

## FORD GT

### Driving Ford's Ferrari

Flat-out in the GT,  
Detroit's Le Mans winner



WORLD  
EXCLUSIVE  
TEST!

## REVEALED

### Aston's next chapter

New Vanquish! DBX crossover!  
New £200m factory! Hold tight...



## 21-PAGE McLAREN SPECIAL

### 720S VERDICT

Meet the new state of the art

'F1? I'D RATHER  
HAVE A P1'

CEO Mike Flewitt interview

### P1, FIVE YEARS ON

Back in the car that  
kickstarted the company

# GT3 vs GT R!

New **Porsche 911 GT3** takes  
on wild **Merc AMG GT R** –  
battle royale on road and track









ICONIC

**THE NAVITIMER**  
SINCE 1952







## INSIDER

- 8 How Aston has just five years to come good
- 12 Merc's new A-Class previewed
- 14 A subscription-only car? New Chinese firm says yes
- 16 Citroën starts its new SUV era with C5 Aircross
- 18 The CAR Inquisition: AMG's Tobias Moers
- 22 How Alonso's spring break could save McLaren F1

## TECH

- 24 Five steps to autonomy: the end of driving?
- 26 Does it work? AMG E63S Drift mode
- 27 New Audi A8 heavier than before – on purpose
- 28 Dr Ian Robertson on why BMW makes tech, not cars

## FIRST DRIVES

- 30 Ford GT No pressure, but the last two were quite good
- 34 Skoda Karoq Yeti becomes extinct
- 35 Lotus Elise Sprint More name, less weight
- 36 Honda Clarity Why hydrogen works
- 36 Skoda Octavia vRS Winning at the school run
- 38 VW Golf R Still possibly the only car you'll ever need
- 39 VW Golf GTI Performance The hot Golf sweetspot?
- 40 BMW 440i M Sport Don't pine for a proper M

## OPINION

- 42 The CAR columnists: Gavin Green & Mark Walton
- 47 CAR interactive: you write, we copy and paste

30

Ford GT:  
The first drive



108



## FEATURES

52

### New 911 GT3 vs AMG GT R

World-first rumble in the forest between Stuttgart's biggest hitters

64

### In rotary heaven

We step inside the world's finest collection of Mazdas

74

### McLaren special: P1 reloaded

How McLaren's hybrid hypercar changed the game

88

### McLaren special: McLaren 720S

Maranello's worst nightmare made real. We drive it

98

### Giant Test: VW Golf GTI

Peugeot's zingy 308 GTi and hyper Mini JCW fight for classy hot hatch honours

108

### Audi goes rallycross

Endurance race programme ended? Time to get dirty

118

### New M5: driven

The old F10 M5 got left behind. We see if the M division has its war paint back on

## REAR END

124 Icon buyer

Can't wait for new M5? Pick the best of the previous 5

132 Our cars

Lived in, loved and the editor wins a Medium Trophy

143 GBU: every car rated!

There will be blood

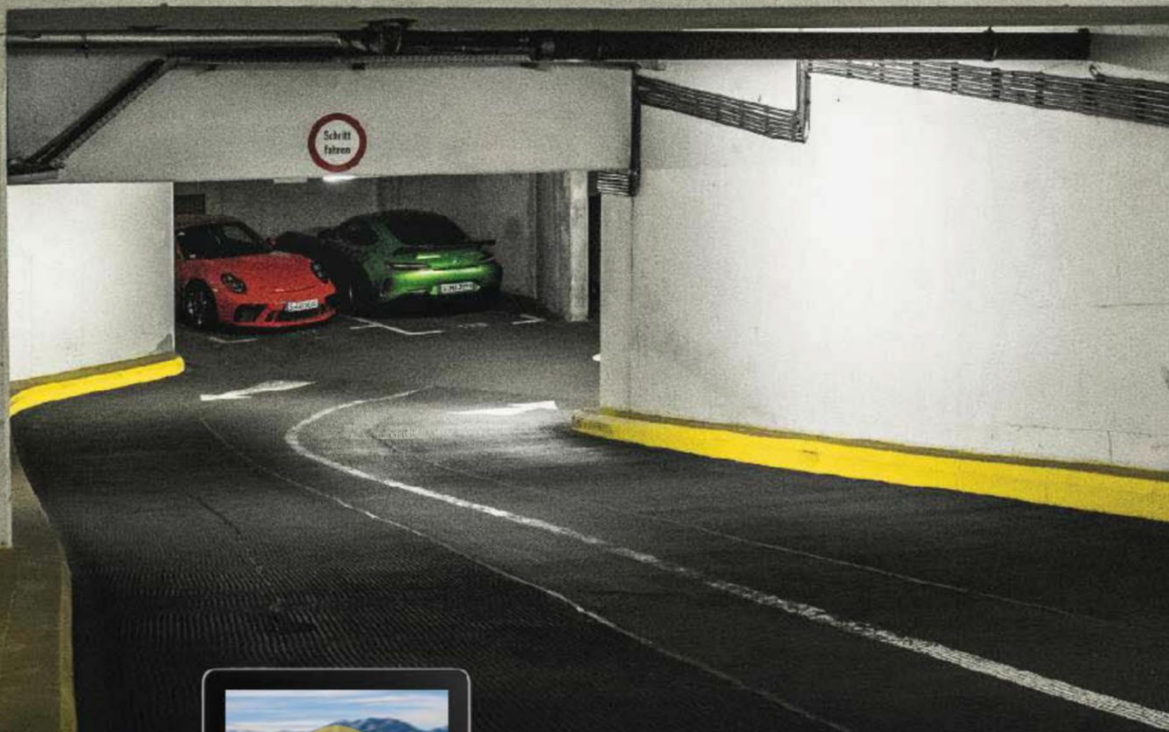
162 The CAR Top 10

Ferdinand Piëch's most extraordinary moments



# 52

Hit the start buttons;  
who makes the best noise?



**FACEBOOK**  
[facebook.com/CARmagazine](https://facebook.com/CARmagazine)



**TWITTER**  
[@CARmagazine](https://twitter.com/CARmagazine)



## IN OUR iPad EDITION

CAR's beautiful imagery works brilliantly on your tablet. Subscribe to the interactive iPad edition, with video content, our Android replica edition, or the magazine itself, on page 96



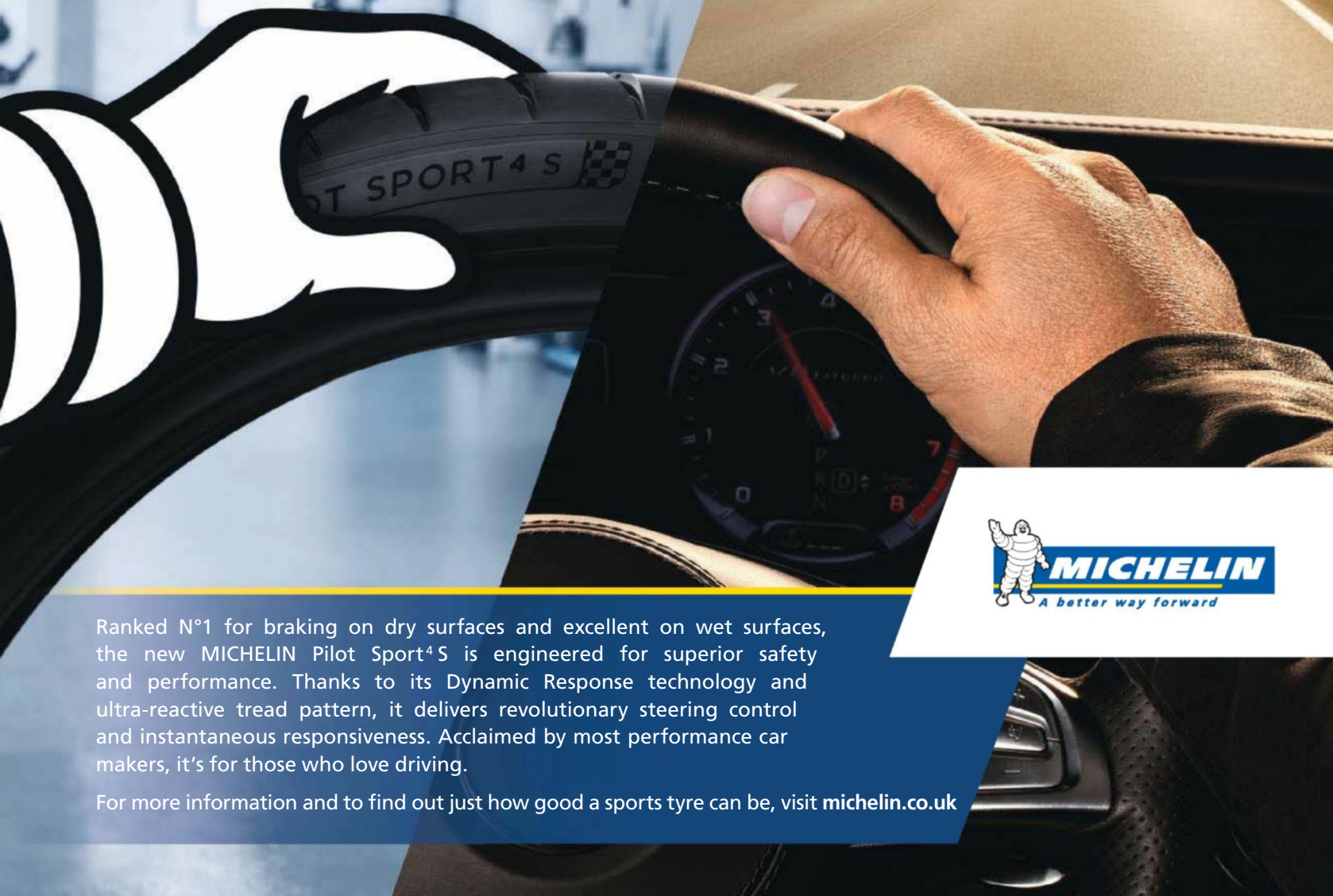
**INSTAGRAM**  
[@carmagazine](https://instagram.com/carmagazine)



**YOUTUBE**  
[CARmagazineTV](https://youtube.com/CARmagazineTV)



# ***MICHELIN PILOT SPORT<sup>4</sup> S*** ***GENUINE PASSION*** ***EXCEPTIONAL DRIVES***



Ranked N°1 for braking on dry surfaces and excellent on wet surfaces, the new MICHELIN Pilot Sport<sup>4</sup>S is engineered for superior safety and performance. Thanks to its Dynamic Response technology and ultra-reactive tread pattern, it delivers revolutionary steering control and instantaneous responsiveness. Acclaimed by most performance car makers, it's for those who love driving.

For more information and to find out just how good a sports tyre can be, visit [michelin.co.uk](http://michelin.co.uk)

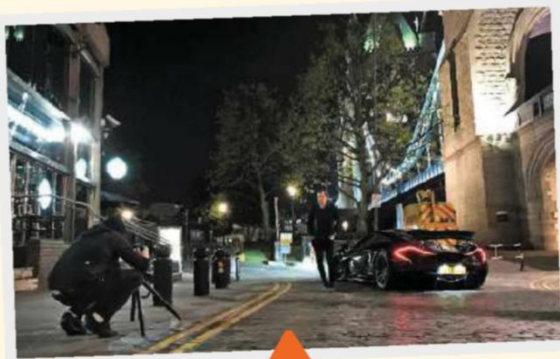
## THIS MONTH ON PLANET **car**



### When passion transcends obsession

Driving amazing cars is wonderful, but the best part of this job is the people you meet. This month CAR's Ben Whitworth spent time with Seb Vettel in Geneva, Peter Schreyer in Seoul and the Mazda-mad Freys at their museum, men whose automotive passion transcends obsession.

**Read Ben Whitworth's Mazda Classic story on p64**



### When supercars become superstars

Mark (squatting, above), meet the P1. P1, this is Mark. 'It's hard to remain professional when you're handed the keys to a P1 for the first time,' photographer Mark Riccioni told us of his night with McLaren's hypercar. 'The attention it gets is outrageous – it's a full-time job stopping gawping traffic from crashing into you.'

**See Mark Riccioni's P1 shoot on p74**



### When Wednesdays become M5 Wednesdays

When Georg Kacher bagged a drive in a prototype of the new M5, we tried everything to talk Ben Barry down. Why, he sobbed, hadn't he had the call? M specialists Munich Legends phoned just as the police were set to get involved – would Ben like to drive every previous M5 back-to-back? Happy Ben.

**Read Ben Barry's M5 legends story on p125**

## FROM THE **EDITOR.**

### It's a pretty terrible track tyre – deliberately

**THIS YEAR I'M** becoming a racing driver. Not a very quick or successful one but a racing driver nonetheless; competition licence, racing Caterham, my own Hans device, odd little mimes for understeer and oversteer – the full nine yards. This is happening thanks to the Caterham Academy, the novice-friendly, one-make race series that this season took its 1000th daydreamer and made a racing driver of them.

There are lots of brilliant things about the Academy, but one is the choice of control tyre, Avon's CR322. Think track tyre and you'll likely picture something sticky, jet-black and expansive. The CR322 is not like this. Its rubber is hard and the tread so deep and prone to deformation that a set worn to the legal limit is a second per lap faster than a new set.

But the CR322 is the perfect tyre for learning how to tease speed from a Caterham. The threshold from grip to slip is a mile wide and communicated in HD clarity to your hands, your bum and, via an insistent howling noise, to your ears. By contrast normal road cars (Academy-spec Caterhams remain road-legal) feel massively over-tyred, and understandably so – most drivers have no interest in being anywhere near the limit, and rightly so on the road in most instances.

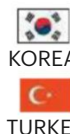
But while there's much to be said for broad, sticky rubber – the gut-churning traction, the eye-widening corner speed – there's something really engaging about a car on more modest tyres, one that talks to you constantly through every curve and change of surface. It's why Caterham's entry-level 160 (the one with the little turbocharged Suzuki triple) is as engaging as its range-topping 620R (the one with the big supercharged Ford four), and why McLaren CEO Mike Flewitt enjoys driving his classic Lotus Elan as much as he does his 675LT (p84).

Enjoy the issue.



**Ben Miller**  
Editor

**car**  
AROUND THE WORLD



**WE'RE ALSO  
PUBLISHED IN:**

CHINA  
MALAYSIA

INDIA  
SPAIN

ITALY  
THAILAND

KOREA  
TURKEY



# INSIDER.

Cars, people, scoops, motorsport, analysis: the month according to **CAR**

## DBX... I've been expecting you

On sale within 18 months, Aston's first SUV is just the beginning of its grand plan to become Britain's Porsche. **By Matt Joy**

**Aston re-energised**  
Our artist's impression shows how the production DBX is likely to look when it's unveiled, with the Tesla Model X and Bentley Bentayga its key rivals.





**Time to crossover**

The 2015 show car was well received, but expect the production version to gain rear doors, as seen on our illustration, and extra rear headroom. SUV proportions have become accepted at all levels of the market, especially when the car looks this good.

**Plug and play**

The DBX will be the first electric Aston, but don't expect the first DBX to be electric. The AMG tie-up gives Aston access to an excellent – and infinitely adaptable – petrol V8.

**Family values**

Aston acknowledges that too often in the past it's made all its cars look the same. Expect greater variety, as well as the new body shape.

**T**HIS TIME ASTON MARTIN is playing for keeps. The days of working wonders on limited resources and hand-me-downs are over; soon those Volvo window switches will be gone forever. Since the 2007 divorce from Ford, Aston has succeeded in building on the enormous strength of the brand, carefully exploiting *that* film franchise to build a closer link between screen fantasy and cars on the street. Combine that with the AMG tie-up bringing much needed expertise with the details, and the future is looking rosier than ever. But is it strong enough to make a success of DBX?

The biggest step change in the company's history, DBX is the reason Aston has invested £200m in the new plant at St Athan, a former RAF base in Wales, officially opened in a ceremony in April. Around 750 new jobs will be created across St Athan and Gaydon, with the new facility expected to add 7000 to Aston's annual production volume; of those, 5000 ▶

ILLUSTRATION: ANDREI AMARVARIU





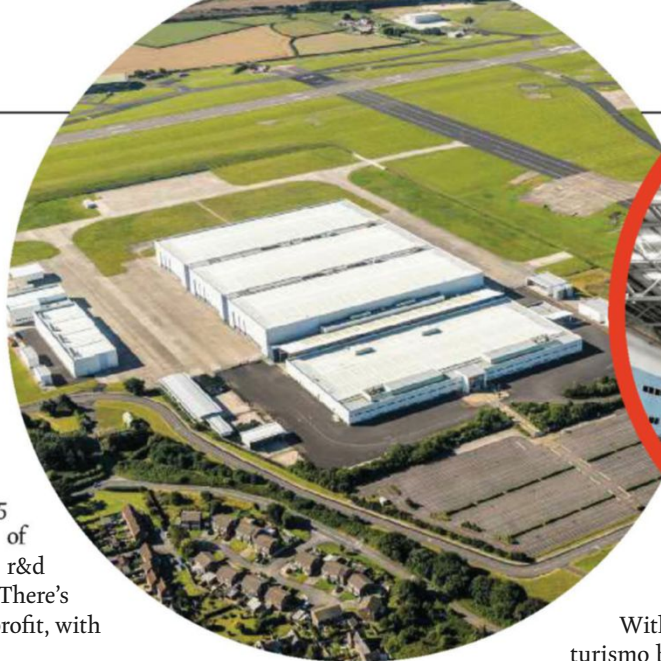
will be DBX, joined by two new Lagonda models by 2022. For Aston to thrive it needs to expand into new segments and tear up its long-standing focus on sports cars and GTs.

There's also the small matter of a return on those huge investments. Financial results show that revenues were up in 2015 but pre-tax losses rose; Aston last made a profit in 2010, and CEO Andy Palmer is adamant it will be 2018 before the firm will make money again. In 2015 there were 300 redundancies as part of a restructure to cut costs, but Aston's r&d spend was up 40% in the same year. There's a clear and bold plan for success and profit, with DBX at the heart of it.

The production version won't differ greatly from the 2015 concept; expect the taller body to gain a pair of rear doors for genuine practicality and ride on a stretched version of the DB11's new aluminium platform. Initially the DBX will use a conventional powertrain, utilising a high-torque version of the AMG-derived 4.0-litre twin turbocharged V8. But before the DBX, the first Aston to use that engine will be the next Vantage, debuting this year. An electric DBX will follow, using AMG tech to provide four-motor all-wheel drive. A high-performance V12 version is also possible.

More pressing, however, is the need to replace the brilliant but aged Vantage. Trading on its analogue appeal in an increasingly digitised segment has been a wise move and few marques are as good at spinning off special editions as Aston, but the V8 is now 12 years old. Sitting on another version of the DB11's aluminium structure, the new Vantage will pare back the weight and bring more breadth to the range by becoming sharper from the outset – the standard V8 will have the 911 Carrera firmly in its sights, including the availability of a manual gearbox.

Its bespoke version of the AMG M1777 4.0-litre V8 will offer better emissions without sacrificing the soundtrack, and leaving room for higher output versions wearing the new AMR sub-branding. AMG has already shown that engine can comfortably deliver over 600bhp.



↑  
Aston's Welsh factory will incorporate these former RAF buildings. The DBX will be built there, and hundreds of skilled jobs created

↓  
Valkyrie hypercar will be the first in a family of mid-engined Astons

With DB11 satisfying the traditional gran turismo brief and keeping current customers happy, the big push into new areas will come from the next Vanquish and the now-confirmed mid-engined supercar. The outgoing Vanquish owes much to the DB9-era cars on which it is based, but the new version due in 2018 adds more of everything: greater performance from the twin-turbocharged V12 engine and sharper responses thanks to leaner architecture, giving Aston a front-engined car in the spirit of Ferrari's new 812. It's a brave move to push even further upmarket, but there is recognition from within the company that the outgoing range of cars lacked sufficient differentiation, something that will be put right within six years.

Heading in the opposite direction from the next Vanquish will be that new supercar; compact and agile, it will be the first mid-engined Aston since the 1979 Bulldog concept. Taking the fight to Ferrari's 488 and McLaren's 720S, the supercar could wear the fabled DBS tag and use a version of the twin-turbocharged V8 engine pushing out over 700bhp. It also has the potential to make use of more exotic materials, with the bonded aluminium construction method allowing relatively easy integration of composites to keep weight down.

The final pieces of the puzzle are the two Lagonda models, slated for arrival in 2021 and 2022. Sharing much of their engineering with the DBX, the SUV and four-door saloon will be the most luxurious Aston Martins ever. **EW**

## Believe the hypercar 2018's Valkyrie showcases Aston's ambition



**THE ICING** on the Aston Martin cake will be the Valkyrie hypercar, a joint project with Red Bull Advanced Technologies. Red Bull won't be bringing an F1 engine with them; the Valkyrie will feature a naturally aspirated Cosworth V12, no doubt delivering a sensational soundtrack and setting itself apart from rival F1 tie-in road cars from Mercedes and McLaren.

Red Bull's chief technology officer Adrian Newey is being given plenty of rein to shape the Valkyrie. The carbon structure and bespoke suspension design have been created to his strict design, which aims to deliver road-car comfort while handling huge downforce. Newey's aero genius means the sculpted underfloor does most of the legwork, allowing Aston

creative chief Marek Reichman the scope to sculpt a dramatic exterior.

Just like the Red Bull racers, the Valkyrie uses top-drawer componentry. As well as Cosworth on the engine, the list includes

Ricardo working on the gearbox, Multimatic the carbon tub and Alcon the brakes.

There will be a track-only version intended to deliver LMP1 sports prototype levels of performance. A maximum of 175 will be built, including 25 track versions; don't expect much change from £3 million.





*head & shoulders* **MEN  
ULTRA**

**NEW**

# **UNBEATABLE\***

DANDRUFF PROTECTION  
**DESIGNED FOR MEN**



**New Head & Shoulders Men Ultra.**

Designed for men, its formula with high-performance booster gives unbeatable dandruff protection\* and stronger hair\*\*.

**Now you are up for any challenge.**

\*With regular use - versus anti-dandruff shampoos, excluding anti-dandruff shampoos containing selenium. \*\*Strength against breakage.



# Sleek A-Class concept shows the way ahead

Replacement for huge seller will get its look from Shanghai concept. Spin-offs galore scheduled. **By Jake Groves**

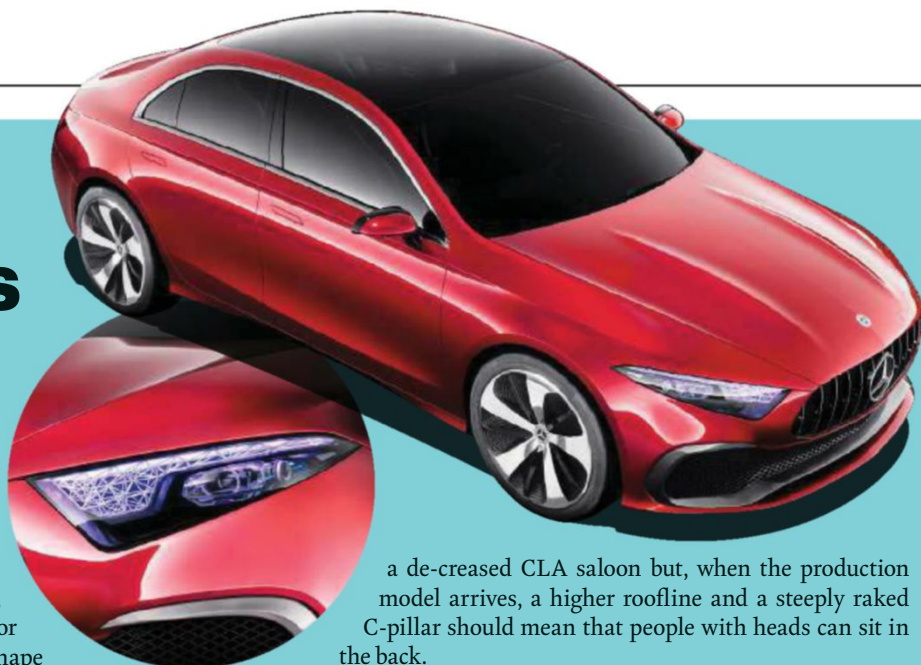
**T**HE TIME of creases is over.' For Mercedes that's a bold statement indeed, but one it was happy to provide evidence for at the 2017 Shanghai motor show in the shape of the Concept A Sedan. This sleek baby saloon previews not only the next-generation series of A-Class cars but the future of the brand's design language as a whole.

That new design language is what Mercedes calls – brace yourself – Sensual Purity. It basically means the superfluous creases have been consigned to the history books. In their place are details like flush door handles à la Tesla and Range Rover Velar, and Merc's Panamericana grille, first seen on the refreshed Mercedes-AMG GT.

Those *Tron*-esque purple headlights give the Concept A a distinctive face and get more interesting the closer you look. It's not a single piece of plastic or glass, but a grid structure coated in UV paint.

You won't win any awards for noticing that the Shanghai concept looks like

Current CLA donates the overall look, but minus most of the creases



↑  
Lights are a whole new shape for Merc, as part of visual overhaul

a de-creased CLA saloon but, when the production model arrives, a higher roofline and a steeply raked C-pillar should mean that people with heads can sit in the back.

Underneath, the next-gen A-Class will run on the MFA2 compact car platform, which will be built in China for the first time – hence the Concept A's debut in Shanghai – alongside production in Germany. MFA2 is modular and therefore configurable to different widths and lengths. We can expect to see the next-gen A-Class hatch, CLA small saloon and shooting brake, GLA crossover and new B-Class all using the same underpinnings.

The flexibility of MFA2 could also make way for new models like a coupe A-Class or the much-mooted baby G-Wagen that could be called the GLB or GLG, though neither of these have been confirmed.



## Mercedes-AMG GLC63

**IF YOU'RE THE** sort of parent who likes terrifying your 2.4 children then your new family bus is here. The Mercedes-AMG GLC63 is Affalterbach's latest hot rod on stilts and comes in 63 and 63 S strengths, and regular SUV or Coupe shapes.

Merc's ubiquitous (and brilliant) 4.0-litre twin-turbo V8 features throughout, in two states of tune. The standard version has a not inconsiderable 469bhp, while the S version gets an extra kick at 503bhp. A 0-62mph time of 3.8 seconds and a limited top speed of 155mph in S guise is enough to induce

screams from your significant other and your young 'uns.

Most of the GLC's innards have been ported across from the AMG E63, including the 4matic+ four-wheel-drive system, the fast-shifting nine-speed automatic 'box and multi-link rear axle.

They go on sale in the summer.

## Mercedes-Benz S-Class

**THE WORLD'S BEST** limousine just got a whole lot cleverer. Forget the same-again wardrobe, the latest Mercedes-Benz S-Class hides its talents under the skin – with a midlife refresh bringing extra autonomous skills, intelligent mapping that'll brake for bends and a new suite of engines.

Revised Distronic Active Proximity Control and Active Steer Assist make their debuts. This big Merc now reads more detailed mapping and uses it to drive itself more, change lanes at the nudge of an indicator stalk and drive in traffic jams unaided.

Stuttgart is ditching the V6 for inline sixes as part of its new modular motor masterplan: choose from S350d and S400d or the S560 and S63 AMG petrols powered by a V8.

The new S-class goes on sale in October. Spot it by the triple eyebrow over the headlights.





**RACING IN STYLE.**  
WORLD SPONSOR AND OFFICIAL TIMEKEEPER SINCE 1988.

**1000 MIGLIA**

CHOPARD  
CHRONOMETER  
CALIBER 01.08-C  
AUTOMATIC  
SWISS MADE

12  
6  
55  
50  
45  
40  
35  
30  
25  
20  
15  
10  
05  
00

F  
E  
1000 MIGLIA 8

MILLE MIGLIA GTS POWER CONTROL (168586-3001). CHOPARD MOVEMENT, CALIBRE 01.08-C

MILLE MIGLIA  
*Chopard*



### None more digital

Lynk & Co promises to be the world's most digital car company. Its infotainment and telematics platform, developed with Ericsson, allows third parties to develop their own apps – just as they do for the iPhone. In theory there are limitless opportunities to make car travel more interesting and versatile. 'The smartphone's success really took off when third-party apps became available,' says Lynk & Co's chief digital officer David Green. 'We want a similar revolution in cars. We're confident we'll have more digital ecosystems around our car than any other car maker.' Approved apps will be downloaded from the Lynk & Co store, just like you'd download smartphone apps from Apple.



### Designed in Europe

Lynk & Co's first car, the O1, is an SUV that's a little bigger than a Nissan Qashqai. Although built in China – alongside Chinese-assembled Volvos – the O1 is designed and engineered in Sweden. Englishman Peter Horbury (left), former Volvo design director, is responsible for the looks. It's a handsome, sharp-edged and chunky vehicle, which has a hint of Porsche Macan in its style, and looks and feels like a European car – a key goal. It uses the new CMA platform that also provides the architecture for the upcoming Volvo XC40, and will share the same engines and many of the class-leading safety systems.



## The Chinese company revolutionising car use

Lynk & Co are on the way with radical ideas about ownership, connectivity... oh, and a couple of actual cars. **By Gavin Green**

**W**ERE A CAR company for people who don't want to buy a car. That's the unusual promise from the boss of the world's newest car brand.

Lynk & Co, part of Geely (which also owns Volvo), is likely to be the first Chinese brand to sell cars in any volume in Europe and North America. Chief Alain Visser says Lynk & Co is 'not really a car company. We're a mobility company'.

Lynk & Co's offering, when European and American sales start in early 2019, is indeed unusual. Instead of conventional sales, it wants to prioritise a subscription model, where 'buyers' will be able to lease (or rent) the car for fixed time or mileage periods (for example, 500 miles, 1000 miles, three months or six months).

Most cars are likely to be 'sold' on two-year subscriptions, similar to an iPhone contract with O2. They're promising much more flexibility than a conventional lease model. For

those who do buy outright, there will probably be a lifetime warranty (already promised in China where sales start at the end of this year). There will be no franchised dealers. Sales will be through a small number of Lynk & Co-owned retailers, in-store pop-ups and, increasingly, online. There is a fixed price and no options. A range or 'collection' of cars, with specific colours and trims, will be offered.

Visser says taking out the middle men saves Lynk & Co about 25%, and this will be reflected in pricing.

To appeal to millennials, a key target is class-best connectivity (see above left). All Lynk & Co cars will have shareable digital locks, rather like a Zipcar (a car-sharing club, whose members can access a choice of cars parked in the area), and a sharing app is standard. Instead of a key there'll be a smartphone app connected to a Lynk & Co cloud. This allows owners to form their own car-sharing networks to let friends, family or other approved users to share their car. This gives owners the opportunity to earn money from their car, when not in use.

Lynk & Co will also offer 'pool' cars in apartment blocks – renting or buying a flat may lead to a share in a vehicle. This reduces the number of parking spaces needed. The same model could be used for pooling company cars.

● @greenofrichmond

↑  
O1 uses a Volvo-twinned platform. Trad engines will be followed by hybrids, then full electric

# VW's electric charge starts next year

Out with those troublesome diesels, in with fully electric cars – really soon. **By Jake Groves**

**T**HE RUSH TO electric propulsion is about to begin, with the VW Group using the recent Shanghai show to push three different electric concepts set to arrive in production form as early as 2018.

Wearing Volkswagen, Skoda and Audi badges, all three are coupe-SUVs in style, but they're not all the same. Three concepts, two different methods of execution, one goal: to get more electric cars on the road within the next five years.

Audi is charging ahead with its plans to get e-tron cars in showrooms starting next year, while VW and Skoda will kick off their electrified futures in earnest from 2020.



## 2018

Production version of Audi e-tron quattro, likely called Q6, arrives

## 2019

Production version of Audi e-tron Sportback; Skoda Superb plug-in launched

## 2020

Production versions of VW ID EVs, Audi's MEB-based compact EV arrive, and possibly Skoda Vision E

## 2025

VW's fully autonomous ID Pilot system released. VW hopes for 1m EV sales a year by then

### Audi e-tron Sportback

Don't be fooled by the similarities between the Audi e-tron Sportback concept you see here and the VW and Skoda concepts sharing the page. Its underpinnings are the MLB Evo platform, as used on the Q7 and the e-tron quattro concept we saw at Frankfurt in 2015. The VW and Skoda, by contrast, use the MEB platform.

This jacked-up A7-inspired e-tron show car merges coupe, SUV and Allroad styling cues. It's longer, wider and lower than Skoda and VW's show cars, not to mention more luxurious. The four rings glow, the headlights project arrows and signs onto the road ahead to catch the attention of phone-distracted pedestrians, and the 2+2 interior uses bamboo, microfibre and electroluminescent paint.

Expect the production car in 2018.



**Audi wheel and lighting guru Cesar Muntada explains the future of wheels and lights**

### Volkswagen ID Crozz

The googly-eyed VW is the third in the brand's line of ID concepts. Called the ID Crozz, it follows in the tyre tracks of the original ID hatchback concept and the Microbus-inspired ID Buzz.

Volkswagen says the ID Crozz (pictured above and below) is a jack-of-all-trades high-riding coupe for lifestyle-ish types who want a splash of style with their huge dose of practicality. Like the other ID concepts, there's a fully autonomous mode in which the steering wheel recedes into the dashboard. It should be capable of up to 310 miles on one charge and a top speed of 112mph.



### Skoda Vision E

Skoda took the ID Crozz, prised off the VW badge, gave it more lights and angles and voila: the Vision E. The Czech EV looks very much like the Vision S, which is the concept that previewed the Kodiaq.

Confused? Don't be – all you need to know is that the Vision E uses the same versatile MEB platform and electric powertrain as the Crozz, looks suitably Skoda-ish and is also capable of being fully autonomous.

Although it transparently uses pooled VW Group resources, the Vision E is significant as the first all-electric car that Skoda has ever put its name to, signalling that VW and Audi won't get to keep the technology to themselves.

The production version of the Vision E won't be the first electric Skoda in the showrooms. A plug-in Superb will join the range from 2019.





# C5 Aircross in Citroën's own words

More than just a rival to the Qashqai, this lavish SUV starts a new chapter for Citroën  
**By Phil McNamara**



## The view from the top

'The C5 Aircross kickstarts the transformation of Citroën, and our global SUV offensive,' says CEO Linda Jackson. 'It will only be a five-seater; we have the C4 Picasso MPV for seven seats.'

Citroën intends to stand out on design and comfort. C5 Aircross will launch in China later in 2017, but comes to Europe at the back end of next year. It's too early to confirm all engines, but Europe will get a 300bhp plug-in hybrid. We have one major launch per region per year, and Europe gets the C3 Aircross SUV this year instead.'

↑  
**Fresh emphasis on design and comfort showcased in C5 Aircross**

## Obeys the Citroën design rules

'We've written a rulebook for Citroën [and DS and Peugeot] design, from proportions to graphics, interiors and detailing such as alloy wheels,' says Citroën's design director Alexandre Malval. 'It started with C4 Cactus. Citroëns are different to a lot of mainstream cars: no flaming [body surfaces like 2001-on BMWs], no aggression, black window pillars. This new design language features very simple surfaces and very clean graphics which make the cars extremely memorable. People thought the aesthetic was only appropriate for compact cars like Cactus and C3; C5 Aircross shows the potential for much bigger cars and SUVs. We want to create a family: imagine a lot of children, same parents but no twins. We don't want to copy and paste the front end from one to another.'

↓  
**Family face will be more varied than in the past, apparently**



## Get the ride right

'Citroën Advanced Comfort is a global approach,' explains chassis engineer Thierry Perron. 'There are many aspects – noise, visibility, light, space – it's not only suspension. Every suspension has a spring to decouple the body movement from the road, a shock absorber that controls the body movements and bump stops that limit the wheel travel. When you compress bump stops, they redirect the energy.' But if you replace them with additional shock absorbers, they dissipate the energy rather than redirect it. This gives better wheel and body control, reduced damping for small wheel movements and improved comfort on smooth roads without sacrificing the control of bigger body movements.'

## Prioritise comfort

'The C5 Aircross will prioritise physical and mental well-being' says Xavier Peugeot, Citroën product chief. 'It has generous space inside to make you feel good. The enveloping front seats can come with five massage programmes, and the rear seats recline up to 27 degrees. And there will be a significant reduction in noise. It will be the most comfortable SUV on the market.'

## We hear

... at the New York Auto Show

**THE NEWS** behind the scenes at **Mercedes** revolved about the recently signed-off sports car strategy. We're told the **SLC** will not be replaced, while the next **SL** will share a new lightweight architecture with the **AMG GT** replacement. In contrast to the future GT, which remains a two-seater in a slimmer and lighter package, the next SL due in 2020 is to evolve into a more

spacious 2+2 which loses the retractable hardtop in favour of a folding soft-top. There might not be a new **S-Class Cabriolet**, so both the **C-Class Coupe/Cabrio** and the **E-Class** duo are expected to move up in size, price and image...

Can **Genesis** do a better job under the new marketing wizard **Manfred Fitzgerald** and the new chief designer **Luc Donckerwolke**? **Hyundai's** upscale brand chose New York to present its first SUV, the **GV80** (right). Due out in 2019, it targets the **BMW X5** and **Merc GLE**.

Although the first **Genesis** plug-in hybrids are allegedly round the corner, no battery-only models are expected before 2021. Instead, expect two more crossovers, one smaller and one larger than the **GV80**, plus a family of new or revised saloons. The most intriguing effort is the compact **G70** due late this year, engineered with a little help from **Albert Biermann**, father of the **M3**



and **M4**. All **G** derivatives are rear-wheel drive, but like the corresponding SUVs they are based on three different architectures, so complexity still rules at **Genesis**. Europe must wait until 2020 when a small-scale operation will focus on Germany, Switzerland and the UK...

As **FiatChrysler** chief exec **Sergio Marchionne** pulls out all the stops before his expected retirement in 2018, the master dealmaker may have to forge a major partnership to save the group from being split up or going under. The auto show rumour mill produced two scenarios,

both unconfirmed and totally hypothetical. Option A sees **FiatAuto** become part of **GM Europe**, **Chrysler** become part of **GM North America** and **Dodge** become the new **Pontiac**, ie shut down. Ram would be merged with GMC, while **Jeep** and **Alfa-Maserati** would soldier on as standalone brands.

Option B proposes a tie-up between FCA and **VW North America**. This would give Marchionne's team access to VW's modular electric car platform (see p15) while opening the Chrysler/Dodge sales channels to the Germans...



# Ford ECOSPORT



**Go Further**

Official fuel consumption figures in mpg (l/100km) for the Ford EcoSport range: urban 34.9-58.9 (8.1-4.8), extra urban 53.3-65.7 (5.3-4.3), combined 44.8-64.2 (6.3-4.4). Official CO2 emissions 149-115g/km.  
[ford.co.uk/EcoSport](http://ford.co.uk/EcoSport)





## The CAR Inquisition

# ‘AMG is ambitious – it’s hard work’

Hypercars, soaring sales and domination of F1’s hybrid era... It scarcely matters what AMG chief **Tobias Moers** dreams of – he doesn’t get time to sleep

**A**N AMG MAN since 1994, Tobias Moers is modern AMG. His story is one and the same as that of Mercedes’ high-performance division and its rise from niche builder of blunderbuss super-saloons to rapidly expanding performance car maker in its own right.

Moers has overseen development since 2002. His fingerprints are all over the current line-up, from the gateway-drug 43s through the GT sports car and Geneva’s GT Concept (on sale 2018), to the Project One hypercar. It’s a line-up of bewildering scope and, when you consider the gulf between the £2million, 1000bhp Project One and the £143k, 577bhp AMG GT R directly beneath it, one that’s perhaps a little scattergun?

Moers chuckles. ‘You could argue the hypercar is too far removed but that’s in the context of what we do currently. There is a big gap *now*...’ He suggests the AMG GT has at least two years left in it, and that there’s dynamic headroom above the GT R – for

a Black Series car. He’s also keen to point out that while AMG might be an enthusiast brand, nothing it does is random.

‘I put AMG’s success down to dedication and a strategic approach,’ says Moers. ‘Everything you decide today has a consequence in the future. Passion and hard work without a strategy won’t bring success. Everything you see – the hypercar, the GT Concept – is considered; a piece of the puzzle. Take the GT. We repositioned that car compared to the SLS before it [the SLS was the first car engineered by AMG from scratch, and a more expensive machine than the current GT]. We’ve also extended the portfolio, moving up with the hypercar and down with the 43s. Previously we didn’t have the breadth or the volume. The GT Concept takes us another direction. For now it’s as luxurious as an AMG should be. We will bring that car to life next year.’

It takes but a moment in Moers’ company to appreciate he’s not a man prone to looking back. Relentlessly progressive,

ILLUSTRATION: SENOR SALME



## CAR'S CURVEBALLS

6 questions only we would ask...

### Tells us about your first car...

'It was a Kadett, an Opel Kadett. Did I like it? It was rear-wheel drive and I was racing on the roads of Black Forest in the snow – what do you think? I learnt to drift with that car.'

### What's your proudest achievement?

'In my business life, taking my two kids out of it, it is the story of AMG; the whole story. I am part of the story, part of our holistic approach.'

### The best thing I've ever done in a car?

'Survive.'

### Tell us about a time you screwed up...

'I have made mistakes in the past of course, and still do, but the most important thing is reflection. Reflect on your mistakes, think about them, and learn to recognise when something begins to feel like a mistake. That way you can change it – then it's not a mistake. Never carry on when it starts to feel wrong. Stop, take the time, and make a change.'

### Supercar or classic?

'Supercar. Performance is more important for me than romance. I respect classic cars, I respect young-timers [modern classics] and of course I have my favourites. But these aren't where my focus is.'

### The CAR curveball. Where did the AMG 300 SEL 6.8 'Red Pig' finish at Spa in '71?

'Second in class... Wait, no! First in class and second overall.'



Merc's Källenius and the only official AMG Project One image to date – looks hardcore

change and technological progress fire his enthusiasm, whether it's Formula One's new fat-tyred vibe, drift-ready all-wheel-drive E63s or performance electrification.

'I'm not a rear-view mirror kind of a guy to be honest,' smiles Moers. 'As a performance car guy, I'm absolutely excited by hybrid powertrains. They give you more power, more performance, you're faster on a racetrack and you're more efficient – what's wrong with that?'

Increased weight and bulk?

'Of course, yes. That's the challenge. That's why we're developing our own battery for the hypercar – nothing we looked at was good enough. We do everything in-house, including the electrical elements of the powertrain. They are absolutely our cars. It's exciting. The instant response you get with a hybrid is unique, and unlike anything you can achieve with even the most powerful combustion engine.'

Moers is proud of AMG's in-house expertise, a point he comes back to time and again. It might be based in Northampton, not Germany, but when you're working on advanced roadgoing performance hybrids, the advantages

of effectively being one entity with AMG High Performance Powertrains at Brixworth, builders of the best hybrid F1 power units four years running, are obvious.

'It's a proven partnership, and a predictable one – I know the strengths and weaknesses of all involved,' says Moers. 'We co-ordinate it. Is our approach stronger [than the Aston Valkyrie project with its numerous collaborations]? I don't know – it's different. But consider also the all-wheel drive on the new E63 [which feels rear-driven and can drop drive to the front axle for drifts]. That was only feasible with our own system. It was engineered in-house; the hardware, the software, everything. That is important property to own, particularly the software.'

Moers and AMG are on a roll. Such is the brand's allure that a third of new Mercedes buyers opt for the AMG Line trim level. Consider 'proper' AMGs alone and record sales of 70,000 units in 2015 proved, among other things, the wisdom of the 43 series models. Last year raised that bar to 100,000 cars. The burden, not least on Moers himself, is surely enormous, but he doesn't want your sympathy. 'There is a saying, "Love what you do and do what you love",' he says. 'That is absolutely the case with AMG. It asks for dedication. AMG is different and it's ambitious – it's hard work. It asks a lot of people. But it pays you back.'

**BEN MILLER**



## Connect 4

### ROAD-LEGAL DRAGSTERS

Straight-line racing – a fine excuse to build road cars with silly power



#### The new one

##### Dodge Demon (2017)

Escalating quicker than nuclear war, hot Dodge Challengers have gone from the 478bhp SR/T8 via the 697bhp Hellcat to the mighty 840bhp Demon. It might only ever do straight lines, but standing-quarters in 9.65sec? Yes please.



#### The record holder

##### Vauxhall Victor FE 'Red Victor 3' (1972)

Andy Frost has been tweaking his Vauxhall Victor for decades and it combines lights, wipers and an MoT with a 3300bhp 8.8-litre V8 running on methanol. The result? 0-153mph in 4.8sec and 6.59sec quarter-mile times.



#### The one you can buy

##### AMS Alpha Omega GT-R

Tuners have been playing with Nissan GT-Rs since the R32, but the king of the strip is the Alpha Omega. Capable of a 7.48sec quarter-mile and a tidy 10.49sec 0-200mph, an Omega's yours for \$225,000. Including parachute.



#### The original

##### Shelby Cobra 427 (1965)

The first Cobra had a 4.7-litre V8, then a 7.0-litre banger kicking out 425bhp. And the really brave/committed could choose a Dragon Snake drag pack that took matters to 498bhp – in a car weighing less than 1100kg.



WATCHES

# Anyone need a sharkproof watch?

Those zany Swiss are at it again. Not to mention a one-handed German watch...

**T**HE VAST ANNUAL BASEL watch fair has just taken place. It's like the Geneva, Frankfurt and Tokyo motor shows rolled into one. Imagine if all the new cars launched at those shows arrived at the same time: it would fill this magazine for months. So instead, here's a very tight edit of the debuts that caught our eye.

**BEN OLIVER** @thebenoliver

## Breitling SuperOcean Heritage II

£3990

Breitling's diver's watch celebrates its 60th anniversary this year. It's only four years younger than Rolex's Submariner and a less obvious choice. It keeps its retro looks but adds an ultra-hard, scratchproof ceramic bezel and a movement borrowed from Tudor, Rolex's entry brand. There's a choice of three-handed or chronograph, and different straps. It's been advertised as sharkproof, in a rare moment of Swiss watch-industry humour. CAR has not verified this claim.



## Meistersinger Salthora Meta X

£2995

German watchmaker MeisterSinger is known for its single-handed watches, in which one hand circles the dial every 12 hours, indicating both hours and minutes. They slow down time: you can tell the time to the nearest five minutes, but how often do you need to know it to the second? This new version is more precise, slightly more conventional and also more rugged looking. The single hand now indicates minutes and circles the dial once an hour, and there's a clever 'jumping hour' display in a window at 12 o'clock. People will still notice that single hand and ask you about it.



## Hublot Ferrari Techframe Ferrari 70 years

£105,000

Ferrari's watch partner Hublot has produced a special model for its 70th anniversary this year. It was sketched by Ferrari's head of design, Flavio Manzoni, and engineered by Hublot near Geneva. Inside there's an 'engine' as complex and clever as a Ferrari's: a manual-winding tourbillon movement with a five-day power reserve and a single-button chronograph. It comes in three materials: titanium, King Gold, or PEEK carbonfibre. Just 70 watches are available in each material.



## NEW CAR DEBRIEF BMW M4 CS



### 1 CS for Completely Sorted?

BMW certainly hopes so. We've had M4, M4 Competition and the weaponised GTS, now there's the limited-edition CS on the second step in the four-tier hierarchy, potentially the sweet spot between mainstream M and second-mortgage trackday insanity.

### 2 What do I get?

Other than traffic-jam kudos, the CS gets a 454bhp version of the twin-turbo straight six – 10 more than the Competition Package – with the limiter bumped from 155 to a more practical 174mph. An M DCT dual-clutch gearbox is standard, and the ESC and active diff have been tweaked especially.

### 3 Trackday time!

Seems a shame not to. Michelin Pilot Sport Cup 2 semi-slicks are standard, or you can switch to road-friendly Cup Sport rubber for free. There's pitlane pose in the carbonfibre front splitter, Gurney flap rear wing and diffuser, while the carbon ceramic discs may save you from ending up on YouTube.

### 4 How much, mister?

Here's the bad news. Expect to pay around £89,130 when it arrives later this year, including door pull deletion in favour of fabric loops, even though there's little actual weight loss bar the slimmed-down sports seats. That's nearly £28k more than a Competition Pack M4, making that now seem like a bit of a bargain.





# 695 XSR

LIMITED NUMBERED EDITION



## BORN TO PERFORM.

**DISCOVER THE BOND BETWEEN ABARTH AND YAMAHA WITH THEIR SHARED RACING SPIRIT. EQUIPPED WITH MOTORSPORT INSPIRED COMPONENTS, SUCH AS AN ACTIVE DUAL MODE AKRAPOVIC EXHAUST AND CARBON FIBRE DETAILING, THE ABARTH 695 XSR YAMAHA LIMITED EDITION IS BUILT TO DRIVE, BORN TO PERFORM.**

Official fuel consumption figures for the Abarth 695 XSR Yamaha Limited Edition: mpg (l/100km): Combined 47.1 (6.0), Urban 35.8 (7.9), Extra urban 57.7 (4.9), CO<sub>2</sub> Emissions: 139 g/km. Fuel consumption and CO<sub>2</sub> figures are obtained for comparative purposes in accordance with EC directives/regulations and may not be representative of real-life driving conditions. Factors such as driving style, weather and road conditions may also have a significant effect on fuel consumption. Abarth UK is a trading style of Fiat Chrysler Automobiles UK Ltd.



# Why **Alonso** racing at the Indy 500 is a genius move

A grim season in F1 is about to be transformed by a one-off drive in the US, and the prospect of a future stab at Le Mans. **By Tom Clarkson**

**T**HIS IS FERNANDO ALONSO'S annus horribilis in Formula 1. It's even worse than the last couple of years because McLaren Honda, while uncompetitive, improved steadily throughout 2015 and '16. There was hope. But this year they've taken 10 steps backwards. The Honda engine is underpowered – as much as 120bhp down on the pace-setting Mercedes – and it vibrates excessively, creating reliability problems.

Alonso's pre-season hopes of scoring podiums are but a pipe dream, and such is the level of disappointment that he's had to re-assess his career objectives. 'I want to prove that I'm the best driver in the world,' he said at the launch of the MCL32. But without the opportunity to win the world title, he's looked elsewhere to assume that mantle.

That's where the idea of winning the sport's Triple Crown – the Monaco GP, the Indy 500 and the Le Mans 24 Hours – came from. Only Graham Hill has previously achieved it. Alonso wants to be next.

'I am not going to win eight championships, more than Michael [Schumacher],' he says. 'I am looking for something else; I want to win different races. I want to win the biggest races in the world – the Triple Crown.'

Alonso has already won Monaco twice (2006, '07), so McLaren has done a deal with Honda and Andretti Autosport for him to have a crack at this year's 500. A date clash with Monaco means he'll miss F1's Blue Riband event, but McLaren feels it's a small price to pay.

'Were we competitive in F1 and challenging for wins, then we wouldn't be doing Indy with Fernando,' says McLaren boss Zak Brown. 'Unfortunately, we're not where we want to be in F1, which is why we explored this opportunity. We're racers, Fernando's a racer and that's why we're going to Indy. McLaren is going back to Indy for the first time in 38 years and we're going to contest two of the biggest races in the world on the same day.'

Rumour has it that former McLaren boss Ron Dennis has said he wouldn't

have let Alonso race at Indy, but he inadvertently facilitated the deal by securing Jenson Button as the team's third driver this year. Button is contractually obliged to replace Alonso for Monaco, giving the team (and the sport) a driver of similar gravitas and fame in the lead McLaren.

Like Ron, much of the F1 establishment remains unconvinced. 'I wouldn't let Alonso do Indy if I was running

**'I want to win different races. I want to win the biggest races in the world – the Triple Crown'**



Warming up on the sidelines, McLaren reserve driver Button







Hill's sole Indy 500 win came in 1966

## The allure of the Triple Crown

Graham Hill's the only winner... so far

Only Graham Hill has won the Triple Crown of the Monaco GP (1963-'65, '68-'69), the Le Mans 24 hours (1972 in a Matra Simca) and the Indy 500. He was having a bad F1 season with BRM in 1966, and accepted the opportunity to compete in the Indy 500 in a Lola Ford as a late replacement for Walt Hansgen. Hill won after taking over the lead from another Indy rookie, Jackie Stewart.

Damon's dad, the F1 world champion in 1962 and 1968,



Hill won Le Mans in 1972, sharing a Matra with Henri Pescarolo

also competed in the Indy 500 in 1967 and '68, but finished well shy of the podium. He died in a plane crash in 1975.

Over the years, 17 drivers have competed in all three events and won one or more. Juan Pablo Montoya has one two – the Indy 500 in 2000 and 2015, Monaco in 2003. He hasn't raced in the Le Mans 24 hours, although he has tested the Porsche 919 Hybrid endurance race car. But he has won the Daytona 24 hours three times (2007, '08, '13), and remains active in IndyCar. He's still a Triple Crown contender.

Through the 1950s, Monaco and the Indy 500 were both part of what we now regard as the F1 world championship (although Indy wasn't run to F1 rules), but in 1961 Indianapolis was dropped from the series. In 1987 the Monaco date was changed, creating a tradition of clashing with the Indy 500.

McLaren,' says Bernie Ecclestone, until recently the F1 supremo. 'And I'd try to stop him going if I was still running F1. I'd have wanted him at Monaco, not Indy.'

Red Bull boss Christian Horner has given his two penn'orth as well. 'I think Zak needs to see a psychiatrist,' he said. 'There's no way I'd let my drivers do that race.'

Horner's biggest concern is safety. Lots of people have suffered at the hands of Indy's unforgiving walls: 43 drivers have died at the track and many more have left there badly injured. Three-time world champion Nelson Piquet has walked with a limp ever since he hit the wall in 1992.

But McLaren is playing the long game with Alonso. Its F1 team is in dire straits and Alonso is its single biggest asset. By indulging the Spaniard's ambition, the team hopes it can retain him longer term, beyond the end of his current contract, which expires at the end of this year. It's a risky tactic, but one that's already paying dividends.

©@TomClarksonF1



McLaren weaves archive footage with reconstructions

## The movie about the man behind the marque

Bruce McLaren achieved miracles in his short life, celebrated in a new film, and left an amazing legacy. **By Ben Oliver**

**LIKE WAR, MOTORSPORT** accelerates and intensifies the lives of young men, and before the modern era it had the same attrition rate. You watch the new documentary *McLaren* knowing that Bruce's career was compressed into 12 years of grand prix racing as a driver, designer, constructor and team manager, five of those with the team that still bears his name. Yet when you see his achievements recounted in this elegant, elegiac film you still wonder how he did it all, and you compare unfavourably your own meagre achievements by the age of 32.

You know how it ends, too. But like the Senna documentary, the intensity with which Bruce lived and raced keeps you engaged with his story until that awful, inevitable moment at Goodwood. This film portrays him with such detail and colour and humanity that I defy you not to choke when it finally happens. The moment is made more awful by

some brilliant sound design in which the roar of the Chevy V8 in his McLaren M8D, which has built gradually to a din, suddenly stops dead, and you see his tyre tracks and that marshal's post. I watched the film at Goodwood, which was eerie enough. Behind me sat Amanda McLaren, his daughter, for whom that scene must be unbearable.

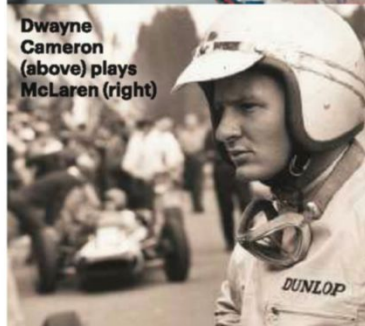
There is glamour and humour too. This was an era when men with comb-overs could still win grands prix (Bruce's fellow Kiwi and team-mate Denny Hulme) and when jet flight was novel and exciting and allowed Bruce and Denny and the others to compete in F1 and Can-Am and endurance events on alternate weekends on either side of the Atlantic. The film is directed by Roger Donaldson who made *The World's Fastest Indian*. It has an obvious chronological structure but isn't bound by it, and uses well the mixture of period footage and talking-head interviews.

The footage is a gift, of course. You wonder if any period of any sport has produced better imagery, and why Ron Howard bothered trying to improve on it in *Rush*. There are some slightly hokey reconstructed scenes here too which just can't compare to the real thing. Other than finding and editing the period footage, Donaldson's best moment probably comes with the interviews with Bruce's team-mates who were with him at Goodwood on that day in 1970. They're in their seventies now, but in recounting those events the age seems to lift from them and they're just kids again, in their twenties, realising that their talismanic leader hasn't come back around, and going out to find him.

*McLaren* will be in cinemas for one night only on May 25 and on Blu-Ray, DVD and digital platforms from May 29



Dwayne Cameron (above) plays McLaren (right)





# TECH.

The innovations transforming our driving world

## The 5 steps to full autonomy

Modern cars are halfway to dumping the driver. Here we chart the industry's roadmap to self-driving vehicles. **By Tim Pollard**

### CHIPS CONTROL TWO OR MORE ELEMENTS

Level 2 autonomy is where we're at today: computers take over multiple functions from the driver – and are intelligent enough to weave speed and steering systems together using multiple data sources. Mercedes says it's been doing this for four years. This autumn's updated Mercedes S-Class is Level 2-point-something. It takes over directional, throttle and brake functions for one of the most advanced cruise control systems yet seen – using detailed sat-nav data to brake automatically for corners ahead, keeping a set distance from the car in front and setting off again when jams clear, with the driver idle.

LEVEL  
2

**WHEN?**  
CURRENT  
STATE OF  
THE ART

**INCLUDES...**  
LANE-CHANGE  
MODE, AUTO  
PARK

**WHO'S  
DRIVING?**  
HUMAN  
HANDS-ON AT  
ALL TIMES

**INCLUDES...**  
NEXT-GEN  
SENSORS,  
ALGORITHMS,  
LAWS

**WHO'S  
DRIVING?**  
DRIVER STILL  
ON STANDBY,  
BUT CAN BE  
HANDS-OFF

LEVEL  
1

### A SINGLE ASPECT IS AUTOMATED

The SAE, the Society of Automotive Engineers, has created a lexicon of autonomy. Level 1, the most basic type, is where one element of the driving process is taken over in isolation, using data from sensors and cameras, but the driver is very much still in charge. This started in the late 1990s at Mercedes, with its pioneering radar-managed cruise control, while Honda introduced lane-keep assist on the 2008 Legend. These were the first steps towards removing the driver's duties behind the wheel.

**WHO'S  
DRIVING?**  
DRIVER IS IN  
CONTROL

**INCLUDES...**  
LANE-KEEP  
ASSIST, AUTO  
CRUISE  
CONTROL

**WHEN?**  
THE FIRST  
STEPS IN  
1990S/00S



**INCLUDES...**  
DRIVERLESS  
CARS, SHARED  
PODS

LEVEL  
4

### FULLY AUTONOMOUS IN CONTROLLED AREAS

Early next decade cars will fully drive themselves in geofenced metropolitan areas, as HD mapping, more timely data, car-to-car comms and off-site call centres (to deal with unusual hazards) improve accuracy. 'You won't really need the driver in Level 4,' says Merc's autonomous guru Christoph von Hugo. 'The likelihood is you will just be renting the car, rather than owning it. You won't take this car on vacation to Florida but you'll take it on an urban journey around New York, say. It is easier to have ultra-detailed mapping for carefully defined areas.' Twenty car makers say they'll sell autonomous cars in the US by 2022.

**WHEN?**  
DUE EARLY  
TO MIDDLE  
OF NEXT  
DECADE

### FULLY AUTONOMOUS, ANYWHERE. DRIVER OPTIONAL

The difference between Level 4 and 5 is simple: the last step towards full automation doesn't require the car to be in the so-called 'operational design domain'. Rather than working in a carefully managed (usually urban) environment with lots of dedicated lane markings or infrastructure, it'll be able to self-drive anywhere. How? Because the frequency and volume of data, and the sophistication of the computers crunching it, will mean the cars are sentient. It's a brave new world – and one that Google's Waymo car is gunning for, leapfrogging traditional manufacturers' efforts. The disruption will be huge: analysts HIS forecast 21 million autonomous vehicles globally by 2035.

LEVEL  
5

**WHO'S  
DRIVING?**  
GENUINE  
HANDS-OFF  
DRIVING

**WHEN?**  
NOT LONG  
AFTER LEVEL  
4, MID NEXT  
DECADE

**WHEN?**  
THE NEXT BIG  
THING: 2019-  
2020

**INCLUDES...**  
FAR-  
ROAMING  
ROBO TAXIS

LEVEL  
3

### THE CAR CAN BOSS SAFETY-CRITICAL FUNCTIONS

Highly automated vehicles are not far off. The SAE calls Level 3 'conditional automation' – a specific – mode which lets all aspects of driving be done for you, but crucially the driver must be on hand to respond to a request to intervene. Audi calls its new A8, due this autumn, a Level 3 autonomous car – meaning the car has the potential to drive itself in certain circumstances, where it will assume control of all safety-critical functions. How? By refining maps, radar and sensors and fusing this environmental data with ever-wiser and faster processors and logic. Today's assumption of a two-second comms lag will soon look very slow.

**WHO'S  
DRIVING?**  
STEERING  
WHEEL  
OPTIONAL

ILLUSTRATION: SON OF ALAN



## Does it work?

### Mercedes-AMG E63 S's Drift mode



**B**UY A MERCEDES-AMG E63 S 4Matic+. Select Race mode. Then select ESP Off, as if you'd ever have that on. You'll also need manual mode for the automatic gearbox, but, of course, you're already in that. Then pull both the paddles towards you, and, in the best tradition of computers, you'll be asked if you're sure. One more tug of the right paddle replies yes and has a clutch in the transmission decoupling drive to the front wheels for Drift mode. Do that and all 604bhp and 627lb ft of torque is sent to the rear axle and it's goodbye tyres.

Genius is close to insanity, and that's particularly true when applied to the Mercedes-Benz E-Class. Clever enough to all but drive itself, it's stuffed to its luxurious headliner with all Merc's latest driver and safety aids, as well as connectivity you didn't know you needed. And that's before you get to the AMG versions: still very clever, but now nuttier than squirrel poop.

Up to a point, the formula's familiar from other AMGs – that's

to say everything starts with a surfeit of power, via a big, noisy V8 engine. In today's E63 S (which has 41bhp more than the non-S version) 604bhp from its thunderous 4.0-litre biturbo engine.

Even Mercedes-AMG recognises that 604bhp and 627lb ft is a lot, which is why the E63 comes with 4Matic+ four-wheel drive. Ever since the four-wheel-drive-only E63 was first rumoured, AMG's boss Tobias Moers was on the defensive. It'd still be a true AMG, he said. Repeatedly. He wasn't lying, either, as it's exactly that, because you can switch off all-wheel traction, its trick 4Matic+ system allowing 100% of the drive to be diverted to the rear by disengaging a clutch to the front. AMG calls it Drift mode. How wonderfully juvenile.

Although engaging it requires a bit of menu browsing and paddle pulling, it's not too testing for those brought up putting cheat modes into their PlayStations. Clever stuff, if for silly results, Drift mode turns the already tail-happy, tyre troubling E63 S into an unruly, expensive, smoke machine.

Looks great in magazines and on YouTube, but of questionable relevance if you pay for your own tyres and petrol. But then you could say that about a 604bhp saloon regardless of Drift mode.

So pop your friendly tyre fitter as a favourite contact in the infotainment, buy some shares in a rubber firm and bribe the corner marshal at the trackday to turn a blind eye to your silliness. It's mad, it's fun, and it works, though AMG trusts you to be clever enough not to use it on the road.

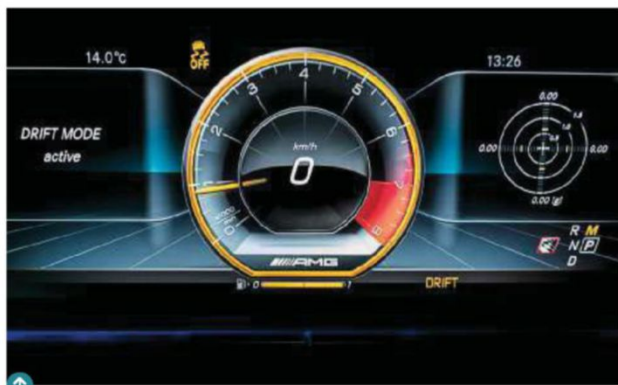
**KYLE FORTUNE** @Kyle\_Fortune



Front-wheel drive is deactivated, leaving tail-happy rears. Screeeeee

#### DID IT WORK?

**Yes.** Adding the screaming of tortured tyres to the engine's guttural roar is an absolute cinch in Drift mode. Select it and the E63 S can be driven around with tyre smoke pouring out of the rear wheelarches and as much corrective lock as you like. You just need space, and a bit of talent, too, as, really, *everything's off*.



There's no Drift mode button, but when you've burrowed your way down through the menus far enough, you know when you've found it



**T**HE BARE BODY shell of this summer's new Audi A8 has gained 51kg over its predecessor, tipping the scales at 282kg.

But – and it's a big but – without the exotic combination of 28 materials joined together using 14 different techniques, the weight would have ballooned way beyond this figure.

Why gain weight when the aim in recent years has been slimming down? Tim Hämmerle of Audi's Lightweight Design Centre explains that it's the result of a perfect storm of unavoidable demands facing the makers of any luxury car: it's slightly bigger; it has to be ready for more stringent crash regulations; it has, for the first time on an A8, a full-length glass roof; and it needs to protect and house heavy lithium-ion batteries and other ancillaries for future hybrid or electric versions.

Those 28 materials can be broken down into various grades of aluminium sheet, sections and castings, as well as conventional and hot-formed ultra high-strength steel (UHSS), a magnesium brace between the front bulkhead and suspension struts and, in a first for the brand, a carbonfibre-reinforced polymer (CFRP) rear panel.

Joining processes include newly developed aluminium-to-aluminium laser welding, different riveting systems, bonding and roller hemming, where aluminium and steel are wrapped together to form slim profiles around the door apertures and windscreen.

As a result Audi claims the saloon's dynamic stiffness is increased by 2.4% and its front-end stiffness by 1.4%.



Next A8, expected to look a lot like this, is ready for various power sources






## Not fat. Just big boned

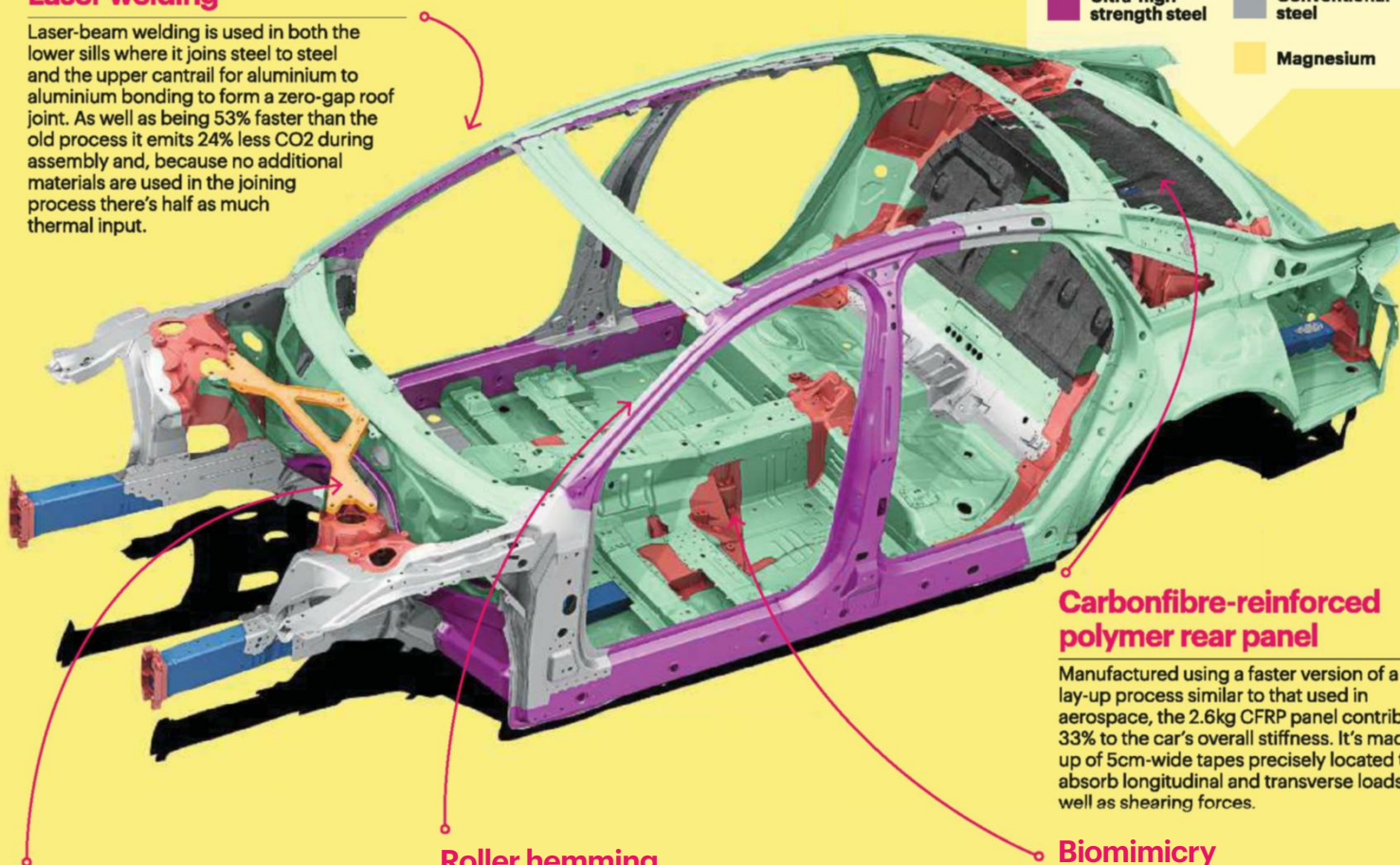
Audi's ingenious new bodyshell is heavier than the old one, but it's part of a plan to future-proof the A8. **By Ian Adcock**

### Laser welding

Laser-beam welding is used in both the lower sills where it joins steel to steel and the upper cantail for aluminium to aluminium bonding to form a zero-gap roof joint. As well as being 53% faster than the old process it emits 24% less CO<sub>2</sub> during assembly and, because no additional materials are used in the joining process there's half as much thermal input.

### UNDER THE SKIN OF THE NEW A8

 Aluminium section	 Aluminium sheet
 Aluminium castings	 Carbonfibre-reinforced plastic
 Ultra-high-strength steel	 Conventional steel
	 Magnesium



### Magnesium cross brace

Tying the bulkhead and suspension towers together, this brace is 33% less dense and 28% lighter than its predecessor. By using die-cast internal ribbing, engineers have managed to shave off a further 500 grams. Aluminium bolts secure it to the strut towers.

### Roller hemming door apertures

Aluminium panels are progressively wrapped around the steel inner core in three 30° steps then pinched into place by pierce locking. This releases valuable millimetres of space, improving the door opening height by 14mm and width by 36mm. The A-pillar profile has been slimmed down, improving the driver's view by 5°.

### Carbonfibre-reinforced polymer rear panel

Manufactured using a faster version of a lay-up process similar to that used in aerospace, the 2.6kg CFRP panel contributes 33% to the car's overall stiffness. It's made up of 5cm-wide tapes precisely located to absorb longitudinal and transverse loads as well as shearing forces.

### Biomimicry

Those with good memories might recall Mercedes' Bionic concept from 2005, a car designed along the lines of the efficiently shaped boxfish. It didn't turn into anything, but nature is inspiring engineers to mimic its lightweight and high strength as found in bird's bone structure. The A8 uses twin 143cm beams under the boot floor, featuring thin wall lattice castings in structures that are 50% stiffer than other designs.





IAN ROBERTSON



BMW board member Robertson was a star of the SMMT's recent Connected Conference

## The next big things

Why BMW is a technology company

**Dr Ian Robertson**, BMW's global sales chief, urges the car industry to shake off old habits and embrace connectivity

► **THE CAR** industry has done the same thing for 100 years, designing, manufacturing and using cars. In the next five to seven years, the car will change enormously. We're at a tipping point in an industry worth \$2 trillion a year, or \$10 trillion if you factor in mobility services.

► **CONNECTED, AUTONOMOUS**, zero emission: those are the themes that are driving the industry. BMW is investing in combustion engines, plug-in hybrids, EVs and fuel cells: there won't just be one answer.

► **ONLY 10** years after the first iPhone, we take connectivity for granted. The BMW Connected app starts to join up your life: if there's unexpected congestion on your morning commute, it can set your alarm off earlier. That's not for everyone!

► **WE HAVE 300** app developers in Chicago. Sometimes they will issue updates daily – unlike the seven-year cycle the car industry has worked to.

► **AN AIRBUS A350** has 4000 sensors and generates 2.5 terabytes of data per day. And the air is quite a simple environment. A BMW generates 4 terabytes of data per car per day – and we have 8.5 million connected cars on the road.

► **MOTHER NATURE** cracked autonomy a while ago. A swarm of a million birds can move fast without a single one flying into another, and they don't have smartphones! Nature has capabilities we need to understand.

► **WE HAVE** programmes running around the world: 40 7-series will be running with full autonomy later this year, though with an engineer on guard at the wheel. We are working with new partners, such as Intel/Mobileye, and Tencent is investing in HERE to move from digitised maps with 6-10 metre accuracy to ones with 6-10cm accuracy.

► **HERE HAS** 6000 software engineers. It's one of three mapping companies in

the world with Google and TomTom. We looked at the fundamentals as to what's required for autonomous driving and location management is a big part of it. We figured this would be a good thing to have our arms around [in partnership with Daimler and VW Group]. It's not enough to have a few million BMWs updating [live traffic] maps: wouldn't it be good to have 50m cars updating it?

► **AUTONOMOUS TECH** is still in its infancy. But I think the technology will be robust enough in five years' time. Government legislation is going to take a lot longer. It won't be uniform, it will be different for urban/city centres to motorways, from one country to another.

► **AUTO INDUSTRY** players are moving to become tech companies. This is the most exciting phase of the last 100 years. It's much more difficult for a tech company to become an auto company. Auto companies can make strides going the other way. We are not looking to stop the disruptors, we're looking to develop our company.

► **OUR STRATEGY** 'Number One' came from the board spending 22 days away in 2015. It shapes our next drive forward. We are now engaging the whole company with it: 14,400 leaders will come to Munich. We are clear on where we want to go, and we are engaging with our people to get there as fast as possible.

## FRESH THINKING: The F1 car of the future

Renault's money's on a light all-wheel-drive hybrid

**To mark its 40th anniversary in and around Formula 1, Renault has created a concept for the F1 car of 2027**

Powered by a turbo V6 and electric motor, with active aero, all-wheel drive and all-wheel steering, the RS 2027 Vision is styled to be recognisable as a traditional open-wheeled single-seater, albeit one with a see-through roof pod and pop-up titanium rollover bars.

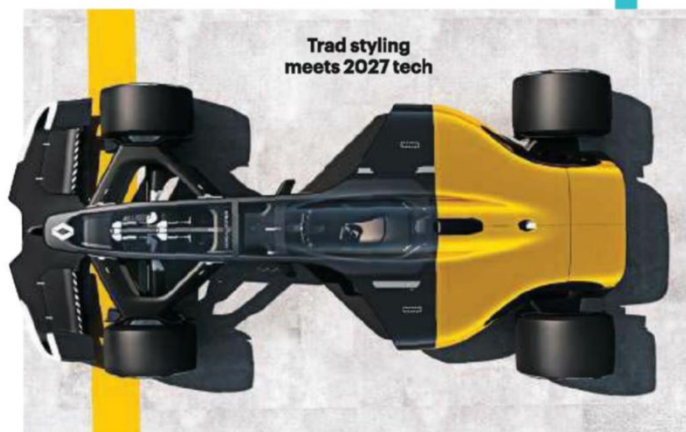
**Self-driving tech is built in, but only for emergencies**

The RS 2027 Vision assumes that spectators will still want to see a contest between drivers, not between self-driving cars; hence a see-through helmet, telemetry available online, and LEDs built into the wheels that will show spectators the car's ranking in the race and its energy reserves. The C-shaped front lights and the Renault

badge on the nose change from white to blue when electric mode is activated. And when the flags are out, autonomous mode is engaged automatically to limit speed.

**Road cars should benefit**

The intense competition of an F1 race should help Renault hone its vehicle-to-vehicle communication, ensuring every car knows where all the other cars are, potentially ending crashes.





# AUDIOVOX®

BY MISCHEN LTD



EXPERTS IN CAR INFOTAINMENT SYSTEMS



Download the interactive headrest vehicle fit guide



For retail sales and installation enquiries

**[sales@mischen.co.uk](mailto:sales@mischen.co.uk)**

For approved dealer and training enquiries

**[dealers@mischen.co.uk](mailto:dealers@mischen.co.uk)**

[www.mischen.co.uk](http://www.mischen.co.uk)

*Mischen*

+44(0) 1932 379813



# FIRST DRIVES.

Nine cars tested, starring Ford GT, VW Golf R, BMW 440i, Honda Clarity, Skoda Octavia vRS & Lotus Elise Sprint 220

FORD GT

## What the hell!

Don't worry about why on earth Ford has built a road-legal racer that costs almost half a million pounds. Just worry about how you can get to drive one in all its 216mph glory



**R**ACE CARS THAT contest the Le Mans GTE category are normally roadgoing sports cars adapted for the track, but Ford has flipped that logic on its head with the Ford GT.

You're very much aware of its race-car origins behind the wheel. The excitement, the grumbles, the sometimes flaky build, the boot that's so small it won't even swallow a crash helmet. Racer with number plates, no doubt about it.

The GT was conceived to take Ford back to Le Mans in 2016, 50 years after the original GT40 put Enzo Ferrari's nose out of joint with a one-two-three after 24 hours. With under three years' development, the new Ford GT won its class at Le Mans last year against Ferrari 488s, given special dispensation to race before a road car even reached a customer.

Road and race cars were developed simultane-

ously, led by Dave Pericak and his team at Ford Performance. Today, over two years since its unveiling at the January 2015 Detroit show, we're in Utah, driving the road car for the first time. The plan is to build 1000 over the next four years, assembled just like the racers at Canadian race outfit and engineering firm Multimatic. The first customers have already taken delivery.

The GT's cabin is tight – a consequence of creating the smallest frontal area possible to minimise drag – and as you open the dihedral door, you're faced with a low roof and huge chunk of sill to navigate. I'm 6'1" and have an inch of headroom. The centre console is so narrow you brush shoulders with your passenger, and there's weapons-grade unlacquered carbonfibre everywhere, its cold austerity lifted by alcantara or leather detailing. You notice the dated sat-nav, some parts-

bin switchgear, but it feels purposefully focused and special, building excitement and trepidation in equal measure.

The reclining seats are fixed directly to a carbonfibre structure made from 45 bonded pieces that also include the instrument panel. To get Muhammad to the mountain, you move the pedal box by pulling a strap and – strangely – adjust the steering column with two levers: one making big adjustments for reach, the other to fine-tune reach and rake. The paddleshifts and almost all controls – from drive modes to indicators – are incorporated into an oblong, alcantara-wrapped steering wheel.

You sit incredibly low down. There's good support and the seat bases are comfortable, but the cut-outs in the seatbacks might irritate if you're double-stinting.

Seated? Pedals and wheel ▶

New GT combines clever aero, potent V6 and ingenious suspension in a low, sleek, carbonfibre body







Air is channelled both into the intercoolers and round to the active rear spoiler



Cabin is all about driving. Steering wheel hosts most of the switchgear

adjusted? Good. Because the Ford GT costs £450,000 plus taxes, and comes in left-hand-drive only. That's double the price of a Lamborghini Aventador S, itself a hike over the new £209k (total) McLaren 720S, and both have greater performance. Ford might not even sell you one: there's an application process, and caveats in place to prevent quick on-sales.

Many of the ingredients are exotic and the engineering innovative, reminiscent of a 'budget' LaFerrari. The striking flying buttresses are the stand-out features on a gorgeously low-slung carbonfibre body that balances high tech with high nostalgia. They channel air both along the body side through to the rear spoiler and take cold air *inside* them, from the intercoolers to the engine's inlet.

The tub is carbonfibre with aluminium subframes front and rear, and the bones of the racer's rollcage are neatly hidden in the cockpit. The suspension is by double wishbones all round, with a pushrod arrangement allowing springs and dampers to be mounted inboard. The pushrod acts on both a torsion bar that does some springing and also a conventional spring. Adaptive dampers are actually housed at the front of the cockpit: the arrangement provides space to chan-

That low nose plays a crucial part in a brilliantly effective aero package. Not so good for shopping



Engage Track mode and it drops by 50mm. Carbon-ceramic brakes, with six-piston calipers, are ace



nel airflow over a keel-like structure, and helps towards an impressively tight turning circle.

Less exotic is the engine. Key to the GT's narrow, tapered packaging is the dry-sumped EcoBoost V6 mounted behind the driver, the reduced cylinder count compared with most supercars also helping to cut weight. So given the price and the lightweight materials, the dry weight of 1385kg with lightweight options is a disappointing 100kg heavier than a McLaren 720S and that 638bhp and 550lb ft is down on the opposition (710bhp and 568lb ft for the McLaren). Still, it's not slow: the sleek bodywork cuts through the air to a claimed 216mph in low-drag V-Max mode.

Waiting in the pitlane, I press the start button, the fuel pump whirs noisily, and the engine settles to a gruff, industrial idle. Five drive modes are offered: Wet, Normal, Sport, Track and V-Max, with the digital driving display changing to suit. Call up Track and the GT's ride height slams from 120mm to 70mm like a racer being dropped off pneumatic jacks. The conventional springs are now locked out of the equation, torsion bars doing all the work for a doubling of spring rate.

You quickly settle in to driving the GT fast. It feels alert and quick to change direction, the body control tight and hunkered down without the

springs feeling too stiff, the broad shoulders of the 20-inch Michelin Pilot Cup 2s letting you carve an arc through a corner without the scrub and frustration so often experienced when acclimatising to a track in a road car. Hydraulically assisted steering builds progressively in resistance, feeling weightier and quick if less flighty than any Ferrari's, giving you a clear indication of just how hard you can push the front tyres. Grip limits are high, with just a hint of understeer in the tighter stuff helping you to balance the car at its maximum cornering speed. Accelerate hard and while traction is good, there's a clear surplus of torque to grip, and you have to feed in the long-travel throttle progressively. Get over-ambitious and you'll notice how sweetly calibrated the traction control is, letting you correct a smaller slide without bounding to the rescue like an over-protective parent.

The front brakes are huge 394mm carbon-ceramic stoppers gripped by six-piston Brembo calipers. Get past the little fuzz at the top of the pedal and they're easy to modulate, and wipe off speed so quickly you typically brake far too early.

The EcoBoost can't do high-rev hysteries like the best Italians – peak power lands at 6250rpm – but it is impressive, and sounds more cultured at higher revs than its low-rev grumbles suggest, a deep warble with subtle boost. A short path

## Ford GT

> **Price** £450,000 plus taxes > **Engine** 3497cc 24-valve turbocharged V6, 638bhp @ 6250rpm, 550lb ft @ 5900rpm > **Transmission** 7-speed dual-clutch, rear-wheel drive > **Performance** 2.8sec 0-60mph, 216mph, n/a mpg, n/a g/km CO2 > **Weight** 1385kg > **On sale** Now



On track it's exciting  
and involving. It should  
be – it's a race car



from intercooler to intake means the throttle response is pleasingly sharp, and combines with an anti-lag function from Sport mode and up, cutting fuel but maintaining boost while you're off throttle; get back on it and it's all guns blazing, with a precise sense of control over the rear axle.

The power delivery was a little different in two of the cars we drove. One seemed to boost hard from around 2700rpm, the other much further into the threes. The first car also seemed to make a pretty ferocious lunge from 5500rpm that added intensity to the performance, where the other was more progressive, less dramatic.

The transmission is a seven-speed dual-clutch arranged in a transaxle. Shifts are delivered quickly but with a woolly edge, and downshifts aren't always delivered on demand. Porsche, Ferrari, McLaren and Lamborghini all do gearshifts with a sharper, more intense edge that makes their cars feel faster, and lends a greater depth of mechanical engagement.

There's no doubt the Ford GT is seriously excit-

ing and involving on track. It should be – it's a race car. The hard part is translating those thrills to a road car, something Ford hasn't been entirely successful in achieving.

The ride in Normal is impressive, and you can soften it further with the dampers in Comfort, retaining much of the GT's flat composure while smothering bumps. But transverse ridges thunk harshly through the carbonfibre structure, and the cabin zizzes with resonance. There are vibrations as you move on- and off-throttle too, and the transmission is inconsistent – sometimes smooth, sometimes incredibly abrupt and uncouth on full-throttle upshifts. When the deployable rear spoiler drops back into the bodywork, there's such a huge bang you fear it's fallen off. And for all the relentless acceleration that'd shock most passengers, the GT isn't *that* quick – somehow, strangely, it feels

#### LOVE

Design, innovative engineering, handling, performance, steering, driving it on track

#### HATE

Price, on-road refinement, some interior quality, small boot

#### VERDICT

Thrilling drive, but race car origins a little too apparent on road

★★★★★

significantly faster on track, perhaps because of the more aggressive throttle mapping in Track mode.

This isn't to say the GT doesn't thrill on the road. You can flick it through a series of corners and marvel at the turn-in, the control, the supple damping, the fantastic brakes, the deep reserves of power, how rear-biased it feels. Some might argue its race-car rawness is a part of its Le Mans class-winning appeal. But for £450k plus, you might expect more polish, and there's no doubt

you could round off the rough edges *and* make it better to drive. Great car, but there's a sense it's half-an-hour short of the full 24.

Enzo's cars might have lost on track in 2016, and 50 years previously, but Maranello – and the supercar establishment – still knows how to do it better on road.

**BEN BARRY** @lamBenBarry





## SKODA KAROQ

# Yeti comes in from the cold

Quirky SUV's replacement dulls down the styling but ups the premium feel and offers excellent practicality, as we find in a pre-production drive

**HAVE YOU SEEN** that optical illusion where each word in a sentence is scrambled except for the first and last letters, and you can still read it all easily because of how the human mind interprets text?

Skoda's naming department clearly has, because all of its new SUV names will start with K and end with Q, so that no matter what letters are in between, your mind will correctly recognise it as a high-riding, off-road-styled crossover.

Even without that help you won't have missed the Karoq's styling cues – it's a Seat Ateca with a Kodiaq face. While the Yeti it usurps was a shape all of its own, this new car is restrained architecturally by the group-wide MQB platform that now underpins it.

That means while it looks a bit blander, it benefits from the latest tech and engines including the three-pot 1.0-litre petrol and four-cylinder 1.6- and 2.0-litre diesels.

Happily the excellent new 1.5-litre TSI with cylinder deactivation features, as does a digital dashboard similar to Audi's Virtual Cockpit. It's the first Skoda to offer these, and the Ateca

currently doesn't offer them either.

The interior is the most intriguing among the VW group's crossovers and it's likely to stay that way until the Spanish car's Leon-like cabin is overhauled, or the VW T-Roc finds its way to production. A 9.2-inch screen displays crisp sat-nav graphics, while 10-colour ambient lighting lends the nighttime cockpit a *Fast and Furious* vibe.

That's where the street racing similarities end, though – this isn't a Supra, it's a Skoda. It simply needs to offer more comfort, space and value for money that its stablemates. It generally fulfils that brief, and when it does fall a bit short – its pitter-patter ride over rough surfaces – it's a limitation of the platform rather than a Skoda-specific issue. Like the Seat, you can only have a multi-link rear axle with all-wheel drive – pick a front-driver and you get a slightly thumpy, resonant torsion beam.

Still, it's cushier than the Ateca with either set-up and has less of a Caravan Club vibe than the VW. Plus it'll offer much better value than both – Skoda says it'll be priced like the outgoing Yeti (which currently spans £17,000 to £27,000).

Like that car you can spec a clever VarioFlex rear bench, enabling the removal of all three seats; or the

### LOVE

Classy interior, practicality

### HATE

Yeti's Tonka truck looks have gone

### VERDICT

More no-nonsense Czech brilliance

★★★★★

ability to forgo the middle perch entirely, pushing the outer two closer together to make a generous four-seater. Even with this flexibility seat heating for all is an option.

Other fancy upgrades include LED front and rear lights, 13 new safety systems, and 105 more litres in the boot – it's now 521 litres or 1630 with the seats folded, which means you can upgrade your dog to an even larger model. A St Bernard, perhaps.

The Yeti had quirky looks that helped it stand out in a crowded market, but also made it a love-it-or-hate-it car. The Karoq is less divisive and has more of a premium feel, but not at the cost of the old car's pragmatism. Expect to see it troubling the Nissan Qashqai's dominance in early 2018.

**ADAM BINNIE**

### Skoda Karoq 1.5-litre TSI auto

➤ **Price** £tbc ➤ **Engine** 1.5-litre turbo 4-cyl, 148bhp @ 3500rpm, 251lb ft @ 1750rpm  
➤ **Transmission** 7-speed twin-clutch auto, front-wheel drive ➤ **Suspension** MacPherson strut front, torsion beam rear ➤ **Performance** 8.4sec 0-62mph, 127mph, 55.4mpg, 119g/km CO2  
➤ **Weight** tbc ➤ **On sale** Summer 2017





## LOTUS ELISE SPRINT 220

# What a weigh to go

21 years on, the Elise has gone on a high 'fibre diet, with startling results

**H**OW MANY MORE times can Lotus serve up the same meal, only cooked in a slightly different fashion? It's a fair question, given that Lotus has been reheating the Elise since 1996. There's some debate as to whether we're on Elise S2 or S3 (Lotus itself no longer uses these historic signifiers, so this is just fan-speak), but, in essence, underneath the extremely familiar bodywork is the same bonded, extruded aluminium chassis that made such a splash 21 years ago.

Here, Lotus is both updating the entire four-car family and bringing back one of its most evocative badges, Sprint, for a car it claims is the lightest it has built since the original Elise debuted.

For 2017, the whole Elise family has a larger front grille and air intakes that are reminiscent of the Exige's, while at the back two of the four tail-lamps have gone MIA and the aluminium diffuser has sprouted a couple of extra vanes.

The front clamshell and rear transom are also revised and within, there's finally Bluetooth, courtesy of a Clarion head unit, plus an exquisite exposed gear linkage arrangement borrowed from the Exige. Total weight loss is around 9kg compared to a 2016 Elise. With the same 134bhp 1.6 naturally aspirated engine and 217bhp supercharged 1.8-litre four seeing service, the regular Elises are known as the Sport and Sport 220 respectively.

But if you want to step up a grade, an additional £5000 bags you a Sprint. You can have it with either engine, and the £37,300 1.6-litre Sprint is the first sub-800kg series-production Lotus (track specials notwithstanding) for two decades. But given the choice, you're going to want this 851kg Sprint 220, aren't you, with its colossal 255bhp-per-tonne? Yours for £44,300.

## Lotus Elise Sprint 220

> **Price** £44,300 > **Engine** 1796cc 16v 4-cylinder, 217bhp @ 6800rpm, 184lb ft @ 4600rpm  
> **Transmission** 6-speed manual, rear-wheel drive  
> **Performance** 4.5sec 0-62mph, 145mph, 37.7mpg, 173g/km CO2 > **Weight** 851kg > **On sale** Now

What you get on either Sprint is up to 41kg shaved from the mass, courtesy of lots of carbonfibre – it's employed for the closely spaced pair of seats, as well as for the front access panel, rollover hoop and engine cover. A lithium-ion battery and lightweight forged alloys complete the strict diet.

The resulting car is phenomenal. No Elise is a dynamic duffer but removing 40 kilos from the upper tiers of a car like this results in a lower centre of gravity and reduced moment of polar inertia, making the Sprint 220 almost preternaturally agile.

Its unabated keenness to slice into any corner at tremendous speed is aided by unassisted steering that is without equal anywhere in the modern automotive world; if you want to know what true, uncorrupted feel and feedback really are, you'll need to grip a Sprint 220's tiller.

All the rest of the Lotus's admirable traits – its rigid body control, its exquisite damping, its throttle-adjustable balance – are only enhanced by the weight-loss programme. Don't let the familiarity of the general Elise idea make you blind to the glittering chassis brilliance on display here.

The revered Elan Sprint went out of production in 1973 and it has gone on to become a Lotus legend. Maybe, just maybe, the thoroughly sublime Elise Sprint 220 will follow it into the motoring halls of myth and wonder.

It deserves to.

**MATT ROBINSON**

## LOVE

Litheness, chassis, steering

## HATE

Impracticality

## VERDICT

Saving the best until, well, now

★★★★★



With its disguise fooling precisely no-one, the new Karoq is clearly derived from a Seat Ateca with a Kodiahq face. No bad thing



De-quirked styling is accompanied by a de-quirked move upmarket



Enjoy it while you can. An entirely new Elise is expected within three years



## HONDA CLARITY

### Virtually real

Honda is edging ever closer to a hydrogen car you can actually buy

**YOU ALREADY KNOW** the chicken-and-egg paradox of hydrogen fuel-cell cars: no refuelling infrastructure before there are cars to justify it, no cars without infrastructure. Honda is a manufacturer more committed than most, leasing fuel-cell road cars to open-minded early adopters in modest numbers since the mid-noughties to lend real-world data to its ongoing hydrogen development toil.

This is the latest one, being trialled by members of the public in Japan, the USA, and now Denmark and the UK too. Only a few cars are being made available over the next year in the UK, where there are currently just a handful of publicly accessible filling stations.

Big technical strides have been made since the new Clarity's 2008 predecessor, the FCX, including fitting the newly downsized fuel cell stack under the bonnet for the first time rather than in the centre of the car, making the Clarity a full five-seater to the Toyota Mirai's four. A bulky one, though, at nearly five metres long. The main powertrain bits – stack, motor, gearbox, control unit – take up similar space to a V6 petrol engine and gearbox. There are two hydrogen tanks, ahead of the boot and under the rear seats.

To drive, it feels entirely undramatic. With only the faintest of gurgles and whooshes from the powertrain, it's a supremely relaxing experience, with a cushy ride from the aluminium multi-link suspension. It's close to the experience of driving a battery-electric car, albeit with a more languid power delivery than most.

Judged as a car, it's an entirely agreeable product, but judging it purely as a car isn't a straightforward process. Each Clarity costs Honda a huge amount of money to build (absorbing its expensive low-volume materials and techniques within its wider r&d budget), and is beholden

to a refuelling network that doesn't quite exist yet. Honda plans to offer the next-generation Clarity for a more conventional sales and leasing programme in the UK in 2022, by which time the filling-station network will have expanded and technology costs shrunk a little. At which point we'll be able to judge it on its own merits – on the basis of this car, it'll have plenty of them.

**JAMES TAYLOR** @JamesTaylor\_5

- Honda Clarity**  
**> Price** n/a  
**> Engine** Electric motor, polymer electrolyte fuel cell and lithium-ion drive battery, 172bhp, 221lb ft  
**> Transmission** Single-speed fixed-ratio, front-wheel drive  
**> Performance** 9.0sec 0-62mph, 103mph, 403-mile driving range, 0g/km CO2  
**> Weight** 1800kg (approx)  
**> On sale** 2022 – limited lease programme until then



Zero tailpipes, zero emissions. Clarity is a big car; longer than a CR-V, at least it now seats five



## SKODA OCTAVIA vRS

### Old-school thrills on the school run

**THE SKODA OCTAVIA** vRS is a very good answer to the question of what to buy if you want something that's fast, fun and family-friendly. There are other good answers to the same question, including a couple from within the same VW gene pool as the Skoda, but the Octavia has its own special appeal, much of which is down to the extra passenger room it offers.

The new vRS range includes petrol and diesel engines, hatch and estate bodies, manual and dual-clutch auto transmissions, front- and all-wheel drive. The entry model is a 227bhp front-drive manual hatch, and it's a cracker. It has a 10bhp increase over its predecessor (and there's a 242bhp version on the way) which won't worry any über-hatches, but it's more than enough to encourage you to take the long way home on the school run.

A smooth 258lb ft wave of torque means overtaking manoeuvres are done and dusted in no time, while tidy body control and a sharp turn-in instil confidence. It will flatter your driving ability, without making your passengers feel queasy. And there's a good amount of luggage room too, so you can carry buggies, scooters, shopping and dogs all at the same time. And there's even more room in the estate, which starts at just £1200 more than the hatch.

The vRS line-up gets the same 2017 tweaks as the rest of the Octavia range, with a slight facelift, major infotainment upgrade and extra safety equipment. What's less impressive is the vRS's artificial engine noise pumped through to the cabin, although thankfully that can be switched off.

**TOM GOODLAD** @tom\_goodlad

Opt out of the bright paint for a stealthy everyday performance car



#### Skoda Octavia Estate vRS 2.0 TSI

- > Price** £26,385 **> Engine** 1984cc turbocharged 4-cyl, 227bhp @ 4700-6200rpm, 258lb ft @ 1500-4600rpm  
**> Transmission** 6-speed manual, front-wheel drive **> Performance** 6.8sec 0-62mph, 153mph, 43.5mpg, 149g/km CO2 **> Weight** 1367kg **> On sale** Now **> Rating** ★★★★★

**VERDICT** Subtle improvements everywhere. Estate an even better all-rounder than hatch.

#### LOVE

Seats five, easy to drive, no cables

#### HATE

Costly to build, few filling stations

#### VERDICT

If this is the future, it's entirely agreeable

★★★★★



## AUTÓDROMO INTERNACIONAL DO ALGARVE

The Autódromo Internacional do Algarve is ideally located in one of the most popular holiday destinations in Europe. The AIA is a world reference for manufacturers of cars and motorcycles and to pilots, being considered as one of the most challenging circuit in the world.

The AIA Racing School with all the safety conditions and with a group of professionals to teach, provide different experiences that have been specially prepared to each participant.

The modern facilities of the circuit provide unique conditions that ensure the complete satisfaction and comfort of its guests and participants. The Autódromo Internacional do Algarve aims to satisfy the specific needs of each company, which makes it the ideal place to stage your event.



Portimão - Algarve - Portugal  
www.autodromodoalgarve.com · info@autodromodoalgarve.com



### RACE EXPERIENCES

The Kartódromo Internacional do Algarve is an excellent testing ground, featuring areas where wet conditions can be simulated, making it the perfect complement to the Autódromo Internacional do Algarve. The Racing School offers to driving sports lovers the possibility to enjoy a safe learning in dream cars.



### ACCOMMODATION AND CATERING PACKAGES

Can offer accommodation and complementary services designed to meet the requirement of individual needs.







VW GOLF R

## Your £32k RS6 is here

More tech and polish for VW's super-Golf, but it's still no Focus RS – for better and for worse

**T**HE GOLF R has been giving the GTI a hard time for a number of years now, slapping it about with a lot more power and a ferocious turn of speed in all weathers and on all roads. This Mk7.5 facelift would suggest VW's happy for that hierarchy to persist.

The R's had the same exterior and interior makeover as the GTI – subtle on the outside, more significant within – and itself gains a little more power. But where the Mk7 GTI in Clubsport S guise proved that the world's most famous hot hatch relished a decent wedge of power (306bhp and 280lb ft), the facelifted GTI gets a very modest hike to 242bhp in Performance guise. For just a couple of grand more (£31,865 for the manual three-door; £33,935 for the DSG five-door) you can have an R, now itself with a little more go and still more polish.

Power from the four-cylinder turbo motor climbs to 306bhp and 280/295lb ft depending on the transmission – the DSG can handle

### Volkswagen Golf R

► **Price** From £31,865; £33,935 as tested  
 ► **Engine** 1984cc 16v turbocharged 4-cyl, 306bhp @ 5500rpm, 295lb ft @ 2000rpm  
 ► **Transmission** 7-speed dual-clutch automatic, all-wheel drive ► **Performance** 4.6sec 0-62mph, 155mph (limited), 35.8mpg, 180g/km CO2  
 ► **Weight** 1483kg ► **On sale** Now

more torque, and deploys it to better effect for a 4.6sec 0-62mph time (the manual's is 5.1sec). On track, in a five-door R hatch with the DSG gearbox, optional Cup 2 rubber and the Performance package (deleted speed limiter, uprated brakes, additional roof spoiler lip and 19-inch 'Spielberg' or 'Pretoria' wheels) the R is both sensational and oddly underwhelming.

The good stuff is all that the R's already famous for – a scintillating turn of speed born of grip, poise, all-wheel-drive traction and towering driver confidence. If there's an easier, more welcoming hot hatch to drive quickly, I haven't met it yet. The engine rather tunelessly turns out meaningful drive from next to no revs, and revs around its dial with an admirable if slightly unexciting linearity. In no time the R piles on serious speed, helped by the fact that you're able to tramp confidently back on the throttle soon after each apex. Do so without any patience or restraint and the R will push wide, despite the 4Motion transmission's use of both axles, but with discipline the R can put together what feels like

a supremely swift lap. The R's preference for cool, efficient performance over involvement manifests itself as a steadfast refusal to ever feel anything like rear-wheel drive, or to really throw shapes, unlike the Focus RS. Good news on wet dual-carriageway roundabouts, if perhaps disappointing on your favourite B-road. An R Clubsport? We can dream.

On the road, where the R belongs, its speed, composure and uncorrupted hatch – or estate – practicality make it an all but unbeatable all-rounder. The R's is a beautifully finished interior, one lifted by the new touchscreen interface, which is as sharply responsive as it is glossy. The 9.2-inch set-up is a cost option, as is the Virtual Cockpit-aping Active Info Display, but both are worth ticking the box for, if only to complete the sense of smugness that comes with driving something that feels £10k more expensive than it is. The basics remain close to perfect too, with sharp (if largely lifeless) steering, tireless brakes and great (heated) sports seats that, like the car itself, strike a sweet balance between support at speed and all-day comfort.

The R is the UK's favourite hot Golf, suggesting its lack of dynamic fireworks matters little. Certainly it hasn't suddenly become a super-adjustable livewire of a hot hatch, but no one's going to shed a tear at that news. Not when the R is more potent, slick and more achingly desirable than ever.

**BEN MILLER**

Mk7.5 facelift leaves the exterior largely alone; it's still a sensible, practical car when you need it to be



### LOVE

Easy speed, sheer class

### HATE

Not a grown-up Focus RS, sadly

### VERDICT

Polished like an Underground handrail and startlingly versatile

★★★★★



## VW GOLF GTI PERFORMANCE

## Again, with a bit more intensity

**T**HE NEW GOLF GTI, tested on page 98, is the most astonishingly grown-up hot hatch you can imagine, but you pay a price for all that day-to-day versatility and long-journey refinement. That price is an encouraging sense of composure and togetherness under duress.

Without the Performance pack's diff, the Mk7.5 Golf GTI is a seven-tenths car. Sublimely composed and sweetly responsive, it likes to keep things neat and fast. If you want to really get stuck in you'll need the Performance – and even if you don't, you'll probably still want the Performance since it's barely any more expensive and looks suspiciously like great value.

Your additional spend (around £950 – UK pricing is yet to be set) nets uprated brakes with red calipers, red GTI badging, that diff and a very modest power hike, up from 227 to 242bhp. On the road you barely notice the extra go, the GTI Performance feeling fit rather than stonking. VW's trusty turbo four isn't an engine to fall in love with but neither does it let the side down. It's always there, responding swiftly and with meaning to help adjust the car's balance and haul it from tighter corners, that diff cleaning up all the standard car's big-throttle-openings-with-steering-lock-on messiness without corrupting its manners.

All of the GTI's do-anything brilliance goes unspoilt, the Performance simply broadening the car's dynamic window for no discernible payoff. In essence, then, the Performance Pack version is the Mk7.5 Golf GTI as it's meant to be enjoyed – still polished, still grown-up, but a more convincing ally when you get stuck in.

BEN MILLER

Looks the same, but does it all faster and with an extra quotient of satisfied whooping



## VW Golf GTI Performance

► **Price** £29,500 (est) ► **Engine** 1984cc 16v turbocharged 4-cyl, 242bhp @ 4700rpm, 273lb ft @ 1600rpm ► **Transmission:** 6-speed manual (or 7-speed DCT), front-wheel drive ► **Performance** 6.2sec 0-62mph, 155mph (limited), 43.5mpg, 150g/km CO2 ► **Weight** 1387kg ► **On sale** Now ► **Rating** ★ ★ ★ ★ ★

**VERDICT** Deeply impressive, but there are more exciting hot hatches



## VW E-GOLF

## Let's try that again

The first e-Golf was a rare sight in the UK. The new one will do better

**W**HAT, WHEN FACED with the great unknown of EV ownership, could be more reassuring than a Golf? Where the Prius and even Zoe reflect their unconventional powertrains in unconventional styling, the new e-Golf – based on the facelifted

Mk7.5 car – does the opposite. It's the BEV at its least challenging.

Key to the v2 e-Golf's appeal will be the increased performance over its predecessor. In comes a beefier lithium-ion battery, rated at 35.8 kWh (up from 24.2 kWh). Together with a more powerful e-motor (mounted up front and driving the front wheels only), the result is a leap in range, from an optimistic max of 118 miles previously to 186 miles, or a realistic, all-season average of 125 miles per charge. Its 134bhp is enough to punt the hardly lightweight hatchback to 50mph in 6.9sec and 62mph in 9.6sec, nearly a second quicker than the previous e-Golf (10.4sec).

For the same money a 2.0 TDI Golf will of course give you more speed, a little more boot space, faster refuelling and more range, but the e-Golf makes a compelling case for itself, not least because it's an enjoyable drive. It may not be Tesla-fast but there's joy in the oily sweetness of its damping, the responsive steering and the cohesive, controlled manner in which the e-Golf moves down the road. Acceleration, from low speeds at least, is brisk and, while you sense the car's weight, there's none of the disconcerting wallow many battery-stuffed EVs have made their dynamic trademark.

Inside you get fine ergonomics, great build quality and all the new infotainment and display toys. Indeed the e-Golf is the only model in the range on which the top Discover Pro 9.2-inch touchscreen is standard. It all adds up to create an unrelentingly premium feel. Range will remain an issue for some, and anxiety will creep in if your journeys regularly exceed 100 miles at a time (on our drive the remaining-range display dropped 74 miles for 53 miles driven), but if the e-Golf's maths add up for you, there are few more reassuringly normal cars in which to kick the engine habit. **BEN MILLER**

## LOVE

Quicker, improved range

## HATE

Range could still be an obstacle

## VERDICT

Classy electric hatch defies golf cart jibes

★ ★ ★ ★ ★

## Volkswagen e-Golf

► **Price** £31,870 (£27,370 with grant) ► **Engine** Single e-motor, 134bhp, 214lb ft ► **Battery** 35.8kWh lithium-ion ► **Transmission** Single-speed gearbox, front-wheel drive ► **Performance** 9.6sec 0-62mph, 93mph, 186-mile range (NEDC), 0g/km CO2 ► **Weight** 1615kg ► **On sale** Now



'Reassuringly normal' look and feel ends when you pop the hood





BMW 440i M SPORT

# Go on, treat yourself

A compact BMW that's neither a wide-arch M nor a super-sensible 20d? Believe – it's the facelifted 440i

**T**HERE'S AN ARGUMENT that everything you need from a BMW is satisfied by one of two badges, either 20d or M. They'll guarantee that you're looking at a polished product aimed with laser accuracy at its intended buyers.

Sales figures for the 4-series Coupe back this up. The best seller is the frugal 420d, followed by the wild M4. Third place goes to the 435d xDrive, which sort of does both.

So what purpose is served by the 440i – a pricey, non-M (or true M anyway), six-cylinder petrol variant, which sort of does neither?

Unlike its Mercedes-AMG C43 Coupe and Audi S5 rivals, the 440i sits within the standard range, so there's little to distinguish it in the car park and no boastful, I'm-better-than-you badging or trim.



So under-the-radar it could get aerial reconnaissance shots of the Kremlin, no bother

## BMW 440i M Sport

> **Price** £42,985 (+ £1690 for auto) > **Engine** 2998cc twin-turbo 6-cyl, 321bhp @ 5500rpm, 332lb ft @ 1380rpm > **Transmission** 8-spd twin-clutch auto, rear-wheel drive > **Performance** 5.0sec 0-62mph, 155mph, 41.5mpg, 159g/km CO2 > **Weight** 1615kg > **On sale** Now

In terms of price and horsepower it's on near-level terms with the 435d but is solidly out-torqued; the all-wheel-drive diesel cracks 0-62mph three tenths quicker than this car's five-second sprint. The 435d is also cheaper to run and grippier in winter weather, the show-off.

The 440i also misses out on the automatic gearbox standard to the six-cylinder diesels (and, curiously, the 440i Convertible), so unless you want a six-cog manual you'll need to find another £1690 between the sofa cushions for the ZF eight-speeder.

Why on earth does the 440i exist at all, then, when there's so much stacked against it? Drive it and the answer is immediately obvious: it's the best 4-series you can buy.

It has everything the sporting coupe driver wants and desires – a sonorous straight-six engine, three pedals if you want, satisfying dynamics and alluring bodylines.

Yes, so does the M4 – but it's £15,000 more expensive and festooned with enough Race-Me badges to ensure you'll have diesel Passats millimetres from your rear bumper at all times, which will get boring.

The 440i's performance is more accessible too. Testing the full-fat M4's limits requires a racetrack or a Teflon driver's licence. Not so here, where you can acquaint yourself with the redline on a regular basis.

It's also better when you just want it to be a car, the gearbox blurring its shifts indiscernibly and the suspension smoothing out



All change! Oh no, hang on, a couple of tiny things change!

the tarmac like a plasterer's trowel.

That's despite BMW fitting the facelifted car (subtly updated to help it trade punches with the super-slick Audi A5) with stiffer suspension, advanced dampers and upgraded steering.

If that all sounds a bit woolly there are some tangible improvements this time around – LED lights at both ends, a modified steering wheel and a tile-based operating system for the sat-nav. There's also this eye-catching new shade, Snapper Rocks Blue. Incremental stuff, but then the 4-series never felt in need of resuscitation.

BMW probably won't sell a huge number of these and that's a great shame – yes the diesels are cheaper to run and offer similar performance, and if you're sensible and like to arrange all your tins label-outwards in the cupboard then we can see the appeal.

But you want a petrol though, don't you, because it's proper? Well, this version feels suitably more special than the four-cylinder 430i, and easier to live with than the M4. Go on, buy it.

**ADAM BINNIE**

## LOVE

Fabulous six-cylinder engine – as ever

## HATE

Outgunned by 435d xDrive

## VERDICT

Steady facelift, very sweet car  
★★★★★



# 4 Series tuning.



**BIRDS B-SERIES PACKAGES for the BMW 435i and 435dx now available.**

We have specialised in tuning road BMWs for over 30 years, catering for the niche of sophisticated BMW owners who appreciate the art of subtle performance tuning. Our packages do not contain spoilers, splitters, or unreasonably stiff adjustable suspension kits. Instead, only carefully put together elements designed to transform the standard BMW into the ultimate B-road weapon.



Engine Management 400ps



QUAIFE ATB Differential



B-Series Sport Suspension

# Birds

Ultimate BMW Performance  
[www.birdsauto.com](http://www.birdsauto.com) | 01753 657 444

## BIRDS PACKAGES ALSO AVAILABLE FOR;

- F20 M135i
- F22 M235i
- F30 335i
- F30 335dx
- E82 135i
- E87 130i
- E9x 335i
- E9x 335d



## ‘Patrick Le Quément recommended Shiro Nakamura as the man who could revolutionise Nissan’



**THE EYES ON DESIGN** lifetime achievement award is probably the most coveted prize for car designers. Unlike most auto design prizes, it is not adjudicated by design commentators, journalists or critics. Rather, the world's best car designers, all past winners of the award, are the judges.

Winners include Marcello Gandini, former chief designer of Bertone and of the Lamborghini Miura and Countach, and Bruno Sacco, the great Mercedes-Benz design classicist. We find Tom Gale, creator of so many daring '90s Chryslers including the Dodge Viper, and Peter Schreyer, the most important German car designer of the past decade. It was Schreyer who made Kias and Hyundais desirable. He transformed them from lumpy eyesores into stylish alternatives to European and Japanese cars.

Chris Bangle's inclusion may be more controversial. He was once widely regarded as the antichrist of car couture as he 'flame surfaced' previously genteel and graceful BMW saloons. In retrospect we see he modernised BMW design and is probably the most influential car designer of this century, pioneering the 'surface entertainment' now common from Mitsubishi to Mercedes. The inclusion of Patrick Le Quément, the visionary ex-Renault design director, is obvious. Other past winners include Giorgetto Giugiaro and the late Sergio Pininfarina.

So when this elite group salutes you, it's fair to assume you know your E-Types from your Alleghros, and your Dinos, DSs and D-Types from your PT Cruisers and Pontiac Azteks.

Only one Japanese designer has won the award, Nissan's Shiro Nakamura. Now when you look at the latest tangle-of-angle Lexus SUVs, over-ornate new Hondas and fussily styled Toyotas, it is perhaps no surprise that Japanese winners are rare (although Mazda's design chief Ikuo Maeda is doing great work).

I've always admired Nakamura. The likeable 66-year-old is in many ways an old-school car designer: modest, gracious and good mannered, invariably elegantly attired in fine

suit and tie. He joined Nissan at the start of the Carlos Ghosn revolution almost 20 years ago and helped transform the company, becoming the most influential Japanese car designer. 'I wanted to elevate the role of design within Nissan and within Japanese car companies,' he told me. 'Carlos Ghosn understood the importance of design.'

Shiro retired from Nissan at the end of March and will now have more time playing bass in his jazz band and making violins, a hobby. He'll get to play his cello more, too. No doubt he'll also pick up some juicy design consultancies. I had dinner with Nakamura in Tokyo a few days after his retirement was announced. We dined with Patrick Le Quément, who recommended Nakamura to

Ghosn as the man who could revolutionise Nissan design.

Now I don't pretend to like all recent Nissans. Rather, what I admire is the astonishing variety and boldness of these Shiro-era cars. Many have defined sectors and changed the car industry. They include the cartoonish but globally successful Juke. There's the influential Qashqai that pioneered the modern mid-sized crossover. We see big front-engine muscle cars (the wonderful GT-R) and stylish sportsters such as the 350Z. (This was Shiro's first Nissan and signal of the transformation to come.) We see the strange but practical Cube (popular in Japan) and the Leaf, the first modern electric car from a mainstream car maker. The new Micra is one of the finest looking superminis.

Plus we find some highly original concepts. I particularly liked the Pivo 2 electric runabout. Its rotating cabin and 90-degree pivoting wheels gave unsurpassed urban manoeuvrability.

Shiro loves London. When he searched for a location for his European design HQ, he chose a former British Rail maintenance depot in Paddington. Nissan remains the only major car company with a large London studio, the only auto company to benefit, day-by-day, from the cultural richness and stimulation of Western Europe's biggest, most vibrant and most diverse city.

'I looked at Germany, Italy, France and Spain, but there you get ideas that reflect German or Latin design. London gave me really international thinking.'

It can't be a coincidence that the two most successful Nissans of the past decade, the Qashqai and Juke, were both Paddington proposals.

@greenofrichmond

**Former CAR editor Gavin is one of the world's most respected motoring commentators. If someone's making waves in the car industry, chances are Gavin's had dinner with them**





# THE SMART WAY TO SELL

PERFORMANCE | PRESTIGE | CLASSIC

We have developed the **quickest**,  
**cheapest** and **easiest** way to sell your car

## WHY CHOOSE US

- 1 Best returns to you
- 2 Speed of sale  
(We have a very fast stock turnaround)
- 3 Your car is sold with a Autoprotect  
Wear and Tear Warranty
- 4 Finance - 53 lenders to fund  
the purchase of your car

## HOW SALE AND RETURN WORKS

- 1 We accurately value your car
- 2 We can collect via covered trailer  
or provide use of a courtesy car
- 3 We market your car for a flat  
£1500 fee\*
- 4 If there is no sale there is no fee

**FLAT FEE OF  
£1500\***

**NO SALE = NO FEE**

Get a **detailed valuation**  
just email or call us:

**01295 690933**

\*excluding VAT



Increased  
return of  
**£10,000**

### Porsche Cayman GT4

Part exchange valuation £85,000  
SOLD FOR £95,000  
Returned customer (less fee) £93,500



Increased  
return of  
**£19,995**

### Ferrari 599 GTB

Part exchange valuation £100,000  
SOLD FOR £119,995  
Returned customer (less fee) £118,495



Increased  
return of  
**£12,995**

### Porsche GT3

Part exchange valuation £67,000  
SOLD FOR £79,995  
Returned customer (less fee) £78,495

**Why sell your car privately or get below trade 'book' price from dealers when you can sell your car this way?**

## Example stock cars



Porsche 911 GT3 RS 4.0  
£279,995



Ferrari California  
£108,950



Aston Martin Vanquish  
£159,995



Bentley Continental GT V8  
£96,995



Porsche Panamera Turbo S  
£89,995



Porsche 911 Carrera 4S  
£106,995



# Mark Walton

THE INCURABLE ENTHUSIAST

‘We value low emissions yet we still fall hook, line and sinker for gigantic quad exhausts’



**IN THIS ERA** of Donald Trump, alternative facts and fake news, we’re entering a new age when trust and authenticity are everything. That’s why I’ve asked CAR to stop using Photoshop whenever my picture appears in these pages. That’s right, those roguish good looks and rich Californian tan you see every month – they’re

not real. I’m actually a dishevelled, pasty-faced trainspotter with a comb-over and wildly hairy ears. But no more! Because trust is important.

Fakery is everywhere in the car business. There’s now a whole family of Peugeot SUVs that look like they’re four-wheel drive, but they’re not. There’s a new Land Rover Discovery 5 that looks exactly like a Range Rover, but it’s not. BMW fakes the engine sounds in its M5, using something called Active Sound Design (basically a Bontempi electric organ under the bonnet).

Even the Bugatti Chiron – the car that promises ‘if it looks like solid aluminium, it’s probably made of 24-carat diamond, laser-etched with gold and then veneered with aluminium’ – even that car has terrible fake exhaust tips (hiding a real, six-pipe titanium exhaust – weird thing to fake).

Don’t even get me started on the classic car business, where a crashed Datsun Cherry can re-emerge as a coachbuilt Mercedes-Benz SSK; where there are more barn-finds in the world than there are barns; and where so many Toyota MR2s have been turned into Ferrari 355s that a genuine, unmolested Toyota will soon be worth more than a real Ferrari.

But automotive fakery will get worse. So many of these details are driven by our desire for old-school engineering. We value low emissions yet we still fall, hook, line and sinker for gigantic quad exhausts. We drive a 68cc three-cylinder, yet we still want our car to be called the 5600 GTX Volcano. Tacky cosmetic air vents, stick-on plastic carbon and those venturi shapes under the rear bumper that do absolutely nothing – the marketing people weave their evil spells, and we lap it up.

So what happens when the engineering of the 20<sup>th</sup> century is completely replaced? Will the next generation of car enthusiasts still hanker after exhaust pipes when there are no exhausts? If so, it’ll lead to new levels of fakery. Imagine a gleaming white, autonomous hover-pod making its way down Google’s robotic production line until it reaches the Aesthetics Department, where it’s fitted with an unnecessary bonnet bulge and a pretend steering wheel, with a horn that can only be heard inside the car.

If this future looks awful, it’s your own fault. The manufacturers aren’t the cause of our irrational desires, they milk them. And who can blame them? Think of the Modernist revolution in architecture 100

years ago. Back then, the mock-Tudor beams and brick facades were discarded in favour of ‘honesty’ in design. Form followed function, and we ended up with brutal concrete tower blocks that everyone hated.

Why should the car manufacturer make the same mistake? If BMW thinks a fake side-exhaust and some V10 noise will help sell its electric car, then it’ll plaster them on.

So if you want more honesty in our automotive future, you, the enthusiast, need to reset your expectations. It’s time to embrace a new world, one with no air vents, no exhausts, no long, phallic E-type bonnets. No grilles, no headlights (because autonomous cars won’t need visible light to navigate or avoid collisions). No steering wheel, no horn, no turbo boost gauge. If you want your car to be honest, it’ll be as featureless as an aerodynamic bar of soap on wheels.

Which makes me wonder: if we do we throw out all those mock-Tudor beams of car design, what will make us actually *desire* these new cars? Those old-school exhausts and vents, we like them because they hint at massive horsepower. Presumably we’ll be attracted to the same promise in battery cars, only they’ll be bulging with muscular volts instead of beefy bhp. How do you even *show* that? Will manufacturers flaunt fat charging cables? Will supercars emit a slightly sulphurous smell, as though a lightning storm is about to happen? Can a big battery ever be sexy?

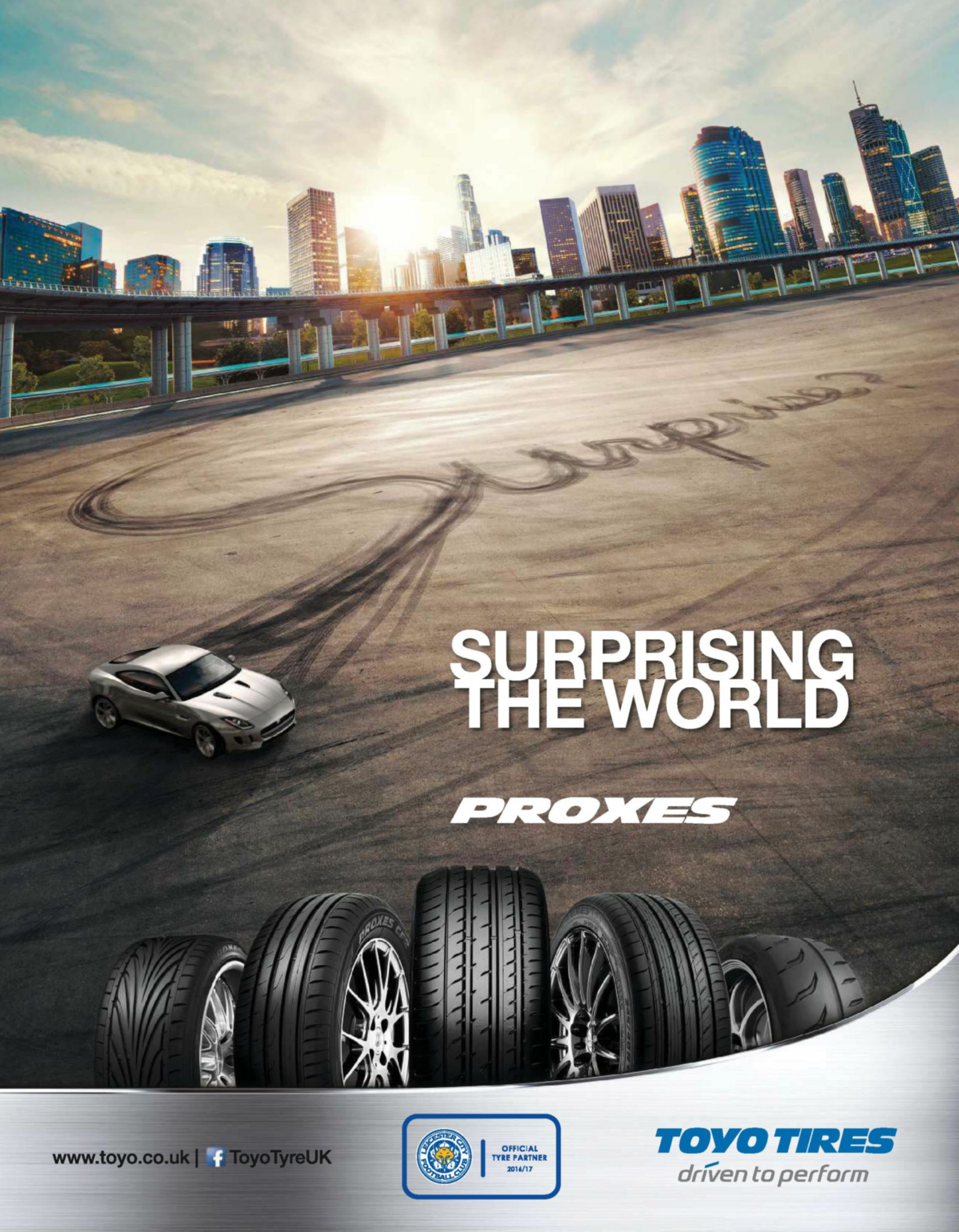
Whatever – in this post-truth world, I’d prefer bland honesty to a fake gear-stick that isn’t connected to anything.

● @markwalton\_

**Editor-at-large Mark Walton is a bundle of contradictions. Not for him the archaic nonsense of vents and a phallic bonnet, though he’s very excited about the new Ferrari 812 Superfast...**








# SURPRISING THE WORLD

## ***PROXES***



[www.toyo.co.uk](http://www.toyo.co.uk) |  ToyoTyreUK



**TOYO TIRES**  
*driven to perform*



# PAINT) (SHIELD

## Protect yourself from the Asteroid Belt

Second Generation "Self Healing" paint protection film has arrived.

Having brought the first Generation of Self Healing Film to the UK a number of years ago, our Technicians have added the latest Second Generation self healing Protective technology to our Inventory.

In your intergalactic travels protecting yourself from those micro meteor impacts has never been more important. We all know respraying your ship in some far off location is a bit of a pain, much better to not have to. Best of all though wear and tear from scratches picked up in your travels is very disconcerting to the Locals; abductions go much easier when you have a scratch free shiny ship when visiting Earth.

For the best paint protection in the Galaxy drop in to planet earth and contact our specialists on 01733 390777, or fire up the Intergalactic net and warp to [www.paintshield.co.uk](http://www.paintshield.co.uk) and they will get you protected and on your way in next to no time (theory of relativity applies).



# PAINT) (SHIELD

**stone chip protection**  
**combat swirl marks**  
**self-healing technologies**  
**protect from -**

- stone chips
- swirl marks
- bird lime
- brake fluid & oil resistant

**concours winning finish**  
**best in class for durability**

**t: 01733 390777**

**f: 01733 390778**

**e: [info@paintshield.co.uk](mailto:info@paintshield.co.uk)**

**w: [www.paintshield.co.uk](http://www.paintshield.co.uk)**





# car INTERACTIVE.

SPONSORED BY

**BOTB**  
WIN YOUR DREAM CAR



## Reach for the sky

► VIA EMAIL

What wonderful photos in your MX-5 RF Giant Test (May issue). The combination of cars, roads and sky looked wonderful, evoking for me some fine drives through the English countryside. Great work, guys.

**Bev Atkinson**

## The £42k budget car

► VIA EMAIL

Just how difficult is it to style an Alfa Romeo well (Stelvio drive, April)? Very difficult, it seems.

If we accept that most cars are efficient, reliable and will fulfil the job they were bought for with relative ease, then the looks and style of a car become important, and very important on an Alfa.

A list of things not to do would start with 1970s table formica for dashboard trim. Follow this with black plastic wheelarch surrounds for the authentic budget car look, half effort on the chrome for the radiator grille with black plastic infill, bulbous jowls again with the black plastic infill, notch above the badge just big enough to ruin the flow of the line over the front.

And how much of a last-minute decision was the positioning of the front number plate? Don't even get me started on the pricing – an estimated £42,000 starting price for the Q4 2.0T is just not on.

**Jim Beale**

How to  
have your  
say:



**VIA EMAIL**

CAR@  
bauermedia.co.uk



**VIA TWITTER**

@CARmagazine



**VIA FACEBOOK**

facebook.com/  
CARmagazine



**VIA POST**

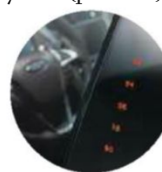
CAR magazine,  
Media House,  
Lynchwood,  
Peterborough  
Business Park,  
Peterborough  
PE2 6EA

## Edgy humour

► VIA EMAIL

Read Ben Miller's update on the Ford Edge in the March 2017 issue. The picture accompanying the write-up was hilarious. But I'm surprised that whoever specced your Edge didn't add Ford's excellent security keypad locking system (pictured), which I suspect is not available in the UK. Unlike the Land Rover system referenced in the story, Ford's system has a keypad on the driver's door that the owner programs with a number somewhat like a PIN. You lock the car and leave the keys/key fob inside, and when you return you merely press the buttons corresponding to your PIN. No need to carry a bulky fob or remember to wear an 'activity wristband'.

This system used to be available from dealers (at least in the US) to retrofit to any Ford vehicle with power door locks. In the US the keypad cost around \$75 with a small fee for installing the keypad. This



system is available in the US on new Edge vehicles, it might be possible to add at a dealer service.

Great magazine – I have purchased it for going on 46 years. The art department and especially your photographers are excellent.

**Howard Kerr**

## Welcome!

► VIA EMAIL

Congratulations to Ben Miller on becoming the new editor. I suspect being the editor of CAR magazine is akin to being a car designer – you have to produce something that fits all tastes. You will have to satisfy teenage boys and girls, beardy on-trend types, early adopters, luddites, rich and poor, and grumpy old gits such as myself. Being ancient also means not much is new, with some of the same phrases turning up again and again.

I enjoy the Our Cars section and bought my Range Rover Sport on the strength of your ownership, and I am delighted.

**Phil Taylor**



## Bring on VR driving

► VIA CAR ONLINE

Regarding Mark Walton's column about self-driving cars (*CAR*, March 2017): Bill Gates said the history of technological progress is about humans overestimating the short-term effects and underestimating the long-term effects.

It may be 10-20 years away in cities, but human drivers won't be able to **keep** up with the reaction times and **pinpoint** accuracy of AI driving. Hence **human** drivers will be seen as a hazard which will be legislated away. We might expect a longer time span for non-urban areas.

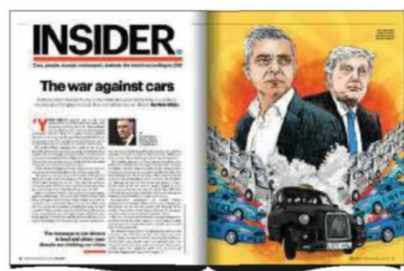
Trackdays and virtual reality will be for driving enthusiasts. Imagine putting on your full immersion suit and sitting on the grid at Monaco with Lewis Hamilton. Sky will run this at £10 per race, and I for one am in!

**Biram Desai**

## We're all doomed (part 19)

► VIA EMAIL

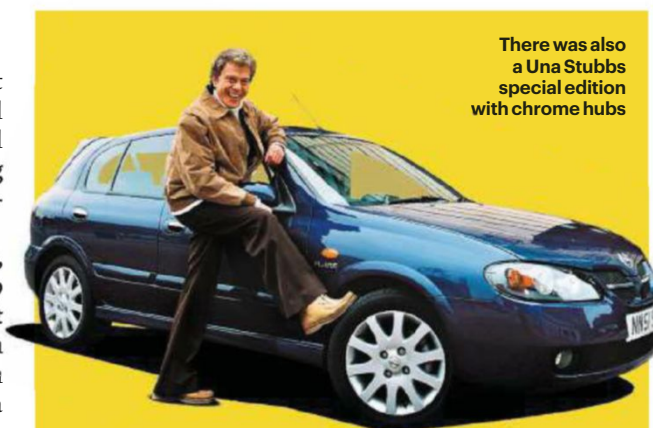
I admire the calm tone of your Insider story about city mayors, presidents etc trying to make life difficult for cars (*CAR*, May 2017). Given the mounting horror of the facts, I think the more appropriate tone would be somewhere between screaming and sobbing. If even a fraction of this comes to pass, we're royally screwed. The days of the car as we know it – and the car enthusiast, in any recognisable form – would seem to be extremely limited.



No diesels. No petrols in city centres. Congestion charging. Compulsory connectedness, with all the Big Data implications and scope for remote interference. But – moaning aside – what can we do about this? I'm assuming old-school stuff like writing to your MP won't work. Is it a case of accepting that this dreadfulness will probably happen, and saving up for an Elise or Atom to use on trackdays?

It's hard to see how we are going to be able to carry on using public roads for pleasure purposes. But there are millions of cars in circulation and I hope at least some of them can be kept in use.

**Ade West**



There was also a Una Stubbs special edition with chrome hubs

## Firing a Flare

LETTER OF THE MONTH

► VIA CAR ONLINE

Good grief. The Nissan Almera Flare (as featured in your Top 10 Regrettable Celebrity Endorsements,

May issue). Aaaargh! I'd managed to wipe that Flare/Lionel Blair nonsense from my memory. What were they thinking?

Although... I suppose you could argue that they must've realised they'd hit rock bottom with that episode, and perhaps that prompted them to get their act together, leading to the Qashqai and the rest of the much-improved line-up. Maybe. I'm prepared to believe that Shiro Nakamura (nice tribute from Guy Bird in the same issue's Insider pages) had something to do with it.

**Ian Green**

Letter of the month wins £25 worth of tickets for the Dream Car competition held by botb.com



## Bring back brown

► VIA EMAIL

This may be more to do with my age than anything else, but I hate the way every current car I look at seems to have a more or less interchangeable black-and-fake-chrome style of interior. There's a plainness and a dullness that seems unnecessary. I remember my early days on four wheels, in the '70s, as being rich with different shapes, fabrics and colours. And so much wood! But then again, I also

miss vinyl roofs, so maybe I'm swimming against the tide.

**Alan Peters**

## Juke it out

► VIA EMAIL

Shiro Nakamura's masterpiece the Nissan Juke

(Insider, May)? Seriously? Possibly the ugliest car on the road.

Oh, and I think he had his design for the Juke Mk2 stolen by Toyota, who have put it out as the angularly ugly C-HR.

**David Cosgrove**



## A Safrane fan writes...

► VIA EMAIL

The new Vauxhall Insignia hatch (First Drives, May 2017) looks a whole lot better than the last one, and I like the idea you propose that it signals a return to traditional car (as distinct from SUV) values. It's also good to see the Insignia following the Mondeo's example in getting bigger. For those of us with fond memories of the Scorpio/Granada and Carlton, this is a fabulous trend. Why should we have to spend out on an E-Class just because we like a bit of elbow room? It's a mystery to me why the Renault Safrane never caught on. I realise I may be slightly at odds with the typical *CAR* reader here.

**Neville Adams**

## It's the journey, not the car

► VIA EMAIL

Why's there no modern equivalent of Phil Llewellyn writing for *CAR*? I used to love his travel stuff in *CAR*, and later the *Independent* (and indeed at one stage in your sister magazine *Truck*). The continent-spanning epics were very good, but I personally preferred his stuff pootling around closer to home.

I recently got a secondhand copy of his collection of travel pieces, *The Road to Muckle Flugga*, on Amazon for a couple of quid, and it's a joy to read those stories again. Llewellyn clearly knew his cars, but it was his endless fascination with people





and places that really brought his writing to life. He's much missed, and I'm sure not just by me.

**Samuel North**

## Aiming high

► VIA EMAIL

Good to see the HondaJet in your pages. Or rather, good to see you using it as an opportunity to highlight the sheer peculiarity of Honda. Considering it's one of the world's biggest and most successful companies, and a major employer on several continents, it seems refreshingly willing to take risks and follow its instincts. A shame that a lot of its road cars have fallen some way short of these lofty ideals, although the new Civic looks interesting.

**David Bell**

## Cost per month matters

► VIA EMAIL

The used cars you featured in your May issue were doubtless all fine cars, but with the cheapest coming in at £15,000, and



From the people who brought you NSX and Civic Type R (but also generations of dull Accords)

some of them costing 10 times that much, they might as well have been new.

It's good to dream, but this was masquerading as serious buying advice.

For me the more relevant element was the small piece at the bottom of the M135i page, suggesting getting an M140i on finance. It's one of the oddities of today's lease/credit/finance culture that for people who rely on their salary – rather than an inheritance or lottery win – it can be easier to drive a new car than a used one.

**Jackie Kidd**



## All abroad

► VIA EMAIL

Really enjoyed Ben Barry's May-issue piece on driving the BMW 520d in Morocco. Pity he couldn't have stayed a bit longer and made it into the mountains and desert. It's a truly wonderful country – the first truly exotic place you reach if you leave the UK and follow your nose in search of adventure. Some great food and generally lovely people, although you do need to develop a thick skin to cope with those who – as Ben found – can be persistent in their sales pitch.

**Matt Evans**

## The right Q

► VIA EMAIL

Hats off to CAR for acknowledging the excellence of the Audi Q7, most recently in your May issue's comparison test with the new Land Rover Discovery. I briefly owned and hated an original Q7 from 2006. But, having recently acquired a nearly new 3.0 TDI 272 (after a test drive), I can't believe how different it is.

**Danny Davies**

# car

Subscription hotline  
**01858 438884** or visit  
**greatmagazines.co.uk/car**  
**CAR Magazine, Media House,**  
**Lynchwood, Peterborough PE2 6EA**  
Tel **01733 468000**  
Email **CAR@bauermedia.co.uk**  
or visit us at **www.carmagazine.co.uk**  
Subscribe **01858 438884**  
Display advertising **01733 366312**  
Classified advertising **01733 468864**

## EDITORIAL

Editor  
**Ben Miller**  
Editor-in-chief  
**Phil McNamara**  
Managing editor  
**Colin Overland**  
Associate editor  
**Matt Joy**  
Staff writer  
**Jake Groves**  
Digital editor-in-chief  
**Tim Pollard**  
Online editor  
**James Taylor**  
Art director  
**Matthew Tarrant**  
Designer  
**Rebecca Wilshire**  
Editors-at-large  
**Chris Chilton, Mark Walton,**  
**Ben Barry**  
Contributor-in-chief  
**Gavin Green**  
European editor  
**Georg Kacher**  
Contributing editors  
**Ben Oliver, Ben Whitworth,**  
**Anthony French-Constant,**  
**Steve Moody**  
F1 correspondent  
**Tom Clarkson**  
Office manager  
**Leise Enright**  
Production controller  
**Hollie Swift**

## ADVERTISING

Commercial director  
**Stuart Adam**  
Digital commercial director  
**Jim Burton**  
Key account manager  
**Dan Chapman**  
Account manager  
**Claire Meade-Gore**  
Regional sales  
**Graham Roby**  
**PUBLISHING**  
Marketing manager  
**Rachael Beesley**  
Direct marketing manager  
**Julie Spires**  
Direct marketing executive  
**Rebecca Lambert**  
Editorial director  
**June Smith-Sheppard**  
Managing director  
**Niall Clarkson**  
Group MD  
**Rob Munro-Hall**



## CAR ONLINE

5 most read stories on [carmagazine.co.uk](http://carmagazine.co.uk)

**Gavin Green reviews the Shanghai show: our man in China divines the key trends and themes**

New Merc S-class: next-gen limo ushers in new engines, Level 2 autonomy tech

**David Brown remixes the Mini: '60s revivalists to sell new old Minis at £70k a pop**

AMG Project One: new details of F1-influenced 1020bhp hypercar due in 2019

**Range Rover Velar SVR spied: go-much-faster SUV spotted at the Nürburgring**

## THE CAR POLL

How comfortable would you feel being a passenger in a fully autonomous car?

**NO WORRIES 15%**

**I HAVE SOME MISGIVINGS 29%**

**AAAAAARRRRGGGGHHHHHHH 56%**



# Your month

The place where you let us peek into your weird and wonderful automotive lives

ELLIOT BROWN®



**SHARE YOUR PICTURES - WIN THIS £475 WATCH!**  
Send a picture and 50 words to CAR@bauermedia.co.uk, labelled 'Your Month'. The best entry this month wins an Elliot Brown Canford watch worth £325. We'll also publish a selection of your entries...



## 1 HEAVY METAL FAN

Struggling to understand Norwegian while removing gas turbines from a decommissioned oil rig in a very chilly fjord. Luckily I packed a copy of CAR to keep me company.

DOUGIE KNOX

## 2 THE NEW GULF

Great visit to the Porsche Museum in Stuttgart. If they made this an option, it would become the new black.

JOESCHNEIDER

## 3 INSIDE STORY

Took a road trip in my Beemer from the West Country to Munich to see the BMW Welt and museum. Couldn't think of a better place to brush up on the M car range! Awesome mag!

ANDY FURMIDGE-OWEN

## 4 DO YOU KNOW WHAT IT IS YET? YES

Spotted this McLaren 720S in (pointless) cameo cruising through Kingston-upon-Thames days before I bought the April issue. I promise it's as dramatic in the metal as on the page!

TONY BARR

## 5 ATTACK OF THE CLONES

Caught this Lexus LC in our office parking garage after a customer preview. A bit Star Warsy in person.

TIM DAVIS

## 6 NORWAY! YES WAY

Our Kia rental waiting to traverse a flooded part of the highway south of Ica, Peru, on our epic 1500-mile Lima-Machu Picchu return trip this March. Despite flooding, mud and rock slides, an amazing drive.

PERE BERTELSEN

## 7 EMPIRE STATE OF MIND

Busy trip to NYC but managed to take time out at the top of the Rockefeller to check out your Tesla Giant Test.

KEITH HILLS

## 8 KEEP THE C-MAX

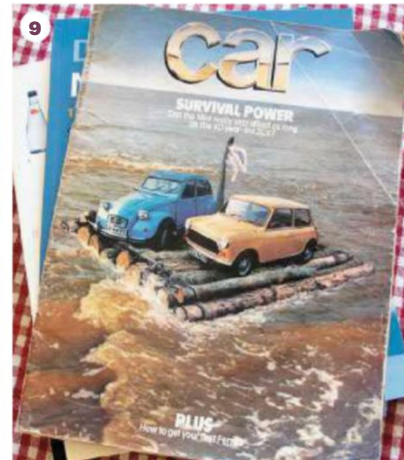
Here I am, accepting delivery of an unmolested low-mileage E46 M3 - only 32k miles on the clock! Long live naturally aspirated straight sixes, hydraulic steering and real engine noise!

REX ENDRIGA

## 9 HORSES FOR COURSES

They say that you never forget your first. CAR was a big influence in choosing the first car of my own - a blue 2CV that matched the one on the cover. The 2CV is long gone but I still proudly have the magazine.

NIGEL HOWARD





# ELLIOT BROWN

BUILT TO GO THE DISTANCE



**THIS IS WHERE WE WORK. AND PLAY.**

Rocks, waves, mud, sun, salt, wind. Challenge and adventure. Every Elliot Brown watch is built for it. That's why Mountain Rescue England & Wales, the British Military, and crews of the Clipper Round the World Yacht Race trust our watches.

Find out more at: [www.elliottbrownwatches.com](http://www.elliottbrownwatches.com)

Bloxworth 929-001-L01: £475







# Stuttgart

G T 3 v s G T R

civil



The GT3 version of each new 911 is the go-to tool for any driver with their priorities right. But AMG's gone and muddied the waters with a genuine alternative, the unhinged, exquisite GT R

Words Georg Kacher | Photography Stefan Bogner

war









A

**UTOBAHN! AT LAST**, the speed limit lifts, from 80 to 100 to 120km/h to unlimited. But it takes another 60 clicks for the traffic to thin out and vacate the fast lane. The day's first chance to give 'em stick opens on the oldest stretch of the A92 between Munich and the foothills of the Bavarian Forest. And when that opportunity

does finally arise, we grab it with both hands.

At a more modest pace these curves through the pan-flat plains would be barely noticeable, but at 150mph-plus a close reading of the road ahead is essential. The porous slabs of concrete have drifted apart over the years, millions of trucks have carved out wavy washboard ruts, and there are some sudden and drastic camber changes. Although the morning is dry and calm, the single-digit temperature read-outs suggest that grip may be an issue over bridges still damp from the night and through the wooded sections.

The GT3 is leading when the first proper gap presents itself, but it could easily be the other way around. As both drivers simultaneously engage go-for-it-mode, the AMG gains ground quickly, thanks to its big power advantage. In just about any gear, from the word go all the way to the near-200mph top speed, the Merc is at least as fast as the Porsche. And yet the driver of the 911 couldn't care less; he's too busy with his foot to the floor, celebrating each blaring 9000rpm upshift.

Here and now, driven like this, these two Stuttgart ►

**The 911 driver couldn't care less;  
he's busy with his foot to the floor,  
celebrating each 9000rpm upshift**

---



Quieter colours are available, but you're fooling no-one: these are loud cars



sports cars are closely matched. But there are as many differences as there are similarities. They're both rear-wheel-drive coupes with seven-speed, twin-clutch transmissions. But the Mercedes, with its front-mounted twin-turbo V8, has an 84bhp/177lb ft advantage over the Porsche; the Porsche, with its rear-mounted, naturally aspirated, horizontally opposed six, is shorter and lighter.

At times the AMG seems like it's trying to be two cars in one. In Comfort mode, with the transmission locked in Drive, it's a laid-back rumbler with drawn-in claws and half-closed LED eyes. In Sport and even more so in Sport Plus, however, all hell breaks loose, with full-throttle manoeuvres accompanied by acoustic earthquakes which come and go in waves, accentuated by fake heeling and toeing, chip-generated lift-off misfiring and that howling part-throttle wah-wah.

It's quite something. So's the GT3, especially on twistier



When, not if: huge torque guarantees GT R will catch up in a straight line



**The AMG's electronics work a thousand minor miracles into a breathtaking dynamic whole**



And there's still 15mph to go: both cars max out just shy of 200mph

roads, which it attacks with verve. Beneath the go-faster body, a battalion of high-tech helpers are working a thousand minor miracles a second, juggling rear-wheel steering, adjustable dampers, big tyres, active engine mounts and sophisticated electronics into a breathtakingly dynamic whole.

To find out what else it can do, and to see how it holds up against an AMG clearly designed to muscle into Porsche territory, we've devised an adrenaline-fuelled 48-hour itinerary that includes some lengthy flat-out stints, but also some of the trickiest Austrian back roads, syrupy city crawling and one solid flat-out hour on the Wachauring racetrack near Melk.

When we compared the first AMG GT S to the 911 Carrera GTS, it was the Porsche's in-built agility that sealed the deal for the marque from the southern side of Stuttgart. Three years later, we're back with a lookalike twosome, but this time the big bad Benz has so much more under its long bonnet,

which explains why it keeps winning the dragstrip duels on the autobahn – there's just so much in-gear punch. Every time a longish straight comes into sight, the Merc makes up what it lost through the preceding set of corners.

High-revving naturally aspirated flat six or twin-turbo V8? Redlined at 9000rpm, the 4.0-litre Porsche engine needs 8250rpm to deliver max power and 6000rpm to establish max torque. Although it gained 25bhp and 15lb ft over the previous vintage, 493bhp and 339lb ft are no real threat to the 577bhp and 516lb ft posted by the team from the northern fringe of Stuttgart. Since the manual version loses half a second to the more purposeful two-pedal edition in the 0-62mph sprint, we've picked the no-cost PDK option for this shootout. It's a claimed 3.4 against 3.6sec victory for the 911, but in our head-to-head comparison the Benz is every bit as quick.

As we head east towards Vienna, loosely following the ▶





This is why the GT3 cabin is so full of buttons: none on the steering wheel

river Danube on a very mixed set of roads, the cars' different characters emerge. The GT R is more GT than R; the GT3 is more R than GT (although a sharper GT3 RS is still to come). Despite its slightly more compliant suspension, the Porsche struggles to relax, let go, drop revs. Instead, it is totally committed at all times, noisily hurling loose chippings through the echo-chamber wheelarches, highlighting the aggressively informative low-speed ride, letting the manly intake rasp and the dense exhaust rumble do the talking.

In the rolling hills near Vienna, on the far side of the busy commuter belt, we pull out all the stops in Germany's finest sports cars. Once more, the different engineering approaches offer a mix of strengths and weaknesses. Traction? Advantage Porsche, which can put all the weight and energy on its hind legs at all times. Turn-in? A dead heat, at least in the dry when the front tyres bite until the entry speed is simply too silly for public roads. Mid-range grunt? Advantage GT R. The peak torque, on tap all the way from 1900 to 5500rpm, is more than a match for the extra 2000rpm the Porsche driver can squeeze out of the boxer engine.

Although both coupes are crammed with high technology, cold rubber gives iffy traction and cornering grip can be a guessing game. While the AMG is always liable to wriggle its tail before ESP quickly catches it, 911s have been known to understeer into oblivion and oversteer tail-first into the ditch. The GT3 mitigates this inherent vice by offering a 'paddle neutral' feature, which disconnects the rear wheels from the drivetrain the instant both shift paddles are pulled. It works, but first you must remember it exists, and then do what you have never done before, in defiance of your instincts.

In both cars, the driver needs quick reactions whenever ample oomph meets dubious grip. Through the open bends which snake up and down the Danube valley, it's a game of release and catch, pumping the throttle and constantly adjusting the steering angle. It's a little easier to ▶

## AMG vs Porsche: the feud

STUTTGART – WHERE FAIRLY NORMAL CARS ARE MADE EXTRAORDINARY

### 1967 911 R

Piëch-powered template for hot road and race 911s ever since: 800kg, and 207bhp from a twin-spark 2.0-litre flat six. Only 20 made. Direct inspiration for the incredible 1973 2.7 RS.



### 1992 964 RS

Revival of the RS tag took the 911 beyond Club Sport with thinner glass, seam welding, 230kg of weight loss and a more powerful M64/O3 motor. Also sold in N/GT trim ready for the track.



### 2004 Carrera GT

Born out of an aborted LMP project, the Carrera GT packed a 5.7-litre V10 punch, inboard suspension and that beechwood gearknob, paving the way for more leftfield projects like the 918.



### 2011 997 GT3 RS 4.0

The fourth and final 997 GT3 variant is still the greatest to some eyes. Rose-jointed suspension, carbonfibre panels and the biggest, baddest Mezger flat-six ever made.



### 1971 300 SEL 6.8 AMG

AMG was still an independent tuning house that liked to go racing. Adding 500cc to the giant 6.3 SEL meant 428bhp, a voracious thirst but second overall at the Spa 24 Hours. And the nickname 'Red Pig'.



### 1989 190 E 2.5-16 Evolution II

The white heat of DTM produced spectacular road cars, none more eye-catching than the final evolution of the Cosworth-engined 190E. 'My other car is the Batmobile' sticker not pictured.



### 2008 CLK63 AMG Black Series

The definitive Black Series model had a more powerful version of the spectacular M156 V8, coilover suspension, ditched rear seats and was the wildest Mercedes in years.



### 2011 C63 AMG DR 520

A spectacular final hurrah for the naturally aspirated era, the DR 520 paired the Performance pack option with different crank and pistons for a dyno-rated 513bhp. Only 20 made, each one a gem.

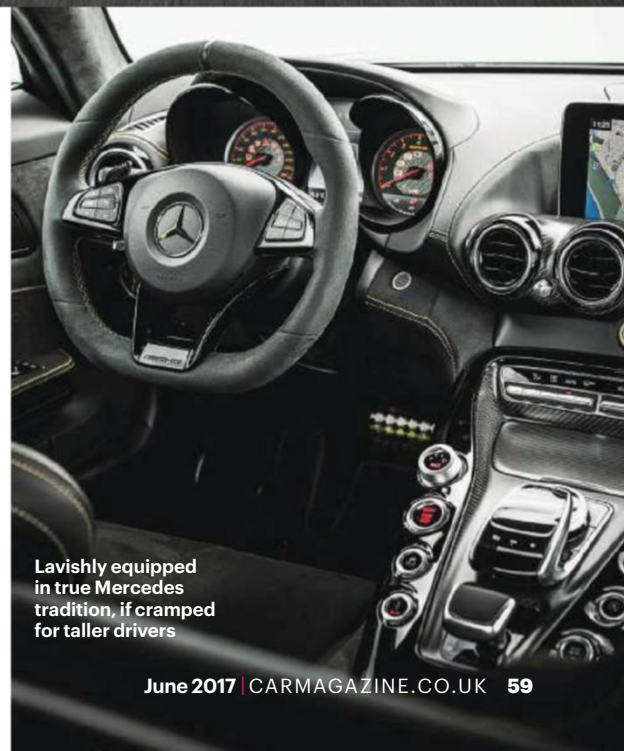




911s have been known to understeer into oblivion and oversteer tail-first into the ditch



Even on wet cobbles the AMG's stability control is genius



Lavishly equipped in true Mercedes tradition, if cramped for taller drivers



Not  
hardcore  
enough  
for you?

**PORSCHE WILL** build about 3500 GT3s, most of which are already spoken for. Likewise, every GT R was pre-sold long before going production. But both manufacturers have more in the pipeline. From AMG, there will be a Black Series version of the GT. From Porsche, the next GT3 RS – which is allegedly even more focused and sharper-edged than the previous model.

Or if you fancy something a little lower-key than the GT3, look out for the X90 Touring Pack version. Only available in manual transmission form, it trades in the flash wingwork and the racy interior for the more subtle aero kit of the discontinued 911 R and a period leather-with-corduroy trim.





The AMG's multi-level traction control harbours eight stages of drama, from mild to wild

Size and weight make the GT3 far more flickable through the bends



AMG comes with composites, optional on the GT3 – stock iron discs have red calipers

kick the more frivolous GT R into play mode than the staunch 911, but as soon as the rear end veers sideways the AMG is a bit of a handful. Perhaps switching off ESP altogether wasn't such a wise move. Perhaps we should instead play some more with the multi-mode traction control device which harbours eight stages of drama, from mild to wild.

The geometric buttons in the old-fashioned centre console of the GT3 invite you to turn up the exhaust volume, adjust the shock absorber calibration, speed up the drivetrain response, and deactivate ESP either on its own or together with ASR (automatic slip regulation). It's a straightforward arrangement – no drive mode selector, no tweaking of springs and steering, no personalised mix-and-match programme. In classic GT tradition, this is a 911 served straight up, no ice and no water, without tonic or Coke. It's a slightly more accessible set-up than the previous GT3, with fewer rough edges, totally involving yet charmingly viceless.

The GT R is loud, flashy and outlandishly fast. In contrast to the almost austere driver environment favoured by Porsche, the AMG is a true luxu-sport steamhammer, an insatiable long-distance mile-gobbler, a pragmatically practical daily driver. From the mean sharktooth grille over the monstrously overcrowded cockpit to the bouquet of driver assisting mod cons, this is a Mercedes-Benz as much as it is a bespoke AMG creation. Despite the bulk, the cabin space is snug, but the boot is easily accessible and big enough at 350 litres, versus the meagre 125 litres of the Porsche. Like the GT3, the GT R comes with unheated body-hugging racing buckets which are adjustable solely in reach.

By lunchtime on day two we've ticked most of our boxes. The urgent autobahn stints have sucked two ▶





GT3 wing is fixed. AMG's myriad aero elements adjust to keep you in the game



tankfuls dry, the concerted attack on the twisties has coated the wheels with layers of furry brake dust, our cornering adventures have shaved measurable amounts of rubber off all the tyres, the tight alleyways in Vienna have made us fear for the jewelled wheels and the Merc's massive mirrors. And then it's time for our laps of the demanding Wachauring. With the exception of a second-gear corner at the end of the start-finish straight, it's all third and fourth-gear stuff.

A shower pushes the grip level from low to high risk. In view of the cold tyres and the marbles framing the racing line, ambition quickly gives way to caution. Under blue skies, the AMG goes out first to set the pace, and what an awesome pace it is. Do not underestimate this car: it is more than a low-end torque monster, a master of powerslide, a horizon-hungry zoom lens on wheels. Its talents also shine on the track, where it exhibits very quick and precise steering, mighty braking

and formidable grip, achieved with sombrero-sized ventilated and cross-drilled discs, special-compound Michelin tyres (275/30 ZR19, 325/30 ZR20), trick suspension, an electronically controlled limited-slip diff and a variable-rate steering which takes g-force into consideration.

Even on warm rubber, moments of tentative understeer are taking turns with angry shoulder-shrugging antics, so traction control definitely has a role to play, and the shift points need to be scaled back by 1000rpm or so in either direction. A couple of laps later, grip is back in full force, so we zoom in on the limit again by tightening the line, straddling the kerbs and stretching the braking points. Turn-in is reassuringly positive now, torque begs to be fed earlier and earlier still, and soon enough the right hand is once more reaching for that magic yellow traction control knob.

While the first AMG GT was a potent poseur, the new GT R



Porsche is more at home on the racetrack, but Merc still huge, huge fun



## After the AMG, the Porsche is like entering a different universe on track



### PORSCHE 911 GT3

- **Price** £111,802
- **Engine** 3996cc 24v naturally-aspirated flat-six, 493bhp @ 8250rpm, 339lb ft @ 6000rpm
- **Transmission** 7-speed twin-clutch auto, rear-wheel drive
- **Performance** 3.4sec 0-62mph, 197mph, 22.2mpg, 288g/km CO2
- **Suspension** Independent strut front, multi-link rear
- **Weight** 1430kg
- **On sale** Now
- **Rating** ★★★★★

### MERCEDES-AMG GT R

- **Price** £143,245
- **Engine** 3982cc 32v twin-turbo V8, 577bhp @ 6250rpm, 516lb ft @ 1900rpm
- **Transmission** Seven-speed auto, rear-wheel drive
- **Performance** 3.6sec 0-62mph, 198mph, 24.8mpg, 259g/km CO2
- **Suspension** Double wishbone all round
- **Weight** 1630kg
- **On sale** Now
- **Rating** ★★★★★

is a competent and rewarding road and track tool.

Stepping from the AMG into the Porsche is like entering a different universe – one that revels in high revs, late upshifts and even later braking. Yes, there is again pupil-widening understeer on the slippery approach to that dropping left-hander, but a brief pull at both shift paddles interrupts the push from behind, making the front tyres rebound at once with the tarmac while encouraging rear-wheel steering to tighten the arc. The 911 pushes, kicks and tugs when accelerating hard past apexes and through corners, as does the fierce GT R.

There is no clear winner here. The GT3 is clearly the smaller and lighter car. It lays the power down like a steamhammer on steroids, and defies g-forces long and hard. But it cannot pull away from the AMG. The GT R is as fast if not a touch faster, and an equally exciting drive. Simply, there is no duff choice here. **car**





**car** INSIDE ROTARY HEAVEN

# FOR THE LOVE OF MAZDA

The world's greatest Mazda collection isn't in Hiroshima. It isn't even in Japan. In fact it's housed in a former tram station in Germany, and it's owned by a Mazda-mad family for whom the rotary is king

Words Ben Whitworth | Photography Mark Riccioni







**I F EVER A POWERPLANT** defined its maker it's the leftfield rotary and Mazda. For decades the Japanese marque has been driven by a fanatical obsession with Felix Wankel's revolutionary engine. It was this unwavering passion that gave us the beautiful Cosmo Sport a half century ago, a string of rotary-powered production cars, the now-legendary outright win at Le Mans in 1991 and a raft of charismatic sports cars, including the RX-7 and RX-8.

An embodiment of that passion can be found – incongruously so – in a century-old timber-roofed former tram station in the ancient city of Augsburg, half an hour's drive north-west of Munich. It is the last place in the world you'd expect to discover the finest and most comprehensive collection of significant and rare-groove Mazdas; one that collectively represent every model and series launched by the company since the early 1930s. At a stroke, this assembly instantly relegates Mazda's own museum at its Hiroshima headquarters to a modest gathering.

Even more intriguing, however, is the fact that the world's largest Mazda collection is a private haul, amassed and curated over the last 40 years by Walter Frey and his sons Markus and Joachim. You may not be a Mazda fan as you

walk through the museum's vast wooden doors, but to take in the significance and desirability of the 50 cars assembled here is to be infused and inspired by the passion that has coursed through the Frey family since Walter decided that the automotive world was the one in which he would make his mark. After touring this incredible facility, anyone who doesn't secretly lust after the space-age Cosmo Sport, chunky four-square REPU tow-truck, or the Giorgetto Giugiaro-penned Luce R130 needs to have their rpm checked.

Now the owners of three successful Mazda dealerships, the Freys are on the brink of realising their dream. The museum opens as this issue goes on sale, but *CAR* has been granted an eleventh-hour preview, with Markus Frey as our guide.

'We spent the last eight years looking for a suitable location for this crazy dream of ours,' explains Markus as we begin our meandering tour of the 1500 square-metre facility. 'We wanted something special, something unique, not just a boring white box,' he explains. 'We asked the mayoral office for help, and they suggested this derelict tram station. It's a listed building so its regeneration was – how do you say in English? – bloody tricky. It had been derelict for 50 years when we purchased it. ▶



Commercial vehicles come no prettier than a pastel pink Mazda K360







Brain says MX-5 but isn't entirely sure – one of only 200 MX-5 coupes in existence



If ever a powerplant defined its maker, it's the leftfield rotary and Mazda

RX-5 (on whitewall tyres) not as pretty as the Luce but just as cool



'It was a shambles; rainwater pouring through the holes in the roof, the main hall stuffed full of old rusting trams, and damp everywhere, because a tributary to the Lech river flows right past the building... What you see today is the result of two years' flat-out work.'

The whole precinct – which the Freys also purchased as part of the deal – used to house the town's tram station and an adjacent power station, to generate electricity for the trams. It's a sprawling 9000 square-metre complex that now houses a raft of artisanal shops and businesses, residential flats and, this being Angela Merkel's 21st-century Deutschland, the town's refugee integration office.

A second cavernous, acoustically tuned exhibition area, complete with catering facilities and eco-friendly heating and lighting, has been added to the main structure, as well as a shop selling Mazda automobilia. 'This area is the perfect place for conferences, shows, parties and seminars. Entry to the museum is €5 – we have no idea how many people are going to visit,' explains Markus. 'This then, is the revenue-generating part of the business.'

Mazda Europe was nonplussed by the initial plans, but Leverkusen has since been swept up in the Freys' fanaticism and is now lending a helping hand to help cover the museum's monthly costs. 'It was also tricky persuading Mazda Japan to let us use the Mazda Classic tagline, but once the people there saw what we were doing, when they saw our plans and our collection, they agreed without hesitation.'

It's an inspired setting. Much of the honey-hued wooden roof and its supporting beams are original, providing a nice contrast to the sleek metal they shelter. Warm spring sunlight pours in through skylights, galleries and the dozen enormous arched windows running down one side of the building.

The line-up starts with the Mazdago, the load-lugging commercial trike Mazda designed and developed in the 1930s, and its successor, the K360. Certainly not glamorous, but their function-first nature made them ideal for Japan's

rapid industrial growth during that period – and later for rebuilding the country's post-nuclear economy. Both have been immaculately restored by the Freys. The two brothers and their father undertake all the restoration work themselves, working together on winter weekends to return their cars to their previous glory. 'Summer weekends are for family and holidays, and we allocate one year for each car,' explains Markus.

On May 23, 1960 Mazda unveiled its first four-wheeled vehicle, the kei-class R360 coupe, swiftly followed by the P360. Looking at these dinky little cartoonish cars, it's ▶

➔  
**Be still our beating hearts – Cosmo first in a string of beautiful rotary Mazda coupes**

➔  
**Tiny, wild AZ-1 about as nuts as it gets; then you pop open the gullwing doors**



➔  
**The Freys' twist on the visitor's book – they'll surely soon run out of space**

## Mr Frey: 'I wanted young women and old cars!'

Charismatic and always wearing an engaging smile, Walter Frey exudes the air of a man who is very content with his lot in life. The owner of three Mazda dealerships and the force behind the museum, he started life the hard way. His father was killed in the war and his family expelled from Czechoslovakia in 1947.

'We were very poor. I mean really poor – I was always hungry and I had no trousers, not even for church. I vowed to myself then I would make a success of my life. I'm not a poor man now! When I was a teenager I wanted young women and old cars, but I seem to now have old women and young cars. But these are my cars and I love them.'

'As a teenager I was fascinated by the rotary engine and it got me into this business. I was studying to be an auto-electrician and one of my teachers told me the rotary engine was rubbish. I knew he was wrong, the fool. What it needed but never really got was some serious engineering behind it from a large manufacturer. I knew Mercedes-Benz was interested in it and I'm convinced that if they had continued with its development, half the cars on the road today would be rotary powered.'



'Most military drones use rotary engines – rotaries would be excellent range-extender engines for cars – but I think the future for Wankel engines is hydrogen.'

Walter loves his Luce R130 but if he could save one vehicle in his collection from a fire, it would be the Parkway bus. 'We took the Parkway with my sons and their wives and children on holiday to Austria. We just all got in and took off. Crazy, right? It was such fun. And that's what this place is all about. Fun and family.' He stops and looks around, as if seeing the museum for the first time. 'For sure, this is my baby. It makes me so proud.'



Super-cute Chantez kei car uses a punchy and fine-smelling two-stroke engine



Initially nonplussed, Mazda Europe is now helping to cover the museum's monthly costs



Yellow RX-3 (Savanna back home in Japan) big on '70s style



Immaculate RX-7 isn't any old RX-7 but Felix Wankel's personal car



## The Freys are driven by the passionate zeal of true automotive fans

hard to believe that just seven years after the R360's debut, Mazda was unveiling the Cosmo 110S. On sale just ahead of the NSU Ro 80 to claim first prize in the rotary race, the Cosmo was a revelation. Not only did it feature fantastically futuristic styling, but its unorthodox curves and creases were also wrapped around an equally advanced rotary drivetrain.

Understandably, it was the Cosmo that ignited Walter Frey's passion for the Mazda brand. He purchased the white short-wheel-base example that takes centre stage at the museum in 1980 for \$25,000 in New York, and it was the first car to take its place in the Frey collection. A second Cosmo is in the final stages of restoration. This defining Mazda halo model was followed by a slew of rotary-powered saloons, coupes and estates.

There are some real rarities and desirables in the Frey collection: the pocket-sized twin-pot Chantez kei; the so-ugly-it's-almost-beautiful rotary-powered CX-5 coupe; the sleek and slinky Giugiaro-styled R130 with both front-wheel drive and rotary power; the Pathfinder off-roader that was made specifically for the Burmese market, to tackle treacherous jungle terrain (surely a shoo-in for most niche of niche vehicles ever); and the rotary-engined Parkway bus, understood to be the only one in existence.

There's more. Felix Wankel's personal RX-7; the luxurious Holden-based Road Pacer; the Rotary-Engined Pick-Up, or REPU for short; the gullwinged AZ-1 kei car; the 150mph triple-rotor Eunos Cosmo, the world's first passenger car to be fitted with a touchscreen sat-nav system as standard; and the vibrant green delivery-mileage 1977 323 that's been signed by the Frey's friends, select customers and VIPs. Markus insists we sign it, too.

I note the lack of motorsport heritage in the museum and mention the Le Mans-winning 787B. Markus sighs and rolls his eyes dramatically. 'Well, we don't have a €1 million lying about to buy one, you know. But, we do have a 727C – one of only two made – being prepped for display. It's beautiful! I would love a 767 Le Mans car, too. They are very cool cars.' I ask him what would top his money-no-object wish list of Mazdas. He answers instantly, and a little wistfully. 'The RX500 concept car that was shown at the 1970 Tokyo motor show. No question.'

The 50-odd cars you see here represent the cream of the







Parkway bus handy for extended family holidays; Mk1 MX-5 less so

Frey collection – between the three of them they have more than 70 additional cars stashed away in nearby warehouses. Markus plans to change the line-up annually – ‘a museum that doesn’t change is a dead place’ – and gather together key models to commemorate significant anniversaries and events, such as the upcoming 30th anniversary for the MX-5 in 2019. Scouting for a pristine RX-8 is also underway.

Elementary accounting will tell you that the Frey family aren’t doing this for the money. They’re driven by the passionate zeal of true automotive fans. They’re doing this for their love of Mazda, for a brand has that has always punched very hard above its weight.

‘It’s a family thing,’ grins Markus. ‘For sure we’re crazy, but it’s important to live your dream if you possibly can. They’re not just cars, they’re stories, part of our lives and our histories. They’re the reason we are here. It’s that simple.’

Visit [mazda-classic-frey.de](http://mazda-classic-frey.de) for more details

## Walter’s Top 10

Walter Frey’s pick of his bunch



### 1. Cosmo 110S (1968)

The car that set Mazda, and Walter Frey, on their rotary paths. A dynamic, provocatively styled and wonderfully futuristic coupe that embodies Mazda’s pioneering spirit. Expect prices to get truly silly over the next five years.



### 2. Luce R130 (1969)

Designed by a very young Giugiaro while at Bertone, the twin-rotor Luce exuded the kind of languid Italianate style other Japanese coupes could only dream of. Celeste, as they say.



### 3. MX-5 Coupe (2003)

One of only 200 made, this rarity looks wonderfully complete and balanced, as if the MX-5 was designed as a coupe first and a roadster second. Can’t say the same of the current MX-5 RF...



### 4. Parkway (1976)

Proof that Mazda fitted a rotary engine to everything it built, the 26-seater Parkway was powered by a 135bhp twin-rotor engine and could crack 75mph.

### 5. Pathfinder (1972)

Landie-lookalike developed for the jungles of Burma. So rare that Mazda HQ initially denied its existence and loaned Nissan the name.



### 6. R360 (1962)

Mazda’s first four-wheeler. Powered by a tiny 356cc 15bhp twin-cylinder engine but extensive use of aluminium and magnesium resulted in a magnificent 380kg kerb weight.



### 7. REPU (1974)

In 1974 Mazda unleashed the world’s first rotary-engined pick-up, dropping a twin-rotor 110bhp 1.3-litre engine into its venerable B1800 workhorse. Light, frisky, thirsty and now a sought-after classic.



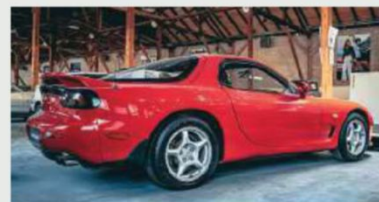
### 8. Road Pacer (1975)

Based on Holden’s HJ Premier, the Road Pacer – yet another great name, don’t you think? – was an opulent limousine developed specifically for diplomatic and ministerial work.



### 9. RX-7 (1984)

This 1984 turbocharged RX-7 was Felix Wankel’s personal car, a gift to the great man from Mazda. Finished in silver with a sumptuous burgundy velour-swathed interior.



### 10. RX-7 (1992)

Eleven years in the making, the last and arguably best RX-7 combined whip-crack sequential twin-turbo 1.3-litre twin-rotor power, pin-sharp dynamics and delectable design. Delicious.



McLaren



**Raise your limits.**

**720S**  
Super Series

McLaren Birmingham  
01564 787180  
[www.birmingham.mclaren.com](http://www.birmingham.mclaren.com)

McLaren Bristol  
01172 033980  
[www.bristol.mclaren.com](http://www.bristol.mclaren.com)

**Prepare.  
Commit.  
Belong.**

[cars.mclaren.com](http://cars.mclaren.com)

Official fuel consumption figures in UK mpg (l/100km) for the McLaren Super Series 4.0L (3,994cc) petrol, 7-speed Seamless Shift Dual Clutch Gearbox (SSG): urban 17.1 (16.5), extra urban 38.2 (7.4), combined 26.4 (10.7). Official combined CO2 emissions: 249g/km. The efficiency figures quoted are derived from official NEDC test results, are provided for comparability purposes only, and might not reflect actual driving experience.



**21-PAGE  
McLAREN  
SPECIAL**

# Sky-high and rising

From debutant to global force in seven short years, McLaren Automotive is on a near-vertical trajectory. Here's the story so far, and to come

- P1, five years on
- **The men who built the marque**
- CEO Mike Flewitt interview
- **Your handy McLaren range explainer**
- 720S: the first drive





THE P1

# A star is born

It's five years since McLaren unveiled its first hypercar, the hybrid P1. The 12C before it was neither exceptional nor pretty. The P1 was both, and the moment McLaren Automotive went supernova. Time for a reunion

Words Chris Chilton | Photography Mark Riccioni





Time to dust off  
those plans for a  
London GP









**There's not a car  
on the road and  
we see nothing  
but green lights**

**C**ITIES AND SUPERCARS have a bad rep. Not individually, but certainly collectively. Like kalimotxo, that weird hybrid of red wine and Coke, there's nothing wrong with the constituent components, but putting them together just sounds wrong. Blame the Persian playboy contingent and their Knightsbridge Grand Prix antics. Blame the pointlessness of driving a 200mph car in an environment when you're lucky to top 20.

But at night it's a different story. I'm not going to pretend that driving through city streets is as much fun as haring up a mountain road, or pounding around a track. But there's something thrilling about driving a quick car in a city at night. Getting that perfect line you never could in the day, catching sight of your mid-engined reflection in a shop window, watching orbs of light strobe across your windscreen as you empty as much horsepower as you dare onto roads that are normally strewn with traffic, but which you now have all to yourself. Tonight I have a P1 and a photographer waiting for me in the heart of London. *C'était une rendez-vous.*

We're here because tomorrow I'm scheduled to jet out to the launch of the McLaren 720S, the replacement for the P1's baby brother, the 650s, née 12C. We know there's no P1-style hybrid system in the 720S – that'll come later – but we can't help but wonder how much of the P1's performance and character did trickle down to the new car. Okay, so as excuses go it's flimsier than a Citroën cupholder, but could I have another go in the P1 please?

McLaren checked the P1's diary. We checked ours. The window is tighter than an obese cat burglar's escape route: we could have a P1 for the night, picking it up early evening and dropping it back before the McLaren Technology Centre buzzes into life the next morning.

We've got form, P1 OOV and me. This is McLaren's development car, and the very same P1 I spent several days driving back in 2014, when I collected it from a dealer in Milan to go exploring the Italian Alps, before heading down to Maranello for a meeting with its arch enemy, the then-new LaFerrari. On that occasion I declared the Ferrari the winner. The P1 was sensational, but the Italian's V12 beat it for engine sound and response, and the LaFerrari ►



felt so much more different to lesser Ferraris than the P1 did from the 650S.

But I'm feeling a pang of guilt seeing the P1 now. It looks incredible: low, lithe and menacing, its 21,000 hard miles disguised by a repaint since we last met, the glassy blackness revealing its true purple hue only where the late-afternoon sun glances directly off the peaks of the wings.

Photographer Riccioni wants to meet in East London, and I'm way over the other side of town. Since it's 7pm, I decide to take the M25 east first, rather than try to slog through the city just yet, and jump into the P1 to fire up the V8.

This P1 might have been smartened up, but it shows its age in the weak struts that make the dihedral doors difficult to lift skywards and all too keen to come crashing back down again. Once inside, the cabin is snug, but the driving position is ideal. I'm sitting on the left – all P1s were left-hand drive – but the slim pillars and big expanses of glass make it easy to place the nose. But the big blindspot on the offside C-pillar looms like that shadowy corner in your seven-year-old self's bedroom. Who knows what monsters lurk there unseen, ready to attack when you want to change lanes?

The dashboard is showing two miles of range for the battery pack, so I press the charge button, which syphons some power from the V8 to top it up to the maximum six miles as we cruise east. The P1 employs a derivative of the same 3.8-litre twin-turbo V8 that has powered everything from the original 12C to the new 570GT (the 720S gets an upgrade to 4.0). The key difference being the P1 V8's 727bhp is augmented by a 176bhp electric motor for a total of 903bhp and 723lb ft, all delivered to the rear wheels. Blimey.

Try unleashing that muscle at 70mph in seventh gear, though, and you'll be bitterly disappointed. The turbos take an age to spool up and even then there's almost zero acceleration. I try the same in sixth, which feels only slightly better, and fifth, which starts to feel genuinely quick, followed by fourth, on a slight curve, which lights up the rear tyres and kicks the back end a foot out of line. Oversteer on the M25. Maybe not a world first, but certainly a first for me.

There's less scope for that kind of silliness as we cruise into London along the A20. The

traffic is still pretty dense, giving the locals plenty of time to hang out of their car windows to show appreciation for Woking's finest. And a gaggle of admirers quickly gathers as we set up a static shot with Canary Wharf as a backdrop.

'How much is it?' comes the inevitable question.

'£866,000,' I reply, smugly dredging a number from my memory bank before Riccioni corrects me: it's actually £1.7m. Ah, yeah. I was thinking of the list price, but this being a limited-edition supercar it's worth more used than new, and the current market value has soared towards two mil. This car's special status as McLaren's own development car means it's worth even more than that. More like £4.5m, according to McLaren. It's interesting to note, though, that while the P1 is rarer than a LaFerrari (375 units plays 499), the Italian is worth more.

I almost detect a nod of approval from the police guarding the entrance to Downing Street as we rumble past, and the AMG C63 full of clearly well-heeled 20-somethings is desperate for us to blip the throttle as we sit side by side at the lights on the Mall. It's almost as much fun to mess with people's minds by switching to EV mode when we lap Piccadilly Circus for the camera. People are used to the idea of electric cars, but not ones that look like this and have a proper supercar badge on the nose. It'll be fascinating to see how McLaren handles its full EV hypercar.

It doesn't take long to deplete the meagre charge, and all too soon it's completely empty. And so, finally, at gone 3am, are the roads. This is when it gets fun, in that lull between the last stragglers calling it a night and the early birds heading in to work, when the city really does feel like your own personal playground. Maybe you can't use all of the performance, but you can still cover ground at a rate that would be unthinkable in daylight hours.

Along Piccadilly and then spearing left past Harrods, where so many supercars waste their summers, there's not a car on the road and we see nothing but green lights. It feels like a scene from a film and I wonder what music I'd be streaming from my phone as the soundtrack if the media system was actually working. Something slightly ▶

**People are used  
to electric cars,  
but not ones that  
look like this**





Even at Transit speeds the P1 is an event. Not so good for shifting carpets



Snug, but with a view as good as an open-top tour bus



If Carlsberg made Uber apps, they'd get picked up in a P1



**McLAREN P1**

**Price** £866,000

**Engine** 3799cc 32v twin-turbo  
V8 (727bhp @ 7300rpm, 531lb ft @  
4000rpm) plus electric motor (176bhp,  
192lb ft), 903bhp, 723lb ft

**Transmission** 7-speed dual-clutch,  
rear-wheel drive

**Performance** 2.8sec 0-62mph, 217mph  
(limited), 34mpg, 194g/km CO2

**Weight** 1395kg (dry)





## THE P1 AND ME

IT ENTERED INTO LEGEND THE DAY IT WAS BORN – HERE ARE FOUR REASONS WHY

'No other road car has gone closer to F1-style speed'



At the launch on the Bahrain track in Race mode, the P1 was astonishing. No other road car has gone closer to matching F1-style speed and control. The day before, on the road, it had been raining and surface water was mixed with a fine layer of sand blown in from the surrounding desert. I stabbed the throttle, the rear Pirellis spun wildly and we fishtailed extravagantly on the silt-strewn road. I briefly contemplated the horror of being the first person to write-off a P1. Fortunately we were soon pointing straight and Paul Mackenzie – P1 project director, sitting alongside – was still my friend.

**GAVIN GREEN**

'A whirlwind of air sucked into a satanic throat'



If you fell into an active volcano, I suspect the sound would resemble a McLaren P1 at speed. It's extraordinary: a whirlwind of air sucked down a satanic throat, hot gases suddenly expelled with whistles and gasps, occasional chirps of pressure. The P1 has a potent, memorable soundscape all of its own. The performance is pretty volcanic too: tickle the throttle and you accelerate like a fast jet; press it resolutely, and the forces on your neck and chest become fierce, ballistic – as though you're a molten rock, ejected high into the atmosphere on a vapour trail of steam.

**MARK WALTON**

'The crank spun with an unbelievable fury'



I'd just stepped from a LaFerrari the first time I drove a P1. The McLaren felt smaller, and the noise was extreme, even at low revs – a guttural belching – and I welcomed the respite of e-mode in traffic. But the real benefit of hybridisation came at speed. On a route littered with hairpins, I remember the excellent ride, the need to manage understeer, and the lag from the V8 as the P1 hauled from low revs. But past 3000rpm the crank spun with an unbelievable fury, and the tyres chewed at the tarmac, spitting into oversteer. Intense doesn't come close.

**BEN BARRY**

'It'll break traction at 170mph in the dry'



My lasting memories of the P1 GTR are how sorted it was and just how damn fast it was. The driving position's fantastic and its systems are intuitive; you don't need a manual. At times you're sitting there listening to it managing things you don't understand, and you're playing no part in, but all of that vanishes when you drive it – when it's simply extraordinary. The acceleration is incredible. Out of corners it just hooks up and then... warp speed. It'll break traction at 170mph in the dry but it also gives such confidence you're soon leaving pairs of black lines onto every straight.

**MARTIN BRUNDLE** ▶

**In this lull the city really does feel like your own personal playground**





**We know from the numbers the Chiron is faster, but it's a very different kind of fast**



Time it right and London goes quiet enough to risk a double yellow

creepy and hypnotic from Alan Vega's protopunk weirdos Suicide might work. *Ghost Rider* seems pretty apt. This is a car with a sinister streak.


We demolish Cromwell Road and soon the Hammersmith Flyover is whisking us over the rooftops of west London, down towards Richmond and over Richmond bridge, the site of Britain's first speed camera back in 1992. They've multiplied since then, and though I used to know the location of every one when I lived here a decade ago, I don't feel confident that more haven't been added since, so I keep a lid on it, squirting off the roundabouts, then backing right off. This is cruel. I expect Amnesty International to do a 'Supercars in 40mph limits' appeal in its next newsletter.


The M3 beckons, and as we swoop past the majestic old water board building at Kempton Park, the national speed limit sign gives us a metaphorical thumbs up. We're just 10 miles from the epicentre of Europe's third biggest city, but at 3.45am the road is absolutely deserted so I drop down to second and go for a big pull through the gears, through third and deep into fourth, the g-force pushing me backwards like the wind rush on a naked motorbike, before coming off the power to let the revs and my heart rate fade. The sense of a total lack of inertia is gobsmacking.

I try it again, and again. Still definitely no-one around. So I come to a dead stop and give it a full-on launch control start. Just last month I drove

the Chiron and declared that none of the recent hypercars, P1 included, prepared you for how fast the Bugatti feels. Now I'm not so sure. We know from the numbers that the Chiron is faster, but it's a very different kind of fast. The Chiron is coolly relentless. The P1 is savage. Savage in its power delivery, and also its refinement. The P1 is thrilling in the way a Chiron isn't. It feels light and alive, not least because it weighs 450kg less, has the most exquisite steering, and a rear axle that has to deal with 904bhp.

But, despite the excellent ride comfort, it's wearing to drive, and with a couple of miles of charge in the tank and the same distance to the MTC, I'm happy to cool down, kill the V8 and let the e-motor take the strain. EV mode is dog slow but it's a welcome addition, one denied LaFerrari.

Back at the gatehouse the guard tells me to ignore the VIP left-turn this time and drive straight ahead to the loading bays. He points to a space on the CCTV monitor: 'Park it there. Put it close to that 720S.' I do, but I wonder how close that new 720 really does get to the P1. I'll find out tomorrow; you'll find out on p88. 

 @chrischiltoncar

SEE MORE MCLAREN P1 IMAGES AT [CARMAGAZINE.CO.UK](http://CARMAGAZINE.CO.UK)



# McLAREN MEN: THE DRIVING FORCES

## **Bruce McLaren** Founder and namesake

The essence of McLaren is one man. A brilliant driver, innovative engineer and inspirational team boss, Kiwi Bruce founded Bruce McLaren Motor Racing in '63, and led his team to victory in Can-Am and F1. He died testing at Goodwood in 1970, aged 32, but not before setting in motion an unstoppable force.

## **Denny Hulme** Race driver, Can-Am force

McLaren's first championships were won not in Formula 1 but in the fearsome Can-Am series. McLaren dominated from 1967 to 1971, with Bruce McLaren and his close friend and fellow Kiwi Denny Hulme driving. An introverted but fiercely intelligent character, Hulme later became president of the Grand Prix Drivers' Association. He was driving at Bathurst in 1992 when he died of a heart attack.

## **Emerson Fittipaldi** Race driver, hirsute hero

McLaren has won 12 drivers' titles, and it was Emerson Fittipaldi who set the ball rolling in 1974. Driving the Gordon Coppuck-designed, Cosworth DFV-powered McLaren M23, the Brazilian won just three of the season's 15 races, and took the title chase down to the wire at the US GP, where fourth was enough. The team had won just eight grands prix beforehand. Which sounds poor until you realise they've now won nowt since 2012.

## **Ron Dennis** Architect

A win-drought following James Hunt's 1976 title led to McLaren's 1981 merger with Ron Dennis's Project Four racing. Dennis oversaw the team's seven constructors' and 10 drivers' championships between 1984 and 2008 but was put on gardening leave in late 2016, the immaculate grounds of the McLaren Technology Centre the envy of Maranello's hapless horticulturists.

## **John Barnard** Engineer, trailblazer

Today, every McLaren is built around a carbonfibre monocoque. Trace that heritage back and you find the 1981 McLaren MP4/1 Formula One car, designed by John Barnard. Aerospace experts thought it wouldn't work; critics warned carbonfibre would disintegrate on impact. But when John Watson won the British GP and walked away from a near-150mph shunt at Monza, the rest of the grid were playing catch up.



## **Mansour Ojeh** Financial engine room

Without 1.5-litre turbocharged Porsche-TAG engines, McLaren's mid-'80s renaissance might never have happened. Ron securing TAG-founder Mansour Ojeh's financial muscle was key. Later, Ojeh became a shareholder and key Ron ally, helping to bankroll the F1 road car, the McLaren Technology Centre and development of the road cars. When the two tussled in the boardroom, it was Ron who emerged with the bloody nose.

## **Senna and Prost** Duelling deities

Senna and Prost were two very different drivers, but between them they gave McLaren its most successful Formula 1 era. Each won three titles between '85 and '91, with Porsche-TAG turbo and Honda V10 power. Senna was the instinctive racer who left the odds to a higher power ('Take out Prost,' God presumably said, 'it'll be mathematically impossible for him to prevail') and Prost the 'points mean prizes' professor.

## **Gordon Murray** Engineer, innovator

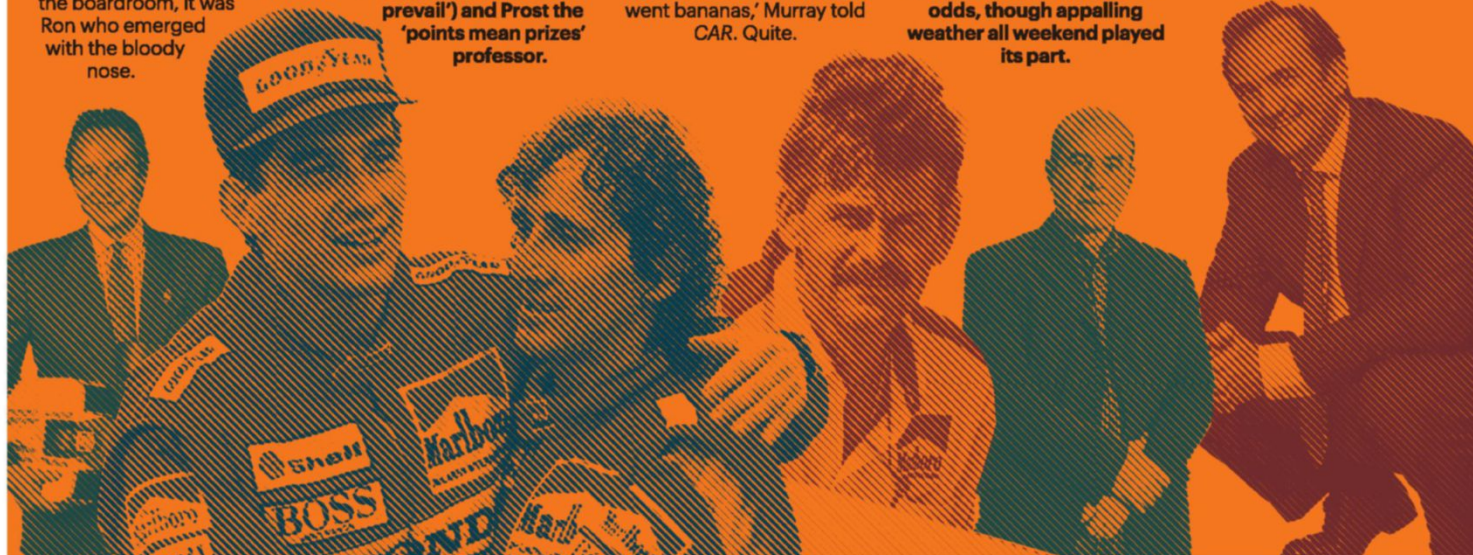
South African Murray cut his gears at Brabham F1, but switched to McLaren for 1987, having a hand in title-winning F1 cars under Steve Nichols. Then Dennis asked him to design a McLaren road car, starting from scratch with £8.5m. The McLaren F1 was the result, a three-seat, 240mph carbonfibre supercar with a BMW V12 and fan-assisted ground effect. 'I actually went bananas,' Murray told CAR. Quite.

## **Paul Lanzante** Team boss, defier of odds

The McLaren F1 road car was never intended to race. But McLaren capitulated to pressure – and money – from keen customers. Ron Dennis asked Paul Lanzante to run the Ueno Clinic-sponsored number 59 car, just months before Le Mans. Incredibly, the car, driven by JJ Lehto, Masanori Sekiya and Yannick Dalmas, won. Against-the-odds wins come no more against-the-odds, though appalling weather all weekend played its part.

## **Antony Sheriff** Businessman

The foundations for McLaren's modern road-car business were laid by ex-managing director Antony Sheriff. He launched the 2003 Mercedes-McLaren SLR, set up the McLaren Production Centre, oversaw the development of 12C, P1, 650S and Sport Series models, and the dealer network. Departed in 2013, in dispute with Dennis.





Mike Flewitt, shot on location exclusively for CAR. Looks comfortable in a race suit, at a racetrack, because he is





THE BOSS

# McLaren, from the inside

Words Phil McNamara | Photography Nick Dungan

**M**IKE FLEWITT HAS vision. His company, McLaren Automotive, is in year two of Flewitt's seven-year business plan, which will steer the fledgling supercar company out past 2022. Out to an annual volume of 5000 cars, though don't overlook the achievement so far: from delivery of its first supercar in 2011 to 3286 cars retailed five years later, and a three-tier line-up of 911 Turbo-beating Sports Series, and Ferrari 488- and LaFerrari-challenging Super Series and Ultimate Series. Out further, out to the day when McLaren sells nothing but electric-powered cars. Flewitt is planning for that future, laying the foundations, cell by battery cell.

'I could see the day where we're all EV,' he says in soft, measured tones, his Liverpoolian roots still evident. 'Or we'll end up building a blend of more usable cars in EV, and maybe some more extreme cars with a hybrid or internal combustion engine.'

'But our EV has to be able to replicate the excitement of driving a P1, or a 675LT. I can't go onto a motor show stand and say: "Here's our first EV. It's okay to drive, but it's really efficient!"' Flewitt chuckles at the notion.

I get the impression that McLaren Automotive's chief executive officer is recounting the brief he's given to his engineers. Emotion, excitement, authenticity; these are words that pepper our discussion, these are McLaren's holy grail. There will be no fake roaring engine to drive you along, but the roar and rumble of a supercar scything through the air, surfing the tarmac. 'That sensation of speed. We've got to find out how we harness all that to make something really compelling,' he muses.

The engineering team is testing battery cells and electric motors; by the end of this year they'll be blooded into a rolling chassis, as the company begins to bring its EV supercar to life. But this means it's too early for the next Ultimate Series car, the successor to the P1, to be a pure EV. 'We didn't rule it out when we started on that journey, but I don't see it having the breadth of capability to be that car,' he confides.

Each battery cell's bloating impact on kerbweight, and the trade-off between delivering a usable range and sufficient power for explosive performance, are the reasons why the next P1 will be a hybrid – and why the all-new 720S isn't one. 'Hybrid technology isn't ready in the [Super Series] segment. It's very expensive, it's very heavy. When we first introduce a hybrid [beneath Ultimate Series], it will be a fully hybrid range, or not at all. And we will be looking for like-for-like weight.'

Given that the carbonfibre 720S's dry weight is 1280kg, that will be no mean feat: Flewitt – who describes himself as innately optimistic – admits

that the hybrid system's weight penalty is between 140 and 170kg. But a hybrid model series will happen, accounting for 50% of sales by the 'Track22' business plan's conclusion – that's a promise.

**MIKE FLEWITT HASN'T** always been so sure about what the future holds. He went to university largely because it was the done thing at his school, and because he didn't have a better career plan. But reading economics didn't motivate him, so he dropped out after a year and started selling insurance in Liverpool. Eighteen months later, destiny called – or at least his best mate, another Mike, who worked at Ford's transmission plant.

'They were starting a technician apprenticeship scheme, with the first 18 to 24 months in production. It was hugely better paid than what I was earning in insurance, so I thought "why not?". I tried it and I absolutely loved it.'

Flewitt had found his calling: the car industry. He spent time in the workshops learning hands-on skills, studied mechanical engineering, and became a foreman by the age of 26. His career progressed via stints at TWR Engineering, and the pre-split Rolls-Royce and Bentley Motor Cars, culminating in becoming manufacturing vice president at Ford of Europe.

And McLaren Automotive is taking control of more of its manufacturing. Future carbonfibre passenger cells, the backbone of each car, are beginning to be developed and pilot-built at McLaren's own Composites Technology Centre in Sheffield. Today's monocages come from Austria, but UK production will be in full swing by 2020. 'We wanted to bring all the management of the design process in-house, and it was a big one-off cost to do it,' says the 54-year-old CEO. 'We were also developing the new manufacturing processes for composites because they are still quite cost-prohibitive, so we started looking at how we could do this in the UK.'

The answer is in collaboration with Sheffield City Council and the University of Sheffield's Advanced Manufacturing Research Centre (initially established with Boeing). The three partners are investing £50m combined, and some 200 jobs will be created. Learnings will drive down costs on each car's hugely expensive passenger cell, and give McLaren more flexibility to customise this defining element of a car, unlocking more differentiation than in the current range, and extra flexibility for more low-volume runs. ▶

**'Our EV has to be able to replicate the excitement of driving a P1, or a 675LT'**





## 'I can't abide boring cars. Cars aren't a commodity; my daily driver has to excite me'


quality wasn't settled enough for me. The M3 is really well pitched, and it communicates nicely with you even on a normal commute.' Before that, Flewitt had a Focus RS for a year – 'great fun, great piece of engineering' – an M5, and there's a Range Rover SVR, McLaren 675LT and five classic Lotus in the household. Flewitt is a man who lives cars and loves cars. 'This is going to sound really arrogant, but I can't abide boring cars. Cars aren't a commodity; my daily driver has to excite me.'

**SO WHAT ELSE** is in Flewitt's future vision of McLaren's supercar line-up? After 720S, this summer heralds a spider version of the 570S, later comes an Ultimate Series flagship influenced by the iconic F1. The BP23 codename stands for 'Bespoke Project 2, 3 seats' – with a central driver's seat as per the F1's. 'When I first sat in the wooden mock-up with a centre seat and instrument panel, it clicked as to why people want this concept – it's amazing. And the two rear seats are well packaged: three [regular-sized] people could sit in it comfortably.'

Customers have long lobbied McLaren to revive the three-seat layout, but it's only now, with the three-tier range established, that the company has the bandwidth. The 106 hyper-GTs, matching the number of F1s built, will be the most luxurious and personalised McLaren, with vast differentiation in materials and paint. A 720S takes 12 days to assemble; Flewitt estimates up to seven extra days on the Special Operations trimming line, and intricate paintjobs that could take 300 hours.

But BP23 will still do what McLaren's do brilliantly: effortless, exorbitant speeds. 'It will be the fastest of all McLaren road cars,' confirms Flewitt. That will be delivered by the company's most powerful hybrid powertrain ever, a weight target of 1500kg despite the luxury and electrification, and an aerodynamically optimised shape revealed only so far as a sketch. 'The nought to 125mph, 190mph and top speed will be really exceptional.' Quite a promise from the company that gave us the 240mph F1.

McLaren Automotive has made progress at an appropriately rapid pace. The start-up has posted operating profit in the past three years, and has committed to channeling around 25% of turnover into r&d. Flewitt is proud of the firm's rapid decision-making, with calls made on the spot rather than advocates sent away to write a three-month study. Despite the intensity of McLaren, Flewitt doesn't exhibit the blunt aggression of many executives, rather a gentle, approachable demeanour.

I ask him to reflect on last year's performance. 'When you stand back briefly and look at the key attributes of last year, we were very pleased we achieved the growth we wanted. But you very rarely feel relieved in this industry. You're moving so quickly; you're always just looking ahead and ahead and ahead.' On to 5000 cars, on to the technology to future-proof McLaren – and on to the business plan to replace Track22, no doubt. 

The composites centre isn't McLaren's only industrial partnership. It has initiated a consortium of suppliers and academics, co-ordinated and part-funded by the British government's Advanced Propulsion Centre, to develop new combustion engine technology. 'We have to be quite smart about how we do things,' explains Flewitt. 'A small, independent company like us can't do everything, and engine technology is so challenging. The project will revolve around one cylinder, and optimising its combustion technology for more power and lower emissions. I couldn't afford all that research just for McLaren.' It should shape a new powerplant, likely downsizing today's V8 to six cylinders, for production later in the Track22 plan.

The initiative has attracted a partner with engine-making in its name, Bayerische Motoren Werke. Does that mean future commonality of McLaren and BMW engines, similar to the 1992 F1 supercar using a Munich V12? 'All the partners have the right to use the intellectual property coming out. There'll be common learning to drive leaner combustion, but you probably wouldn't recognise a common piece of hardware,' explains Flewitt.

His day-to-day car is currently a BMW, a nearly-new M3 he bought with 1100 miles on the clock. 'Bloody car magazines are the problem, I treat them like a shopping list,' he jokes. 'I tried an M2. Good car but the ride

## 'ONE DESERT ISLAND CAR? MY ELAN' – MIKE THE MAN

**On his first car...** 'It's not glamorous: a Triumph Herald 1360 convertible. I absolutely loved it, and it was such an easy car to work on. I remember changing gearboxes, repairing bodywork... you just learned with a Haynes Manual.'

**McLaren's vibe...** 'I'd not known this level of work ethic in 34 years in this industry. People are so passionate about McLaren's success – they're not just there for a pay cheque. That makes you feel incredibly accountable for everything that happens.'

**Classic racing...** 'I restored a Lotus Elan that had been a very early club racer from '63, and decided to race it at Silverstone in 2015. I was nervous, and didn't want to do a whole lot more than survive the race and not come last. Not the most lofty ambition! I did it.'

**On hiring...** 'It's hard to pick people to work here at McLaren. They've got to adapt, then start adding to it, putting in commitment. I've made appointments who are brilliant elsewhere but they haven't worked in McLaren. I lose sleep over that.'

**Supercar or classic – which is best?** 'That's not a fair question for a man in my position! I can go out in my '64 Elan road car or my 675LT and I enjoy both, but they're different. If I had to maintain one on a desert island, it would have to be the Elan!'

**F1 or P1?** 'I've driven an F1 just once. If you put aside the values of the cars, I'd have a P1. P1 is so exciting, so emotional. We can say that the LT gives you 98% of what a P1 gives you, but there is still something special about the P1. It's a staggering car.'



# FAMILY McLAREN: A USER'S GUIDE



## 540C

533bhp, 199mph, V8, £130,605

Entry-level McLaren is also the most conventional car, doing without the active chassis tech, ceramic discs or six-piston calipers of the snortier models. But it still has the carbon core and the twin-turbo V8 good for 124mph in 10.5sec.



## 570GT

562bhp, 204mph, V8, £155,755

With emphasis on the Gran Turismo, the 570GT adds 2% slower steering, softer suspension and a quieter exhaust for big-distance civility. Glass rear deck looks sensational and boosts luggage space to a reasonable 370 litres.



## 570S

562bhp, 204mph, V8, £147,905

The top of the Sports Series tree on the road. 200mph performance plus standard carbon-ceramic brakes and adaptive damping for a sharp steer with day-to-day comfort. Track Pack adds downforce and drops the weight by 25kg.



## 570S Spider

562bhp, 204mph, V8, £165k (all est)

Spider version of the 570S due later this summer. Retractable roof will add a little to the 570S coupe's incredibly low kerb weight but stiffness goes unaffected, and on the flipside you'll have sun, noise and smiles all over your face.



## 570S GT4

562bhp, 204mph, V8, £159,900 + tax

Burgeoning GT4 class is taking sports car racing by storm. McLaren's offering went on sale last year, and the 570S GT4 scored poles and race wins in its development season. Retains road car's multi-level stability control and has ABS brakes.



## 720S

710bhp, 212mph, V8, £208,600

After the 12C and the 650S, Super Series v2.0 begins with 720S. Stiffer MonoCage chassis also gives easier entry, wrapped in an aggressive and aero-slick carbon body. Heavily revised engine for 710bhp and more noise.



## 650S GT3

495bhp+, n/a mph, V8, £330k + tax

This is McLaren's off-the-shelf GT3 racer until they get around to the 720S GT3. Hugely successful, the 650S GT3 uses a pneumatic six-speed sequential 'box, adjustable suspension and aero, air jacks and a 125-litre bag fuel tank.



## P1 (discontinued)

903bhp, 217mph, hybrid V8, £866k

First Ultimate Series McLaren took the same fundamentals as the okay 12C, added hybridisation and created a car some 1745% more impressive. P1's replacement is in development now.



## BP23 (due 2019)

1000bhp+, 240mph+, hybrid V8, £1.65m + tax

Ultra-GT in development now, and set to sport a three-abreast cockpit with central driving position, à la F1. McLaren's fiercest hybrid powertrain yet will deliver 'mummy!' acceleration, even on the dark side of 150mph.



## F1 McLaren Honda MCL32

860bhp, 235mph, hybrid V6, £ (not for sale)

Born under the same roof as the road cars, the 32 is a confection of lovely 728kg carbon car and fairly awful Honda power unit. 'Fastest car in the corners' observed Alonso, wryly, in a recent race.

**SPORTS SERIES**  
WHERE IT BEGINS, ON ROAD AND TRACK. 540C IS AS LOW AS McLAREN GOES - 533bhp AND £130k

**SUPER SERIES**  
ON A PAR WITH STUFF LIKE THE HURACAN AND FERRARI 488

**ULTIMATE SERIES**  
EXTREME PERFORMANCE, BLEEDING-EDGE TECHNOLOGY

**FORMULA 1**  
FANCY A CRACK AT F1? SURE YOU WANT THE McLAREN?





THE 720S

# One giant leap

McLaren wants it all with the 720S: more power, more performance, smarter aero, better comfort, cooler gadgets and the moon on a stick. And you know what? Aiming high has paid off

Words Chris Chilton | Photography Richard Pardon





**A** **GRUMPY PANDA.** Purple-suited comic superhero, the Phantom. It's hard not to look at the new McLaren 720S and not have an opinion. And because of those lights it'll be hard for some people to look at the 720's mug and not have the opinion that it's awful.

They'd be wrong, but amen to that anyway. The car it replaced, the 650S, itself a hasty reworking of the bland 12C infused with some P1 motifs, was a car that looked dated before it had even hit the road. Now in its sixth year of selling cars, McLaren is confident, profitable, and has just unleashed the design language that will feed into its entire next generation of sports cars.

See the 720S in the flesh, and you can't help but think there's not a better-looking supercar on sale. You can't help feeling frustrated that McLaren didn't get things right from the beginning. Handily, at the launch event in Rome, there's a 12C present just to ram home the frustration.

There are clear P1 influences to the artist formerly known as P14, particularly at the rear. But the 720S has very different surfaces, the iridescent bodywork rising and falling like a silk sheet billowing in a breeze. The most striking feature after those polarising lights – which are actually giant air intakes – is the huge unbroken quarter panel. For as long as anyone can remember, supercars have had giant air intakes here feeding cooling air ▶





It's seriously  
good on track,  
uncompromised by  
its on-road comfort





to the side-mounted radiators of engines that would much rather be sitting up front than crammed into a sweat box behind the seats.

But the 720S has none of those intakes. Or none that you can see. But they're there all right, hidden behind dummy door skins, a kind of expansion of the 'tendon' McLaren already uses on the 570S. Air is brought over the front wings and drops down into the space between the two door skins, feeding the radiator while leaving the flanks clutter-free. The effect is striking, revealing the huge wheelbase and cab-forward stance, visually pushing the rear axle so far from the cabin it resembles a drag bike with a massively elongated swingarm.

The skin isn't all that's changed. The skeleton has too. Where the 12C/650 was built around a carbon tub, the 720S features a full carbon monocoque, like the McLaren P1, with a central carbon roof section incorporated into the chassis structure. The dihedral doors – a McLaren trademark and an important only-one-in-the-class feature – now have two hinges instead of one, the top one fixed to that roof section, making you wonder how exactly McLaren is going to make the Spider version work.

Let's leave Woking to worry about that. Reach between the two door skins, push the chunky switch (no daft invisible buttons this time...) and the door swings high, but stays close to the body through its entire arc. McLaren has reduced the space needed to open them by 155mm per side, befitting its everyday usable image.

Another concession to usability is the sill, which now drops low towards the A-pillar, like a 570S. It's almost, *almost* possible to get in without looking

like you've fallen into a bucket. That sill is carbon of course, though the piece visible on top of this car's carpet is merely decorative. But the stuff you can see shimmering on the A-pillars isn't. It's pure grandstanding on McLaren's part and it looks fantastic.

It's a shame the response to a push of the starter button isn't as cocksure. If you're after some kind of Aston Martin-like theatrical flourish, you're out of luck. The carbon brakes need a weighty push before the ECU registers enough pedal effort to allow you to summon first gear (and mean the car creeps annoyingly in traffic), but the moment the forged alloys up front start rolling and turning, you can't help but focus on what's happening at the rim and forget about all else.

McLaren's chassis department is like a valiant group of soldiers defending steering from a 360-degree attack of virtual feel. And this car is no different. But it *feels* different. The 650's steering was almost disarmingly light on first acquaintance, but you soon learned to love its delicacy and rich stream of messages. Power-assisted steering didn't come better than that.

Instantly you feel the extra heft of the 720's steering at low speeds, something that'll be reassuring to some drivers, but comes not from ▶

**It's an impressively  
supple chassis that  
rides more like a limo  
than a supercar**





#### McLAREN 720S

**Price** £208,600

**Engine** 3994cc 32v twin-turbo V8, 710bhp @ 7500rpm, 568lb ft @ 5500rpm

**Transmission** 7-speed dual-clutch auto, rear-wheel drive

**Performance** 2.8sec 0-62mph, 212mph, 26.4mpg, 249g/km CO2

**Suspension** Double wishbones, adaptive dampers, hydraulic roll control

**Weight** 1419kg

**Length/width/height** 4543/1930/1196mm

**Rating** ★★★★★

Quiet, comfortable, logically laid out. McLaren interiors keep getting better



Drift Control is too timid. Instead, turn off the ESP and trust your talent. Yikes!





Braking is not just ultra powerful but stable too, helped by new Pirellis



Instrument pod can be swivelled from normal to gimmicky minimalist mode

## The balance is so sweet that little slides are there for the taking

reducing the assistance, but changing the front suspension geometry to increase the castor, which has the effect of improving self-centring and front-end stability. McLaren tried electric steering racks during development but wasn't satisfied with the feedback they offered, so this sticks with an electro-hydraulic rack, an appealing old-school touch in an otherwise forward-thinking car.

I'm not going to fall into the trap of suggesting electric steering can't be fun – Porsche's 918 Spyder is a great counter to that – but this is the real thing. But how much longer can McLaren hold out when the advantages of electric steering – self-parking and ESP-integration – become too much to ignore? Let's hope it's a while yet.

We're skirting Rome, heading to the Vallelunga circuit, the steering wheel gently writhing as it deals with some pretty horrendous Italian tarmac. Brave route for a launch, this, even when the car in question rides more like a limo than a supercar. To get the best compliance from the 720S we've pressed the Active button, which allows you to tweak the familiar twin Handling and Power dials, in our case by shifting the Handling one to the left. In the past the modes were called Normal, Sport and Track. Now they're Comfort, Sport and Track, and the default set-up without the Active button selected is equivalent to the mid-setting, not Comfort.

The label's not kidding. This is an impressively supple chassis. Like the 650S, but unlike the 570S, which gets cheaper conventional suspension, the 720S uses McLaren's hydraulic roll control. But this time McLaren has added a raft of new sensors to help the system react more quickly and appropriately. Also quicker acting is the throttle. Spontaneity-killing turbo lag is arguably the biggest flaw in McLaren's cars, but new twin-scroll turbos help reduce – if not eliminate – that in the 720S. There's an increase in capacity too, from 3.8 litres to 4.0 litres, helping deliver 710bhp and 568lb ft. That's 69bhp up on the 650S, and only 17bhp shy of the output of the P1's internal combustion engine.

But having driven the P1 just a couple of days earlier (as you'll see on page 74), it's the refinement that's the biggest difference. The P1 feels raw, an emotionally and physically draining experience. The 720S has a far more cultured streak. Maybe too cultured. It's simply too quiet. Consider the optional sports exhaust, which apparently adds 30% more volume for a 675LT-like experience, an essential option tick.

And throw in a grow bag for the rear shelf while you're at it. There's so much glass you could cultivate your own fruit and veg to sustain you on long European trips, and there's a massive luggage area underneath the back window to make those trips viable – though unfortunately that window doesn't open to allow access like the one on the 570GT.

The switchgear is better quality, and more logically placed, particularly the transmission buttons, which people with bony elbows could almost operate without taking their hands off the wheel in the old car. There's the usual long, vertical sat-nav display, and unlike with the 12C, this time the unit's supplier hasn't gone bust so it actually works. And simple operations like raising the nose of the car for speed bumps are now streamlined.

Streamlined. Even from inside the 720S you never forget the body's devotion to air management. Seeing the second door-skin beyond the window line is the most striking example, watching the now full-width spoiler cum airbrake leap into life another. A couple of hours after setting off, we've reached the track to give that airbrake a proper workout.

The Autodromo Vallelunga Piero Taruffi is a track I've driven a couple of times before, first on the original Lamborghini Aventador launch and more recently when we first sampled the current Audi RS3. I'd always wondered what it was like to drive in a car that actually wanted to turn. And the McLaren definitely does that.

We've switched the two dials to Track mode, which stiffens the suspension, sharpens the throttle, and rotates the entire instrument panel to reveal a second digital display that only features important info like revs and gear position. It's a pointless gimmick as far as I can see: the rev counter display is actually smaller, so I press the button to the left to spin it back to its conventional position.

Although the new engine sounds disappointingly muted, it delivers in every other sense, flinging you out of corners where you can make the most of the incredible traction and kiss 8000rpm before pulling the paddle home for the next cog. McLaren says the 720S will get from zero to 124mph in just 7.8sec (Ferrari 488: 8.3sec), and needs only another 4.6sec to get back to zero. What that second number doesn't convey is how much more stable the 720S is under braking. For me this is one of the most important changes to the way this car drives, and it's down to that steering-meddling front-end geometry change we mentioned earlier. ▶



## The 720S is infused with the same agility as the P1 and is very nearly as fast

That stability gives you real confidence to explore the way the car behaves on track, sussing out the rarely felt understeer if you go in way too hot, and the pleasing way you can sort it by lifting to tuck the nose back in. Ease on to the gas past the apex and the balance is so sweet that little slides are there for the taking. Supercars are rarely this friendly.

Back in the pits I look at the data recorded via the optional telemetry system, then look at McLaren's test driver Chris Goodwin's data for the same track driving what I vainly hoped was the P1, but turned out to be my car anyway. Predictably, he's miles quicker, and you can see where he's made up time, braking later and harder, his trace a proper cartoon mountain peak as acceleration swaps to deceleration, mine more of a grassy knoll.

I get a message that there's a window to do a few more laps so head back out to play with the 720S's other gadgety feature, this one standard: Drift Control. This feature lets you tailor the ESP threshold by sliding your finger left or right across a graphic of the car on the multimedia screen. Slide it full left and you've effectively got zero slip, while full-right allows a proper little slide before the electronics cut in.

You can bet some McLaren suits had a few sleepless nights fretting about whether to use the D word or not, and I can tell them they were right to be worried. Very Slight Oversteer mode would have been far more appropriate, because 'drift' conjures up images of armfuls of lock and tyre fires, when in fact this one rarely edges the tail out more than enough to require a quarter turn of corrective lock.

Now obviously I can appreciate that if you've just spent £208,600 of your own money on one of these and have little or no experience of oversteer, a quarter turn is going to feel like you're in the Japanese D1 drift championship final. It's also the amount of oversteer you might actually encounter if you were driving quickly, not just being daft for the cameras (for which we avoided Drift Control and turned the ESP fully off).

In theory, it's a great tool to help drivers understand the physics of driving a seriously potent mid-engined car and manage its 710bhp in safety. But I'm not sure about its consistency. I feel like I need more exposure to it before giving it a resounding thumbs up.

On one corner the amount of slip seems modest and then I feel the car straightening up, so back out of the gas to give it another go, tucking the nose in, lightening the tail and giving it the boot, which suddenly sends the tail slewing wildly sideways. Hmm.

But let's not allow the success or failure of what is clearly a gimmick that'll be little used in practice to distract from the rightness of the 720S as a whole. I take one last look at the incredible body surfaces before dropping two full-sized wheely cases into the nose, slinging a couple of big bags under the rear canopy and dropping into the seat for the drive to the airport.

When I'd driven the P1 earlier in the week I'd come away wondering how similar the 720S would feel. Of course they're poles apart in some respects. The P1 was built to tear circuits apart, a skill that's just one in the 720's broad repertoire. But it's infused with the same agility. At 1419kg it's lighter than the P1 and in practical terms very nearly as fast. Who needs a heavy hybrid component when the result is already this explosive?

But most importantly, it has that same wow factor, the crucial piece missing from the 12C's puzzle. That's the thing about race teams. They learn from their mistakes. 📺

📍 @chrischiltoncar



Big glasshouse makes this quite a rarity: a supercar you can see out of...



... and wide-opening doors perform similar feat of letting non-gymnasts in



"The only  
way to feel  
the noise is  
when it's good  
and loud..."

YOUR NEW FAVOURITE ROCK MAGAZINE...

**PLANET ROCK**

WHERE ROCK LIVES

LAUNCHING: 12.05.17

FIND OUT MORE AT [WWW.PLANETROCK.COM](http://WWW.PLANETROCK.COM)







# SAVE UP TO **62%\*** WHEN YOU SUBSCRIBE TO **car**

- Never miss an issue • Free delivery to your door
- Free download to your digital device

OFFER  
**1**



## PRINT & iPad

12 issues for £43  
by Direct Debit  
Or spread the payments and  
pay £10.75 every 3 months



OFFER  
**2**

## PRINT EDITION

12 issues for £38 by Direct Debit  
or spread the payments and pay  
£9.50 every 3 months

OFFER  
**3**

## iPad EDITION

12 issues for £31 when you pay  
debit card or PayPal

**SUBSCRIBE ONLINE OR BY PHONE QUOTING EDAA**

**WWW.GREATMAGAZINES.CO.UK/CAR**

**CALL 01858 438884**

OVERSEAS READERS CALL +44 1858 438828

\*62% saving when you choose the print and digital package option and pay on Direct Debit. Subscriptions will start with the next available issue. The minimum term is 12 issues. Direct Debit payments will continue to be taken at the offer price above unless you tell us otherwise and you will not receive a renewal reminder. This offer closes on 13th June 2017. This offer cannot be used in conjunction with any other offer. Cost from landlines for 01 numbers per minute is approximately 2p to 10p. Cost from mobiles per minute is approximately 10p to 40p. Costs vary depending on the geographical location in the UK. You may get free calls to some numbers as part of your call package – please check with your phone provider. Order lines open 8am-9.30pm (Mon-Fri), 8am-4pm (Sat). UK orders only. Overseas? Please phone +44 1858 438828 for further details. Calls may be monitored or recorded for training purposes.

For full terms and conditions please visit: [www.greatmagazines.co.uk/offer-terms-and-conditions](http://www.greatmagazines.co.uk/offer-terms-and-conditions)



**CATCH us!**



Unbeatable as a versatile hot hatch, might the revised Mk7.5 Golf GTI be just a little too grown-up for its own good? Could the old master learn a thing or two from the fast and furious Peugeot 308 GTi or Mini JCW?

# F YOU CAN



Words Ben Barry | Photography Charlie Magee





That badge has served VW well, but the rest of the world hasn't stood still





Four decades on,  
the GTI is still the  
default choice for  
a day-to-day car  
with hot-hatch flair

**T**HE MIDDLE-AGED Welshman stops, jumps out of his car and walks over to the Volkswagen. 'What's this then, boys?' he asks, eyes scanning quickly for clues. We tell him it's the new Golf GTI, that we're group testing it against the Peugeot 308 GTi 270 and Mini John Cooper Works. He casts a dismissive glance at the strangely painted Pug and gawky Mini, then looks back at the Golf. 'Got to be the Golf, hasn't it?' he declares definitively. 'Go on, drive it like you stole it.' Then he gets back in his police car and disappears.

Based on showroom appeal alone, our Welsh copper just called a verdict in a few seconds that'll take the CAR team two days of deliberation; and I suspect the majority of you agree. Four decades after it launched, the GTI's look, its badge, and the promise that it'll do the day-to-day stuff metronomically with flashes of hot-hatch flair continue to make it the default choice.

Now the seventh generation has been facelifted for 2017, a gentle evolution that promises to make Wolfsburg's all-rounder even more circular. In five-door trim, our standard GTI weighs in at £28,520. You might notice the Golf's revised front and rear bumpers, new LED head- and tail lights, perhaps the slightly different way in which the trademark lipstick extends through the grille and into the lights like a Glasgow smile.

The 2.0-litre engine gets a similarly gentle massage, power increasing by 10bhp to 228bhp, equivalent to the old model boosted by the Performance package. Inside, there's a slick new infotainment system and driver display, and a host of driver assistance systems all called Something Assist.

The rivals we've selected both take different twists on the hot-hatch formula. The Peugeot 308 GTi 270 costs £815 more than the VW at £29,335, can't hold an iPhone torch to its state-of-the-art tech, but adds mechanical content with a gritty integrity. Much of this will whizz over the heads of casual hot-hatch fanciers but straight into the ears of those with a 98+ blood type: a proper limited-slip diff, four-piston Alcon brakes, and 19-inch alloys wrapped in sticky Michelin Pilot Super Sports. At 266bhp, the Peugeot also hits 38bhp harder than the Golf, and ▶



Only a 1.6 but 308  
has more power  
than the VW and is  
quicker to 62mph



Golf infotainment is all-new. Our car gets 8-inch Discover Navigation as standard. Capacitive buttons easy to mis-press. 9.2-inch Discover Pro with gesture control optional.

Heated seats are snugly comfortable. Fabric standard, our car's Vienna leather a £1750 upgrade.

Active Info Display re-brands Audi's Virtual Cockpit driver-configurable instrument binnacle. Mostly clear and intuitive, shame about the fuel gauge.

Mini's Media Pack XL with nav is standard. Tech Pack with rear camera, Harman Kardon hi-fi, head-up display and online services £2450 extra.

Sports seats have high-quality leather as standard. Driving position spot on, more lateral support would be welcome.

Six-speed Steptronic automatic adds £1380. It's quick and punchy, and 7.4mpg more frugal. Adds launch control.





308's touchscreen controls nearly everything, including heater controls. Makes for slicker dash, but it's hopeless.

Those aren't real leather bolsters, but that is alcantara. Good support, if positioned too high. Massage function free.

Steering wheel looks too small at first, but is nice to grip and adds to agile handling. Didn't for us, but can obscure some drivers' view of dials.

scoots from 0-62mph 0.4sec faster at 6.4 seconds. All with just 1.6 turbocharged litres.

Even the Mini John Cooper Works needs 400cc more. Its 228bhp can only level-peg with the Golf GTI's output, but it undercuts it on price by over £4k, and because it's lighter, it bests the GTI's 0-62mph time by 0.3sec at 6.1 seconds. There's no limited-slip differential (as on the Golf, electronics mimic the effect) but you might notice the spokes of the optional 18-inch alloys fanning out like petals, clearing the four-piston Brembo brake calipers by millimetres. Our car also gets the optional six-speed Steptronic automatic transmission. Don't groan – it's much better than expected. That it boosts mpg from 42.2 to 49.6mpg doesn't hurt.

I drive the Golf over to our test location the night before. It's a no-nonsense spec, with a slick manual gearbox, standard fixed dampers and 18-inch alloys. It rides nicely, if less compliantly than my old Golf R long-term test car on 19s with adaptive dampers; there's just a slightly harder edge. But it still does long-distance schleps effortlessly: the heated seats with their generous padding and snug bolsters (and £1750 optional Vienna leather) are fantastic, the driving position faultless, comfort and refinement impressive.

I struggle with the new infotainment system. Discover Navigation looks slick and impressive with its 8-inch touchscreen, and is easy to fathom at a standstill. But I often accidentally select the wrong function while driving because there are no physical buttons: the sat-nav disappears with one unintentional prod like Crimea from a map of Ukraine, and I accidentally switch off Radio 6 Music. Very distracting.

Active Info Display is also new, and more convincing. It's Audi's Virtual Cockpit by another name, 12.3-inch of TFT digital freshness that slots in the instrument binnacle. You can config-

ure it in five different ways, prioritising info like sat-nav or speed or fuel efficiency figures. Mostly it works well, but the fuel gauge is a white needle on white increments, like painting the 'x' that marks the spot the same colour as the spot.

Our overnight stop is close to the Welsh border, and during the last hour or so of driving the damp roads tangle like tributaries, the Golf's LED headlights bringing daylight to the pitch-black back lanes. The GTI is fabulous here, because everything is in such perfect balance: the easy lightness and linearity of its steering, the six-speed manual's crisp action, the eager performance that indulges the wrong gear here or there. You can drive the GTI right to the edge of its capabilities, feeling entertained yet safe, knowing nothing will catch you out. Or you can wind back and its performance will sink into the background.

Hard to call it thrilling, though: the turbo four energetically picks up speed from below 2000rpm, and hauls strongly through the mid-range so you can pick off dawdling traffic in easy chunks, but it's not the most compelling soundtrack, and at high revs it feels like it's out of oxygen on Everest. Similarly the chassis lacks that last degree of engagement: you can coax it into playfulness, but the stability control quickly reins in the exuberance and can never be switched off altogether, unlike the Golf R's. The GTI needs more attitude.

The GTI Performance upgrade (see First Drives in this issue) would help. The £995 option brings not only a 15bhp power ▶



#### KEY TECH: VW IT crowded

All new Golfs come with a new infotainment system and 6.5-inch screen minimum. As standard, the GTI gets the Discover Navigation system and an 8.0-inch touchscreen – Discover Pro, with its 9.2-inch screen, wasn't fitted to our test car. The screen is beautiful and the system rapier-sharp, but the usual caveats apply – without the tactile feedback of a button, blind-reach inputs are all but impossible to make and it's infuriatingly easy to hit the wrong thing by accident.



hike and larger brakes, but also a mechanical limited-slip diff for extra traction. The slight scrabble and lack of positivity from the Golf's front end under determined acceleration from corners makes it clear our car doesn't have one. Combined with the strong but unremarkable power delivery, I'd already be suffering buyer's remorse if I hadn't ordered the upgrade. Later, when I set fire to the brakes like I've just tossed a match on a pile of dry leaves, the feeling intensifies.

That night I meet up with Ben Miller and Matt Tarrant, then head out in the Peugeot 308 GTi 270 the next morning. It's a welcome reacquaintance a few months after handing back my brilliant CAR long-term test car.

This 308 is very lightly optioned, with just the £1300 Coupe Franche two-tone paintjob. So while our 'cheaper' Golf is optioned to £32,940, the Peugeot turns the tables with an as-tested £30,635. You just can't give Peugeot that much extra money. The interior can't match the satisfying precision of the Golf, but it is neatly and stylishly laid out, if plagued by an infotainment system that's about as clued up as the French intelligence services. Heater controls on a touchscreen are just a bad idea.

You sit high in excellent sports seats, fitted as standard. The bolsters are upholstered in convincingly faux leather with grippy alcantara centres, the bases comfortable, lateral support excellent, the standard massage function ironing out knots in your lower back while you lift-off oversteer your way cross-country. Ahead of you, there's a leather-wrapped steering wheel the size of a bread plate. No car with a steering wheel so small could be sensible; it adds to the Pug's feeling of playfulness.

At 1205kg, the Peugeot's claimed weight seems almost unbelievably crisp-packetish. That's 189kg lighter than the Golf, and 15kg lighter than the Mini. Combined with a power output around 40bhp clear of the others, the 308 romps it with a power-to-weight ratio of 222bhp per tonne, compared with 163bhp for the Golf, 187bhp in the Mini. Huge.

You immediately feel that difference on the road. The 308 is firm, but rides with a light-footed keenness, pliancy and tactility that makes the Golf seem inert, more one-dimensional. It also feels incredibly alert and playful, the softer front end darting obediently and digging in with every little nudge of the steering, the torsion-beam back end pivoting about like a sidecar passenger jumping from side to side to optimise weight distribution. The small amount of body roll helps key you in to that fluidity, so too the electrically assisted steering, with its easy, progressive weighting and light fizz of feel. Stability control? All gone with one little push.

Build your confidence, push on hard and the benefits of the 308's limited-slip diff and four-piston brakes are soon apparent. The diff lets you power on through corners where the Golf would scrabble, and keeps you tight to the inside line with only a hint of steering corruption. The Alcon brakes are nicely modulated and offer huge reserves of stopping power, feeling as if they'll stand the Peugeot on its nose like Roadrunner screeching to a stop while the Golf in pursuit sails over the cliff, billowing smoke.

Trickle out of a junction in second gear and you'll notice the dead spot in the Peugeot's delivery until well past 2000rpm even if the stats say the peak 243lb ft kicks in at 1900rpm. But generally that's glossed over in normal driving, when the turbo's fuse is almost always lit. Then it pulls hard on a wave of energy and boost, and you flick between the close ratios via a wand that could be shorter and slicker in its action, but never frustrates.

Perhaps it's because this car's tyres haven't endured 15,000 miles and its brakes haven't been hammered at Silverstone, maybe it's because it doesn't have the panoramic roof, which added weight to my old car in exactly the wrong spot, but this car feels even sharper than I remember. There's no doubting it recaptures Peugeot's hot-hatch glory days. Mini never really lost them. Climb into the John Cooper Works and it's clearly a less practical prospect than the others: the upright screen and carbuncular door cards threaten to compress in around you like the *Star Wars* trash compactor. If the cramped quarters are a deal-breaker, remember you can now get the Mini John Cooper Works in chunkier Clubman or Countryman body styles. But only as an emergency.

The interior is wilfully quirky. The iDrive infotainment is as excellent as on any BMW, and I love the ring of light around the huge infotainment screen, which warmly glows like an automotive heartbeat, telling you a sat-nav direction is imminent, or showing which driving mode you've selected via the vicar's collar at the base of the gear gaiter. But the rotary dial is located way down between the seats, and when you reach for it, you're forced to do an impression of Donald Trump doing an impression of a disabled reporter. The headlight control is located where normal manufacturers place a bonnet release.

But if you can live with the dimensions and the idiosyncratic daftness, it's a great drive, still feeling small, still keeping that distinctive Mini character despite it growing and leaving behind the real Mini that wasn't owned by Germans and would rot like a proper car by three generations.

The seating position is satisfyingly low down and sporty – though more lateral support wouldn't go amiss – and even before you drive harder, it feels short, a little tall perhaps, and very keen to go waltzer the second you pile pressure on the front tyres and lift the throttle. That sensation – together with the busiest, ▶



## KEY TECH: MINI The pressure's on

The Mini JCW's direct-injection 2.0-litre turbo engine is shared with other Cooper S models, but there are key differences to generate 228bhp at 5200rpm and 236lb ft at 1250rpm, up from a Cooper S Works' 207bhp at 4700rpm and 221lb ft at 1250rpm. JCW-specific content includes a new turbocharger to deliver additional boost, revised pistons and a new exhaust with reduced back pressure. That's pretty extensive in the context of a relatively modest hike.

Big for a mini, but still drives like a small car. A really good small car







### KEY TECH: PEUGEOT Differential calculus

Peugeot used to offer a cheaper GTi 250, but it's been dropped because the 270 is better value. Key to the 270's appeal is a Torsen limited-slip diff and Alcon brakes. The diff is incorporated into the gearbox, and stops the inside front wheel spinning away power for a much more positive turn-in under power. The Alcon brakes clamp grooved 380mm front discs with four-piston calipers and are mounted on aluminium hubs. Serious kit.



308 GTi has a horrible low-down flat spot. Ben's found his way out



Mini is no steal, but it's cheaper than the Golf GTI and quicker to 62mph



## Volkswagen Golf GTI

**Price (as tested)** | £28,520, (£32,940)  
**Transmission** | 6-speed manual, front-wheel drive  
**Engine** | 1984cc 16v 4-cylinder turbo  
**Suspension** | MacPherson strut front, multi-link rear  
**Made of** | Steel, aluminium



## Peugeot 308 GTi

**Price (as tested)** | £29,335 (£30,635)  
**Transmission** | 6-speed manual, front-wheel drive  
**Engine** | 1598cc 16v 4-cylinder turbo  
**Suspension** | Pseudo MacPherson strut front; torsion beam rear  
**Made of** | Steel



## Mini John Cooper Works

**Price (as tested)** | £24,380 (£30,865)  
**Transmission** | 6-speed automatic, front-wheel drive  
**Engine** | 1998cc 16v 4-cylinder turbo  
**Suspension** | MacPherson strut front, multi-link rear  
**Made of** | Steel



### Power and torque

**We say** | Peugeot punches hardest with smallest fist

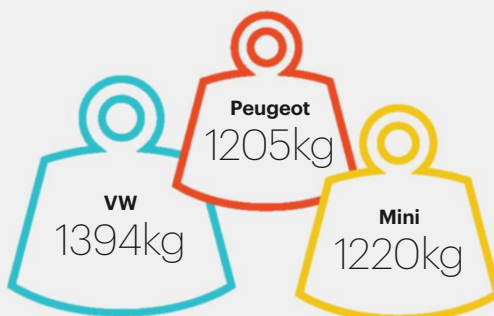
227bhp @ 4700-6200rpm  
 258lb ft @ 1500-4600rpm

268bhp @ 6000rpm  
 243lb ft @ 1900rpm

228bhp @ 5200rpm  
 236lb ft @ 1250rpm

### Weight

**We say** | Mini is the middleweight



### Power to weight

**We say** | We can't argue with 308's more power, less weight



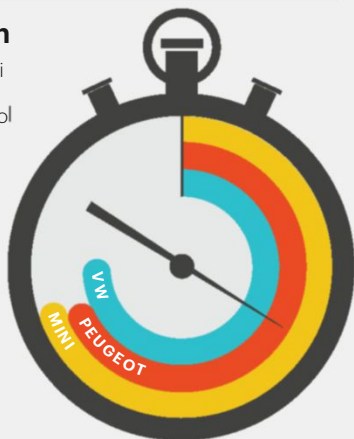
### 0-62mph

**We say** | Mini does it with launch control

VW  
6.4sec

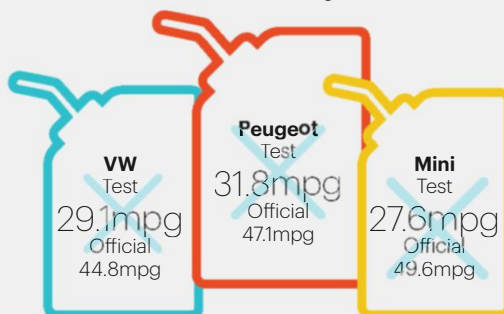
Peugeot  
6.0sec

Mini  
6.1sec



### Official and test mpg

**We say** | A rare real-world win for downsizing



### Top speed

**We say** | Where legal and safe, obvs

VW  
155mph

Peugeot  
155mph

Mini  
153mph



### Fuel tank

**We say** | We thought that Mini fill was cheap



### Range

**We say** | Frenchie on forecourt less frequently

VW: 320 miles  
 Peugeot: 371 miles  
 Mini: 268 miles



### CO2

**We say** | VW erring on side of caution these days



### Lease rates

**We say** | Golf has highest list, cheapest lease

VW £354  
 36 months, £1061 deposit

Peugeot £376  
 36 months, £3385 deposit

Mini £384  
 36 months, £1153 deposit



2nd

Still the waterproof go-kart the ads suggest. Not so Mini any more, yet much more cramped than the others.

3rd

The best all-round proposition and very satisfying to own, but Golf GTI lacks real driver excitement in this company.

1st

Peugeot rivals the Mini for thrills, the Golf for practicality. Trails both on tech, mind.

When your bronze medallist is as good as the Golf GTI, hats off to the top two

firmest suspension on test – can invite caution where the Golf in particular offers safety. But you learn to trust the Mini, picking up messages from its firm, meaty steering, building the confidence to bung it into faster corners with just an agile little shimmy from the rear, not the three-counties accident you feared.

Accelerate hard in tighter corners and, like the Golf, the Mini scrabbles for traction where the 308 GTi just grips and goes, but generally it puts its power down well, and suffers little torque-steer, despite its feisty power delivery.

The engine is superb, a deep and angry fruitiness zinging from the exhaust as you're whooshed along on a surplus of eager boost, the throttle response in Sport mode making the impressive rivals seem lazy. A new turbocharger integrated into the cast-steel manifold is central to this character, the shorter pipework reducing the time it takes gasses to flow into the inlet manifold. Together with new pistons and a sports exhaust with reduced back pressure, the mods help the John Cooper Works produce 21bhp more than the same engine in the confusingly similar-sounding Cooper S Works.


The Mini could have more straight-line kick, but it's super-swift point-to-point because you can carry so much momentum, throwing it into corners and letting the tyres scrub the speed like you might a go-kart, or standing on the strong brakes when you're all out of options. Even the six-speed auto works brilliantly, popping in gears instantly as you race up and down the 'box in manual, or second-guessing your intentions when you leave it in the auto Sport mode. It's an irrepressible bundle of energy, with steering, gearchanges, throttle response and brakes that are instantly taut and responsive.

As is probably obvious by now, the Golf GTI doesn't win this test. Excellent as a day-to-day hack, comfy for the family, and fun to drive fast it may be, but a truly brilliant driver's car? Not for me. Partly, I think a recent stint in the pre-facelift GTI Clubsport

is to blame, a stiffer, faster, more focused machine that traded little of the GTI's day-to-day usability but added significantly more driver appeal. I'd either buy one of those, or get your new Golf with the GTI Performance pack.

The Mini JCW is pricey for a Mini, but significantly cheaper than the Golf. It's also sensational to drive, feisty and instinctively responsive, like you're strapped to the back of a yappy dog chasing a pigeon. It's far more entertaining than the Golf. You want and expect that from the JCW badge. But with its focus comes compromised practicality, a choppy ride (although adaptive dampers are available), a car that's likely to be more wearing as a daily driver, if far from unbearable – I drove it three hours home and enjoyed every second.

The 308 GTi isn't quite as aggressive as the Mini, but it delivers an even more exciting driving experience with a slightly lighter touch. The way it combines its benign but adjustable balance with supple suspension, sweet steering and a willingness to balletically dance through Wales is particularly satisfying. That you get such high-quality content – diff, brakes, sticky tyres – only underlines its appeal. Then you fire up the Peugeot configurator and realise you don't need to spend much more than the list price to get your dream spec, that it was easily the most economical car on test at a recorded 31.8mpg and that you've got a practical Golf-sized body, and the 308 GTi looks like a very solid buy.

Maybe there's a middle-aged Welshman looking at these pages and still thinking 'Nah, has to be the Golf, doesn't it?' But it doesn't. It's the French GTi you want, copper. 

• @lamBenBarry

**The 308 isn't quite as aggressive as the Mini but is even more exciting to drive**



# WHAT AUDI



# DID NEXT





After years at the top of endurance racing, Audi Sport has switched to Formula E and rallycross. Both are threatening to go big, but our money's on the sport with the engines and the jumps...

**Words** Ben Barry  
**Photography** Greg Pajo







The pack of rallycross cars square up on the startline, engines battering rev limiters like the cast of *Stomp* falling downstairs. Each driver pulls back on a huge lever of a handbrake that sticks up vertically in the cockpit, the all-wheel-drive racers ready to smear 600bhp onto the tarmac the instant those levers slip from gloved hands...





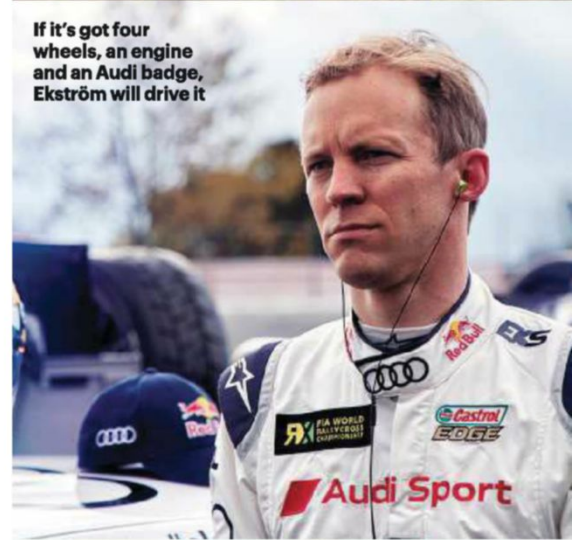
Relatively soft, jump-ready suspension makes for comedy squat and bodyroll

The green lights go on and the pack surges forward, sprinting to 60mph in a couple of seconds, one car squeezed hard in the middle of two others. It shakes and tremors seismically under the strain, then suddenly champagne-corks out of the middle, spinning fast and unpredictably when it lands. The crowd in the stadium gasps as the victim's collected by a blameless rival, a fluke of physics righting its direction of travel, the wrong-place, wrong-time car left beached in gravel.

This is the full-contact world of FIA World Rallycross, the motorsport that blends rallying and circuit racing with decent slugs of American football contact and drift-culture attitude. Somewhat incongruously, it's also the sport that slick, perennially premium Audi has turned its attentions to, and



Track limits are kind of meaningless in rallycross – fortunately



If it's got four wheels, an engine and an Audi badge, Ekström will drive it



with some success; three decades after the original Audi Quattro S1 left the forests of the World Rally Championship, lead driver Mattias Ekström is gunning for his third championship on the bounce, battling works-supported teams running Ford Focuses, Peugeot 208s and VW Polos, as well as a number of privateers.

The wider world hasn't heard of Ekström, but should've. The 38-year-old Swede is a full-time Audi DTM German touring car pilot with the kind of multi-disciplinary CV that once marked out talents like Vic Elford, who won the first rallycross round, held 50 years ago in 1967, at Lydden Hill in Kent.

Ekström has won the DTM championship twice, faced down the likes of Michael Schumacher to take victory at the ►



Race of Champions three times and won the Spa 24-hour in 2011. He's dabbled and impressed in NASCAR, V8 Supercars and Group N rallying, and strolled into rallycross to destroy opposition including WRC champions Sébastien Loeb and Petter Solberg, and gymkhana specialist (automotive, not equestrian) Ken Block. When the World Rallycross and DTM weekends clashed at Hockenheim in 2016, Ekström entered both, winning at rallycross, if placing outside the DTM top 16.

The 2017 Rallycross season kicked off in Barcelona, with a further 11 rounds over three continents ensuring the series qualifies for FIA world-championship status. In his EKS team's hospitality area, Ekström is approachable and likeable, like an upbeat Kimi Räikkönen, but so across everything – from the bigger picture of the sport's direction to a malfunctioning coffee machine – that he's probably exhausting to work for and compete against. You imagine he'd park nose-out in the airport car park and pre-pay, just to grind down the rival who's dropped 30 seconds reversing and fumbling around for his credit card.

'It's nice to start again after the winter break,' says Ekström. 'You can feel like a king when you're testing; this is when you see which league you're really playing in.'

Because Ekström's father was a rallycross driver in the '90s, Ekström junior spent a good chunk of his youth in the rallycross paddock. His first forays in the sport started only at the Munich X Games in 2013, however, after which he privately funded a part-time campaign for 2014. It was the same year FIA World Rallycross was established from the previously European-only rounds and new promoter IMG took control.

Audi then gave Ekström's project its blessing – 'It was more like a sponsor, not a works team,' explains the PR – and he went on to win the title in both 2015 and 2016. Now Ekström's three-car EKS team is Audi works-supported, if still not a full works effort, with Audi displaying its R8 supercar alongside the rallycross S1 in the paddock.

It's a fantastic set-up at the Circuit de Catalunya: the permanent track is 1125 metres long, and can be seen in its entirety from the grandstands. A lap runs some of the corners used in Formula 1 towards the end but tackles them backwards and adds two dirt-covered tarmac diversions that account for 40% of the lap, one featuring a crowd-pleasing jump. At some point during each heat, every driver must take his

## Ekström taps Solberg like a slap with a glove about the cheeks as he squeezes past

'joker' lap, a 153-metre detour that shuffles the pack.

Day one starts dry, but black clouds hang over the hills, threatening rain. With such short races, there's intense action from the second the flag drops, the cars sliding where circuit racers would grip through fast sections, nudging each other as they jostle for position at the chicane as tarmac switches to dirt, and the joker lap spicing up the action to such an extent that you feel a pair of eyes short of being able to fully keep up.

We watch as Ken Block and Petter Solberg get feisty – 'Oi, oi, oi, oi!' shouts the commentator, 'Grrrande! K-en B-lock!' – Andreas Bakkerud slams his Focus into the wall, and Audi driver Reinis Nitiss makes a spectacular dive up the inside before the mud.

To the newcomer, the rapid-fire rounds are highly entertaining, if a little bamboozling – though, to be fair, the commentary's language barrier isn't helping. It works like this: all competitors battle it out – currently 18 permanent drivers, plus three wildcard entries per event – in four four-lap qualifying rounds that provide championship points for the top 16.

Because there are so many drivers, the four qualifying sessions are split into heats with a maximum of five cars each. Drivers from all the heats are classified according to their times, allowing for an overall ranking for Q1 and so on. From there, the top 12 cars progress to two four-lap semi-finals, six cars in each, all getting points. The top three progress from the semis to a six-lap, six-car showdown.

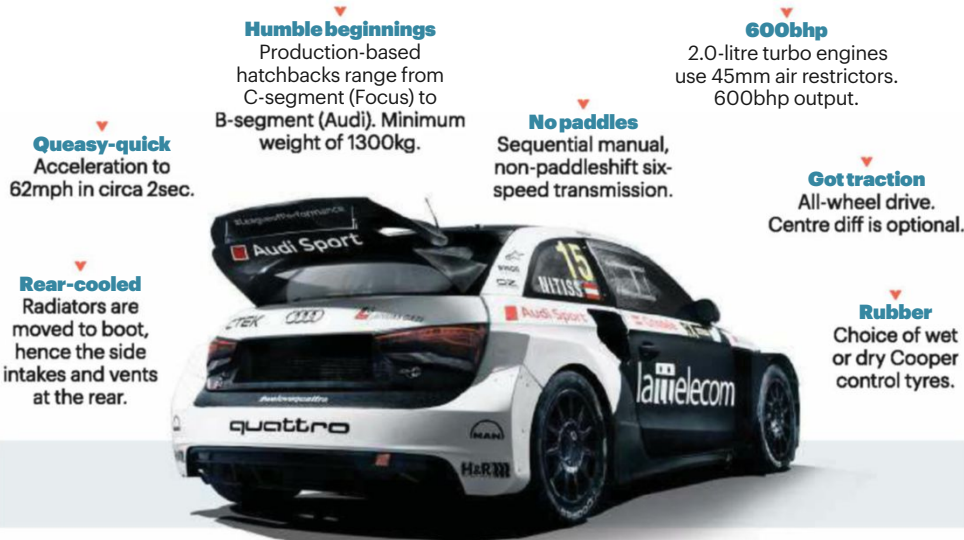
Q1 and Q2 are held on Saturday, Sunday hosting Q3 and Q4 – so even those who don't progress to the finals are seen by and help entertain the bigger race-day crowd – followed by the semis and the final. A series of junior categories fill the downtime, meaning 60 heats a weekend.

By the time Ekström's final Q2 group runs, torrential rain is slowing the cars by around 30 seconds over the short lap, everyone struggling for grip. Ekström's locked in a tight battle with Solberg, and follows the ex-WRC champion's Polo onto the dirt. Just before the jump, Solberg slips wide onto deeper mud, opening up a gap for Ekström. It's a gap you'd struggle to walk through but Ekström squeezes by, tapping Solberg gently twice like a slap with a glove about the cheeks, before bounding into the distance, taking the win.

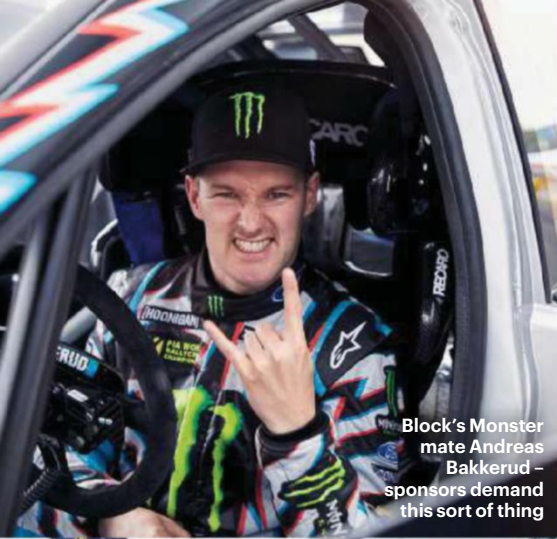
The heavy rain has cost his group dearly though, and Ekström finishes Saturday down in 11th. 'In DTM, you know where you will be to tenths or even hundredths of a second and the conditions are changing maybe by 5-10%. In rallycross the conditions can change by 300%,' he says back in the paddock. 'Everyone is a little careful in Q1 to Q4, but tomorrow it will be even wilder.'

The rules state teams must keep the tent doors of their service area open from 8.30am to 6pm, and fans crowd in as technicians put the Audis up on axle stands for inspection. ▶

### Audi's S1 RX Quattro: a really hot hatch







Block's Monster mate Andreas Bakkerud – sponsors demand this sort of thing



Somewhere, an aerodynamicist is sobbing into his CFD simulations



'You're that guy! That Loeb guy who wins, like, everything!'



You've got to be quick to be able to pull off neon blue booties



Fans can see most of the lap from the stands – cars are sideways for most of the lap, too



The scene will be familiar to anyone who's been to a WRC service area. But despite the obvious parallels and the factory links, the Audi S1 has no connection with Volkswagen's recently axed WRC programme, though Solberg's VW Polo is a modified ex-WRC Polo R.

The EKS Audis are all built from a production bodyshell in Sweden, under the supervision of technical director Janne Ljungberg. Like the project, Ljungberg's role has grown organically.

'A friend co-drove for Mattias while he was rallying, I helped out, and ended up working in DTM with Mattias,' Ljungberg explains. 'He has good technical knowledge; he sees and hears everything. For him, the car has to be perfect.'

Ljungberg has been with the EKS rallycross programme since the start. 'Most of the team are old friends with a rally background,' he says. Audi's involvement brings the head count to 33, with five team members from Audi, three on the technical side. Access to simulation tools has been a boost with this year's works-support.



## A race weekend, rallycross style

### QUALIFYING

➤ Four qualifying sessions are split into four-lap heats. After each qualifying session, the drivers are ranked on their times, giving an overall order. Championship points are awarded for the top 16, from 16 to one point.

### SEMI-FINALS

➤ The 12 fastest drivers go into two six-car, four-lap semi-finals. Odd numbers go into semi-final 1, even numbers to semi-final 2. Every car scores championship points, from six points for a win to one for sixth place.

### THE GRAND FINAL

➤ Six cars contest a slightly longer six-lap final. The gloves come off on-track, with some pretty physical driving. Points are awarded 8, 5, 4, 3, 2, 1. Pull off the perfect weekend and you'll bag 30 points. Ekström got 29 – room for improvement.



It's the same circuit as the Spanish GP, just tackled in a very different way





Usually when you see a Fiesta landing this heavily it's an over-loaded rental

'Before, we had to use our common sense when building the car,' says Ljungberg. 'Now we can experiment with ideas long before the final specification is set.'

Ljungberg says that, fundamentally, rallycross cars are similar to WRC machines. But because rallycross cars are raced in more controlled environments with much shorter straights, they can have far more power than the 380bhp produced by 1.6-litre WRC cars without adversely affecting safety. The S1's 2.0-litre turbocharged four is built by Lehmann – long associated with Audi – and puts out up to 600bhp. A non-paddleshift sequential transmission necessarily beefier than a WRC car's handles the power.

Unlike WRC cars, rallycross cars aren't road legal: the 'lights' are graphics, preventing actual units from smashing during close contact, and there are cooling inlets in the side of the car and vents to evacuate hot air between the rear 'lights' because the radiator is moved to the boot. The theory is that if you're following a rival, dirt would block up a front-mounted radiator, increasing temperatures. Solberg's WRC-derived Polo, however, is unique in maintaining its front-mounted radiator; the paddock is watching with interest.

Competitors choose from either a wet or dry tyre from one manufacturer, and might tweak the set-up a little or change

key parts from track to track, or over a weekend. While the car is homologated by the FIA, there's more freedom than the WRC: Ken Block's C-segment Focus can compete alongside Ekström's B-segment S1, drivers can swap between gearbox manufacturers over a season, and Ekström switched to a smaller rear wing during Saturday. Trips to the wind tunnel are, however, *verboden*, the organisers keen to contain costs for privateers as works-backed teams increasingly enter.

Series boss Paul Bellamy estimates budgets for a top two-car team at around £4.2m-£5m, perhaps a tenth of a WRC budget, but says it's possible to compete with one car for around £1.2m.

'You cannot buy a win in rallycross,' comments Ekström, 'You need luck, you need to pick your battles, and it's very driver-influenced. No-one wants to lose!'

Guy Wilks is running one of the smaller budgets, the Brit sidelined from rallying a few years ago after stints with Skoda and Peugeot before resolving to bounce back. He made a World Rallycross final on his debut – partially funded out of his own pocket – and is on the grid today with a VW Polo after starting from scratch five weeks ago. He'd never previously raced door-to-door, but says the peripheral vision training he did in rallying comes in handy, helping him with his awareness of fellow racers. ▶

## Rallycross cars are similar to WRC machines but they can have far more power







'Look, just gimme a chance' – Ben puts his case to EKS tech Janne Ljungberg



Audi on top of the podium – haven't we seen this somewhere before?

↑  
Speed on the dirt is weather-dependent, though Ekström's always up front

Is the randomness of the sport frustrating after the single timed runs of rallying? 'It can be,' replies Wilks, 'but I love the wild side of this sport!'

When I describe how slow the cars look as they brake downhill on dirt; his eyes light up. 'Ah, but there's real skill in that,' he says. 'You're in at walking pace on the mud, killing it with your left foot on the brake, then you have to rotate it through the hairpin even though you're going so slowly, then get it straight, find the traction, bang up through the gears...'

Bright sunshine replaces the thunderclouds for race day, the grandstands very busy if not packed; Bellamy estimates around 14,000 to 16,000 fans will watch the action over the weekend, 75% of them under the age of 35, a key part of the sport's appeal for sponsors and manufacturers.

With the track drying and the stakes higher, the speed and the spectacle ramp up. Cars slide wildly, bounce over each other with abandon and skim past barriers with millimetres to spare.

## The final looks more like the evacuation of a burning 747 than a race

Ekström lines up for the second semi-final and leads into the first corner, Bakkerud second. Wilks, punching far above his weight, is in the mix. When the Brit pulls his joker lap, he ends up in a tense battle with EKS Audi driver Nitiss. Wilks charges up the inside just before the jump, gets squeezed into the tyre wall and flicks up violently onto two wheels. The front wing peels back like old wallpaper. The crowd – oddly, given the carnage – applaud. Wilks ends up seventh of 21 overall; Ekström wins his semi, untouchable.

The final shakes down to Ekström, Scheider, Bakkerud, Solberg, Hansen and Kristofferson. With everything to play for in just a couple of intense minutes, it looks more like a disorderly evacuation of a burning 747 than a race. Kristofferson hiccups off the line, Ekström launches cleanly and leads the pack, his left wheel perfectly hooking onto the inside kerb for turn two while the back slips wide, skimming the tyre barriers that mark out the dirt sections, shutting out the snake of rivals trailing him like nitrous'd shopping trolleys.

The joker laps throw a hand grenade into the mix, especially when Hansen takes the longer lap, Kristofferson the shorter. Hansen is accelerating hard as Kristofferson slews sideways out of the final corner, into his path. The closing speed is huge, the cars on a collision course, but somehow they slice past each other like Red Arrows; Hansen takes the place.

Ekström's chased all the way home by fellow Audi DTM driver Timo Scheider in a Fiesta, and as he powers over the finish line just 0.362sec ahead, confetti explodes in a shower at the side of the track. We watch as Ekström sprays champagne on the podium, then heads back to the paddock to thank sponsors and fans, his PR game as faultless as his driving.

Exhausted from following the race weekend, photographer Greg Pajo and I chat about what we'll do on our Monday off. Ekström announces he's heading straight to Hockenheim for DTM testing. We're not even competing against him and we feel like losers. Heaven help his opposition. 📺

📍 @IamBenBarry

The UK World RX round is at Lydden Hill, May 27/28

SEE MORE WORLD RALLYCROSS IMAGES AND VIDEO AT CARMAGAZINE.CO.UK





# CAR FINANCE IS ALL ABOUT THE NUMBERS...

Here are just a few of the cars we've recently funded:

413 Range Rovers

125 Ferraris

353 Porsches

46 McLarens

82 Bentleys

43 Lamborghinis

69 Aston Martins

... and 1,000s more

Join our 64,000 clients today...

THE UK'S NO. 1 FUNDER FOR PRESTIGE, SPORTS & CLASSIC CARS



OFFICIAL VEHICLE  
FINANCE PARTNER



OFFICIAL VEHICLE  
FINANCE PARTNER

08450 944 997

[www.oraclefinance.co.uk](http://www.oraclefinance.co.uk)

**PLEASE NOTE: WE ARE A CREDIT BROKER AND NOT A LENDER.** This means we act independently through a wide range of lenders to offer a broad and competitive choice of products and solutions. Oracle Asset Finance is not affiliated to any motor manufacturer. Please contact us for an individual finance quotation on any prestige or sports car. Finance & terms are subject to status. UK residents only. Oracle Asset Finance Limited is authorised and regulated by the Financial Conduct Authority for the sale of consumer credit.

Cars listed above funded in 2016/17.



# Slidem



An all-wheel-drive M5 sounds wrong, like cloned sheep or socks with sandals. Then you drive it and discover that far from ruining your favourite sports saloon, all-wheel drive has saved it

Words Georg Kacher



# meister







**E**

**VEN IN** this hide-and-seek camouflaged trim, the widebody proportions, chiselled bumpers, fat wheels and wraparound aero kit make it clear that this is not the new 518d but the sixth-generation BMW M5, which will debut at the Frankfurt show in September and go on sale in March next year.

Thanks to the curious tactics imposed by more and more communication departments, some of us already know exactly what the F90 M5 (the current car's the F10, code fans) looks like in the flesh, and now, thanks to a prototype drive, we also know how it drives. So hop in, adjust the seat, grumble about the non-height-adjustable seatbelt, and prepare to follow smoky Timo Glock of DTM fame. Glock clearly can't wait to take us round the high-speed handling circuit of BMW's Miramas test track, close to Marseilles.

Had God given man three eyes and seven digits per hand, the ergonomic overkill of the new M5 would be fine and dandy. But on an alien circuit, hot on the heels of a proper racing driver in an M4 GTS, in the rain and on cold tyres, the secondary controls of this car are not a wimp's best friend. ▶



Disguised on the outside and inside, but this is the real deal. And it's great



Had God given man three eyes and seven digits per hand, the ergonomic overkill of the new M5 would be fine





To add insult to injury, some items like the M1 and M2 thumb-switches on the horizontal spokes of the steering wheel are covered with black tape, and black felt covers the gearlever. Thankfully, the seat next to me is occupied by Frank van Meel, head of M division, a keen driver and M5 expert. He knows blindfolded which button to push to what effect, and he takes me with unending patience through the motions from pussyfoot to hooligan. He can also talk you through this complex professor of a sports saloon. 'We took the high road because it puts us one step ahead of the competition,' he says before pausing. 'And because the customers want to personalise the access to the dynamic abilities of their car.'

When you fire up the modified but familiar V8 engine (dubbed S63B44T4, code ferrets) by hitting the starter button hidden behind another piece of fabric, all systems sheepishly assume their least aggressive calibration. Traction- and stability control are on duty 24/7 and the four-wheel drive is programmed for optimum grip and stability – neither teeth nor fangs are bared. That's perfectly okay for the drive home from the airport when heavy traffic, the football commentary and incoming calls turn the ambition-meter to zero. On the circuit, however, it's imperative to lock the DNA in MDM (M Dynamic Mode) to stop the chips from playing 'Who's afraid of the big bad wolf?' through second-gear corners. Although MDM channels more torque to the rear wheels and permits more slip, it still feels a bit like having sex with your socks on. Predictably, 4WD Sport pushes the handling balance rearward, for your first sip of power oversteer.

Two more laps with guardian angels at every apex and we're finally ready for the serious stuff. Herr van Meel hits the DSC off button, grins his devilish grin and assumes a fake fearless posture. A glance in the rear-view mirror of the car in front tells me Timo Glock is no longer doing the 'smiling single-handed instructor' thing. And despite his awesome

## In the outgoing M5 you had to wait and wait and wait before you could give it stick

driving skills, the M5 closes the gap in places to a couple of car lengths. The two-door batmobile is, after all, 150bhp short and must do without front-wheel drive. This only goes to prove that on wet tarmac, the extra grip and traction provided by all-wheel drive can be a priceless advantage. But where exactly does the difference between MDM (effectively DSC on) and M xDrive (DSC off) lie? Are they two means to the same end, and are the nuances of its north/south, east/west torque splits simply too subtle for my clumsy senses?

Slowly, agonisingly slowly, I get the hang of the M5. It's the old turn-in late, step-on-the-gas early routine. In the outgoing M5 you had to wait and wait and wait before you could give it stick, and whatever you did to set the 20-inchers on fire, the result was almost always more smoke than traction. Not any more. The new M5 not only curves and crabs and carves through radii at whatever degree of ostentatiousness you care to choose, it also slides and spools and swings out of corners with raw urge and determination. This adds up to a new quality of balance at the limit. Faster cornering speeds is one thing, more complete control is another. The key is in the new



**M xDrive – for the discerning speed merchant**

M5's delightful dynamic flow. It makes for seamless motion, well-mannered drifts and intuitive interaction. Less drama and more fun is a compelling new formula, one that frames the M3 and M4, for better or worse, as old-school tools. There's no doubt about it: the way M Division has set up its four-wheel drive makes drifting more manageable, elegant, faster and rewarding.

On the other edge of the sword, DSC off beckons. In its most extreme guise, it allows you to shift all the torque to the rear wheels. I repeat: 553lb ft to just one end of the car, with all the electronic wizards who normally keep that axle in check sent on temporary leave. In this configuration, the new M5 behaves like the old M5, only with more power and grunt and no safety net.

'We assume that buyers who select 2WD want all the fun and no supervision,' says the head honcho. With all the stops pulled out, it feels like there's a battalion of hyper-nervous hornets packed under the M5's rear seat collectively sharpening their stings with every stab on the throttle.

'It works fine,' says van Meel, 'but you have to be quick. Very quick.' Again, it takes me a handful of laps to acquire a taste for this, the M5's spiciest set-up. The dialogue is now strictly between steering and throttle, with the brakes separating one act from the other. To keep a lid on that hornets' nest, third gear becomes a better option than second through the slower bends, and fifth beats fourth through the high-speed left-right-left combination.

The next challenge is the wet handling track. There's standing water, puddles and rivulets running across the track between soaked grasslands on both sides of the curvy piste.

As the flag drops, we brace ourselves for unilateral aquaplaning over unannounced mu-split deflections and drenched asphalt with the grip level of an ice rink. Sounds grim and it is hard work, but thanks to the low friction coefficient, the cornering speed is slow, manageable and eventually confidence-inspiring. On this rain-swept terrain, 4WD is an electronic sleeping-pill, DSC off is like walking a tightrope, and 2WD is a nearly noiseless yell for help. The best compromise? MDM, which is all playful until you overdo it – when the DSC lifeguard brings the beginner safely ashore.

The 4.4-litre V8 engine has been upgraded for more oomph and less thirst. According to the Garching grapevine, the latest iteration of the twin-turbo 48-valve develops 608bhp at 6000rpm. Maximum torque is 553lb ft from 3000rpm. The seven-speed DCT 'box has been replaced by an eight-speed M Steptronic transmission with Drivelogic. Although this is a conventional auto, it dials in quick and almost seamless shifts, boasts evenly spaced ratios, confers as yet undisclosed consumption and emission advantages, offers converter ▶





# The fun in fünf

F90 was always going to go big on tech, but it's solely to improve the driving experience

## Steptronic star

Increase in torque insisted the dual-clutch transmission went in the bin. In comes an M Steptronic unit, better able to cope and to chat with the new M xDrive system. M Steptronic boosts efficiency and still delivers sufficiently rapid changes to hit 62mph in 3.3 seconds, with three modes to choose from.

## Four becomes two

The heresy of an M car with four-wheel drive can be silenced with a single prod of a button; all-wheel drive is there, and it's good, but there's also a rear-drive-only mode should you need to smoke it up. The Active M Differential can deliver 100% lock-up too, guaranteeing drifts Ken Block would be proud of.



## Somehow lighter

Even with the beefier transmission and four-wheel-drive gear, the F90 M5 is still 35kg lighter than the outgoing car, largely thanks to the G30 structure bringing magnesium and more aluminium to the lightweight party – plus the M signature carbonfibre roof.

## Faster and more furious

The 4.4-litre V8 in the old M5 was quick enough but had its V8 song clipped by the twin turbos. Expect better from this upgraded version, which has new turbos and higher injection pressures for more power and a modified exhaust for a better backbeat.

## BMW M5 (F90)

- > **Price** £85,000 (est)
- > **Engine** 4395cc 32v twin-turbocharged V8, 608bhp @ 6000rpm, 553lb ft @ 3000rpm (est)
- > **Transmission** 8-speed auto, four-wheel-drive (with two-wheel-drive mode)
- > **Performance** 3.3sec 0-62mph (est), 155mph (limited, 197mph optional), 31mpg (est), 210g/km CO2 (est)
- > **Weight** 1910kg
- > **On sale** March 2018



lock-up from the word go and is game for multiple downshifts. In S mode, the black box holds the gear no matter what, changes the shift pattern from country lane to racetrack and ensures every full-throttle upshift kicks butt. Although the knobby gear selector suffers from severe button rash, it now also incorporates the Drivelogic shift speed selector.

The new M5 is 35kg lighter than the vehicle it replaces, the weight distribution is better balanced, and the active torque split always addresses the wheel that needs it most. Under normal driving conditions, the new M5 is rear-drive from dawn to dusk. All-wheel drive cuts in only when required, which is frequently the case on slippery terrain or with a hardcore tearaway at the wheel. The M1/M2 buttons activate two different personalised set-ups. In addition, there are three direct-access buttons for drivetrain, dampers and steering, plus a DSC-off sub-menu listing 4WD, 4WD Sport and 2WD. Sounds complicated, is complicated. BMW wants the F90 to offer the best of all worlds, but what it gains in content and cleverness it loses in pragmatism and user-friendliness.

The sportiest saloon ever conceived at BMW could have ended up as the big brother of the M3 but the new M5 has carved out its own niche instead. If the first outing on the proving ground is anything to go by, the V8-engined saloon wants to be more of a muscular GT, a family-size driver's car and a high-speed executive express. Acceleration from 0-62mph is a breathtaking 3.3sec affair – that's six-tenths quicker than the 592bhp version of the M6 coupe. And the big push continues, past 125mph only 9.2sec later. While the top speed is again limited to 156mph, extra money buys the M driver's package, lifting peak velocity to 197mph.

As for the competition, the Mercedes-AMG E63 S must be the main rival, followed by the intriguing Cadillac CTS-V and the Audi RS7. Although we won't have a final verdict for another year, what the M5 already lacks is some kind of hybridisation, an optional manual transmission and, dare we say it, a decontented lightweight rear-drive spin-off with the 20bhp-hotter competition engine. Conversely, M xDrive should work rather well for the next-generation M3/M4. After all, business is always enlivened by variety.

Master the modes and you can get as sideways as you like in the new M5



## ICON BUYER.

# Past

They're resolutely rear-drive, but we wouldn't have the five previous M5s any other way. Now, which should you buy?

Words Ben Barry | Photography Alex Tapley





# meisters

**T**HE NEW SIXTH-GENERATION M5 tops 600bhp, four times the power of the entry-level Five, and enough to make the Ferrari 488 GTB sweat. If that sounds outrageous, it's actually business as usual for the definitive super-saloon: in 1985, the first M5 made 286bhp, more than tripling a 518, edging out the new Ferrari 328.

The badge still promises much the same as it always has – discreet high performance, long-distance comfort, plus a side helping of oversteer – but the M5 has delivered its numbers with surprising diversity.

To understand its legacy, we're visiting specialists Munich Legends, driving the last five M5s, and getting the lowdown from the experts who maintain them day-in, day-out.

At a time when we'd adjusted from three-box Ford Cortina to jellymould Sierra, that first hand-built M5 must've looked retirement-ready, but its boxy lines are superbly evocative today. Badging removed, unadorned by the optional bodykit, it's left to the 16-inch alloys and sawn-off-shotgun tailpipes to bring the visual menace.

The interior is similarly subtle, if offering more clues that this is something special: the red, purple and blue M tricolour on the

three-spoke leather wheel, gearknob and seats; the 6500rpm rev counter and 170mph speedo.

You quickly feel at home: the straight six idles smoothly and responds eagerly to every tickle, and the checked fabric seats give slightly under your weight, the bolsters' contours moulding around you. Pull back on the swan's-neck gearlever, and you notice the shift's long throw but also its perfect buttery resistance, how the pedals were set up by people who'd heel-and-toe to work, that the steering crackles with nuance.

The E28 feels flexible rather than fast at first, but the straight six takes on a harder mechanical edge from 3000rpm, the warm bassiness transitioning to a fizzy top end. The fuse is already lit, and by 4500rpm it's found the gunpowder, the mechanical meshing more intense, dominating the cabin, that last run beyond 6000rpm a rasping blur.

As you press on, the dead spot at the top of the steering expands, so too body roll over the front end, and the leaden feel of a brake pedal that does very little.

It's discouraging at first, but you learn to make broader brush strokes with your inputs, cutting through the vagueness to feel the detail beneath. With the engine singing and chassis working hard, the E28 comes alive, 250lb ft, soft suspension and ▶





**BMW  
M5 (E28)**

► **On sale** 1985-1988

► **Price then** From £34k

► **Value now** £35k-£75k ► **Engine**  
3453cc 24v straight six, 286bhp  
@ 6500rpm, 250lb ft @ 4500rpm

► **Transmission** 5-speed manual,  
rear-wheel drive ► **Suspension**

MacPherson strut front,  
semi-trailing arm rear

► **Performance** 6.5sec  
0-62mph, 153mph,  
25mpg



First two  
M5s share  
driver-angled  
console. Note  
tape player on  
pre-airbag E28





## NEED TO KNOW E28

- Appeal to businessmen means virtually all M5s have interstellar mileages, so you'll probably have to accept 120-130k miles.
- Just 187 were built in

right-hand drive, so don't be picky. Buy the best you can afford/find, then budget for work – assume some will need doing.

- Make sure the M88 engine's timing chain has been replaced at 100k

miles. Get it inspected before you drive off if you don't know it's been done.

- The E28 M5 was available with an optional bodykit, but it can warp with age. Stealth bodywork is cooler.

modest tyres helping it slide far more fluidly than any E30 M3. Fabulous.

Judge that difficult-second-super-saloon (aka E34 M5) by its album cover and you'd expect a sleeker, more grown-up, slightly bloated E28. Correct. The only M5 to incrementally evolve its predecessor, the E34's longer body is more streamlined; the wheels increase from 16 to 18 inches, the weight by a morbidly obese 240kg. Inside, the dash architecture remains – centre console angled towards driver, passenger side scalloped – but there's a greater distance between dash and windscreen, and the E28's slimline steering wheel swells for a chunky airbag.

Early E34s stretched from the E28's 3453cc to 3535cc, this later car to 3795cc; it idles lumpily. 'It was getting towards the maximum,' says Munich Legends boss Dan Norris. 'They can be challenging to tune.'

Power rises to 342bhp, delivered 400rpm higher up the rev range than the E28, and variable-length inlet tracts boost low-down torque, giving 295lb ft @ 4750rpm. The overall character (low-down bass, high-rpm zing) is similar, however.

Heavy vibration from the rear of this customer car unfortunately discourages adventurous behaviour, but you notice the steering's tighter on-centre definition if more muted feel, the more progressive brake pedal, and the grittier, less tactile action of the six-speed gearbox. Body roll is nipped in the bud much more quickly than in an E28, but it feels significantly heavier, and the ride is busier; this car has the then-new electronic

damper control, but the two calibrations are either very closely aligned or broken.

'E34s still don't command the values, so people don't invest in them,' says Norris. 'But they've probably got a good future, and I'm surprised they still haven't caught everyone's imagination.'

E34 production ended in 1995, the last of the hand-built M cars, and the last M5 with a straight six. The badge

wouldn't return until the E39 of 1999. When it did, semi-trailing arms were replaced by a sophisticated multi-link rear axle; shotgun twin tailpipes by wheelbarrow quads; mandatory opposite lockery by M's first stability-control system.

Inside, the leather seats are snugly comfortable, the driving position and pedals perfect, the layout surprisingly modern: a multi-function wheel; infotainment screen; lights on the rev counter that progressively extinguish as oil temperatures rise.

Crucially, M's first V8 is up ahead, 5.0 litres of naturally aspirated heaven. Power climbs to 395bhp, but it's the torque that's truly transformative, shading the E34's 295lb ft at 4750rpm with 369lb ft at 3800rpm, and just 50kg extra to lug.

Blip the throttle at idle and there's an instant bark of response and convulsive rock from the body. Yet at cruising speeds there's a laid-back flexibility, a pleasing physicality to the controls ▶

## NEED TO KNOW E34

- Both 3.6 (315bhp) and later 3.8 (342bhp) engines available. Hand-built and tricky to tune precisely.

- Only 1994-on models get a six-speed manual.

- With E34 values still low, owners often take short

cuts with maintenance. Expect huge mileages.

- Electric damper control standard on 3.8-litre cars. Expensive to replace, owners often replace with conventional dampers.

- 891 touring models were produced from 1991, all left-hand-drive 3.8s.

- Cecotto, Winklehock and 20 Jahre special editions in lhd, but only the Limited Edition in rhd – 50 made, with interior upgrades.

- Nürburgring package with upgraded dampers, Servotronic power steering, thicker anti-roll bars, wider rear tyres.



### BMW M5 E34

- On sale 1989-1995
- Price then From £43k ➤ Value now £11k-£25k ➤ Engine 3795cc 24v straight six, 342bhp @ 6900rpm, 295lb ft @ 4750rpm ➤ Transmission 6-speed manual, rear-wheel drive
- Suspension MacPherson strut front, semi-trailing arm rear
- Performance 6.3sec 0-62mph, 155mph, 24mpg



→  
The 21st century began here: E39 feels modern, goes like a dream



## NEED TO KNOW E39

► The V8 marked a big technological leap, and it's common to have issues with lambda sensors and airflow meters. 'It feels like a very robust car, but it's actually quite delicate. Make sure you can afford to run it,' says Munich

Legends' Dan Norris.

► **The E39 doesn't age particularly well, suffering bodywork corrosion and interior wear at surprisingly low mileages.**

► Clutches can wear prematurely – the high biting point makes it easy to slur gearchanges,

exacerbating the problem.

► **2001 model-year introduced revised head- and tail lights, E46 M3 steering wheel, grey instrument dials and revised infotainment with 6.5-inch screen. Hella headlight upgrade is popular.**

## BMW M5 E39

► **On sale** 1999-2003

► **Price then** From £60k ► **Value now** £14k-£35k ► **Engine** 4941cc 32v V8, 395bhp @ 6600rpm, 369lb ft @ 3800rpm ► **Transmission** 6-speed manual, rear-wheel drive

► **Suspension** MacPherson strut front, multi-link rear

► **Performance** 5.1sec 0-62mph, 155mph, 21.1mpg, 336g/km CO2

that stops well short of obtrusiveness, a rich, smooth exhaust note, and a pliant ride that'll lull kids to sleep in minutes. It's more effortless if still true to the Jekyll-and-Hyde schizophrenia of early M5s.

Drive hard and the intensity builds exponentially, as the V8's lazy muscle-car demeanour snaps to attention. The revs soar as you push past 4000rpm and the trademark metallic rasp hardens to a snarling blare, until everything distils down to the speed you're amassing. A sub-7000rpm power peak might sound a little stingy, but there's real reward in holding out for the final goose-pimple 1000rpm, and it's so much quicker than either E28 or E34.

Despite the excess of power, the E39 chassis feels far from overwhelmed. There's some body roll and pitch, but it's tidily checked, and the front tyres bite hard on turn-in, grip telegraphed through a leather rim that's firm immediately off-centre, if a little sluggish. Combined with a generously long wheelbase and easily accessible torque, the E39 feels very rear-biased but easy to manage, even if its stability control is a bit health-and-safety.

In 2005, just two years after the E39 went off sale, BMW introduced the radically different E60 M5. It ensconces you in the best driving position yet, with even the shoulders of taller drivers falling well below the glasshouse, active bolsters squeezing your frame as g-forces escalate. The pedals don't need to be perfect for heel-and-toe because the clutch is electro-hydraulically activated, the driver either controlling the seven-speed sequential gearbox manually, or leaving it in auto. There's still plenty to keep your left hand amused/confused: a Power button to unleash maximum performance, three damper and ESC settings, and five gearbox shift calibrations. But it's the amazing 8250rpm redline that makes you double-take.

To play on its Formula 1 campaign during the V10 era,



E39 (left) and heavy, hard-hitting E60 look and feel very different



BMW slotted a 5.0-litre V10 in the M5; it makes a breathless 500bhp at 7750rpm and 384lb ft at a peaky 6100rpm, basically a Lamborghini Gallardo engine in a family saloon (or, later, estate). Weight increases by just 35kg; thank aluminium from the firewall forward.

It delivers a significant shift in the M5's character, bundling sensible Dr Jekyll into the back seats while mental old Hyde seizes the wheel. Even at a cruise it feels highly strung, the body control more resolutely tied down, the ride more jittery than before, the engine straining to be unleashed. At first those SMG gearchanges seem ridiculously ponderous and disappointingly unrefined; eventually you learn to ease the throttle during shifts, just like a manual. Better.

The soundtrack's distinguished by a rapid-fire, percussive gargle at low revs, the delivery a little torque-shy at the kind of revs where turbos now whoosh in. But at 3000rpm the scenery starts to blur, and the following 2500rpm is pretty intense, a higher-pitched wail quickly building. Mostly, you'll shift by that point, because what happens post-5500rpm is insane, a kind of elasticity of velocity that continues to manically increase in rate long after you thought the crank would be banging on the canvas. Hold out for high revs, pull for the upshift, keep the throttle pinned and – thwack! – suddenly that ponderous gearshift is almost brutally instantaneous. Drive it like you stole it and the E60 makes sense.

But with 19.6mpg and 344g/km – and a quick exit from Formula 1 – it soon didn't. No wonder the next model came with a twin-turbocharged V8, its 28.5mpg and 231g/km almost as important as the launch-spec 552bhp/501lb ft.

It divides opinion, the F10, and people often criticise its size, 190kg of love handles and lack of tactility, Dan Norris included. 'It feels like an M5 for people don't really want an M5,' he says. ▶

## NEED TO KNOW E60

▶ From about 60,000 miles, big-end bearings and conrod bolts should be replaced to prevent total failure – some owners send off oil samples to check for early signs.

▶ While the bottom end is open, replace the Vanos

system's high-pressure oil supply pipe.

▶ Both throttle bodies can fail, at £700 each. With an induction strip-down required, it's best to replace both. Budget £2k.

▶ The larger engine means pricier servicing: typically £300-£400, but £800-

£900 every third service.

▶ The SMG gearbox is more reliable than hearsay suggests, but budget £1500 for a new clutch and flywheel every 40,000 miles.

▶ Drive hard and you get 8-10mpg and need a litre of oil every 1000 miles.



You sit low in the E60, with sequential shifter for the first time

## BMW M5 E60

▶ On sale 2005-2011

▶ Price then From £62k ▶ Value now £16k-£25k ▶ Engine 4999cc 40v V10, 500bhp @ 7750rpm, 384lb ft @ 6100rpm ▶ Transmission 7-speed semi-auto, rear-wheel drive

▶ Suspension MacPherson strut front, multi-link rear

▶ Performance 4.7sec 0-62mph, 155mph (limited), 19.6mpg, 357g/km CO2







**BMW  
M5 (F10)/30  
JAHRE EDITION**

► **On sale** 2011-2017 (2015 for 30 Jahre) ► **Price then** From £72k ► **Value now** From £30k (30 Jahre £70k-£80k) ► **Engine** 4395cc 32v V8 bi-turbo, 592bhp @ 6250rpm, 516lb ft @ 1500rpm ► **Transmission** 7-speed dual-clutch auto, rear-wheel drive ► **Suspension** Double wishbone front, multi-link rear ► **Performance** 3.9sec 0-62mph, 155mph (limited), 28.5mpg, 231g/km CO2

But I really like the F10. The early car I ran for six months did steer lifelessly, but even that couldn't sour the enjoyment, and later cars are much better. Case in point: the 30 Jahre 30th-birthday edition, with its alcantara-wrapped rim that crackles with feedback. The optional carbon-ceramic brakes stop you like a knuckleduster (the standard stoppers are disappointing under hard use) and the ride on its Competition Pack suspension is firm, if offering an extra layer of pliancy over an E60. It feels tied-down and communicative.

A twin-turbocharged V8 isn't as exotic as a V10, but it's extremely impressive. It makes 592bhp in this special edition – 40bhp up on the standard F10 – and 516lb ft at 1500rpm translates into much more low-rev flexibility. A foreboding rumble accompanies acceleration, and while there is fractional lag, throttle response is keen. It's quick to rev too, and the way the blown V8 storms round the rev counter and shrieks with a deep, almost demented fury nearing 7000rpm properly captures the M Division spirit, while reinterpreting it with a darker, harder twist.

The F10 scores over its predecessor with its dual-clutch gearshift: refined if swift at a canter, it's finger-click punchy in the most aggressive of its three modes (configurability is rationalised here, but still rules) for a never-ending stream of performance. Set all guns blazing and the F10 is eyes-on-stalks



30 Jahre Edition's alcantara-heavy interior includes upgraded audio

thrilling. Naturally it oversteers, but the way it grips and slips is quite interesting: the Michelin Pilot Super Sports can absorb a lot of provocation, and you have to push hard and constantly work against the grip, sometimes even in the wet. But on a dustier or greasier surface the torque wins, the F10 much more of a handful than its predecessors. You can understand why some owners crave extra driveshafts, but wasn't stability control invented so we could all drive 600bhp super-saloons?

After a day's driving, I'd expected it to be tough to call which car I'd actually buy. But while I enjoyed every M5, it's the E39 that has me clearing a space in the garage. Modern enough to feel usable, appreciating in value yet still affordable, fast but with old-school charm, and striking a perfect balance between comfort and tail-out kicks, it's everything you could want from a performance saloon. True to type, the M5 changes course dramatically this year, as you'll have seen in this issue, with all-wheel drive now standard and many other differences. History suggests no M5 is to everyone's taste, but the new one looks like a remarkable addition to a formidable lineage.

📍 @IamBenBarry

**NEED TO KNOW F10**

► Munich Legends report very strong reliability from the F10. Servicing should be no more than £400.

► **Competition Pack option** was introduced in 2013, with extra 15bhp, 10mm lower suspension with

20% stiffer springs and dampers, 10% quicker steering rack, 20in rims, and re-tuned diff/DSC.

► 30 Jahre model in 2015, just 300 worldwide. Essentially a Competition Package plus 15bhp and cosmetic niceties.

► **Stock brakes** are

marginal for high-performance driving. Carbon ceramics optional from 2013.

► Disappointingly numb steering was improved with 2013 software tweaks, plus stiffer front suspension bushings and smaller torsion bar.



8 LJL	16 MRJ	NTB I	1 PWK	8 SBP	1 TKF	1 VVC
LKR 36	8 MSE	1 NTJ	2 PWW	4 SCE	1 TLA	1 VVK
2 LKT	MTJ I	1 NTP	RA 5	12 SDJ	1 TLE	1 WCB
1 LLD	MWA 43	1 NUS	1 RAA	SDL 95	1 TLJ	1 WCC 5
1 LLF	MWD 15	1 OAA	1 RBC I	1 SEK	1 TLN	1 WCJ
1 LLJ	1 MWG	ODR I	1 RBR 5	5 SFJ	1 2TMO	1 WCS I
1 LLL	4 MWJ	1 ODY	55 RBT	5 SFO I	1 TNC	1 WCW
1 LMG	MWR 26	1 OJ	4 RBW	1 SGG	1 TNR	1 WEF
1 LMR I	1 MYH	1 OMT	9 RCD	1 RHA	1 TPO	1 WEZ I
1 LNF	60 NAE	1 ORC	1 RCE I	1 SHG I	1 TSF	1 WFH I
1 LNR	16 NAA	1 PBK I	1 RCG 87	1 SHH 55	1 TTAJ	1 WFT
1 LOD	NAK 35	3 PCF	1 RCO	3 SDR	1 TVH	91I WGG
LPP 12	1 NBA	11 PCM	7 RHA	1 TSJ	7WS 45	1 WGG
1 LPV	1 NBN	1 PDL I	7 RDJ	1 ISLN	UN 6	1 WGP
1 LRN	1 NBV I	1 PDO I	1 RDK	4 SND	1 USK I	1 WJA 8I
1 LRT	1 NCJ	10 PDR	1 RDT	1 SNH	V 59	1 WJB I
1 LSO	11 NCP	1 PFJ	1 RDY	1 SNL I	2 VAD	1 WJE
1 LSR	4 NCR	1 PFT I	745 RE	1 SOJ I	1 VAF	1 WKA
4 LTH	4 NCT	9 PGM	RFW 73	SPD 94	1 VAM	1 WKK
1 LWD	3 NDP	1 PGW 30	1 RGT	11 SRJ	1 VBS	WMR 87
1 LWF	1 NEG	1 PHB	9 RHC	50 SU	1 VCH	1 WMT
1 LWW	NEZ I	6 PHM	1 RHM 79	1 SVC I	1 VD 5	1 WNC
90 MBJ	6 NF	1 PHR I	1 RHP	1 SVH	1 VDD	1 WOJ I
11 MBW	1 NFB	5 PJV	1 RJA I	1 SWJ I	1 VDS I	1 WPS 4
MCP 74	1 NFN	91 PJW	1 RK I	1 SWR	1 VED	1 WRJ
98 ME	1 NGC	409 PK	98 RLK	T 6	1 VEP	1 WRR I
MF 6	1 NGF	1 PLN	1 RL6	7 TAD I	1 VEW	1 WSE
MGD 4	1 NGJ	5 PLR	1 RL6 20	82 TAL	1 VG 2	1 WSF
1 MHE	1 NHG	15 PMR	1 RLR	1 TBN	1 VHC I	1 WSJ
1 MHF	1 NHH	1 PNB I	14 RMJ	1 TBS	1 VHH	1 WWP
1 MHK	1 NJD	1 PNF	1 RMY I	1 TCL 5	1 VJW I	1 WWT
14 MJE	6 NJJ	1 PNL	1 RNJ	4 TDG	1 VMD	1 XJR I
1 MJK	1 NJN	1 PNR	1 RP 2	1 TDP 2	1 VJF 8	1 YAW
1 MKF	1 NLP	1 PPT	6 RPP	1 TDS 6	1 VKF	2 YB
1 MKS	8 NMS	1 PPW 3	1 RPD I	1 TEU I	78 VLL	1 YD
1 MLO	1 NNN	PRD 888	1 RTJ	1 TFF	1 VMY	1 YEF I
241 MM	1 NOG	6 PRP	7 RTP	1 TFT	1 VOB	1 YEG I
MMG 78	1 NOP	PS 849	1 RWR	1 TGE	1 VPF	21 YJ
MMN 75	1 NPD	6 PST	2 RVF	1 THK	1 VPR	1 YL
1 MNG	1 NRD	7 PUA	1 RWR I	11 THM	1 VRH I	1 YLL
1 MNT	1 NRK	19 PT	1 RYX	1 THW I	1 VSB I	1 YLY I
25 MP	NSH 7	1 PVR	SAG 96	TJP 23	1 VSG	1 YPS I
79 MPA	54 NSM	PWG 5	5 SBA	1 TKA I	1 VTB	1 YRL I

A80 UL	BEA 6IE	B120 OME	COM 4N	DOV 333E	APE 127A	GUT 73R	HOY 7E	LEA 5T	MCH 4IE	NOO 1I4N	PON 1ID	S4 KER	T4 UNT	W4I LEY
A82 AMS	B348 MER	BRU 153R	COM 83R	DOV 3R	F14 XEN	H14I NES	HUI AND	L3 GGE	ME18 ROY	NOR 832R	POO 1L	S4L IHH	TED I	W4I YSX
A23 ACT	B345 LER	82 YCE	COIL DON	DOW 3IIL	FLE 55H	HAIL IHL	HUS 4M	LEN 1IOX	M614 DOW	NOR 122T	PP0 773R	S4HI TER	TEE 5S	W4SI LAL
AD4 AD	BEA 7A	82 YN	CON 3R	DOY 1IIE	FLII TES	H415 ALL	JAB 48R	LEN 7ON	MED 13Y	N012 MAS	P24 SAD	SAY 73D	T3I FER	GWA 15H
AD6 13X	BEA 777S	B27 ONY	COO 1I3Y	DUM 80R	FLII TES	H415 ALL	JE14 NNE	LE55 LNS	MEE 3K	I NRM	PRII VET	SAY 32S	T3I PLE	WAM 29
AGA 2R	B33 LER	BUII ART	COO 7E	DUII HAM	FOL 4N	H41I SEY	J62 OME	LI4 NNE	MEE 5E	NOR 27H	PRO 832T	S4 YLE	T3 NCH	W4II DAS
AHE 2N	B13 ERE	BUD 613S	6 ORK	D1 YKE	FRY 9R	94 HAM	JES 73R	LOC 6K	MEH 74A	NUT 73R	PRY 9E	SCO 23R	THII MBS	WAN 135S
A177 KEN	BEE 2IE	BUN 7ON	CIO RKE	D7 SLO	GAB 80R	HAN 63R	LJO8 SON	LOD 6E	M3II KLE	OAT 6S	PUD 5IE	SEA 2S	THII URY	W412 NES
ALD 32R	BEG IIM	BUR 2N	CON 2R	D4 RON	94 NT	HAR 133R	JOI KER	LOR 3IIA	SME 1L	OHA 64N	PII UXX	S3II ENA	71 NYS	W4I2 NES
ALD 23D	B3 NYJ	BUR 2R	CON 23IA	EAP 2R	642 DEN	HAR 221J	JOII LYS	LOV 313Y	MEII LON	OLW 7N	PUL 13N	SEL IF	717 LEY	WAR 232N
ALE 7H	B3II SON	BUR 20W	COI2 SER	34 RTH	GAR 237H	HAR 220J	LUD 63E	LUC 4IN	MEI2 OSE	ORA 1IEE	PUI2 SER	SEII WYN	TOE 1R	WAS 37V
AL1 606K	BER 724M	BUR 27ON	COT 74M	EA03 RTH	G42I AND	HAR 220P	KAR 2IIN	LUK 3R	MEN 5	ORG 45M	PKY 3S	SHA 7IE	TOU 77IE	WAS 533M
ALM 4N	BE5I ONE	BUS IIH	80 COW	EA5I JCT	G4I2 NER	HAR 77E	K4II SAR	LIU ACY	M3II SAH	OSW 4ID	RAD 13Y	SHE 1I4A	TOT 150N	W444 TCH
ALT 74F	BE5I TVR	BUS 5E	BEN 60X	E8 VE	GAR 242D	HAT 773R	K34 TON	L7II NNE	M333 R3Y	OYS 7ON	RAM 4A	SHE IIC	724 CY	W44 TNE
AND 23S	BES 7ON	BUX 77ON	C12 ABB	II NTH	G42 TON	HAY 42D	KEE 93R	M46 KEY	MER 7ON	P444 GAN	RAM 463E	SHE 17ON	T24I NER	W445 YNE
AND 26W	83 VAN	87 RNE	C24 FTY	II MES	G42 VEY	HAY 773R	K3II LEY	MAC 134N	MIIE UEL	PAG 37T	RAM 503N	SHI ORE	T2 OUP	W34I THY
AND 223J	B16 DAY	CAII ELS	NCR 15P	ELS IIE	G45 SON	HEA 16Y	KEN I	M4 DGE	MIII ONK	PI4I MER	R4II GER	SHIO LEY	T120 UTY	WEB 813Y
A26 ENT	B16 MGB	CAI DLE	CRO IIE	SI 13Y	GEII DER	H34 TER	KEN IIT	MAG 90T	MOA 7T	PAI N5Y	RAT 724Y	SKA 73S	72 UDY	W33I DER
ARI 3II E	BLA IID	CAN 333E	ACI2 OOK	EMS 133Y	GEZ I	H323 HAW	K325 HAW	MAG IIL	MOC 6K	PAII TON	12 EES	SI ACK	THII KER	WEL 8Y
AS5I NLE	8IO UNT	CAII HAM	CRII TEN	EMS 5IIE	GHA 57IY	HEC 70IY	KE55 EL	M44 GOR	MI0N 164A	PAI2 DOE	REH 4IIA	SLO 4IIE	STII DOR	W3 LDY
ASH 88Y	80 DDY	CAN 7I	C12O WNE	EMY 7R	GHA 24IA	HEI6 GHT	KC5I REL	M4I LER	MOI2 AGS	P42 ESH	REL IF	SMA 1I3Y	THI2 NER	WEII AND
ASH IIOK	BOG IO	CAR 2D	CRII CIPS	FEII DER	GIB 8ON	HEI 3II E	K33 TLE	MAJ 357Y	MOI 2IG	P422 OTT	REN 47A	SNA 4I7H	UTT 7ON	WEI 13R
ASK 33K	BOL IIOH	CAI2 DEN	CUR 7IN	ERN 5HT	GII4 DYS	HEN 513Y	KEY 7I3S	MAM IIA	MO53 LEY	PAR 55ON	REP 7IIE	CUE IX	UTT IIG	W3I TON
ASK 3Y	BON IIA7	CAR 3N	CUT 73R	35T 35T	GII OME	HEN 1IIA	KEY I	M4II SON	MOU 17T	PAS 60E	R3 SCU	SOP 3R	UTT I3Y	WES 732N
A1IO REY	BOO 606K	CAR 155E	DAF 70R	ETII ELS	GOA 7IE	HEN 22Y	KEY 7S	M42 CEL	MOX IIE	PAI 2IGE	REU 73R	SIO UPS	VAL IIE	WII ALE
AWA 4N	800 N	C14 RNE	DAG 93D	ETII ELM	GIO DLY	HER 237T	KI2 TON	M42I ANA	MOY 7A	PAV 6I	RHO 17A	SIO UTH	VAL 32IA	WHA 713Y
I3 ACK	800 7S	C4I2 VER	DAM 133N	EVE 25ON	GOR I1E	HEW 37R	K176 HEN	MAR 133E	MUG 92	PEX 2ON	R16 DLE	SPE 6K	V4 USE	WII LDE
BAD IIAH	BOR 22OW	C47 TON	DAM 133S	EVE 27ON	GOU 5IIP	HEW 37T	K8A 66S	MAR 1I7N	MUII VEY	PAX 2IS	ROR 1IIA	SPE 12S	V3 ALE	WOL 7ON
BAG I3Y	BOS 706K	CAI SER	DAR 213Y	EWA 12I	GIO ULD	HEW 15H	KI7I BBS	M42I ENE	MUII DAY	P342 SON	2O CHE	STA 12T	V13 UNA	WOI1 BLE
B466 OTT	BOT IIAH	CAW 13Y	D422 OCH	EWA I1IS	GOU 214Y	HEW 177T	KON 24D	M24 LOW	MUT 713Y	PEA 4T	ROG 64N	STE 4R	V13 ENA	WON 6E
BAK 33S	BOV 3Y	C3I3 STE	D425 HAN	FAB 3R	GOU 213Y	HII DLE	KUR 77IS	MAR 20N	MUT 77ON	PEE 3K	206 ER	STE 2N	V10 LET	WOO 77ON
B4II UDY	BOW 3S	CHA IIA4	DEA 4R	F4 BRE	GOW 3R	H16 HEN	LAG 1E	M425 DEN	NAG 6Y	PEN 28S	20 HAN	STO 88S	V0G 4N	W100 RTH
BAL IE	BOW 32S	CHA I2M	D342 DEN	FAI2 EST	G247 TON	WH08 DAY	LAM 8E	MAR 27IN	NAH 4R	PEI DER	ROS 4IIE	STO 22IE	V0II CEZ	W0T 464R
B4IO GUN	BOW 13Y	CHA 73R	DEE 2Y	FAL 66ON	G12 AVE	HOL IIT	LAM 832T	M427 ANN	NAN 377E	PER 207T	ROS 72ON	SUE 4	V0II UOL	W216 LEY
BAM 9S	807 LE	CHE 3N	DEL IE	FAN 6G	G23 ENE	HON 13Y	L42I SAS	M50I CON	NAS I1H	I PERW	ROT 73R	SUII DAY	V07 LER	WUR 23L
B4II BER	824 VO	CHE 3W	DEII UCE	F42 HAN	G233 NER	HOR 18Y	LAR 12Y	MAS 13N	N477 HAN	PEX 7ON	ROW 33R	SUN 235H	V0W 13S	74 TES
B4I I3Y	BRA 213R	C134 NER	DEI2 HAM	FAR 2ID	G2 ET	HOR 513Y	LAS IIE	MAS 546E	N47 LOR	PHO 313E	20 XY	SU54 NNA	V10 WLE	Y34 TES
BAR 2R	B123 NDA	CHII FFE	D32 MOT	FH5I ONS	G236 ORY	HOS IIE	LAT IIN	MAY 606K	NEE 3D	PII ONE	RUB IIA	SU5I ACE	V10 YGR	YEB 804H
BAR 22IE	823 TT	CLII NCH	DES 12E	F457 DONG	GRII EFF	HOW 513Y	LAU 233N	MAY 57ON	NER 7S	PI4 GUE	RUB 7Y	T466 ART	W4I GHT	I YEH
BAT 7H	B23 WER	COI4 TES	D35I REE	FAW 637T	G2I MES	HOW 177T	LAV 32Y	M64 DAM	NE55 STA	PLA I1K	RUS 60E	TAI BOY	WAK 31N	YEL 8S
B4I I4M	BR12 GHT	COA 7S	D13 SKS	FEII CEZ	GUII NER	HOW I	LAV I1IN	MCB 210E	NEW I14N	SP12 ART	RUS 55ON	T422 ANT	W4I DEN	YOU IIG
B4W 773R	820 CK	TCO IE	DQG 637T	F3II DER	GUN 73R	HOW 137T	L3 AKE	MCC IE	NEW 55ON	POC 606K	RSY 242T	T4I2 TAN	W8 LKY	Y0II SEF
RAY 77ON	RR1I KFR	COII FTER	DQI OPS	F9R 2N	GIJR 2R	HOW 24T	134 SFD	M66I YNN	N1RL ETT	POI IJTT	SAB 444H	74Z 1FR	W4I IET	Y1II SEF

The World of Press Issue #1

Registrars

I THJ

**FREE MAGAZINE**  
with Supercar Supremo  
**Tom Hartley Jnr**



# OUR CARS.

A month in the life of 11 cars – starring Audi R8, Porsche Macan, Ford Edge, Audi Q5 & more

## The greatest of expectations

The Q7 we ran last year was so good, Audi had to take us to court to get it back. No pressure then, Q5. **By Chris Chilton**





HELLO  
MONTH 1  
AUDI Q5

'THE NEEDS OF a magazine force us to swap these cars every six months: I'd have happily driven this one for 10 years' – that was Ben Oliver talking about our recently departed Q7, and one of the most profound endorsements of a car I can remember reading in this magazine. The new Q5 has plenty to live up to.

And contrary to appearances, this is a new car, and not merely a facelift of the original. The new chunky grille-frame and scowling bonnet-line help make that clear at the front, and if you see old and new together the 2017 car's pronounced swage line does the same from the side. But from the back... I parked ours next to an old Q5 at a petrol station and had to look hard to spot the differences. It's a handsome car, though: more muscular than the Q3, and more athletic than the Q7. Think A5 Sportback reimagined for the Baja 1000.

Unlike other Audis, the Q5 range is surprisingly light on choice. Leaving aside the SQ5 for a moment, you get to pick from basic SE, starting at £37,240, better equipped and better looking Sport for £1100 more, and S-line trim for a further £2k, plus a stack of options. But when it comes to engines, there are only two: a 187bhp, 2.0-litre TDI and a 249bhp petrol, both with a seven-speed S-tronic twin-clutch 'box and awd.

Given a recent house relocation means I now do more miles than a public school hussy, the 2.0 TDI was the only sensible choice. But I went for the petrol Q5 for a couple of reasons. First, we know that TDI engine inside out but the petrol engine, falling halfway between a Golf GTI and a Golf R on power, is less of a known quantity, especially in an SUV. And second, because

whatever it does to the gallon can't possibly come as a shock after six months in a 550bhp AMG V8, especially when the combined fuel consumption figure is a very reasonable 40mpg. Okay, so we all know better than to believe the nonsense that is official fuel consumption figures, but since the tide seems to be turning against diesel, we're curious to see whether petrol power really is a viable alternative.

It certainly looks like the best choice if you want to get anywhere in a hurry. The diesel might eke a further 15 miles from every gallon, but it needs 7.9sec to reach 62mph, compared to just 6.3sec for the petrol. And though a diesel's superior torque output usually makes for more relaxing progress in a big car (the Q5 weighs 1875kg), its 295lb ft isn't that much better than the 273lb ft of the petrol. The TDI does fare slightly better in the company car tax battle thanks to its lower CO2 output, but you're only talking a few hundred quid a year, which keeps the petrol in the running, if not necessarily at the front.

Our car came in S-line spec, which brings an upgrade from 18- to 19-inch wheels, sporty leather and alcantara trim, and more aggressive bumpers for your £40k. But the price of our car was significantly inflated thanks to the addition of kit like 20-inch wheels (£900), matrix LED lights (£650), panoramic roof (£1400) and adaptive air suspension (£2000). It also has a couple of option packs: the Comfort and Sound pack, which delivers keyless entry, electric seats and a B&O hi-fi for £1250, and the £1100 Technology pack (better nav, a 36-month Audi Connect subscription to access online content, and a wireless phone charger that is absolutely useless to me because my iPhone doesn't support it).

That lot brought the total to £51,085, which is pennies away from the price of a completely option-free – but still well equipped and much faster – SQ5. And around £20k more than the cost of my family's own car, a current-shape A4 Avant. We might well return to both of those comparisons later in the loan.

For now, though, we'll finish with our early impressions of the Q5. It looks great, feels usefully roomy, and we're enjoying the refinement of the petrol engine over the typical chuntering diesel clatter you

expect when you punch the starter button in a modern SUV. In fact the Q5's overall refinement has really shocked me. It's so quiet and rides so well I'm struggling to think of another non-limo type car that's such good company on the motorway. Come back next month to find out if that honeymoon feeling has lasted. @chrischiltoncar

## LOGBOOK

### AUDI Q5 2.0 TFSI S-LINE

> **Engine** 1984cc 16v turbo 4cyl, 249bhp @ 5000-6000rpm, 273lb ft @ 1600-4500rpm > **Transmission** 7-speed dual-clutch, four-wheel drive > **Stats** 6.3sec 0-62mph, 147mph, 159g/km CO2 > **Price** £40,170 > **As tested** £51,085 > **Miles this month** 901 > **Total miles** 2460 > **Our mpg** 27.4mpg > **Official mpg** 40.4mpg > **Fuel this month** £166.26

CHRIS TEAGLES



iPhone and Audi's Connect system aren't getting on well; Virtual Cockpit still lovely

'Stand there, don't look cold and just smile will you? It's definitely the new Q5'



**GOODBYE  
MONTH 4  
PORSCHE  
MACAN**

**I HAD AN** interesting conversation with a former senior engineer at Porsche recently. He told me that in the run-up to the Macan's launch, Audi boss Rupert Stadler got the hump with the way Porsche people kept emphasising how much of the Q5 they'd changed when turning it into the Macan, as if there was something wrong with the Audi. Stadler phoned the then Porsche (now VW group) CEO Matthias Müller, and Müller summoned the Macan team to his office for a bollocking and an order to tone down the anti-Audi briefings.

They should have just waited. I've been driving this Macan Turbo for the past three months. I've been lucky enough to have tested most of the new cars Porsche has made for the past 17 years and plenty from the years before that too, and there's no question that this feels like a proper Porsche: amazingly so, given its origins. It's there in the consistent heft and precision of its controls, and in the mad explosion of switchgear, and in the way you get out of the car after a long trip feeling utterly unfatigued because the driving position is so bang-on. Vic Elford won the Targa Florio in 1968 in part because his Porsche 907 was comfortable and easy to



More buttons than an industrial accident at Cadbury's, but you probably won't mind

drive, so he stayed fresh. That subtle understanding has made its way through to the Macan.

Three months and nearly 4000 miles was not a stern enough test of this car. Of course nothing went wrong. I never entirely warmed to the looks: stretching sports-car styling over an SUV or saloon chassis often makes for an awkward result, and it took Porsche two goes to get it right with both the Cayenne and the Panamera. Despite my reservations about SUVs with hatchback profiles and the consequent effect on boot volumes in cars with 'utility' in the name, the Macan always coped with the considerable load-bearing demands of two toddlers and what marketing people would call an 'active lifestyle'. I absolutely loved the eye-widening pace of that twin-turbo V6 and the noise it made, particularly

## Every inch a Porsche

Given its shape, size and height, you'd be forgiven for thinking the Macan isn't a proper Porsche. You'd be wrong. **By Ben Oliver**



### COUNT THE COST

**Cost new** £87,430 (including £18,203 of options)  
**Dealer sale price** £74,768  
**Private sale price** £71,861  
**Part-exchange price** £61,203  
**Cost per mile** 25.5p  
**Cost per mile including depreciation** £2.60



the extra crack it emits on a full-bore upshift.

But I wonder if I enjoyed it enough in daily family use to justify the extra fuel cost of the petrol over the (pretty stellar) diesels, and more importantly the need to stop every 300 miles or so. This, rather than fuel bills, might be of greater concern to those able to spring 80 large for a baby Porsche. The greatest distances I saw from a tank were 320 and 350 miles, although the latter was really pushing it, and more than once I had to stop just short of my destination to fill up.

A recent week in a new 5-series – the wagon version of which might well be considered by buyers alongside the Macan – got me thinking about the Porsche's cabin. I love the analogue feel of all those buttons, and there's no shortage of tech and data. But after the Five's gesture control and animated, 360-degree camera views and screen the size of a swimming pool, the Macan felt a bit like a G-wagen despite being just three and a half years old. If you're a Porsche person you probably won't care, but our perception of our cars is increasingly governed by their tech; older models feel old faster now.

The Macan has a new and very direct rival in the Range Rover Velar. Speaking to Land Rover engineers it seems like the Macan was pretty much their only benchmark; probably with good reason. They certainly didn't try to copy it: the Velar's styling is gorgeous and unapologetically brash SUV below the glasshouse, and its reductionist cabin is the polar opposite of the Macan's. Yet Land Rover knows that the Velar needs to convince people not to buy the Macan. And despite its looks and newness and the claims it makes for its tech, I'm not convinced that it could. You have to wonder if anyone can get the rest of a car as consistently right as Porsche, regardless of its origins.

•@thebenoliver

## LOGBOOK

### PORSCHE MACAN TURBO

► **Engine** 3604cc twin-turbo V6, 394bhp @ 6000rpm, 406lb ft @ 1350rpm ► **Gearbox** 7-speed twin-clutch auto, all-wheel drive ► **Stats** 4.8sec 0-62mph, 165mph, 208g/km CO2 ► **Price** £62,540 ► **As tested** £80,743 ► **Miles this month** 1014 ► **Total miles** 9528 ► **Our mpg** 21.3 ► **Official mpg** 31.7 ► **Fuel cost overall** £988.05 ► **Extra costs** £0



CHRIS TEAGLES

# Pre-season testing – the highs and the highs

MONTH 4 CATERHAM SEVEN ACADEMY



## Finished, just in time

You may recall that I elected to build my Caterham Academy race car (which I actually start racing next month). With, *ahem*, a little help from Caterham technician Alex Betts, the car was finished in time for the pre-season Handling Day at Donington Park, a key date in the finely honed Academy programme that teaches car control, standing-start technique and passing scrutineering without rejection and tantrums.

## We meet at last

Two admin errors on the part of the wretched DVSA, keepers of the Individual Vehicle Approval (IVA) test required to make the Caterham road-legal, meant that I completed just a handful of miles in the car (don't ask where) ahead of the Donington Handling Day. Nonetheless I had a blast wildly flailing between cones in a consistent Midlands drizzle, 1.6-litre Ford power regularly overcoming Avon grip...



## You what?

...and managed to leave myself gobsmacked by setting the second-fastest time in the timed slalom event at the end of the day, just a tenth behind winner David Spare (blue overalls, big grin). I can't offer any explanation for this but took the natty branded Avon Tyres cap, the fetching glass trophy and the sporting congratulations of my equally gobsmacked Academy classmates nevertheless.



## Back down to earth

Next came a test day at Castle Combe, run in sessions like a trackday (20 minutes on; 40 minutes off, thinking about tyre pressures, fuel, racing lines and how much faster everyone else is). The hours streamed by in a haze of euphoric highs ('I'm on a track, going as fast as I can, in a car I bolted together!'), a couple of moments of blind panic and periods of sober contemplation – I have a lot to learn. **BEN MILLER**



SNAPPY RACERS

## LOGBOOK CATERHAM SEVEN ACADEMY

► **Engine** 1595cc 16v 4-cyl, 125bhp @ 6100rpm, 119lb ft @ 5350rpm ► **Transmission** 5-speed manual, open differential, rear-wheel drive ► **Stats** 5.0sec 0-60mph, 122mph, n/a g/km CO2 ► **As tested** £24,995 (includes race season) ► **Miles this month** 114 ► **Fuel this month** £24.69 ► **Extra costs** £100 (trailer hire)



# Mr Popular and his big yellow R8

Planet-wrecking examples of wanton excess? Nah, the supercar is a force for good – just ask James and his giggling band of ‘victims’

MONTH 7  
AUDI R8  
V10 PLUS

**BEAR WITH ME**, for I am about to expound a theory. I reckon supercars are fundamentally a force for good in the world; that they cancel out their carbon footprint by making people grin, giggle, even sometimes get a bit emotional as they travel. They’re designed with the utmost love and care, they rarely die a premature death in a scrapyard, and their purpose in life is to be shared with people, not to be locked away in air-conditioned garages.

As a temporary supercar owner, I feel it’s somehow my duty to share the R8’s superpowers with anybody who’s interested. No struck-up conversation at a petrol station has been ignored (top three stock answers: ‘602bhp’, ‘£132,000’ and ‘not that bad, actually, about 20mpg’), no proffered smartphone to take a souvenir snap of someone with the car, or request to let their kids sit in the driver’s seat, has been denied.

And I’ve tried to give rides to as many of my friends, neighbours and colleagues as possible. The worst possible crime in this job must surely be to become blasé, to fall immune to the magic. Seeing people’s juvenile excitement as they experience it for the first time is one way to make sure you don’t.

‘Um... how do you get in?’ The door handles are covertly recessed below the shoulder line. ‘It’s low, isn’t it!’ It is. ‘Whoohahaha!’ – uniform reaction to the V10’s over-theatrical flare of revs on start-up. ‘It’s actually really comfortable isn’t it?’ It really is, in terms of ride quality at least – try a long motorway journey in those seats and you might feel otherwise. ‘Will it

be alright over that speed bump?’ I’m yet to meet one it can’t manage. ‘Hahahahaaaaa...’ – more than a few passengers have intermittently burst into fits of giggles; which, come to think of it, is more or less what I did the first time I drove a supercar.

One of my favourite bits of car-based writing is Jean Linda-mood’s ‘A Ferrari among Friends’, from *Automobile* magazine in 1988, in which she takes 49 friends, neighbours and relatives for a spin in a Testarossa. ‘It seemed a little odd that no-one had much to say inside the car,’ she wrote. ‘Basically, they laughed a lot and then said “Thank you”.’

Nearly 30 years on, the R8 seems to have a similar effect. My mum’s next-door neighbour couldn’t finish a sentence without it turning into peals of laughter, some usually urbane friends whooped like a one-person Jerry Springer audience, and a few went unusually quiet. A journalist friend who writes about real things other than cars wrestled with a conscience in turmoil: ‘Dammit, I didn’t want to like it but I can’t help it.’ And another barely passed comment on the car. You can’t please everyone.

My mum has the last word. ‘It’s two cars in one, really, isn’t it? Because when you want it to be a fantastic sports car it is, but when you just want it to be comfortable it can be that too.’ Which sums it up quite nicely, really. She ought to do my job. ‘You will drive carefully, won’t you?’

**JAMES TAYLOR**

@JamesTaylor\_5

## LOGBOOK AUDI R8 V10 PLUS

- > **Engine** 5204cc 40v V10, 602bhp @ 8250rpm, 413lb ft @ 6500rpm
- > **Gearbox** 7-speed dual-clutch auto, all-wheel drive
- > **Stats** 3.2sec 0-62mph, 205mph, 287g/km CO2
- > **Price** £132,715
- > **As tested** £149,645
- > **Miles this month** 1534
- > **Total miles** 6701
- > **Our mpg** 21.0
- > **Official mpg** 21.9
- > **Fuel this month** £430.74
- > **Extra costs** £0







# Toyota's talented tortoise

It's clearly no performance car, but take a more relaxed approach and the Prius offers effortless high-mileage days. **By Matt Joy**

MONTH 6  
TOYOTA  
PRIUS

**EVEN THE MOST** pianissimo of electronic alarm sounds can't take the sting out of 5.20am on a Monday. I'd go as far as to

classify myself as a morning person, yet the first fully formed word that comes out of my mouth those days is usually rude. Technically dressed, I'm in the car and on the road by 5.40 which means the Prius regularly has to deal with me at my worst. Yet it gives back nothing but love.

Most weeks I'll be at the CAR moth-ership at least twice, which means a 240-mile round trip on each occasion. A thousand miles in a week isn't that remarkable but you probably wouldn't choose to squeeze it into two days. And let's be honest, you probably wouldn't choose to do it in an economy-focused hybrid vehicle either, right?

Sometimes there will be something else in the car park that seduces with the promise of increased comfort or performance, or even both. But frequently, what can often appear to be a better tool for the job falls foul of two obvious issues. Namely the fallacy that a faster car will get you home quicker, and secondly that a bigger, comfier car usually needs fuel more often.

It's an extreme example of course, but the other week I took home the latest Bentley Mulsanne, which shares the four doors and four wheels template of the Prius but just about nothing else. On the drive home, its 6.75-litre V8 dispatched all kinds of riff-raff with ease, my buttocks were both warmed and massaged (you're welcome) by the finest leather seat and my ears assaulted by incredible Naim audio. Yet I spent most of the journey watching in terror as it drank fuel – the Mulsanne swallowed over £60 for a return journey. Even if you drain the Prius's tank until it's running on nothing but optimism you won't squeeze more than £44 of unleaded into it, and that'll take you over 500 miles.

Not needing to stop is sometimes as good as going faster in the first place, as

Aesop will attest. And a billion horse-power is a complete waste of time when the outside lane of the entire motorway is filled with people who will stay in lane three until they drive into the sea.

The Prius also sits in something of a sweet spot on the performance spectrum. We'll not do it the disservice of pretending it's fast but, if you really want to, you can let the 1.8-litre motor roar along at peak revs and keep up with the faster motorway madness. But it gently discourages you from doing so, and without realising it makes you wonder what the point of rushing is. Engage the radar-guided cruise control, shuffle down into the comfortable seat and relax a little. The JBL stereo costs a fraction of the Bentley's Naim system but will thump your skull or serenade you with equal enthusiasm.

There's fun to be had in the preservation of momentum too. Electric power steering means there isn't a huge amount of feel, but the skinny eco tyres mean it steers sweetly, and you can pretend it's all in the name of economy as you kiss the apex on three wheels.

Don't let anyone tell you driving a Prius can't be a laugh.

● @MJMattJoy



**Matt Joy,** 'technically dressed' and probably up on three wheels



↑ Prius downside: your fuel station loyalty card points tally will all but flatline

## LOGBOOK TOYOTA PRIUS EXCEL

➤ **Engine** 1798cc 16v 4-cyl, 97bhp @ 5200rpm, 105lb ft @ 3600rpm, e-motor 71bhp, 120lb ft ➤ **Gearbox** Electric CVT, fwd ➤ **Stats** 10.6sec 0-62mph, 112mph, 94.2mpg, 76g/km CO2 ➤ **Price** £27,755 ➤ **As tested** £28,300 ➤ **Miles this month** 2539 ➤ **Total** 9258 ➤ **Our mpg** 55.17 ➤ **Official mpg** 94.2 ➤ **Fuel** £291.44 ➤ **Extra costs** £0



# She's a grower

Everyone else has their doubts about our Ford Edge – except the bloke who's spent 13,000 miles discovering its practicality and rugged charm. **By Ben Miller**

## COUNT THE COST

**Cost new** £39,965 (including options worth £5470)  
**Dealer sale price** £32,089  
**Private sale price** £30,979  
**Part-exchange price** £29,724  
**Cost per mile** 12p  
**Cost per mile including depreciation** 90p

Edge lacks a third row, but the upside is a boot like a studio flat



GOODBYE  
MONTH 6  
FORD EDGE

**SIX MONTHS AGO** I met with a man in the windblown car park of a motorway services at Baldock. It was November, and the sting in the wind had nothing of summer's softness.

That man was the immaculate Ben Whitworth, the reason for our meeting the handover of the Ford Edge. I'll spare you the mind-numbing logistics, but Ben ran the car for the first couple of weeks of its time with us. Then I decided that I really, really wanted the Ford. To secure it, I offered Ben a straight swap for the Lotus I was due: science is yet to be able to accurately measure periods of time as brief as that which elapsed between suggestion and acceptance. Me, I couldn't wait to get my hands on the all-wheel-drive, generously-booted Edge. Dog ownership and the cost of flights for a family of four to the Alps in ski season do curious things to man.

As Ben handed me the key he told me, 'Look, it's not very inspiring but I've no doubt it'll blend into your life so seamlessly and completely you'll wonder how you ever did without it.'

How right he was. I've been fortunate enough to run an M3 and a McLaren 650S previously. While handing them back hurt, the loss was emotional rather than practical. You grow dependent on the way mid-engined supercars and spectacularly lairy M cars can rub a little magic on the everyday, and how good a twin-turbo, big-capacity engine on sports exhausts sounds at full chat under bridges. But there was nothing especially challenging about the day after both of them left my life.

By contrast losing the Edge will cause actual problems. How am I going to transport the dog without 602 litres of ideally shaped boot? What am I going to use to tow the trailer I often hire to get our Caterham racer to far-flung events? How will the boys cope when whatever I replace the Ford with will invariably lack such generous rear legroom (one's already 6ft 3) and the rear seats' three-pin plug charger and nuclear bum-warmers?

Weird thing is, I'm the only member of the CAR team to



No Macan, but then what else is?

really like the Edge. Those who borrow it for the odd evening and weekend come back talking only of the odd steering, the bizarre panel gaps to the bootlid (yawning on the left; non-existent to the right), the sub-par interior quality and the fact that, despite being huge, the Edge's packaging – and rakish rear window angle – mean there's no third row of seats. They talk of how, thanks to the eddies coming off the mirrors, you can't see anything in them in heavy rain on the motorway. Of how the collision-detection warning panics needlessly at parked cars, and how the aggressively illuminated cup-holders make unwanted lighthouses of water bottles at night. But they haven't lived with the Ford, only dallied with it.

Put in the time, and affection and respect grow like a lawn in April's sunshine and showers. I don't even think it handles too badly, certainly if you avoid driving X5s, Macans and Evoques for the unfavourable comparisons they tend to throw up.

But have I actually fallen in love with the Ford, or merely had my first full immersion in the compellingly practical world of SUV ownership? Probably the latter. Sure, an X5 is better to drive, an XC90 infinitely nicer to be in and the Discovery a machine with more space, prestige and off-road ability than the Edge could ever dream of, but all are in a different league on price, or so you might think. Problem is, the Ford isn't cheap. £30k in its most basic form, my mid-range Titanium is a £40k car – Discovery Sport territory, complete with third row of seats, HSE spec and comparable diesel performance. Go for the admittedly smaller Tiguan (the Touareg's the right size, but its V6 engines price it out of comparison) and you're into top-of-the-range R-Line money, or a nicely optioned Q5 Audi.

It's opened my mind, then, Edge ownership. Over time, and by doing all that I've asked of it with ease, it's persuaded me SUVs aren't silly cars bought in response to irrational fears. They're bought because they work: they're relaxing to drive, great at doing all that families need to do and, with their whiff of adventure rather than failed contraception, easier on pathetic egos than an MPV.

If pushed I'd have to say I wouldn't buy an Edge, but that won't stop me missing its versatility terribly.



Edge is leaving - dog is inconsolable

All-wheel drive subtle but effective

Big, but array of sensors takes stress out of parking

#### LOGBOOK FORD EDGE

> **Engine** 1997cc 16v turbodiesel 4-cyl, 207bhp @ 3750rpm, 332lb ft @ 2000rpm > **Transmission** 6-speed automatic, all-wheel drive  
> **Stats** 9.4sec 0-62mph, 131mph, 149g/km CO2 > **Price** £34,495  
> **As tested** £39,965 > **Miles this month** 3405 > **Total miles** 13,179  
> **Our mpg** 34.9 > **Official mpg** 48.7  
> **Fuel cost overall** £1585.90  
> **Extra costs** £747 (dog bars, boot liner, replacement front Continental tyres)



1

### FINE VIEW

All that goldfish-bowl glass means superb visibility – up to a point. The combination of narrow rear screen and a wiper that fails to clear the top quarter of the glass means the rear-view reversing camera is vital. It's a similar story with the front screen – yes, it's vast, but in wet weather the driver's wiper stops four inches short of the A-pillar to create a spot perfect for hiding oncoming cyclists and motorbikes.

5

### IT GOES WELL

Initial get-up-and-go from the 130bhp 1.6-litre diesel is laid-back at best, but once it's up and running the 1601kg Renault cruises along at a decent clip. Steering is lifeless but quick and direct, so you can point the big Renault accurately into corners with a surprising lack of arm-twirling. The ride quality is relaxed and languid but on broken blacktop, those big 20-inch wheels make for jittery progress.

# 5 reasons to admire the Scenic

Month three with Renault's bold family bus and already it's making plenty of sense. **By Ben Whitworth**

MONTH 3 **RENAULT GRAND SCENIC**

2

### SLICK INTERFACE

That screen looks great, and it's big and crisp like a good poppadom. Once you get your head around its over-wrought menu system, it's intuitive. The sat-nav is fast to react, and the split-screen layout means plenty of useful info. Downsides include splitting functions between analogue and digital – for example you adjust temperature using dials, but tweaking airflow means going into two menus.

3

### FINE FOR FIVE

As the owner of a new Seat Alhambra – you know, the boxy one with the sliding rear doors – I feel well placed to pass judgement on the Renault's people-carrying qualifications. As a five-seater the Grand Scenic excels. The seats are superbly comfortable, there are generous levels of lounging space, oddment storage capacity is plentiful and the boot is cavernous. But the two third-row seats are small, cramped and best reserved for children who need ferrying short distances. A full seven-seater? I'll take the Alhambra.

4

### GOT GEAR

Some of the equipment is worth its weight in gold: some of it, well, not so much. The standard-fit, full-length glass roof is a joy, flooding the cabin with light. And when it connects to my iPhone the £500 Bose stereo is outstanding. On the downside the driving modes seem gimmicky – a sports exhaust note on a 1.6-litre diesel bus? Pur-LEASE.

### LOGBOOK

RENAULT GRAND SCENIC DYNAMIQUE S NAV DCI 130

► **Engine** 1600cc 16v, 4-cyl turbodiesel, 130bhp @4000rpm, 236lb ft @1750rpm  
 ► **Transmission** 6-speed manual, front wheel drive ► **Stats** 11.4sec 0-62mph, 118mph 119g/km CO2  
 ► **Price** £28,445 ► **As tested** £31,080 ► **Miles this month** 2003  
 ► **Total miles** 4556  
 ► **Our mpg** 45.9 ► **Official mpg** 61.4 ► **Fuel this month** £258.62  
 ► **Extra costs** £110



## THE REST OF THE FLEET



Steve and his  
£200k portable  
micro-climate

## Bentley Continental GT

**MONTH 4** By Steve Moody

**EVERY TIME THE** sun is out my kids insist on poking the button to lower the roof, even when it's five degrees with a stiff north-easterly. They're fine, because the V8 creates so much heat the cabin has its own tropical micro-climate and they're little and sit in a fug of warmth, but I reckon I look like a smug arse, rubbing people's noses in my imaginary richness.

Then they make me play their bloody music too, and the remarkable Naim sound system is so epically powerful it turns the Conti into a portable Little Mix concert. Which because there's no roof, everyone can hear.

So we turn up at the school gates looking and sounding ridiculous, me with an ice cream headache, while mums look on askance at the gauche nouveaux. Secretly, I'm bloody loving it.

**LOGBOOK** BENTLEY CONTINENTAL GT V8 S CONVERTIBLE

> **Engine** 3993cc, V8, 521bhp, 502lb ft > **Gearbox** 8-speed auto, awd  
> **Stats** 4.3sec 0-62mph, 192mph, 258g/km > **Price** £164,800  
> **As tested** £196,575 > **Miles this month** 688 > **Total miles** 4137 > **Our mpg** 20.9 > **Official mpg** 26.7 > **Fuel this month** £184.07 > **Extra costs** £0



## BMW i3

**MONTH 5** By Tim Pollard

**SUICIDE DOORS**, coach doors, rear-hinged doors... the BMW Group has form with unconventional hinges, although the i3's 'opposing doors' are somewhat smaller than those on distant Rolls-Royce cousins. They add just 28cm extra space to access the rear bench; this is disguised by the fact that the front doors have to be open first – a tad unhelpful when offloading the kids. And front seatbelts must be unbuckled, too...

Still, there are upsides. The i3's back doors are cooed over far and wide, adding to the streetside drama. And the lack of a B-pillar means that clambering in and out is a cinch. Room for legs and heads is adequate for adults and generous for kids, helped by the lack of a transmission tunnel. The i3 isn't often used as a family car, but it trumps many superminis.

**LOGBOOK** BMW i3 RANGE-EXTENDER

> **Engine** 168bhp e-motor plus 647cc, 2-cyl range-extender > **Gearbox** Single-speed auto, rwd > **Stats** 8.1sec 0-62mph, 93mph, 13g/km CO2 > **Price** £31,560  
> **As tested** £37,009 (with grant) > **Miles this month** 697 > **Total** 5178  
> **Our mpg** 199.7 > **Official mpg** 471 > **Fuel this month** £19.57 > **Extra costs** £0

## Seat Ateca

**MONTH 2** By Phil McNamara

**I'VE QUICKLY GOT** the measure of the Ateca, both good and niggling. Most importantly, it's fine dynamically, handling like a sorted estate rather than a roly-poly SUV. Compare it with Ben Miller's Edge: the Seat's responsive and the consistent steering shames the Ford's. The Seat can't match its languid ride though. And with my last four cars having run diesels, the 1.4 petrol's smooth civility from idle to 4000rpm is welcome. No point revving it harder as it becomes strained, and short-shifting boosted mpg to 34.6 this month. There are snags, though. The DAB radio loses reception four or five times per commute and this Ateca is sensitive to crosswinds. And despite following the manual's tips, I can't get the mirrors to automatically fold when parked.

**LOGBOOK** SEAT ATECA XCELLENCE 1.4

> **Engine** 1395cc 16v 4-cyl, 148bhp, 184lb ft > **Transmission** 6-speed manual, front-wheel drive > **Stats** 8.5sec 0-62mph, 125mph, 123g/km CO2 > **Price** £24,440 > **As tested** £28,650 > **Miles this month** 2051 > **Total** 3311 > **Our mpg** 33.5 > **Official mpg** 52.3 > **Fuel this month** £299.22 > **Extra costs** £0



Phil, singing to  
himself again  
because DAB's  
dropped out

## VW Passat Estate

**MONTH 11** By Anthony French-Constant

**FROM ITS SNUG** socket atop the dashboard, the Sea Fury gun-sight sliver of smoked glass that is the head-up display continues to leap up and down like a hermit's fist; a constant reminder that one of the Passat's few shortcomings is the absence of memory presets by which the missus and I may store our favoured driving position and settings. In an ideal world, the scope of said presets would not only encompass a driver's seat bizarrely power-operated in the seatback-rake department only, but also the air conditioning, radio and mirrors.

Then all that will be lacking on changeover is a large waste-paper basket in the centre console and a spring-loaded phone cable to re-house our current remorseless tangle of excursion-bent electronic tapeworm.

**LOGBOOK** VW PASSAT ESTATE GT 2.0 BI-TDI 4MOTION

> **Engine** 1968cc 4-cyl turbodiesel, 237bhp, 369lb ft > **Gearbox** 7-speed twin-clutch auto, awd > **Stats** 6.3sec 0-62mph, 147mph, 140g/km CO2 > **Price** £36,550 > **As tested** £43,310 > **Miles this month** 977 > **Total miles** 9360  
> **Our mpg** 37.1 > **Official mpg** 52.3 > **Fuel this month** £152.02 > **Extra costs** £0



The electronic  
tapeworm is  
camera-shy



# THE ULTIMATE IN PERFORMANCE UPGRADES AT DMS AUTOMOTIVE WE'VE BEEN UNLEASHING AUTOMOTIVE PERFORMANCE FOR OVER 19 YEARS



**DMS CLS63 AMG (EVO AUGUST '14)** "ENGINE UPGRADE ADDS HUGE PERFORMANCE AND REAL CHARACTER"

**DMS 1M (EVO MARCH 12)** "THERE'S A REAL RIP TO THE WAY THE REVS PILE ON ABOVE 4000RPM"

**DMS SL65 BLACK SERIES (EVO OCTOBER '10)** "IT FEELS LIKE THE LOVE CHILD OF AN SL65 AND A PORSCHE GT2"

**DMS 135i (BMW CAR MAY '09)** "THE STANDARD CAR IS GREAT BUT DMS HAVE SOMEHOW MANAGED TO TAKE IT TO THE NEXT LEVEL"

**DMS 997 TURBO 3.6 (EVO SEPTEMBER '08)** "IT'S EPIC, HILARIOUS AND ADDICTIVE IN EVERY GEAR, YET DOCILE WHEN CRUISING"

**DMS 997 TURBO 3.8 PDK (EVO JUNE '11)** "DELIVERY IS ALMOST UNCOMFORTABLY FORCEFUL"



**BELOW IS A SMALL SELECTION OF OUR MORE POPULAR MODELS TO UPGRADE. WE ARE ABLE TO UNLEASH PERFORMANCE FROM SMALL FOUR CYLINDER DIESEL ENGINES UP TO V12 SUPERCARS.**

## AUDI

AUDI RS6 4.0 T V8 » 690+BHP (+DE-LIMIT)  
AUDI RS6 V10 » 680+BHP (+DE-LIMIT)  
AUDI R8 V10 » 592+BHP (+DE-LIMIT)  
AUDI RS4 B7/ R8 » 445 BHP (+DE-LIMIT)  
AUDI RS3/RSQ3 » 420+ BHP (+DE-LIMIT)  
AUDI S3 / GOLF R » 373+ BHP (+DE-LIMIT)  
AUDI 3.0TDi (ALL MODELS) » 315+ BHP  
AUDI 3.0 Bi-TDi (ALL MODELS) » 380+ BHP  
AUDI Q7/A8 4.2 TDi » 400+ BHP

## BMW

M5 V10 » 548+ BHP (205 MPH)  
X5M / X6M » 618+ BHP  
1M » 411+ BHP  
M3 E90/92 » 445 BHP (+DE-LIMIT)  
M135i/ M235i » 402 BHP  
M4/M3 3.0T » 520+ BHP  
M5 F10/M6 (STAGE 1) » 680 BHP  
M5 F10/M6 (STAGE 2) » 730 BHP  
F10 520D » 240 BHP  
F10 530D » 305 BHP  
335i/135i/X6 » 370+ BHP (+DE-LIMIT)  
123D » 252 BHP

316D/216D/116D » 160 BHP  
318D/218D/118D » 225 BHP  
330D E90 » 296+ BHP  
320D E90 » 215 BHP  
420i/320i/220i/120i » 275+ BHP  
435i/ F30 335i » 390 BHP  
428i/328i » 295 BHP  
535D / 335D / X5 SD » 355+ BHP  
640D/335D/535D/435D » 390 BHP  
730D » 305+ BHP  
X5 4.0D / 740D » 370 BHP  
X5 3.0D » 305 BHP  
X6 X5.0i 4.4 » 500+BHP  
X6 M50D/X5M50D/550D » 450 BHP

## MERCEDES-BENZ

A200CDi/C200CDi/E200CDi » 175 BHP  
A250/C250 » 260 BHP  
A45/CLA45 » 420 BHP  
C300 HYBRID » 285 BHP  
A220CDi/C220CDi/E220CDi » 215 BHP  
C350/CLS350/E350/S350 » 315 BHP  
E400 /C450 » 420+ BHP  
C400 » 400 BHP  
'63' 5.5 Bi-TURBO ALL MODELS » 690+BHP  
'500' 4.7 Bi-TURBO ALL MODELS » 498+BHP  
S65 (W222) » 780 BHP  
SL65 BLACK » 720+ BHP (+DELIMIT)  
SL65 AMG » 690 BHP (+DE-LIMIT)  
'55' AMG KOMPRESSOR » 580+BHP  
C63 AMG 6.3 » 530+BHP (+DE-LIMIT)

C63 AMG 4.0T » CALL FOR DETAILS  
SL63 AMG 6.3 » 560+BHP (+DE-LIMIT, RE-MAP & LOWER ABC SUSPENSION)  
CL600 Bi-TURBO » 580+ BHP  
SLK55 AMG » 420+ BHP (+DELIMIT)  
320 CDI V6 » 274 BHP  
350 CDI V6 » 312 BHP  
420 /450 CDI V8 » 358 BHP

## ALL 2015 RANGE ROVERS AVAILABLE

R ROVER SC 5.0 » 580+ BHP  
R ROVER 4.4 SDV8 » 395+ BHP  
R ROVER 3.0 TDV6 » 315+ BHP  
R ROVER 3.0 SDV6 » 345+ BHP  
EVOQUE/DISCO SPORT 2.2 DIESEL » 240+ BHP

## PORSCHE

997 TURBO/S 3.8 INC PDK » 611 BHP  
997 TURBO 3.6 » 625+ BHP  
997 GT2 RS » 670+ BHP  
996 TURBO/GT2 » 600+ BHP  
997 CARRERA S PDK » 400+ BHP  
997 CARRERA S » 376+ BHP  
997 CARRERA PDK » 368 BHP  
997 CARRERA GTS » 435 BHP  
997 GT3 UP » 436 BHP  
BOXSTER 3.4S » 336+ BHP  
CAYMAN S » 342 BHP  
MACAN 3.0D » 315 BHP  
CAYENNE GTS » 440 BHP

CAYENNE TURBO 4.8 » 578+ BHP  
CAYENNE TURBO S 4.8 » 600+ BHP  
CAYENNE 4.2 DIESEL » 450+ BHP  
CAYENNE DIESEL » 315+ BHP  
PANAMERA TURBO » 600+ BHP  
PANAMERA DIESEL » 315+ BHP

## EXOTIC / MISC

FERRARI CALIFORNIA » 487 BHP  
FERRARI 599 » 647 BHP  
FERRARI 430 » 525 BHP  
GALLARDO » 546 BHP  
LP560 » 608+BHP  
LP640 » 707 BHP  
HURACAN » 640+ BHP  
AVENTADOR » CALL FOR DETAILS  
MCLAREN MP4-12C » 700 BHP  
MCLAREN 650S » 720 BHP  
MURCIELAGO LP640 » 707 BHP  
MASERATI Ghibli 3.0S PETROL » 470 BHP  
MASERATI Ghibli 3.0 DIESEL » 312 BHP  
MASERATI GT/SPORT » 438 BHP  
MASERATI GT S / MC » 479+ BHP  
BENTLEY 4.0 T V8 » 690 BHP  
BENTLEY CGT / F-SPUR (INC 2013) » 680+ BHP  
BENTLEY GT SPEED (INC 2013 ON) » 695 BHP  
BENTLEY SUPERSPORT » 720+ BHP

**FOR ALL OTHER MAKES AND MODELS, PLEASE CALL US.**

SALES@DMSAUTOMOTIVE

WWW.DMSAUTOMOTIVE.COM

WORLDWIDE OFFICES AND INSTALLATION

UK: 0800 030 5555 INT: +44 800 030 5555



/DMSAUTOMOTIVE  
FOLLOW US FOR OUR LATEST NEWS



**MORE  
BHP  
EQUALS  
LESS  
RPM  
EQUALS  
MORE  
MPG**





# GBU.

Totally unique guide to EVERY car on sale in the UK, with a punchy view on all of them – yours included

## The Good, the Bad & the Ugly

### ABARTH

#### 500 ★★★★★

> Pricey pocket rockets, all powered by 1.4-litre turbos in various stages of steroidal over-compensation. Divine details, dodgy dynamics  
> **VERDICT** Like a small yappy dog: noisy, excitable and likely to give you a headache

### ALFA ROMEO

#### MITO ★★★★★

> Decent engines but generally rubbish to drive, Alfa's soggy-handling, hard-riding premium mini is crucified by the real thing and Audi's A1  
> **VERDICT** At least it's got its looks. No, wait. It's an ugly Alfa. It's got nothing

#### GIULIETTA ★★★★★

> Looked like a credible Golf rival for a while but now the game has moved on. Keen prices, but rivals are roomier, classier and more fun to drive  
> **VERDICT** Miles better than a Mito. Miles better than a 4C, even. Miles behind a Mk7 Golf

#### 4C/4C SPIDER ★★★★★

> Sexy carbon two-seater over-promises and under-delivers on a double-your-dong-length web-scam scale. Spider a step in right direction  
> **VERDICT** Shoots to the moon, hits itself in the foot. Elise more fun, Cayman a better bet

#### GIULIA ★★★★★

> Good grief – an Alfa Romeo we can finally recommend that you buy. New, auto-only 3-series rival has sharp steering, sultry looks, great driving position. *Bellissimo!*  
> **VERDICT** Note to dealers: don't cock it up

#### STELVIO ★★★★★

> Either we've collectively entered into another dimension or Alfa has just built two excellent cars in a row. Now we just need everyone to start buying them again  
> **VERDICT** Worth the risk at least once in your life

#### GIULIA QUADRIFOGLIO ★★★★★

> Like a regular Giulia doped up by Lance Armstrong, this 191mph, 503bhp rocket is a quadruple shot of espresso for Alfa's long lamented soul. At last  
> **VERDICT** The closest you can get to a four-door Ferrari. Really. *That good*

### ALPINA

#### D3/B3 ★★★★★

> Twin-turbo petrol and diesel stonk and smooth auto 'boxes mated to a quality chassis, but watch for some questionable OAP-spec interior finishes  
> **VERDICT** Try an xDrive D3 Touring – it's what the M3 wants to be when it grows up

## NEW IN THIS MONTH



#### Mercedes-Benz E-Class Coupe

'Like coupes used to be before everyone decided they need to be 'Ring-meisters'

#### Vauxhall Insignia Grand Sport

'Plenty of effort but a lack of inspiration makes it too close to how you'd hope an Insignia isn't'



#### Ferrari GTC4 Lusso T

'Deleting four cylinders and a driven axle sneaks the GTC under the psychologically distressing £200k barrier'



#### D4/B4 ★★★★★

> Same blend of fast and frugal as above but slotted into slinkier 4-series shell. ZF auto not as snappy as M4's twin clutch, but much smoother  
> **VERDICT** 53mpg and 62mph in 4.6sec? And you're alright with this, BMW?

#### D5/B5 ★★★★★

> Twin-turbo B5 petrol V8's 590lb ft could de-forest the Amazon while planet-loving D5 doesn't let meagre 155g/km prevent 174mph max  
> **VERDICT** M5 alternative with Touring body option you can't have with the real thing

#### B7 ★★★★★

> BMW doesn't make an M7, but Alpina does. Twin-blown petrol V8 delivers 'bahn-busting performance that's best

enjoyed in Germany  
> **VERDICT** Niche S63 alternative hamstrung by the ugliness of the raw materials

#### XD3 ★★★★★

> X3 35d-based high-rise hot-rod delivers 350bhp, 516lb ft, and the horizon through your windscreen. Spoiled by a rock-hard ride  
> **VERDICT** Another niche BMW Munich leaves to Alpina, maybe 'cos Porsche Macan is better

### ARIEL

#### ATOM ★★★★★

> Only the Pope's lips get more up close and personal with the tarmac than an Atom driver, but there's zero protection when the heavens open  
> **VERDICT** Spectacular toy. Great on track, barmy on road. Chassis doubles as a clothes airer, which is just as well...

#### NOMAD ★★★★★

> Not content with terrifying on tarmac, Ariel now offers the off-road Nomad. Gains a roll-over structure but still no doors  
> **VERDICT** Don't forget to put the hot water on – you'll be needing a bath when you get home

### ASTON MARTIN

#### VANTAGE V8/GT8 ★★★★★

> Ageing entry-level Aston has ace steering, but make sure you go manual: plodding semi-auto is as dynamic as a Ron Dennis interview  
> **VERDICT** 'Monica Belucci' on the age/desirability scale; madcap GT8 tactile but not as fast as it looks

#### VANTAGE V12/GT12 ★★★★★

> Cramming a huge V12 into the V8-sized engine bay was apparently the easy bit; it's taken Aston until 2016 to add a manual gearbox. Worth the wait  
> **VERDICT** Chassis finally has the stick shift it deserves. Buy it no other way

#### DB11 ★★★★★

> First genuinely new Martin in a decade gets slick aero slinkiness, belting V12 turbocharged charmer and, most crucially, Mercedes help with the wiring  
> **VERDICT** Finally the right blend of much needed new stuff and classic Aston charm results in a cut-above GT. Eat your heart out, Europe!

#### VANQUISH S ★★★★★

> Not quite funeral parlour dressing but lipstick and sorted underpinnings come too near the end of the Vanquish. A pity, because the DB11 is both fresher and cheaper. Oops  
> **VERDICT** Instant respect, even though you've bought the wrong Aston

#### RAPIDE ★★★★★

> Take that, Panamera! Aston shows Porsche how to make a supercar/saloon cocktail. Forget limo pretensions, though: it's a four-door 2+2  
> **VERDICT** Pretty, but interior more dated than a New York socialite and as hard on your wallet

### AUDI

#### A1 HATCH/SPORTBACK ★★★★★

> Posh Polo does it all, from 1.0 miser to S1 micro rocket. Not cheap, even before you've splurged on options. £30k is a mouse click away  
> **VERDICT** Classy Mini rival that doesn't turn into Quasimodo when you tick the 5dr option

#### A3 HATCH/S'BACK/SALOON ★★★★★

> Mid-life update adds exterior angles, three-pot engine and optional digi-dash. Still king of quality in this sector, but adrenalin isn't among extra standard kit  
> **VERDICT** Brilliant hatch and not much financial gulf to a Golf. Try sporty S-Line on supple SE chassis

#### A3 CABRIOLET ★★★★★

> Premium sun-grabber without macho sports-car posturing. A bit tight in the back, but pretty tight in the bends too. Try a 1.8 TFSI with Sport trim  
> **VERDICT** Asexual drop-top for sensible-shoes types. Worth the £2k premium over Golf

#### S3/RS3 ★★★★★

> Further proof that the Germans are still power junkies at heart. 296bhp S3 is trouble enough, while new 362bhp RS3 will do 174mph. Achtung, baby  
> **VERDICT** Far better than they used to be, but not as exciting as they should be. Buy a Golf R



**RS3 SPORTBACK ★★★★★**NEW  
ENTRY

> The superhatch for those lacking in imagination and/or driving talent, RS3 struts its stuff best in a straight line. But 4.1 to 62mph is well weapon > **VERDICT** Only feel a little bit ashamed for wanting one

**A4 SALOON/AVANT/ALLROAD ★★★★★**

> All-new A4 is Captain Obvious in every way: lighter, smarter, better to drive – and only microscopically different to look at > **VERDICT** As you were, except inside, where tech obsession offs elegance. Rivals remaining calm

**RS4 ★★★★★**REPLACED  
SOON

> Brutal RS treatment makes a monster of no-hum A4. No 4dr, no manual and no turbos, this wicked wagon's V8 redlines higher than Ferrari's 488 GTB > **VERDICT** Pace and space, but rides like the tyres have a tic. No match for new C63

**A5 SPORTBACK ★★★★★**

> Sadly more tech and even better quality doesn't compensate for a lack of personality. Better looking, then so is Dorking after eight pints. You could buy worse but you'll definitely get bored > **VERDICT** Better to live in than to drive

**A5 COUPE/CABRIO ★★★★★**

> Deceptive bunny boiler – looks normal until you realise it's killed a TT and is wearing its face. Cue B-road mayhem. Not really > **VERDICT** Even more of an A4 in a frock than the last one, but still better to drive

**RS5 ★★★★★**REPLACED  
SOON

> Has iconic Quattro arches, but feels like it was engineered down the Arches at Phil Mitchell's *EastEnders* den of bodgery. Cramped too > **VERDICT** Great V8 can't save misfiring flat-footed coupe. Buy a BMW M4, or the better RS4

**A6 SALOON/AVANT/ALLROAD ★★★★★**

> Demure big Audi an unsung hero, refined and cheap to run. Allroad an SUV for agoraphobics; twin-blown 309bhp BiTDi a proper mischief maker > **VERDICT** Base models short on wow, but a solid alternative to better-handling Jag XF

**RS6 ★★★★★**

> For wealthy mentalists who think the S6's 444bhp isn't enough, RS6 delivers 25% more and gives the new R8 V10 a hard time at the lights > **VERDICT** Beautifully finished all-weather family wagon that scares supercars silly

**A7 SPORTBACK ★★★★★**

> Slant-roof A6 takes styling cues from pretty '60s 100 coupe but can't out-cool Merc's CLS. More grippy than a sloth whose been sloppy with the superglue > **VERDICT** Stylish GT with sensible engines, but a sports saloon? My RS, maybe

**RS7 ★★★★★**

> Pricier, less practical RS6 with fastback rear, same guts but gets clever rear diff as standard for oversteer here, there and everywhere given room > **VERDICT** An Aston Rapide for the Agoraphobic, but we'd have the naughtier RS6

**A8 SALOON ★★★★★**REPLACED  
SOON

> Audi's elder statesman for elder statesmen has more tech than CES at Vegas – but who wants people to think they're being chauffeured in an A4? > **VERDICT** Gadgets galore, but Merc's incredible S-Class nails the luxury basics better

**Q2 ★★★★★**

> Odd-looking small SUV is like a Countryman that's lost a battle with a set-square. Nice enough to drive but still a nerd to the Mini's prom queen > **VERDICT** The Q doesn't stand for Quasimodo. Probably

**Q3 ★★★★★**

> Dumpy dinky faux field forager is a yummy mummy fave. Forget 4wd and the diesels and go for light, zippy, 1.4 TFSI > **VERDICT** So much better to drive than it looks. Which it'd have to be, right? Unless it was an Alfa

**RSQ3 ★★★★★**

> Audi's first tall-boy RS model. Hearing of the £45k price or unleashing that 335bhp five-pot both elicit same incredulous gasp > **VERDICT**

Who needs this stuff? Short people in a rush? What we do know is it's better than a GLA45 AMG

**Q5 ★★★★★**

> A4-MLB2 in Barbour, Q5 ups the comfort, tech, looks similar to the old one... textbook Audi v2.0 in other words, but still something you'd want on your drive > **VERDICT** Expect to be swearing at one soon

**Q7 ★★★★★**

> German heavy metal turns techno as Mk2 Q7 sheds weight despite megaload of extra gizmos. High-performance SQ7 TDI mind-bendingly adept > **VERDICT** They thought of everything but the charm

**TT COUPE/ROADSTER ★★★★★**

> Brilliant coupe gets virtual dash and sharper handling. Try 2.0 FSI. Boot big, but rear seats for handbags only > **VERDICT** A proper real-world sports car – but same money buys an early R8

**TT RS ★★★★★**

> At the outer limits of the TT's dynamic envelope, a 17% power hike ekes 395bhp from five pots and targets wounded Cayman > **VERDICT** Audi springs the offside trap, rounds the keeper, but hits the bar. So close!

**R8 V10/V10 PLUS ★★★★★**

> Friday-afternoon restyle meets Monday-morning mechanics. New R8 offers no V8 for now, but V10 is back with 533bhp or Lambo-equalling 602bhp > **VERDICT** A Lamborghini Huracan for £50k less. Friendly but ballistic; playful chassis a joy

**BAC****MONO ★★★★★**

> Single-seat racer that took a wrong turn out of the pits. Pushrod suspension, Cosworth-tuned 2.3 Duratec and bath-like driving position > **VERDICT** Sublime track tool with a six-figure price that'd net you a Cayman GT4 and an Atom

**BENTLEY****BENTAYGA ★★★★★**

> Cynics will say it's a Q7 in expensive jewellery, but The World's Fastest SUV matches 187mph top speed with superb chassis. We flambéed the brakes > **VERDICT** Super-lux options include £110k Breitling clock. Or spend the same on a two-bed semi in Crewe

**BENTAYGA DIESEL ★★★★★**

> They said it would never happen, but we knew it would. Still fast, still heavy, still thirsty but now you get to use the dirty pumps and only need to stop every other minute > **VERDICT** You might have to lie at the golf club or they'll make you use the tradesmen's entrance

**CONTINENTAL GT COUPE/CABRIO ★★★★★**REPLACED  
SOON

> The repmobile of millionaires. Reliable, well built and full of VW bits. Death Star smooth W12 sounds more rebellious, while twin-turbo GT V8 S is joyful > **VERDICT** More of a sports car than hefty GT image suggests

**CONTINENTAL GT3-R ★★★★★**

> Bonkers road racer with *Max Power* styling, no rear seats and shouty exhaust. Surprisingly nimble using 4wd and torque vectoring, and epically fast thanks to tricked-up 580 V8 > **VERDICT** Uncouth drag racer for rich Russians

**FLYING SPUR ★★★★★**

> New Spur is sharper to drive, sharper to look at, softer to sit in, and feels less like a stretched Conti. Fridge and iPads essential options for pampered rear-seat recliners > **VERDICT** Think of it as a bargain Roller rather than a pricey A8

**MULSANNE ★★★★★**

> Huge, hand-built anachronism, with twin-turbo V8 born in the '50s, buffed to perfection, and a field of cows sacrificed for your arse's pleasure > **VERDICT** Buy the Speed – any less outrageous display of consumption is just poor form

**BMW****1-SERIES ★★★★★**

> Only rear-driver in its class. Good for handling, not for cabin space. Just facelifted so now 3%

## NUMBER CRUNCHING

### THE POWERFUL AND POWERLESS

Take the average bhp across the range and you find out who's truly committed to max power and who's for motive minimalism

**THE HIGHEST****FERRARI**  
665BHP

The entry-level Ferrari, the California T, is packing 550bhp

**THE LOWEST****MAHINDRA REVA**  
41BHP

Two cars, one output, no escape

**MCLAREN**  
633BHP

Maranello's Surrey-based rival is just a whisker behind, but with the 720S still to come

**SMART**  
84BHP

Just 35kg heavier than the Reva but with twice the power, thank God

**LAMBORGHINI**  
621BHP

Arguably the best Huracan to date, the 580-2, brings the team below McLaren's figure

**DACIA**  
100BHP

With prices this low you can't expect internal combustion by Thor

**BENTLEY**  
563BHP

If it was power multiplied by the number of doors, the Bentley boys would be well clear

**FIAT**  
100BHP

No wonder the figure's so low when the 105bhp TwinAir 500 is so good

**ASTON MARTIN**  
541BHP

A gentleman's sports car wouldn't be right without at least 500 well-bred ponies up front

**CITROEN**  
105BHP

Commendable commitment to emissions, currently largely ignoring the hot-hatch segment



less grotesque. 118i petrol a brilliant all-rounder  
**> VERDICT** Want a roomy, well-appointed hatch that's great to drive and look at? Buy an A3

## M135i ★★★★★

**FACELIFT SOON**  
 > Last of the downsizing deniers, BMW's hot hatch stays with six-pot power; all rivals offer four. Undercuts mechanically identical M235i by £4.5k  
**> VERDICT** Storming drivetrain, but VW's incredible Golf R just pits it

## 2-SERIES COUPE/CABRIO ★★★★★

> Boot-faced booted 1-series is a Mustang with a couple of A-levels. 218d is 8.9 to 62mph and 63mpg; 4-cyl 228i a cut-price, cut-down M235i  
**> VERDICT** Plainer than a margarine sarnie, but TT and RCZ can't touch its space/pace combo

## M240i ★★★★★

> Still hard to look at without squinting but sweet six-cylinder is even more grumpy. The perfect 2-series if you pretend the M2 doesn't exist  
**> VERDICT** Ignore the Golf R temptation and keep it rear

## M2 ★★★★★

> 2-series coupe with M4 chassis and 365bhp turbo six – that's some crowbar they've got at M division. All of the fun, all of the time  
**> VERDICT** Best M car since the E46 M3. Buy with manual 'box and stacks of tyres

## 2-SERIES ACTIVE TOURER ★★★★★

**BEST IN CLASS**  
 > BMW in front-drive MPV shock. Decent drive, great interior. Need to cart OAP relatives around? You'll need the 7-seat Gran Tourer. Boom boom!  
**> VERDICT** The ultimate driving (to the park/crèche/post office) machine

## i3 ★★★★★

> One of BMW's best cars is home to its finest cabin. Electric version has short range; hybrid is noisy and has a fuel tank like a flea's hip flask  
**> VERDICT** Carbon-chassis supermini, electric power and £30k price. Did we wake up in 2045?

## 3-SERIES SALOON/TOURING ★★★★★

**BEST IN CLASS**  
 > Celebrating four decades of overpriced, undersized family cars. New modular engines make it better than ever, 320d (now sub-100g/km) still top choice  
**> VERDICT** Jag XE is treading heavily on its twinkling toes

## 3-SERIES GT ★★★★★

> High-rise Touring alternative almost as vast as a 5-series thanks to wheelbase stretch, but way more hideous. Another BMW design disaster  
**> VERDICT** A £35k Mondeo with a BMW badge. Why bother when the same-price X3 is so good?

## 4-SERIES COUPE/CABRIO ★★★★★

> 3-series in a shell suit subtly better to drive, but same great engine choices and almost as practical. Shame about the carryover cabin  
**> VERDICT** Crushes Audi's A5. Folding hard-top cabrio weighty but worth it

## 4-SERIES GRAN COUPE ★★★★★

> Pretty and practical, like a bikini car wash, hatchback GC costs £3k more than 3-series but has standard leather. Five belts but four seats  
**> VERDICT** Smart and useful, much more than a niche exercise. But why isn't this the 3-series?

## M3/M4 ★★★★★

> Oh thank God – there's finally a Competition Pack to breathe some life into this staid M-car duo. £3k more = 444bhp and light-up seat badges. Classy  
**> VERDICT** Buy an M2

## 5-SERIES ★★★★★

> BMW's second most important car gets the full treatment, with new chassis, slightly forgettable exterior and massive tech injection. Smart, semi-autonomous and still the best in class  
**> VERDICT** Spirit-crushingly good. Bring on the M5

## 5-SERIES GT ★★★★★

> BMW GB: 'The contours... make its attraction instant. Stylish presence of a saloon combines harmoniously with the sporty elegance of a coupe'  
**> VERDICT** Munich's Vel Satis. Hated by critics, loved by owners. All three of them

## M5 ★★★★★

> While our enthusiasm for the twin-turbo V8 is tempered slightly by the artificial engine noise, it's sublime to drive and gets better with every iteration  
**> VERDICT** Still the fast saloon daddy. 592bhp '30 Jahre edition' utterly magnificent

## 6-SERIES COUPE/CABRIO ★★★★★

> Anonymous big GT best enjoyed with mighty 40d diesel power. Plenty of room for four – if you fire your passengers into the back via a wood-chipper  
**> VERDICT** Under-the-radar GT bruiser, short on sex, but not on appeal

## 6-SERIES GRAN COUPE ★★★★★

> Coupe? It's a bloody saloon! And £20k more than a same-engined 5-series! BMW must chuckle at every sale. Still, rather nice  
**> VERDICT** Desirable enough to leave the 6-series coupe in the shade/showroom

## M6 ★★★★★

> Six-figure M5 in a shiny suit is even better to drive. Two-door looks good value beside Merc's S63 coupe, but can't touch a 911 GTs for kicks  
**> VERDICT** M6 GC almost makes M5 redundant, but at £100k/18mpg you'll need two jobs

## 7-SERIES ★★★★★

**BEST IN CLASS**  
 > So high-tech BMW presumably ram-raided Google's R&D bunker, confident the 'carbon core' construction would enable it to drive back out  
**> VERDICT** Gesture control, remote parking, active anti-roll – it's got it all. But not the kudos of the S-Class...

## X1 ★★★★★

> Ugly old one sold by the bucket load; all-new replacement is miles better to look at and to drive. It's a proper mini-SUV now...  
**> VERDICT** It's even based on the fwd Mini platform. Swallow that bile now

## X3 ★★★★★

> Studiously un-gangsta SUV shuns petrol power – and M Power – options for solid diesel-only blend of handling and handiness. Looking better post facelift  
**> VERDICT** The BMW SUV we don't hate ourselves for liking

## X4 ★★★★★

> Blame the Evoque and people who bought the X6 for this carbuncle. £4k-£5k more than an X3, but better equipped and annoyingly better to drive  
**> VERDICT** Depressing X3 spin-off for grown-ups who still dream of being a footballer

## X5 ★★★★★

> One-time Premier League fave looking more like League 1 beside better-driving and -looking rivals. Skinfint sDrive 25d is a rwd four-banger  
**> VERDICT** Still impresses with engines and quality, but thanks to Landle it's lost its lustre

## X6 ★★★★★

> All the impracticality of a coupe and all the wasteful high-centred mass of an SUV. Genius. If you must, X40d gives best price/punch/parsimony  
**> VERDICT** Pointless pimp wagon. Buy a Porsche Cayenne or even an X5

## Z4 ★★★★★

**REPLACED SOON**  
 > Sports car for post-menopausal women in lemon trouser suits. Coupe-cabrio roof hits boot space when folded. Base 18i spec sub-Wartburg  
**> VERDICT** No match for Boxster. Stick with mid-spec trim. And keep taking the evening primrose

## i8 ★★★★★

> Carbon-constructed 3-cyl hybrid supercar that's fun for four, as fast as an M3 and does 40 real mpg. Minor demerit: looks like it's crimping off a 911  
**> VERDICT** Fascinating and fabulous. The future of the sports car is in safe hands

## BUGATTI

## CHIRON ★★★★★

> The Veyron was okay but why couldn't it have 30% bigger turbos and 300bhp more power?  
 Bugatti answers the question nobody asked – and answers it loud  
**> VERDICT** We're about to drive it, and predict a riot

## CATERHAM

## SEVEN ★★★★★

> Still the benchmark for bobble-hatted Terry-Thomas wannabes, the adaptable Seven comes in flavours from 160 3-cyl to mental road racers  
**> VERDICT** 80bhp 160 underpowered, 310bhp 620R lethal, 180bhp 360 model just right

## CHEVROLET

## CORVETTE ★★★★★

> Farm machinery meets Spacelab in fabulous 460bhp V8 symphony of composite materials, leaf springs and pushrods. Shame it's left-hook only  
**> VERDICT** £60k for a bargain berserker. £20k more for the 650bhp Z06

## CITROËN

## C1 ★★★★★

> Trying hard to escape the clutches of its sister cars, the C1 can have a funky Airscape cloth roof and half-hearted personalisation options. 1.0-litre has most pep  
**> VERDICT** Good, solid proletarian urban fare rather than hipster cool

## C3 ★★★★★

> Citroën produces a great small car by looking up its own Wikipedia entry and remembering what it's good at; spacy, compliant and different  
**> VERDICT** Are Citroëns cool again? They're certainly getting there

## C3 PICASSO ★★★★★

**REPLACED SOON**  
 > Compact supermini-based box that's fun to drive (avoiding the petrol one, mind) and well packaged. Might not set pulses racing, but you'll get very protective of it  
**> VERDICT** Picasso was a cubist, so why not name a box after him?

## C4 ★★★★★

> Recently refreshed C4 has all the edginess of a Hush Puppy deck shoe. But it's useful, anodyne transport and sub-100g/km BlueHDi models are very economical  
**> VERDICT** Nobody would hate you – or notice you – if you bought one

## C4 CACTUS ★★★★★

> An architect's wet dream. Sloppy to drive but otherwise a roomy family car with kid's toy colour combos. Airbumps will stop it kicking off in the car park  
**> VERDICT** Cheap yet brilliant. Why can't the French be this good all the time?

## C5 SALOON/ESTATE ★★★★★

> Be aware: this car is still in existence. Slow selling but roomy estate is fairly stylish and practical with Hydractive rear suspension  
**> VERDICT** There have been great French family saloons. This is not one

## C4 PICASSO ★★★★★

> Defiantly anti-cool family shifter. Touches like lower rear windows and spirograph mirror make mums go weak at the knees for its peace-and-bloody-quiet ambience  
**> VERDICT** Drives like a shed. Who cares, if Satan's brood shut up?

## BERLINGO MULTISPACE ★★★★★

> Recently refreshed with SUV aspirations, but still a wipe-clean tin lifeboat for cagoule-wearing Thermos-sipping birdwatchers. Rattles and drives like a van. Is a van  
**> VERDICT** Dogging cheap seats for aspiring Bill Oddie

## DACIA

## SANDERO ★★★★★

> Cheapest new car on sale, not the worst. Yoghurt-pot plastics and pre-Glasnost styling can't detract from a spacious sub-six-grand runabout with Renault engines  
**> VERDICT** Austerity rocks. Right, Greece?

## LOGAN ★★★★★

> Estate looks like a Sandero that's reversed into phone box. Cavernous boot, but dreadfully unrefined thanks to all the brittle plastic and tin  
**> VERDICT** You put things in it. It will carry them for you. You can take them out. Job done

## DUSTER ★★★★★

> No-nonsense SUV that's ideal for wannabe peacekeepers on a ridiculously small budget. Buy the boggy 4x4 diesel in white for the full UN effect  
**> VERDICT** The Neighbourhood Watch will never be the same again

## DS

## DS3 HATCH/CABRIO ★★★★★

> Best-selling DS gets robo-croc snout and Apple CarPlay but 'premium' claims increasingly lost in translation  
**> VERDICT** Like Prince William's bonce, the Gallic charm is wearing thin

## DS4/CROSSBACK ★★★★★

> Range now split between regular hatch and jacked-up Crossback. Softer set-up and fewer buttons a plus; rear windows still don't open  
**> VERDICT** Medium rare luxury-Frenchness. Germany reportedly not worried

## DS5 ★★★★★

> Office joker in testosterone world of Serious Business Men. Quite appealing, with a lovely aerostyled cabin. Diesel Hybrid4 a good idea not executed properly  
**> VERDICT** Bland ubiquity will always beat charming quirkiness

## FERRARI

## 488 GTB ★★★★★

> We were worried the turbos would ruin it, but while we'll miss the 458's 9000rpm wail, the 488 is more playful and even easier to drive. A stunning achievement  
**> VERDICT** Even the looks grow on you after a while. Rivals better dust off their gracious loser faces

## CALIFORNIA T ★★★★★

> L-plate Ferrari first of Maranello's new turbo cars. Boost management mimics naturally aspirated engines. Looks better, sounds worse  
**> VERDICT** Forget the unfair 488 comparisons, it's an SL65 rival and well worthy of the badge

## F12/F12TDF ★★★★★

**BEST IN CLASS**  
 > Jumbo GT steers like a supercar, cruises like a limo, drifts like a nitro-lit M3. Also available in taste-reduced 769bhp Tour de France guise for £100k more  
**> VERDICT** Stick with 730bhp original unless you've an unholly appetite for extra vents and carbonfibre

## LAFERRARI ★★★★★

**BEST IN CLASS**  
 > 1000bhp hybrid hypercar where the electric bits exist to save tenths not icecaps. 499 to be built and all sold despite the £1.2m asking price  
**> VERDICT** The greatest single supercar of all time – except maybe the FXX K track version

## GTC4LUSSO ★★★★★

> Looking even more like a Z3 M Coupe battered by a giant spatula, this updated FF gets four-wheel steering to go with its improved four-wheel drive and 680bhp V12  
**> VERDICT** Closest Ferrari will ever get to an SUV, apparently. Take a moment to think about that...

## GTC4 LUSSO T ★★★★★

**NEW ENTRY**  
 > Deleting four cylinders and a driven axle sneaks the GTC under the psychologically distressing £200k barrier, not that the news will sell thousands more  
**> VERDICT** Less is a little bit more, while also still very much a lot

## FIAT

## TIPO ★★★★★

> Oh God, really? Fiat has another crack at the C-segment, this time sensibly playing the value card. So dull it's already been replaced yet still the best Fiat hatch since the last Tipo – from 1988  
**> VERDICT** Only consider buying Fiats with numbers, not names

## 124 ★★★★★

> MX-5's step-sister, seemingly intent on undermining said darling hairdresser's star turn with its punchier 1.4 turbo blow-dryer. Awkward style, for an Italian  
**> VERDICT** To drive, this is the MX-5 you've been waiting for

## PANDA ★★★★★

> Spacious city car with 'squirrel' obsession, as roly-poly as blobby looks suggest. Two-pot TwinAir willing but thirsty  
**> VERDICT** VW Up! costs less, drives better and is nicer inside

## 500/C ★★★★★

> Delicate job, modernising a retro cash cow. Fiat's approach pairs a korma-grade facelift with updated tech and even more colour palette kitsch  
**> VERDICT** Fashion victims rejoice! The cupholders actually work now

## 500L/MPW ★★★★★

> Bloating supermini-sized people carriers, desperately attempting to cash in on city car's chic. Seldom has the point been so massively missed  
**> VERDICT** In-car coffee machine option the only purchase excuse



**500X ★★★★★**

> Compact crossover is Arnold Schwarzenegger of the 500 range – steroidal and somewhat limited in its range of abilities, but actually rather likeable > **VERDICT** Worthy Nissan Juke alternative works the 500 thing surprisingly well

**PUNTO ★★★★★**

> Been facelifted more times than Joan Rivers but is somehow still alive. Now reduced to bare-bones range and budget price. We still wouldn't > **VERDICT** You might be tempted. Don't be

**QUBO/DOBLO ★★★★★**

> Postman Pat's wheels? Don't be daft, Pat's retired to the Caribbean and is living off the royalties. Drives a red Bentley > **VERDICT** Van-based MPVs. Practicality first, people second

**FORD****KA+ ★★★★★**

> Hits the city car target bang-on by being the complete opposite of the old Ka (good to drive, decently spacious), but misses by being less sexy than Borat. And Plus? Plus what? > **VERDICT** Hails from South America, like the EcoSport. Isn't rubbish, unlike the EcoSport

**B-MAX ★★★★★**

> B-pillar-free Fiesta-based mini MPV gets rear sliding doors for maximum practicality but not the sliding rear seats of some rivals. Firm ride > **VERDICT** Buy with a 1.0 EcoBoost triple and Zetec trim for maximum school-run fun

**FIESTA ★★★★★**

> Still brilliant after all these years, Fiesta is poised and practical. Terrific new triples make up for the interior > **VERDICT** The best driving supermini. Even 1.0 models feel like hot hatches in waiting

**FIESTA ST/ST200 ★★★★★**

> Bargain banzai hot hatch shreds that tricky gyratory complex with style to spare thanks to torque vectoring voodoo. ST200 costs £5k more than base; misses point spectacularly (if not the apex). Softer suspension now > **VERDICT** The one that you want

**ECOSPORT ★★★★★**

> Third-world hand-me-down is no fun to drive and reasonably roomy interior ruined by a daft side-opening tailgate. Nissan Juke monsters it > **VERDICT** A rare Blue Oval balls-up channelling the complacent Mk5 Escort spirit

**FOCUS HATCH/ESTATE ★★★★★**

> Looking all the better for its 2014 refresh, the Focus shows Ford's chassis engineers know their stuff. So it's just the designers who have lost it > **VERDICT** Great to drive but the Golf is a more polished destination for your dough

**FOCUS ST/RS ★★★★★**

> Chip-controlled 4wd RS is an overclocked 345bhp mix of outrageous drift angles and limpet traction. And we used to think the fwd ST was impressive > **VERDICT** In bhp/£ stakes, both are mega value. But only the RS does donuts

**MONDEO HATCH/ESTATE ★★★★★**

> Delayed so long dealers will soon be doing MOTs and PDIs at the same time. Huge space and you can even have the 1.0 EcoBoost > **VERDICT** Everybody wants them new-fangled SUVs these days, but this is a great family car

**KUGA ★★★★★**

> Otherwise likeable Kuga crossover gets an angry face, semi-sporty ST-Line version and

better cabin, thank heavens. The best-handling mid-sized crossover, but that's not saying much. > **VERDICT** If you really must.

**EDGE ★★★★★**

> Stupidest Ford name since Maverick, but looks good and drives like a Ford – a big, ponderous Ford, hamstrung by 2.0 diesels and slower than continental drift > **VERDICT** Comfy, refined, irrelevant amid premium rivals

**ECOSPORT ★★★★★**

> Desperate B-segment SUV had most of its undercarriage chucked away, improved to the point where it feels vaguely like the nine-year-old Fiesta it's based on. Interior should be donated to the British Museum > **VERDICT** Thinking of buying one? Have a word with yourself

**C-MAX/GRAND C-MAX ★★★★★**

> More a roomier Focus than full-blown MPV, C-Max delivers driving pleasure to blot out family pain. 7-seat Grand version gets rear sliding doors > **VERDICT** Rivals are roomier, but none is better to drive. Just pretend it's the wife's

**S-MAX ★★★★★**

> Exploits latest Mondeo's undercrackers to full effect. Pricey, but still the best of the seven-seaters to drive. Toys include electric everything and speed-correcting cruise control > **VERDICT** Harder to beat than FC Barcelona

**MUSTANG ★★★★★**

> GI Henry's finally been posted to Europe and he's cutting in on the TT's dance. At last gets multi-link rear end, but rear-space could be better > **VERDICT** EcoBoost 4-cyl torquey but tedious; it's the V8 you want, if not its 18mpg thirst

**GALAXY ★★★★★**

> Goose to the S-Max's Maverick, new Galaxy is based on the same Mondeo-derived platform. Just as high-tech, but more spacious > **VERDICT** Great if you need a big 7-seater – fits adults in all rows with no human rights violations

**GINETTA****G40 ★★★★★**

> Pint-sized road-legal racer. Two models: G40R (civilised version, with carpets) and GRDC (actually a race car with number plates) > **VERDICT** Tiny, twitchy and top fun. Pick the £35k GRDC and get free entry to race series

**HONDA****JAZZ ★★★★★**

> Brilliantly packaged supermini with typical genius mismatch of brain and social skills. Ordinary performance, more refined than before > **VERDICT** If a Skoda Fabia had seats this smart, other superminis would call it a day

**CIVIC HATCH/TOURER ★★★★★**

> Wilfully different, with origami rear seats and huge boot. Desperately needs incoming small-cc turbo engines > **VERDICT** Capacious wagon makes sense but a Golf is still more satisfying

**CIVIC ★★★★★**

> The might of Honda's engineering prowess delivers more space, clever new engines and an exterior that looks like it was drawn on a bus on the way into school > **VERDICT** Easy to admire, loving requires recreational drugs

**HR-V ★★★★★**

> It took Honda 10 years to build a second HR-V, and you're left wondering why they bothered. Almost wilfully generic > **VERDICT** Platform's

magic packaging the only saving grace

**CR-V ★★★★★**

> Roomy but unremarkable SUV with a choice of two- or four-wheel drive. Unlike most Hondas won't need ear defenders to drown out road noise > **VERDICT** Kuga has the chassis, Qashqai has the style, but neither is as practical as CR-V

**NSX ★★★★★**

> 'We've blown all our development cash on an insanely complex hybrid drivetrain. Do you think anyone will notice if we fit an interior from a Civic?' > **VERDICT** Like a 918 for half a mil' less – mind-blowing to drive, crap to sit in

**HYUNDAI****i10 ★★★★★**

> Five-door city car that balances mature driving experience with strong value – even if it's not as cheap as it was. Five-year warranty, too > **VERDICT** Basic motoring done not just well but with a dash of style. Mid-spec 1.0 our choice

**i20 HATCH/COUPE/ACTIVE ★★★★★**

> Update adds Active crossover to 5dr Hatch and 3dr 'Coupe'; suitable for somnambulant warranty fiends only. Turbo triple lumpy > **VERDICT** Fur-lined tartan slippers, Horlicks and early to bed; repeat

**i30 HATCH/TOURER ★★★★★**

> Where the current crop of Hyundais got serious – which means it's now in need of a facelift as the mainstream moves ahead again > **VERDICT** 'Tries hard but lacks imagination' would be the i30's school report card

**i40 SALOON/TOURER ★★★★★**

> Vast Mondeo rival with huge boot and lots of kit. Facelift resembles a lizard with an Audi grille for a mouth > **VERDICT** Nearly-but-not-quite mainstream alternative plays value card well

**ix20 ★★★★★**

> Compact MPV and Kia Venga's ugly step-sister; roomy but ultimately forgettable > **VERDICT** Sorry, what were we talking about?

**TUCSON ★★★★★**

> Promising initial impressions of shiny-looking ix35 replacement tarnish quickly; it's dull to drive, duller inside and poorly refined > **VERDICT** We had high hopes. Someone get the Tucson a stepladder

**SANTA FE ★★★★★**

> Biggish SUV has always led Hyundai's assault on the European market from the front. Comfortable, self-assured and easy to live with > **VERDICT** A Hyundai you can choose without shame. Looks fresher than Waitrose parsnips

**i800 ★★★★★**

> Massive van-based people carrier that'll seat eight and still have space for their luggage. Ideal for part-time airport mini-cabbers > **VERDICT** It is what it is: a van with seats in. But it's a nice van

**GENESIS ★★★★★**

> Luxury saloon hamstrung by unsuitable petrol engine and they must-be-joking price tag. Has silly new winged badge and handles like a waterbed > **VERDICT** Step one of Hyundai's move upmarket. Well, it worked for Infiniti. Oh, wait...

**IONIQ ★★★★★**

> Korean take on the Prius minus Gwyneth Paltrow smugness and drawn-in-the-dark exterior. Hybrid, EV or upcoming PHEV – a version for all shades of greenie > **VERDICT** Challenges neither pulse nor helmsmanship

**INFINITI****Q30 ★★★★★**

> It's an A-Class in an alternative frock – a slow A-Class at that. Suspension and seats comfy, just don't look too closely at the dash > **VERDICT** The fat goth of the premium hatchback segment

**Q50 ★★★★★**

> Another American-market Japanese premium product that's lost in translation. Shame it wasn't lost at sea on the way over. Hybrid mega quick > **VERDICT** Like a tiny speck of fluff the Mercedes C-Class casually brushes from its sleeve

**Q60 COUPE/CABRIO ★★★★★**

> Nissan 370Z after a back, sack 'n' crack. No diesel but V6 sounds ace and S models (4ws and LSD) are tidy in the bends. Pity it looks dated > **VERDICT** Not without merit, but without a hope of talking us out of buying a BMW 4-series

**Q70 ★★★★★**

> Does it look like a rubbish Maser QP, or a slightly cooler Daewoo Leganza? Either way it's a novelty act without the novelty > **VERDICT** Worth considering over a 5-series, but only if Harald Quandt ran off with your wife

**QX50 ★★★★★**

> Blandly styled EX crossover got a new badge but precious few new fans. Well equipped, but costly to run and not that great to drive > **VERDICT** Nothing to see here, people, move on – to your local BMW dealer and its excellent X3

**QX70 ★★★★★**

> Striking jumbo jeep comes with more kit than a Knight Rider convention but the lavish cabin is too small and the fuel and tax bills anything but > **VERDICT** Taxi for Infiniti! Porsche's Cayenne has this one covered, old timer

**JAGUAR****XE ★★★★★**

> Straight-bat styling hides exotic aluminium chassis and class-leading handling. Bit tight on space, though, and engines not a high point > **VERDICT** Rivals are better packaged but this is the driver's car in the class and a proper little Jag

**XF ★★★★★**

> Second-gen XF now 75% aluminium, looks like an over-inflated XE; bigger inside, smaller outside, still a great steer > **VERDICT** Diddy diesels moo more than a dairy; insert your own joke about cats and cream

**XJ ★★★★★**

> Questionable styling but unquestionably excellent steer – although passengers may mutiny. Interior looks lux but lacks intelligence, even with latest infotainment > **VERDICT** Hollywood baddies' limo of choice, flawed

**XJR ★★★★★**

> Absurdly track-ready limo builds on already ballistic XJ Supersport, but bumps power up to 543bhp and tightens chassis (at expense of ride) > **VERDICT** More rare-groove than Elvis's first acetate, but spectacular – if you're up front

**F-TYPE COUPE/ROADSTER ★★★★★**

> Posh pauper's Aston sounds superb, goes well too. Forget basic V6 and choose from V6S and mental V8S. Now with manual and 4wd options



SAVE UP TO **62%** WHEN YOU SUBSCRIBE TO **car**



> **VERDICT** So nearly sublime, but Cayman/Baxter duo cost less, entertain more

#### F-TYPER ★★★★★

> Supercharged 543bhp almost too much fun in rear-wheel drive form (but still less knife-edge than V8S); 4wd available if you've left bravery pills at home > **VERDICT** All this drama or an 'ordinary' 911? Tough choice...

#### F-TYPE SVR ★★★★★

> JLR's SVO black ops division delivers a 567bhp all-wheel-drive F-type that goes and sounds like an elephant on MDMA > **VERDICT** Quilted leather and 200mph – but terrible hi-fi for a car that costs twice the entry V6

#### F-PACE ★★★★★

> Jag's first SUV is a road-biased Macan botherer. Built light to be nimble, body control brilliance and pokey engines prove family DNA > **VERDICT** Macan remains most sporting choice, but more rounded F-Pace has plenty of bite

### JEEP

#### RENEGADE ★★★★★

> Strange but true: yooft-targeting junior Jeep is built in Italy alongside Fiat 500X that donates its platform. Even stranger: it's not terrible > **VERDICT** Lower spec models outdriven by rivals; only the top Trailhawk cuts it in the rough

#### CHEROKEE ★★★★★

> Gimlet-eyed Discovery Sport rival looks like the banjo-playing inbred from *Deliverance*. Despite generous kit, we'd leave it on the porch. > **VERDICT** Feels too cheap to be premium, too pricey/ugly to beat Qashqai

#### GRAND CHEROKEE ★★★★★

> Proper off-road credentials backed up by sensible running costs, but feels cheap. Ludicrous SRT8 version demolishes 62mph in five dead > **VERDICT** Makes sense at \$30k in the US, but doesn't drive or feel like a premium car

#### WRANGLER ★★★★★

> Incredible off-road, and much better than a Defender on it, but that's like saying Pol Pot was more benevolent than Stalin > **VERDICT** When North Korea nukes us, this cold war cast-off will be all that's left moving

### KOENIGSEGG

#### AGERA ★★★★★

> Evolution of Lex Luthor's original CC8S supercar features carbonfibre wheels and twin-turbo 5.0 V8. R version even runs on E85 biofuel > **VERDICT** Yahoo! Yin to Volvo's yawning yang keeps Sweden's car output balanced

### KIA

#### PICANTO ★★★★★

> Tough-looking budget Korean mini twinned with less funky Hyundai i10. Three-pot 1.0 is slow but sweeter than 1.25 four. Smart interior, small boot > **VERDICT** You'll never benefit from the 7-year warranty and VW's Up! is better to drive

#### RIO ★★★★★

> Long on space, short on enjoyment, life with a Rio is no carnival. Diesel refinement will have you driving to a favela in the hope of a carjacking > **VERDICT** White goods car gets the basics right but there are many better rivals

#### CEED HATCH/SW/PROCEED

★★★★★

> Good-looking Korean Golf wannabe is big on equipment and not bad to drive. Ceed is 5dr, Proceed gets 3, and SW is the wagon > **VERDICT** Recent update brings new downsized turbo engines. Europe still ahead. Just

#### SOUL ★★★★★

> Improved second-gen chunky spunky SUV better to drive but ride and noise suppression poor. Petrol version rubbish, but much cheaper > **VERDICT** A Korean with character but other SUVs are more rounded (in both senses)

#### OPTIMA ★★★★★

> Sexless Mondeo clone cobbles together some mojo via the addition of sharp-suited Sportswagon and a plug-in hybrid > **VERDICT** All the car you'll ever need, but not the car you want

#### VENGA ★★★★★

> Weird sit-up supermini-cum-MPV packs Focus space into near-city-car dimensions. Hard to get comfy though. 1.4 petrol best > **VERDICT** Too pricey and too ordinary to drive for us to care

#### CARENS ★★★★★

> Big, versatile, value-packed seven-seater. Go diesel – 1.6 petrol is wheezier than emphysema-riddled asthmatic with a punctured lung. > **VERDICT** For all its pseudo-premium Euro aspirations, this is the stuff Kia still does best

#### SPORTAGE ★★★★★

> All-new, all-turbo SUV truly handles and rides but somehow a picture of Mr Potato Head's face got mixed up with the final blueprints, and before they knew it... > **VERDICT** Improved in every way. Except to look at

#### SORENTO ★★★★★

> Ambitious new flagship SUV reckons it's a real Land Rover rival. Now bigger than ever, and so is the price: up to £40k. 2.2 diesel only engine. > **VERDICT** Impressive, but lacks the badge and performance of genuine premium off-roaders

### KTM

#### X-BOW ★★★★★

> 22nd century Ariel Atom from Austria's barmy motorbike maker mixes carbon construction with hardy Audi turbo'd 2.0 four > **VERDICT** Big money, big grins, but single-seat BAC Mono gives more racecar-like experience

### LAMBORGHINI

#### HURACAN ★★★★★

> Way more accomplished Gallardo successor, twinned with new R8. Dual-clutch 'box mandatory, 602bhp V10 flicks Vs at turbos > **VERDICT** Beats 488 for aural and visual thrills but nothing else. So we'll have the Spyder. On me head, sun!

#### AVENTADOR S ★★★★★

> Aventador hits the sweet spot of all Lamborghini's development; old enough to sort the gripes from new and young enough to not yet be the subject of 31 run-out limited editions. Semi life-affirming > **VERDICT** Pose-to-talent ratio heading in right direction

#### AVENTADOR/SV ★★★★★

> The F12 may be better in every respect, but this is what a supercar should look like. Limited-run Aventador SV closes that gap with shocking power and agility > **VERDICT** SV is the one

## THE GOOD, THE BAD & THE UGLY

to have. Sub-7min 'Ring lap makes the hybrid hypercar crew look stupidly expensive

### LAND ROVER

#### DISCOVERY SPORT ★★★★★

> 'Educated, professional luxury SUV desperately seeking decent diesel engine.' Ingenium replied. Happy ever after? > **VERDICT** Comfy silence a promising start. We'll know it's love when they get the interior decorators in

#### DISCOVERY ★★★★★

> Gen-5 Disco can climb mountains and social strata with equal equanimity; this is Land Rover in the 21st Century. Worryingly close to Range Rover, slightly frustrating engine choice > **VERDICT** The best seven-seat party wagon money can buy

#### RANGE ROVER EVOQUE ★★★★★

> Definitive posh mum's SUV, now also available as convertible. Well, that was one way to resolve the classy interior's claustrophobia-triggering tendencies. Ingenium engines commendably hushed > **VERDICT** Pricey, but perfectly pitched

#### RANGE ROVER SPORT ★★★★★

> As luxurious as a Rangie, as practical as a Disco, better looking than an Evoque and could follow a Defender cross country. Add in impressive handling and ballistic SVR and diesel versions > **VERDICT** Nobody likes a show-off

#### RANGE ROVER ★★★★★

> A benchmark in luxury SUVs. V6 diesel perfectly acceptable, supercharged V8 petrol hilarious > **VERDICT** The perfect car for smuggling cash to Switzerland, skiing, turning up at a ball, game shooting and being smug

### LEXUS

#### LC500 ★★★★★

> A serious sports car from the most serious of car makers gets clever hybrid or tasty V8, 10-speed automatic and less bovine acoustics. It's even quite sexy > **VERDICT** It's no longer the Japanese Mercedes

#### CT ★★★★★

> Pig-ugly premium Prius a bizarre mix of decent handling, woeful performance and a ride so poor it makes a black cab feel like an S-Class > **VERDICT** Wouldn't merit a single sale if company car tax bills were less CO2-focused

#### IS ★★★★★

> Sharp-suited, well-specced 3-series rival finally gets decent rear space. Good chassis, but 250 V6 irrelevant, and frugal hybrid hobbled by nasty CVT > **VERDICT** So close. Give this a proper auto 'box and it would be right up there

#### GS/GSF ★★★★★

> Twin-pronged petrol hybrid cooking range now spiced up by GSF 5.0 V8. Lack of turbos admirable but like hunting M5 bear with a peashooter > **VERDICT** 300h makes company car sense, wilfully different GSF good fun

#### LS ★★★★★

> Monstrously expensive but so refined it makes a library feel like a sound-off contest (which the Mark Levinson hi-fi would win) > **VERDICT** Built for those in the back, but the S-Class makes every seat worth buying a ticket for

#### NX ★★★★★

> Trumps Audi Q5 with a fabulous interior and

arrest-me (for persecuting curves) exterior design. Fwd or 4wd with electric motor at rear > **VERDICT** Doesn't work as a driver's car, so take the NX300h hybrid over faster, costlier NX200t

#### RX ★★★★★

> Looks like Lord Vader's helmet with wheels on, but interior opulence and general tranquillity make up for idiosyncratic infotainment issues > **VERDICT** Build quality and refinement to save the galaxy, even if the hybrid tech won't

#### RC/RCF ★★★★★

> RCF's old-school unblown V8 completes charismatic package that shocked M4 in our Giant Test. Elegance of regular range can't overcome lack of diesel option > **VERDICT** Deserve more success than they'll likely get

### LOTUS

#### ELISE ★★★★★

> Reminds just how connected cars used to be. Slothful base 1.6 reminds how they used to go, too, so pick 1.8. Alfa 4C is a pricey, pale imitation > **VERDICT** Still sensational, but a 10-year-old example does the same job for half the price

#### EXIGE ★★★★★

> Gym-bunny Elise with supercharged V6 retains beautifully connected unassisted steering. Superb new 350 Sport turns up the wick > **VERDICT** The Lotus or tyre-frying Ben Barry would buy. Make of that what you will

#### EVORA 400 ★★★★★

> Thoroughly refreshed Evora loses its looks but gains easier access and thumping supercharged 400bhp > **VERDICT** The chassis and steering are Lotus at its sparkling best. Sublime, but you'll still buy a Cayman

### McLAREN

#### 540C ★★★★★

> The world's first decontented supercar is somehow still worth donating a ball to put on your driveway. Entry-level doesn't get any better > **VERDICT** Ron could do worse as a leaving present

#### 570S/570GT ★★★★★

> Base McLaren ditches carbon body and super-trick suspension, but keeps carbon MonoCell and twin-turbo 3.8-litre V8. Now available with glass hatchback, too > **VERDICT** S and GT performance near identical; both make 911 Turbo S feel too normal

#### 650S ★★★★★

> Original 12C showed real promise, 650S delivers on it in spades. Trouble is the new 675LT now makes the 650S feel like a poor relation... > **VERDICT** Still two reasons to buy over the 675LT: it's £60k cheaper and not sold out

#### 675LT ★★★★★

> What happens when you upgrade 33% of the 650S? Absolute bloody magic. 666bhp, stiffer suspension, faster gearshifts, quicker steering and lighter by 100kg, whatever deal Woking's done with the devil, it's worked > **VERDICT** This is the McLaren you've been looking for

#### P1 ★★★★★

> £1m hybrid hypercar with aero straight from McLaren's F1 brains. All sold, and if you haven't got one you can't have track-only GTR either > **VERDICT** Astounding, but LaFerrari feels more special (as it should for £400k more)

## CHECK OUT OUR iPad EDITION

CAR's beautiful imagery works brilliantly on your tablet. Subscribe to the interactive iPad edition, with video content, or the magazine itself, on page 96 or at [www.greatmagazines.co.uk/car](http://www.greatmagazines.co.uk/car)



## MASERATI

## GHIBLI ★★★★★

> The small exec you wish you owned still drives great, still looks the business, still doesn't have the four-cylinder diesel that will get it on your shopping list. A shame > **VERDICT** An alcohol-free Quattroporte

## QUATTROPORTE GTS ★★★★★

> Because Ferrari don't 'do' saloons you can have a brilliant blend of Maranello turbo V8 wrapped in some gracefully ageing Maserati bits. Remains the coolest four-door car money can buy > **VERDICT** It won't let you in unless you're in a suit or chinos

## GRAN TURISMO/GRAN CABRIO ★★★★★

> Four genuine seats a rarity in this class, but fill them and you'll regret choosing the weedy 4.2 over the 4.7 at the first sniff of a hill > **VERDICT** Podgy, pretty, practical GT for folk who hate four-door faux coupes. And luggage

## GT MC STRADALE ★★★★★

> Defies hulking 1770kg mass (and that's after a 110kg diet) and modest 444bhp to deliver an engaging driving experience. Epic noise > **VERDICT** Massively underrated. A GT3 for an Italian l'othario with a 'Ring season pass

## LEVANTE ★★★★★

> Good news: Maserati's long-awaited SUV is better than the Ghibli. Bad news: UK only gets diesel. That's like Berlusconi without the bunga bunga > **VERDICT** Far from flawless but it'll show you a good time

## MAZDA

## 2 ★★★★★

> Shot-in-the-arm supermini packs good value, handling and looks, leaving sweatmarks on the shirts of the VW Polo marketing team > **VERDICT** Under-radar Fiesta threatener gatecrashes the top table

## 3 HATCH/SALOON/ESTATE ★★★★★

> Another left-field, right-on Mazda that's great to drive and cheap to run. Like shifting gears? You'll love the 118bhp unblown 1.5. If not, go diesel > **VERDICT** Don't buy a family hatch until you've tried one. Oh, a Golf? Apart from that

## 5 ★★★★★

> Ancient off-the-pace MPV that looks like it's been side-swiped by a kamikaze dispatch rider. Roomy and reasonable to drive, but just no! > **VERDICT** Large 'n' loaded but there are too many fresher rivals to warrant wasting your wedge

## 6 SALOON/TOURER ★★★★★

> Boss won't let you have a 3-series? Double your digit and try this impressive alternative. Handles well but rides like the tyres have DTs > **VERDICT** Swoopily styled, tax friendly, entertaining alternative to po-faced Passat

## CX-3 ★★★★★

> Late arrival to the compact crossover party, but worth a look thanks to smart, premium cabin and crisp, engaging drive. Pity about the firm ride > **VERDICT** Pricey, but better than most and well equipped. Ideal MX-5 social life support truck

## CX-5 ★★★★★

**NEW ENTRY** > How an SUV should drive. Better than ever, still unfairly ignored over inferior rivals but you've only yourselves to blame > **VERDICT** It's the closest you'll ever get to a five-seat MX-5

## MX-5 ★★★★★

> Shorter than the '89 original, and in real terms half the price. 1.5 sweet but a little slow; 158bhp 2.0 quicker but characteristically challenged > **VERDICT** Brilliantly uncomplicated budget sports car. Dink the GTI for this

## MX-5 RF ★★★★★

> When a folding fabric roof above your head is just too common to contemplate, pay more for the heavier and more complicated RF and never fold the bloody roof down anyway > **VERDICT** Right car wrong spec, you doughnut

## MERCEDES

## A-CLASS ★★★★★

> In the manner of a stale donut nuked in the microwave, midlife refresh has softened the A-Class, but it's still a little tasteless > **VERDICT** Expensive, cramped and crass inside – A3 and 1-series do it better

## A45 AMG ★★★★★

> Mad turbo four-pot now makes 367bhp and 350lb ft. Goes like a banker who knows the game is up; almost as expensive > **VERDICT** Four-wheel drive is not enough. Option the Dynamic Plus pack with LSD as well

## B-CLASS ★★★★★

> Posh MPV big brother to the A-Class misses out on the looks and the charisma, but is far more homely and just as technically savvy > **VERDICT** So boring the BMW 2-series Active Tourer actually begins to make sense

## CLA SALOON/SHOOTING BRAKE ★★★★★

**FACELIFT SOON** > CLS clone based on the A-Class, now with swoopy Shooting Brake estate. Lacks gravitas of former and sex appeal of latter > **VERDICT** Just because you can make something smaller doesn't mean you should

## C-CLASS SALOON/ESTATE ★★★★★

> Latest C impresses with mini-S-Class looks and almost all the same on-board tech. Denies muttering it wishes the 3-series would drop dead > **VERDICT** BMW still better to drive, but if you want a relaxing techno cocoon, this is it

## C-CLASS COUPE ★★★★★

> All-new sexpot version of latest C-Class (no shrinking violet itself) now 10cm longer and available with air suspension. Still tight in the back > **VERDICT** Much more of an event than the 4-series, but new A5 right back in the game

## C63 AMG ★★★★★

> Sounds madder than ever despite switch to bi-turbo 4.0 V8; coupe gets unique 12-link rear suspension for sharper responses > **VERDICT** Saloon, estate or coupe, you get mega traction and one of the best turbo engines ever

## E-CLASS SALOON/ESTATE ★★★★★

> It may look like a fat C-Class but this techno tour-de-force thinks it can drive better than you. Exceptional interior out-luxes all comers > **VERDICT** New 4-cyl diesel so smooth it churns motorway miles into butter

## E-CLASS COUPE ★★★★★

**NEW ENTRY** > Swish, clever and satisfyingly capable, as long as there's six cylinders up front. Like coupes used to be before everyone decided they needed to be 'Ring-meisters' > **VERDICT** Middle age has never been so appealing

## AMG E63 ★★★★★

> Only AMG would offer the E63 with an all-wheel-drive system that you can switch off in Drift Mode. Which is exactly why you should buy one, and possibly open an account at Kwik Fit > **VERDICT** Go S or go home

## CLS/SHOOTING BRAKE ★★★★★

> The word 'coupaloon' is banned from these pages. Which is fine, because we're all slightly in love with the glamorous Shooting Brake > **VERDICT** Second-gen version of the original four-door coupe continues to lead the pack

## S-CLASS ★★★★★

> Enormously technically accomplished, with camera-guided ride quality and stacks of safety kit. Maybach and Pullman variants immensely flash > **VERDICT** Makes 7-series/A8 seem like toys. Captains of industry should insist on it

## S-CLASS COUPE/CABRIOLET ★★★★★

> Over 5m of barking mad indulgence; Coupe carries it off like Errol Flynn on a bender but, like a model-turned-MP, will regret going topless > **VERDICT** Howard Hughes would approve, but he went crazy in the end

## S63/S65 AMG ★★★★★

> Twin-turbo 577bhp V8 and 621bhp V12 S-Class variants, because being richer than the world isn't enough and you need to out-drag it, too

## THE GOOD, THE BAD &amp; THE UGLY.

> **VERDICT** S63 V8 is bonkers, S65 V12 utterly certifiable. Does your chauffeur deserve it?

## GLA ★★★★★

> Confused A-Class on stilts with lifestyle pretensions and unnecessary surplus of interior air vents. GLA45 AMG simply unnecessary > **VERDICT** An A-Class for the bewildered. Maybe you thought you were ordering a GLC?

## GLC ★★★★★

> GLK replacement project, now available in right-hand drive. Sounds like you shouldn't care, but the interior might just make you moist > **VERDICT** Rivals are cheaper, better to drive – GLC makes you feel special inside

## G-CLASS ★★★★★

> Cold War relic that's so solidly built it could ram raid a bank vault. Obscene special editions a growing – literally – Mercedes obsession > **VERDICT** You shouldn't want one, but... Will outlast any Defender. And possibly the planet

## GLE/GLE COUPE ★★★★★

> Rebadged M-Class is heavy, ponderous and depressingly cheap inside. Plug-in hybrid plays the tech card, new Coupe an alternative to X6 > **VERDICT** As you were: it's perfectly adequate in a class dominated by the outstanding

## GLS ★★★★★

> Luxo-monster seven-seater lacks Range Rover panache but it's comfy, refined and the infotainment doesn't come from Poundland > **VERDICT** Active anti-roll essential, but otherwise it's a brilliant bus

## SLC ★★★★★

> Buy the SLC43 AMG and it's like an uglier but cheaper F-type with a nicer interior. Buy any other SLC and you've lost your mind > **VERDICT** Come back 718 Boxster, all is forgiven

## SL ★★★★★

> The plastic surgeon was worth every penny: post-facelift SL is far more MILF than Morpheus. Turning up the sporty makes the most of the super stiff structure, too > **VERDICT** Think twice about that Ferrari California. No, seriously

## AMG GT ★★★★★

> SLS replacement is smaller (just), cheaper (considerably) and blessed with a 4.0-litre twin-turbo V8 > **VERDICT** It's got the muscle but maybe not the finesse

## AMG GT C ROADSTER ★★★★★

**NEW ENTRY** > C now means more when R means the most, Roadster delivers extra buzz without massive compromise. If you ignore the cost > **VERDICT** Current GT sweet spot, for the next five minutes at least

## MG

## MG3 ★★★★★

> Tough-looking, spacious supermini has handling that lives up to the promise of that badge. As does the woeful build, crap engine and concrete ride > **VERDICT** The Chinese are coming! But so far they've only got to Tajikistan

## MG6 ★★★★★

**STEER CLEAR** > Previous woeful also-ran now updated with more efficient diesel, more kit and a hefty price cut > **VERDICT** Better, but remains condemned by ghastly steering, buzzy engine. Wrong badge, wrong car, wrong owners

## GS ★★★★★

> Spacious, duck-faced SUV hamstrung by coarse 1.5 turbo petrol, shonky gearboxes and shoddy interior. Handles okay, if you can hack the firm ride > **VERDICT** Cheap, but not sufficiently so. Dacia will sleep well tonight

## MINI

## HATCH/CONVERTIBLE ★★★★★

> Bigger and gawker and less charming, but lovely BMW engines are smooth and peppy, while ride has improved without ruining handling. Five-door in danger of being practical > **VERDICT** A better ownership proposition than ever, even if you love it a little less

## COOPER S/JCW ★★★★★

> Up-sized BMW 2.0-litre four-pot-powered 228bhp JCW most powerful Mini ever. Terrific

turboed fun, if a tad overwrought and synthetic

> **VERDICT** Beware the options list, lest it lead to bullion robberies and perilous dangling over cliffs

## CLUBMAN ★★★★★

> Replace circus-freakery of old one with full complement of portals, add longer wheelbase, bigger boot; now bake > **VERDICT** Loaf-alike maxi-Mini freshness, the grown-ups' choice

## COUNTRYMAN/PACEMAN ★★★★★

> Countryman has been replaced for 2017, but the three-door Paceman is still spun off the old, far inferior, Countryman > **VERDICT** Vastly improved Countryman now a strong SUV

## MITSUBISHI

## MIRAGE ★★★★★

> Facelift can't hide the Mirage's catastrophic lack of style or charm. As well suited to the small car segment as a Sopwith Camel is to executive short-haul flights > **VERDICT** Want your kids to stay off the roads? Buy them one

## ASX ★★★★★

> Box-ticking small SUV gets a by-the-numbers facelift, leaving you with a car that feels like it was designed on a spreadsheet. At least it's relatively cheap and well kitted > **VERDICT** Best bought on the internet

## SHOGUN ★★★★★

> Great-value old-school workhorse for those whose workplace is covered in mud, oil or bomb craters. Big, noisy diesel, chunky underpinnings and reliable, with hose-down cabin > **VERDICT** If you don't need this car, you don't need this car

## OUTLANDER ★★★★★

> Mid-life overhaul brings sleeker looks and lifts cabin ambience by miles. Diesel still a bit of a tractor but PHEV comfy and refined > **VERDICT** The UK's best-selling plug-in hybrid finally makes sense

## MORGAN

## 3-WHEELER ★★★★★

> As comfortable as riding over Niagara Falls in a barrel and equally sane. Not as quick as it feels, but quick enough for a three-wheeler on bike tyres > **VERDICT** Brilliant Caterham alternative without the macho trackday posturing

## AERO ★★★★★

> Drop-top was first of the new-era Morgans and goes it alone since Aero Supersports, Coupe and Squiffy Perkins bought it at the Somme > **VERDICT** Two worlds collide. And with 367bhp they may not be the only ones doing the colliding

## PLUS 4/FOUR FOUR/ROADSTER ★★★★★

> Entry-level Mog still with 'traditional' ash frame and 'traditional' (ie, awful) dynamics. Four-seat 4/4 is surprise eco champ: 44mpg > **VERDICT** Cheap, considering the craftsmanship, even at £33k, but if you want an old car, buy one!

## PLUS 8 ★★★★★

> Don't be fooled by tatty-ho styling, 8 is built on 'modern' bonded and riveted Aero chassis. Fidgety like a child with worms > **VERDICT** Classic Morgan style, modern BMW V8 poke, manners like a five-term Borstal veteran

## NISSAN

## MICRA ★★★★★

> So much better than the old car, new Micra is on Wikipedia right now deleting all mention of its predecessor. Proves that a car designed by Europeans will appeal to Europeans, amazingly > **VERDICT** Wheeled redemption, at least until the next Polo/Ibiza turns up

## JUKE ★★★★★

> Mould-breaking compact crossover; you think it would look like that if the mould hadn't broken? Cheap interior and so-so dynamics belie the hype > **VERDICT** Does it still count as 'different' if everybody's got one?

## NOTE ★★★★★

> Like a Honda Jazz with middle-age spread, this is a small, practical MPV-hatch with limited aspirations of greatness > **VERDICT** An automotive cardigan: deeply uncool but good at what it does



# TOUGH STUFF

COMPOSITE CERAMIC TECHNOLOGY

**GTECHNIQ**  
SMART SURFACE SCIENCE

LEADING THE WAY IN  
**AUTOMOTIVE  
DETAILING  
TECHNOLOGY**



**YEAR GUARANTEE**



Like no other product, **Crystal Serum** provides paint protection with previously unachievable levels of gloss, durability, scratch and chemical resistance.

Its composite structure offers the ultimate in **ceramic protection** plus the same slick finish and candy-like gloss as the very best carnauba waxes.



**PROFESSIONAL**



[service.gtechniq.com](http://service.gtechniq.com)



## LEAF ★★★★★

> Gawky looking EV pioneer now with 20% extra range. Updated interior even more like a **Star Trek** shuttle, and not in a good way > **VERDICT** BMW i3 far funkier, Renault Zoe far cheaper, internal combustion still superior. Beam us up

## PULSAR ★★★★★

> So dull it can only be explained by a conspiracy theory claiming it owes its entire existence to a long-range Qashqai sales-boost strategy > **VERDICT** Buy a Focus. Or a Golf. Or a Ceed. Or an Auris. Okay, maybe not an Auris...

## QASHQAI ★★★★★

> Second-gen crossover carries on exactly where the original left off: meandering ominously in the middle lane to the tune of 'are we there yet?' > **VERDICT** Likeable, with a side order of resting on its own laurels

## X-TRAIL ★★★★★

> The X-Trail used to be a rough-tough off-roader apparently designed on an Etch-a-Sketch. Now it's a Qashqai put through a photocopier at +10% > **VERDICT** It still ain't exciting. But it's probably going to sell a lot better

## GT-R ★★★★★

> Now with a slightly thicker veneer of luxury (and another 20bhp) – but this is still basically a morally ambiguous hardcore moments from rage > **VERDICT** Drivetrain sounds like a drum kit falling down the stairs; leaves your brain feeling much the same

## PAGANI

## HYUARA ★★★★★

> Spectacular cottage (villetta?) industry supercar with active aero, AMG-built 720bhp twin-turbo V12 and an interior more decadent than a Roman orgy > **VERDICT** Want have, can't have: they're all sold.

## PEUGEOT

## 108 ★★★★★

> Pug-faced city car. Go for 82bhp 1.2: the 68bhp 1.0 is so slow we were all monkeys when it set off and it still hasn't hit 60mph > **VERDICT** Reasonable no-frills city car but boot and rear space tight. Skoda Citigo is better

## 208 ★★★★★

> Refresh more than just a prettier face as dynamic update adds handling chops to 208's interior chic > **VERDICT** Pug's recovered that VaVaVoom from the back of the sofa. No, wait – that's the other lot

## 308 HATCH/SW ESTATE ★★★★★

> Handsome, hushed 308 at its best when eating motorway miles, or when you're watching it out of the window of your Golf. Fiddly touchscreen > **VERDICT** Hatch isn't up to scratch, but roomier SW wagon is worth a look

## 308 GTi ★★★★★

> Discreet styling hides playful proclivities; LSD keeps things tight up front while fantastic French chassis delivers lively rear > **VERDICT** 250 and 270 variants both great, but 270 gets more kit and extra power

## 508 SALOON/ESTATE ★★★★★

> Little-seen XL Pug with unconvincing cod German accent. HYbrid4 gets 4wd via 37bhp 'leccy motor on rear wheels > **VERDICT** RXH is poor man's Audi Allroad. Rest of range is padding on your company car list

## PARTNER TEPEE ★★★★★

> Spacious, versatile Tepee so useful it could almost be a van. Funny, that. More practical than a regular MPV, drives okay > **VERDICT** Make your own clothes? Live in a yurt? This is for you

## 2008 ★★★★★

> Welly-wearing 208 gets a facelift which hits on the idea of actually resembling an SUV, and at a stroke makes a decent car more credible > **VERDICT** Not so much leaping on the SUV bandwagon as hitching a ride... but it's an attractive hitchhiker

## 3008 ★★★★★

> Tell friends you've bought one and they'll laugh until they see it. Sharp to look at, surprisingly fun to drive and not too weird > **VERDICT** Just make it absolutely clear you've not bought the old one

## 5008 ★★★★★

> If you've just read the 3008 entry you can skip on down. Edgy design inside and out hides genuine practicality and in the 5008, seven seats. Rejoice as Peugeot demonstrates they really have got their act together

> **VERDICT** Annoy the Germans and buy French

## PORSCHE

## 718 BOXSTER ★★★★★

> The turbo revolution continues as Boxster bins the six for a brace of faster forced-induction fours. Updated face now flatter than Brian Harvey's > **VERDICT** Whole lotta lag; chassis still a stairway to heaven

## 718 CAYMAN ★★★★★

> Efficiency march means sublime outgoing model ditches choral flat-six for punchy but industrial turbo four. Gets uglier in the process, still handles like you wish all cars would > **VERDICT** Better by the numbers but... know any nice 981s for sale?

## CAYMAN GT4 ★★★★★

> Junior GT3 is first Cayman to get more power than current 911. 380bhp, manual 'box, LSD and a grin wider than a Glasgow smile > **VERDICT** Porsche finally admits that the Cayman and not the 911 is its real sports coupe

## 911 ★★★★★

> 991.2 may not look much different but under the skin lurks a whole new range of turbocharged engines. The most grown-up 911 yet > **VERDICT** Rear-engined appeal lives on. Proper Turbo now utterly ferocious, Turbo S unhinged

## 911 GT3/GT3 RS ★★★★★

> New engines, PDK-only, electric steering and rear steering too for this generation. Epic drive > **VERDICT** Both have won our end-of-year Sports Car Giant Test (2013, 2015). Enough said

## 911R ★★★★★

> The 911 that Porsche secretly wants the 911 still to be. It's an anti-991.2: a non-turbo 4.0 bruiser in retro disguise, with 493bhp and manual 'box > **VERDICT** Supple, poised, supreme fun. But we'd still have a Cayman GT4

## 918 ★★★★★

> Epic 4wd hybrid can waste GTis with 6sec 0-62mph electric mode, then slay Lambos by adding 600bhp V8. Superb electric steering, too > **VERDICT** Almost overshadowed in the P1-LaFerrari posturing war, but easily as good

## MACAN ★★★★★

**BEST IN CLASS** > Baby Cayenne is even better than dad – and Evoque. Base car with Golf GTI 2.0 makes no sense when S and S Diesel are pennies more > **VERDICT** GT3 RS for trackdays, Cayman GT4 for weekends, this for everything else. Sorted

## CAYENNE ★★★★★

> Porsche's cash-cow is a prize German Angus now, handsome and the best SUV to drive. V6 S quick, too quiet, Diesel S dynamite > **VERDICT** A proper Porker? Turbo S's sub-8min Nürburgring lap time says yes

## PANAMERA ★★★★★

> When they said four-door 911, this is what they meant. The Mk1 was just throat-clearing; this Mk2 is the opera. Drips with tech, innovation and better dynamics – and it looks perfect > **VERDICT** A lesson in making nonsensical niches make perfect sense

## RADICAL

## SR3 SL ★★★★★

> Properly type-approved (street legal) SR3 gets a 300bhp blown Ford 2.0 instead of a bike motor, a heater and even a 12v socket. It's almost lavish > **VERDICT** Toned down for occasional road use but still hairier than a cave man with hypertrichosis

## RXC TURBO ★★★★★

> Play out those Le Mans fantasies on the commute with this Peterborough-built Polaris. Sequential 'box welcome in town like an EDL demo > **VERDICT** When you've outgrown your Caterhams and 911 GT3s, here's the answer

# SPEC EXPERT TESLA MODEL X

Look no further for the ultimate electric family car

You get a lot of kit on any Model X but the boxes that are available for ticking tend to have big numbers after them. Firstly you have the crucial decision of which battery pack to go for; we say ignore the 75D and choose the 90D or 100D if you can stretch to it; both push the official range beyond 300 miles and offer the same ballistic acceleration of 0-60mph in 4.8 seconds.

**Starting price: £90,300**

There's two big interior choices. Five seats come as standard, the six-seat layout is £3000 and seven-seat version £1000 more; if you don't need the extra chairs then you'd probably be better off with a Model S. Secondly you need to choose trim colours. The standard black-on-black is far too dark, while the white leather is laughably child-intolerant. We suggest the black or tan leather with white headlining for £3000, but add £250 to switch the incongruous wood for carbonfibre.

**Running total: £103,850**

Finally, skip the Premium Upgrades Package, which doesn't seem great value at £4500, and instead tick the Subzero Weather Pack: seven heated seats, a heated wheel and wiper blade defrosters for £1000 is much more like it. Then you just need the Ultra High Fidelity Sound upgrade at £2500, which sounds incredible, works seamlessly with Spotify on the touchscreen and makes the most of the noise-free powertrain. Lovely.

**Final total: £115,350**

The standard 20-inch Slipstream wheels are fine, but if you can stretch to it the 22-inch Turbine wheels are smarter, whether finished in silver or black, for £5500. On the paintwork front we'd suggest steering clear of the obvious red; the Silver, Deep Blue and Midnight Silver metallics are £1000 and look great paired with the larger rims. Or go for the full space-age look with the multi-coat Pearl White for £1500.

**Running total: £96,300**



Then there's the thorny issue of Autopilot. Spend £5000 on Enhanced Autopilot and you get more cameras and processing power for semi-autonomy – the caveat being in the UK at least it only works on motorways for now. Another £3000 on top nets you all the hardware and software the car needs for level 5 autonomy: get in, tell it where you want to go and you're off. Clearly there's still some way to go before you can use this facility, but if you plan to keep your Model X for three years or more we say go for it; it's more expensive to add the tech in afterwards, and it's the other key USP of the Tesla experience.

**Running total: £111,850**



**TOTAL PRICE: £115,350**



# THE GOOD, THE BAD & THE UGLY

## RENAULT

### TWIZY ★★★★★

> Part electric scooter, part social experiment, it's easy to love the doorless Twizy, especially on balmy evenings along La Croisette. Grimy days in Doncaster a tougher ask > **VERDICT** Transportation of the future, if it's never wet in the future and you like chatting at traffic lights

### ZOE 40 ★★★★★

> Splendid Zoe solves range anxiety by clever new battery with more power, potentially induces wealth anxiety instead with £4000 price premium. Unless you're smart and lease it of course > **VERDICT** At least you can guarantee the emissions are genuine

### TWINGO ★★★★★

> Rear-engined rwd runabout isn't as nippy as it sounds, but is roomy, with clever smartphone connectivity. More cheeky than sister Smart, and cheaper > **VERDICT** Lower-power version with '80s F1 Turbo paintjob the way to go

### CLIO ★★★★★

**FACELIFT SOON** > Welcome return to form for the five-door Clio with even boggy ones looking handsome, a well sorted cabin and sprightly driving qualities. Three-cylinder turbo petrol a (slowish) hoot > **VERDICT** Fiesta more fun, Clio more stylish

### CLIO RS ★★★★★

**FACELIFT SOON** > Remember when Clio RS was king of the hill? No? Probably for the best, because even new, more powerful RS Trophy can't offset awful auto 'box' > **VERDICT** Brings its own Trophy but still doesn't win. Rumoured RS Wooden Spoon pure speculation

### CAPTUR ★★★★★

> It's a Clio on stilts – but that's not necessarily a bad thing. No 4x4 pretensions means focus is on personalisation. Good engines. It's no Juke to drive > **VERDICT** Technicolor clown car if you're not careful with the spec, otherwise okay

### MEGANE ★★★★★

> All-new French Golf looks like a foie-gras Clio outside and a low-rent Tesla inside. Is this an instant improvement over the old one > **VERDICT** Renaultsport-fettled GT with rear-wheel steering a keen drive, too. Sacré bleu!

### MEGANERS ★★★★★

> Continues as the old three-door for now; raucous 2.0 turbo, manual 'box, awesome chassis – this a proper, pulse-spiking hot hatch > **VERDICT** Buy one before they ruin it like the latest RS Clio

### SCENIC ★★★★★

> Fourth-generation compact MPV trades the practicality that made your wife want one for an exterior sharp enough that you'll consider having more kids, although the stiff ride could see you arrive too early > **VERDICT** Console your manhood with the fact that 20s are standard

### KADJAR ★★★★★

**BEST IN CLASS** > Nissan may rue the day it left the parts store door 'Kadjar', as Renault's take on the Qashqai bests the original in every way > **VERDICT** Aggressive pricing, smooth ride, great refinement, squishy seats

## ROLLS-ROYCE

### GHOST ★★★★★

> A little posher, with more bespoke options to hide BMW-ness, new gearbox for the V12 and minor fettling to the metal > **VERDICT** Perfectly built and pitched and more individual. A Phantom for millionaires not billionaires

### WRAITH ★★★★★

> A 624bhp twin-turbo V12 sporting vehicle that drives like no other. Dismisses distance but would never lower itself to squeal through bends > **VERDICT** Whisper it, but Rolls has produced an amazing driver's car

### PHANTOM ★★★★★

**DIES SOON** > Simply the best luxury car money can buy, with a cabin to embarrass a superyacht, opulence to make Donatella Versace blush (if she could), and a V12 pulling you along. Not that you'll hear it > **VERDICT** Every car on earth starts with ambitions of being a Phantom

### DAWN ★★★★★

> Wraith with the roof cut off – although actually 80% of the exterior panels are new. Best-looking Roller, it rides like a liner and costs more than a VW software decision > **VERDICT** Nothing between the stars and the stars

## SEAT

### ATECA ★★★★★

> Spanish latecomer to the SUV party gets the dress code right, isn't the life and soul but neither will it bore you into leaving early. Another sangria please! > **VERDICT** SE, petrol, Manuel ('I am from Barcelona!')

### MII ★★★★★

> Tedious-looking city-box is far less funky than Renault's Twingo but roomier and good to drive. You don't look at the mantelpiece, and all that > **VERDICT** VW Up more desirable, pretty Skoda Citigo cheaper. Siesta time in Seat's prod dept?

### IBIZA HATCH/SC/ESTATE ★★★★★

> Angular, angry-looking supermini, possibly because it knows how much better a Fiesta is to drive. It's not bad though, and ST wagon is huge > **VERDICT** Not as sporty as it likes to think, but holding up in face of newer, better-driving rivals

### IBIZA CUPRA ★★★★★

> Update to 189bhp 1.8 turbo with manual 'box makes this a brilliant budget blast. Great interior, finessed details, tempting choice > **VERDICT** Fiesta ST for outright thrills, this for everything else

### TOLEDO ★★★★★

**STEER CLEAR** > OAP special whose sole interesting feature is that while it looks like a boring saloon, it's actually a boring hatch! Massive interior > **VERDICT** This and identical Skoda Rapid duke it out for UK's dullest car. Czech please!

### LEON HATCH/ESTATE ★★★★★

> Mid-life evolution for Leon means new engines and tech, plus non-surgical facelift. Will still be shunned for a Golf > **VERDICT** Eminently likeable, just by too few buyers

### LEON CUPRA ★★★★★

> Much to the amusement of tyre manufacturers everywhere, the front-wheel-drive Leon Cupra now has 290bhp. GTI who? > **VERDICT** Ballistic, and best bought with a manual transmission

### ALHAMBRA ★★★★★

> Subtlety of subtle facelifts belies 15% efficiency improvement. Still a big box with slidey doors and seven proper seats; put your family first for a change > **VERDICT** Genetically identical to the VW Sharan, but nearly £2k less

## SKODA

### KODIAQ ★★★★★

> Commendably vast SUV takes the Octavia's approach by bulking out on a shared platform, but unfortunately doesn't share its dazzling personality > **VERDICT** The most comfortable place to die a little inside

### CITIGO ★★★★★

> Skoda's all but identical version of the VW Up and Seat Mii. Pick your badge – they're all well packaged but too noisy and slow > **VERDICT** Cheaper than the Up, but not by much. Hyundai i10 also worth a look. Yes, actual advice!

### FABIA HATCH/ESTATE ★★★★★

> Very mature little supermini with bodywork creases a Corby trouser press would be proud of. Estate version ideal for Jack Russells > **VERDICT** Roomy, well made and unexciting – like a low-rent VW Polo. Which is what it is

### RAPID HATCH/SPACEBACK ★★★★★

**STEER CLEAR** > Long, narrow notchback hatch is automotive equivalent of Eastern European refugee. Big boot. Spaceback is shorter, more 'stylish', still dross > **VERDICT** Unless you've got a lot of potatoes and no other way to carry them, just don't

### OCTAVIA HATCH/ESTATE ★★★★★

> Basically the same as a Golf and A3, but bigger, cheaper and more functional. Hot vRS versions old-school ballistic fun. 4x4s practical > **VERDICT** It's a lot of car for the money

### SUPERB SALOON/ESTATE ★★★★★

> So vast inside it echoes. Sharp lines, stacks of kit, double the number of umbrellas. Shame about dull interior and stiff price > **VERDICT** All the family car you'll ever need. Only bigger

### YETI ★★★★★

**BEST IN CLASS** > Ikea wardrobe on wheels – so practical you'll wonder how you ever lived without it. Good news is you don't have to assemble it yourself > **VERDICT** Bigger engines are better. Choose Outdoor model for that rugged look. Grrr

## SMART

### FORTWO ★★★★★

> Chunkier new ForTwo has middle-age spread compared to the last one. Wider, with a much better ride, higher quality cabin and slicker auto, it is older, but wiser > **VERDICT** Less of a compromise, and still a brilliant city runabout

### FORFOUR ★★★★★

> Renault/Merc tie-up means ForFour is accomplished with a classy cabin, although ludicrous pricing seem at odds with budget city car buyers > **VERDICT** Sister car Twingo is more than two grand cheaper. Work that out

## SSANGYONG

### KORANDO ★★★★★

> Borderline rubbish to drive but more practical than the Teflon-coated trousers you're probably wearing if you're giving it serious consideration > **VERDICT** Huge, handy and hellish value, but we'd have a pre-reg Qashqai or CX-5 any day

### REXTON W ★★★★★

> Like that weird 1960s IZal bog roll, Rexton kind of does the job, but is hard and shiny to the touch and not that nice to use. Deals better with mud > **VERDICT** Plenty of space, but dynamically, like IZal, it's gone down the pan

### TURISMO ★★★★★

> Less odious than the old Rodius, but every bit as practical, this giant 7-seater is slower than the Crossrail boring machine > **VERDICT** Has mini-cab written all over it, or soon will, which will handily help disguise the ugliness

### TIVOLI ★★★★★

> There's no getting away from it: Korea's also-ran car maker has built a contender. Great value, spacious and – shock – well-finished inside > **VERDICT** Dross heritage now under threat

## SUBARU

### IMPREZA ★★★★★

> Yes, it still exists beyond WRX and STi. No, you don't want one. Boggy Impreza reduced to a 1.6 petrol hatchback only with optional CVT. Shudder > **VERDICT** Have you got a brand new combine harvester? It's probably a better drive

### WRX/STI ★★★★★

> Sorry WRX, I'm breaking up with you. It's not you, it's me. No, it is you, it's definitely you and your crashy ride, nasty dash and inflexible engine > **VERDICT** Brilliant, on its day, in its day. But that was yesterday, so let's call it a day

### LEVORG ★★★★★

> Impreza estate with a silly name. Single choice of 1.6 petrol with CVT auto and 4wd means it's got a silly drivetrain, too > **VERDICT** Levorg is gravel backwards; dealers may need to. Niche

### XV ★★★★★

> Hopelessly expensive half-way SUV half-wit. Suspension thumps so intrusive you'll think the Stomp musical is performing in the wheelarches > **VERDICT** In the tough crossover market Subaru makes up the numbers, and the price

### FORESTER ★★★★★

> Appealingly functional square-rigger the kind of crossover that existed before we had 'lifestyles'. Good on road, great off it, but not cheap > **VERDICT** Old-school Subaru honest, charming. Tweed cap, pipe, sheep flock optional

### OUTBACK ★★★★★

> The unloved Legacy's only UK legacy is this Allroad-style crossover. New for spring 2015, it's huge inside and the 4x4 look isn't all for show

> **VERDICT** Still more niche than a cragside crevice. Dependable, not desirable

### BRZ ★★★★★

> Gloriously simple but under-nourished rear-drive Boxer coupe, crying out for a supercharger. GT86 twin marginally more 'fun' > **VERDICT** Loveable car we wanted them to make but you don't want to buy

## SUZUKI

### CELERIO ★★★★★

> Braking-phobic city car otherwise spacious, full of kit and cheap. Three-cylinder petrol only plus all the handling vim of a B&Q Value wheelbarrow > **VERDICT** Dowdy and rowdy. Be glad you've got DAB and a cupholder

### SWIFT ★★★★★

> An unsung hero, and not just the excellent 134bhp Sport. Handles well, spacious and cheap. Upgraded Dualjet motor sweet > **VERDICT** Buy one and challenge anyone who questions your choice to a fistfight

### SX4 S-CROSS ★★★★★

> The cheap way to clone a Qashqai. Won't score any points for style, in fact you might hide it at the back of the school car park. Diesel is the best bet – you'll have to stop and get out less > **VERDICT** A crossover to be cross over

### JIMNY ★★★★★

> A box with a four-wheel-drive system bolted onto the bottom, and a 1.3-petrol engine hanging out front. There are seats too > **VERDICT** The swamps the Jimny can easily drive over were probably primordial when it first launched

### VITARA ★★★★★

> Two-tone cross-dresser to rival the Juke, with a handsome body and usefully economical diesel engine. Cabin could do with some work though > **VERDICT** Rutting rhinos and pink paint are a thing of the past: it's a serious family car now

## TESLA

### TESLA MODEL S ★★★★★

> Electro-rocket gets a new face and in P100D guise, kidney-thumping amounts of acceleration. The future, with a cabin from the recent past > **VERDICT** Crush supercars, emit nothing

### TESLA MODEL X ★★★★★

> Model S with a Super Guppy body means you can scare the bejeezus out of your six passengers by reaching 62mph in 3.1 seconds. Effective, albeit in one dimension > **VERDICT** Musky

## TOYOTA

### C-HR ★★★★★

> New compact crossover is stylish, huge fun and kooky inside too. And no, you've not just read a Trip Advisor review for the Soho Hotel > **VERDICT** Buy one and Toyota will never make another dull car. Possibly

### AYGO ★★★★★

> Bright-looking, stupidly-cramped city car with a characterful three-pot motor is as pug to run as it feels. See also Citroën C1, Peugeot 108 > **VERDICT** As 'Up' hill struggles go, battling VW with this is like climbing north face of the Aygo

### YARIS ★★★★★

> Sizeable but soulless, Yaris can't match rivals' dynamics or pocket luxury feel. Clever but costly hybrid version slashes fuel bills and boot space > **VERDICT** Largely joyless supermini last to be picked for the school football team

### AURIS ★★★★★

> Most Aurises sold are hybrids, mainly 'cos rest of the range is pants and other makers haven't got their hybrid acts together yet > **VERDICT** Only worth picking as company wheels if you have a Starbucks-like aversion to paying tax

### PRIUS ★★★★★

> Putting the ludicrous 94mpg claim to one side, Prius v4.0 boasts entirely new structure, improved suspension, and is no longer totally joyless to drive > **VERDICT** A Toyota hybrid that handles. Electric-only range still pathetic





# MidlandCredit.co.uk

Getting the Nation Driving

## NEED CAR FINANCE?

# BUY ANY CAR from *any* DEALER



**FAST DECISION  
WITHIN 1 HOUR** ✓

**NO DEPOSIT** ✓

**POOR CREDIT** ✓

**NO FEES** ✓

26.9% APR REPRESENTATIVE



TRUSTPILOT

**FINANCE FROM  
£3,000 to £50,000**

**NO ADMIN FEES**



**APPLY ONLINE NOW!**

**www.midlandcredit.co.uk**



*Or Call us NOW on*  
**03339 00 00 00**



Midland Credit Ltd is a licensed credit broker and not a Lender and is authorised and regulated by the Financial Conduct Authority for consumer credit  
FCA no. 732202. 26.9% Apr representative written quotations available upon request, the rate you will be offered will depend upon your personal circumstances



**MIRAI ★★★★★**

> Weird on the outside, *Star Trek* on the inside and a hydrogen fuel-cell underneath. But for all that it drives just like a very refined regular car  
 > **VERDICT** We're convinced by the tech, but there's nowhere to refuel it yet

**AVENSIS SALOON/TOURER ★★★★★**

> Journeyman company car is like a small oil-field drill: does little well – despite new BMW diesels. Tourer marginally more stylish  
 > **VERDICT** White goods. Also available in light grey, medium grey, dark grey. Not beige, oddly

**VERSO ★★★★★**

> Safe, stodgy seven-seater with snore-worthy chassis and a big-selling BMW-sourced 1.6 diesel that feels like half its horses are asleep too  
 > **VERDICT** Does as little badly as it does well, but easy meat for Ford C-Max or Citroën Picasso

**RAV4 ★★★★★**

> Was a soft-roader pioneer back in '94 but has settled for fluffy slippers in its old age. Trump card is boot big enough for a casino table  
 > **VERDICT** Roomy, reasonable, unremarkable. More dynamic SUVs deserve your dosh

**LAND CRUISER/V8 ★★★★★**

> Actually two distinct models but both proper bare-knuckle ladder-frame brawlers that wouldn't know a latte if you spilt it on their rigger's boots > **VERDICT** Rough, but if we were stranded in the desert we'd trust it over a Range

**GT86 ★★★★★**

> The slowest fast car you can buy is slightly better than before thanks to new aero, revised suspension and better cloth trim. None of this matters – it's still B-road heaven  
 > **VERDICT** As pure as Jon Snow. Both of them

**VAUXHALL****VIVA ★★★★★**

> It may look like it was dropped before it had set, but is comfy, roomy and refined for a city car, and comes with plenty of standard kit  
 > **VERDICT** More generous than it may appear at first glance. We'd still buy an Up, though

**ADAM/ADAM ROCKS ★★★★★**

> Obese Fiat 500 wannabe with huge options list and comedy naming shtick. Adam S warm hatch worth a thought; Rocks crossover flaccid  
 > **VERDICT** Revitalised by new 1.0-litre turbo triple. Buy a paper bag and try it

**CORSA ★★★★★**

> Made-over Corsa looks like a candidate for When Plastic Surgery Goes Bad, but it is more refined and better to drive. 1.0T a good motor  
 > **VERDICT** Vauxhall keeps trying, but Fiesta still cheerfully waving from way out in front

**CORSA VXR ★★★★★**

> Luton's hooligan now smoother round the edges. Unless you pay extra for the slippery diff and hardcore suspension. Thug life > **VERDICT** Better but still not best. Lacks Fiesta ST's sparkle

**ASTRA HATCH/ESTATE ★★★★★**

> Massive step forward in terms of driving dynamics and interior design, added

techno-charm of OnStar concierge and Apple CarPlay a bonus > **VERDICT** In hatchback grandmother's footsteps, Focus and Golf turn round to find Astra standing right behind them

**ASTRA GTC/VXR ★★★★★**

> Astra 3dr remains as was for now; ie still stylish enough to stand comparison to Scirocco. VXR fearsomely fast but moody  
 > **VERDICT** The sexiest Vauxhall. Let's hope replacement doesn't lose its mojo

**CASCADA ★★★★★**

> Brave attempt to take on German compact cabriolets, but chassis has less integrity than Sepp Blatter. Good value if you don't mind the image (What image? Exactly!) > **VERDICT** Marty McFly wouldn't. Doc Emmett Brown just might

**INSIGNIA GRAND SPORT ★★★★★**

> Last non-PSA car shows plenty of effort but a lack of inspiration makes it too close to how you'd hope an Insignia isn't  
 > **VERDICT** Fine if you're given one

**MALOO ★★★★★**

> Never before have so many stereotypes been incorporated into a single vehicle. Spectacularly fast, absurd, useless, Australian and brilliant all at the same time > **VERDICT** The fastest way to stick it to the taxman

**MERIVA ★★★★★**

> Suicide is painless, goes the theme tune to M\*A\*S\*H\*, clearly not referring to tight car parks and the Meriva MPV's back-to-front rear doors > **VERDICT** Nice idea, but does anyone care about mainstream MPVs any more?

**ZAFIRA TOURER ★★★★★**

> Large MPV with slick seating arrangement and much more spacious than the old bus it replaced. Struggles in the face of S-Max greatness > **VERDICT** Accomplished but out-flanked by crossovers' rise to dominance

**MOKKA X ★★★★★**

> Facelift filed under 'about f\*\*\*ing time too', Mokka gets a better cabin, some new engines and pointless suffix. Driving misery reduced by half > **VERDICT** X marks the spot where the ball was – about five years ago

**ANTARA ★★★★★**

> Old-fashioned SUV based on the Chevrolet Captiva. Chevrolet has subsequently quit selling cars in the UK altogether. You do the maths > **VERDICT** Comprehensively outclassed by Kuga etc. Felt dated at launch in 2007

**VXR8 ★★★★★**

> 577bhp Aussie import that's £20k cheaper than an M5. Optional auto 'box's bid to add sophistication akin to serving lager in cut crystal. But who gives a 4X? > **VERDICT** Big, brutish charm. But row your own, mate

**VOLKSWAGEN****UP! ★★★★★**

> Box on wheels is the kind of city car the Japanese have been building for years, except this is much better quality and has a VW badge  
 > **VERDICT** Hyped as a revolution and hardly

that. But a spacious small car with a strong, appealing image

**POLO ★★★★★**

> Bothered by the Fiesta's Airfix plastics? Buy a Polo instead – brilliant engines, bank-vault build quality and almost as good as the Ford to drive  
 > **VERDICT** Small capacity turbo petrols are a riot, and increasingly efficient, too

**POLO GTI ★★★★★**

> Baby GTI right down to the tartan seats, now with bigger balls. Vastly improved by introduction of manual gearbox. Surprisingly strong value > **VERDICT** Where's the nearest Byron Burger drive-thru?

**GOLF HATCH/ESTATE ★★★★★**

> What every rival would like to be if only it could get away with charging this much. Tweaked and preened but perpetually desirable, made for a life of Waitrose car parks  
 > **VERDICT** Never knowingly undersold

**GOLF CABRIOLET ★★★★★**

> The swot's sexy top-dropping sister promises open-air thrills but remains a sensible hombody at heart. Your parents would approve  
 > **VERDICT** Or will you always be thinking about the A3 Cabriolet you almost bought?

**GOLF GTD/GTI/R ★★★★★**

> GTD is your dad in running shoes. GTI is your dad when he was wild, young and free. R is your dad having a mid-life crisis. All are ace > **VERDICT** After seven generations, VW has this hot-hatch thing nailed

**GOLF SV ★★★★★**

> The artist formerly known as the Golf Plus. And by 'artist' we mean medium-sized MPV. The car you always knew the Golf would grow up to be  
 > **VERDICT** Not a bad choice, but now the BMW 2-series Active Tourer is breathing down its neck

**BETTER HATCH/CABRIO ★★★★★**

> Although better to drive it lacks the design purity of its predecessor and the charm of the original > **VERDICT** Even wannabe retro hipsters are, like, so totally over this cynical marketing exercise, man

**SCIROCCO ★★★★★**

> Old Golf in a slinky dress. Scrubs up well. Fun, friendly, and more generous in the back than Audi TT > **VERDICT** Ballistic R version definitely worthy; low-power diesel not so much

**PASSAT SALOON/ESTATE ★★★★★**

> Interior design and refinement so good it shames some limos, cutting-edge kit and elegant looks. If only it wasn't so dull to drive  
 > **VERDICT** Mega mile-muncher for the undemanding. Aesthete to Mondeo's athlete

**CC ★★★★★**

> Previous Passat on a night out – but we aren't talking clubbing and a kebab. Awfully close to being genuinely sexy, even if it is a CLS knock-off > **VERDICT** Like all great knock-offs, it's almost as good and cheaper

**TOURAN ★★★★★**

> It's still more Millets than House of Fraser, but the all-new Touran does family stuff irritatingly

well. Makes the C-Max seem somehow shoddy  
 > **VERDICT** MPV meets MQB, nearly goes VIP

**SHARAN ★★★★★**

> Large seven-seater sliding-door people carrier. Nice enough but made to look silly by the all-but-identical and significantly cheaper Seat Alhambra > **VERDICT** Get the same car from Seat for less. Or try the Ford Galaxy

**TIGUAN ★★★★★**

> All-new Tiguan is accomplished but achingly predictable. Have Seat or Skoda made more of the MQB platform with their versions?  
 > **VERDICT** No sex please, we're VW

**TOUAREG ★★★★★**

> The people's Porsche Cayenne. Do the people still want their own Cayenne? Well, it is nearly £10k cheaper... > **VERDICT** Big, comfy, competent SUV. Great on and off road

**VOLVO****V40 ★★★★★**

> Smart Swede in a sector dominated by Germans. Efficient D4 engine and impressive kit, but it's a bit bloated in seat, suspension and steering feel > **VERDICT** Sitting uncomfortably between Golf and A3. A rock and hard place

**V60 ★★★★★**

> A Frenchman who can't cook. A Jackson who can't dance. A Volvo estate which can't carry much. No such things against the very nature of being exist, do they? > **VERDICT** Handsome, safe, efficient estate hamstrung by one issue...

**V90 ★★★★★**

> Sacrilegiously abandons the space race for style while prioritising comfort and refinement over German machismo. Lovely inside. A genuine alternative now > **VERDICT** If there's such a thing as Swedish zen, this is it

**S90 ★★★★★**

> Smart-looking, well-crafted and (shock) adept handling exec saloon dances a merry jig on the grave of unloved outgoing S80  
 > **VERDICT** Loudly purring Swedish cat enters the 5-series/E-Class pigeon enclosure

**XC60 ★★★★★**

> Space, sharp looks, competitive pricing, family safety and a wipe-clean cabin. Only grumbles are grumbly D5 diesel engine and high CO2  
 > **VERDICT** Volvo really is good at SUVs. XC60 hard to beat, even by much newer competitors

**XC70 ★★★★★**

> A V70 in breeches, with raised ride height and 4x4 option. Awd starts at less than 40 grand, which is good value if you find SUVs crass  
 > **VERDICT** If you don't like having a dozen brace of shot pheasant in your boot, don't buy one

**XC90 ★★★★★**

> It was worth the (long) wait: luxurious seven-seater interior, a smorgasbord of clever safety tech, efficient four-cylinder and plug-in drivetrains, and refined drive > **VERDICT** One of the most complete cars on sale at any price

**LEASE ACADEMY PETROL MISERS** Don't fancy the taste of diesel any more? Try these frugal alternatives**FORD MONDEO 1.0 ECOBOOST ZETEC NAV 5D**

£186pm

Understandably sub-Chiron performance, more room though  
 > **Spec** 1.0-litre 3-cyl petrol, fwd, 6spd manual, 123bhp, 55.4mpg > **List price** £21,370 > **Initial payment** £1922.31, £213.59/month for 48 months  
 > **Mileage allowance** 5000/miles  
 > **Via** vehiclesavers.com

**NISSAN MICRA 0.9 IG-T VISIA**

£135pm

Fresh, modern, requires no apologies in advance  
 > **Spec** 0.9-litre 3-cyl petrol, fwd, 5spd manual, 89bhp, 64.2mpg  
 > **List price** £13915  
 > **Initial payment** £1212.30, £134.70/month for 48 months  
 > **Mileage allowance** 5000/year  
 > **Via** jetvehiclefinance.com

**PEUGEOT 308 ACTIVE 1.2L PURETECH 110**

£210pm

Family-friendly, light sprinkling of Peugeot magic  
 > **Spec** 1.2-litre 3-cyl petrol, fwd, 5spd manual, 109bhp, 70.6mpg  
 > **List price** £19,645  
 > **Initial payment** £1898.42, £210.94/month for 36 months  
 > **Mileage allowance** 8000/year  
 > **Via** neva.direct

**SUZUKI CELERIO 1.0 SZ3 DUALOGIC**

£147pm

An impressive 78.5mpg combined, and not entirely hideous to drive  
 > **Spec** 1.0-litre 3-cyl petrol, fwd, 5spd manual, 68bhp, 78.5mpg  
 > **List price** £8999 > **Initial payment** £930.24, £155.04/month for 48 months  
 > **Mileage allowance** 8000/year  
 > **Via** nationwidevehiclecontracts.co.uk







**BOTB**  
WIN YOUR DREAM CAR

**BOTB**  
WIN YOUR DREAM CAR

**BOTB.COM**  
**WINNER**  
**BOTB.COM**

feefo 95% TRUSTPILOT

AS SEEN ON TV

**WIN YOUR DREAM CAR WITH BOTB**



Weekly Winner - Neil Read  
Porsche 718 Cayman S



Weekly Winner - Mitchell Cowan  
Ford Mustang GT + £10k Cash



Weekly Winner - Emmanuel Omubo-Dede  
Ford Fiesta ST

**WIN YOUR DREAM CAR AT BOTB.COM**  
**FREE £5 ON SIGN-UP - WINNER EVERY WEEK!**



# SECOND TIME ROUND

GRAY'S ANTIQUE MARKET

58 DAVIES STREET, LONDON W1K 5LP

Open Monday - Friday from 10am

BUYING OR SELLING A WATCH?

**DON'T CALL US!**

UNTIL YOU HAVE CALLED EVERYONE ELSE!  
FOR

**ROLEX, CARTIER**

AND OTHER FINE WATCHES

**\*IMMEDIATE CASH PAID\***

**HIGHEST PRICES**

*Proof of identity required with purchase of all watches*

[www.secondtimeround.com](http://www.secondtimeround.com)

[www.secondtimeround.biz](http://www.secondtimeround.biz)

**24 HOUR TELEPHONE HOTLINE**

**020-7499-7442**



## Supercar Driving Experiences at **THRUXTON**

MOTORSPORT CENTRE

*Brilliant new McLaren 570S comes to the fastest track in the UK!*

*Test drive it against the established Superstars, the Ferrari 458 and Lamborghini Huracan.*

*Plus other McLaren driving options as well!*

**When only the best will do!**



Photo: ePete Gibson

High Tech Skid Pan facility at Thruxton – 3200m<sup>2</sup> of polished concrete  
with remote control water jets, Toyota GT86 and MINI Cooper training cars.

**T: 01264 774921** [thruxtonracing.co.uk](http://thruxtonracing.co.uk)







## PROTECT ALL FOUR WHEELS

for less than it normally costs to refurbish just one!

- Protect your wheels from kerb damage
- Suits 98% of wheel and tyre combinations
- Tyres can be changed with AlloyGators in place
- Suitable for run-flat tyres
- Protects tyre wall from damage



PROTECT  
ENHANCE  
CUSTOMISE



For more information please visit  
[www.alloygator.com](http://www.alloygator.com)  
or call us on 08450 707078



## Transform your garage!

Call now  
to arrange a  
**FREE Design  
Consultation**  
...and be  
inspired!



### Create a beautifully organised space!

As Europe's leading garage interior company, we have the expertise to design and install your dream garage. Whether you're looking for an organised home for your car, or want to create a lifestyle room for the family, our award-winning cabinets, flooring and wall storage systems can provide the perfect solution for your needs.

- MODULAR CABINETS
- WALL STORAGE
- FLOOR TILES
- DESIGN & INSTALL



For a free brochure call **0845 371 0050**  
or download at [www.duragarages.com](http://www.duragarages.com)

**DURA**  
Fitted Garages

Alternatively, return  
this slip in an envelope  
(no stamp required) to:

Freeport RSLX-YXCA-GUTJ,  
Dura Ltd, St James Road,  
Brackley NN13 7XY

NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
POSTCODE \_\_\_\_\_ TEL \_\_\_\_\_  
EMAIL \_\_\_\_\_

CAR/ANT 7

**FurnitureClinic**

## Leather Care & Repair Specialists

Leather cleaning & restoration kits  
for DIY use or a professional  
nationwide repair service.

SCUFFS & SCRATCHES

COMPLETE RESTORATION

COLOUR CHANGE

CLASSIC & MODERN CARS

DIY KITS

NATIONWIDE SERVICE

**Furniture Clinic**  
Tel: 0844 879 3691

[www.furnitureclinic.co.uk](http://www.furnitureclinic.co.uk)

**ClassicCarsForSale**  
ClassicCarsForSale.co.uk

**SELL  
YOUR  
CLASSIC  
CAR FOR  
FREE**

### The UK's best website for **buying and selling** classic cars!

With thousands of classic cars already on the site and many more added daily, you're bound to find exactly what you're looking for. Browsing the adverts is easy, and if you're not sure what you're after, you can search by body types, age, and price.

**Plus, the site is now mobile optimised so you can browse cars for sale on the go.**

[ClassicCarsForSale.co.uk](http://ClassicCarsForSale.co.uk)

From the publishers of  
**Classic Cars** **practical CLASSICS**





## TAILORED CAR COVERS FOR INDOOR & OUTDOOR USE

For over 35 years, we've been the market leader in supplying innovative solutions in car protection. British designed and manufactured we're proud of our heritage and it shows in the unrivalled quality of our products.

Save 10% with code **CAR-2017**

T: 01943 864 646

E: [info@specialisedcovers.com](mailto:info@specialisedcovers.com)

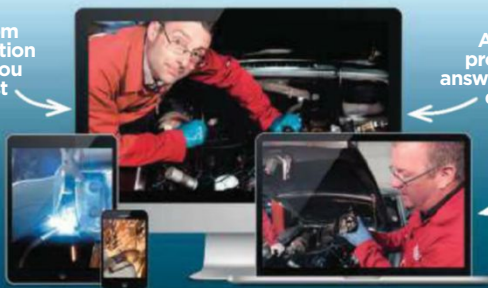
W: [specialisedcovers.com](http://specialisedcovers.com)



# WATCH & LEARN

New videos  
added  
every  
month!

Learn from  
car restoration  
experts you  
can trust



A library of  
professionally  
answered technical  
questions

Watch 100+  
videos on  
any device

# NEW unlimited access!

Become a member  
today to watch as  
many videos as  
you want!

Tuition videos that give you the essential skills you need to maintain, improve and restore your classic car

## BUY NOW AND SAVE 25%

Quote **MAGSAVE25** at our online checkout to **SAVE 25%** off an annual membership Visit [www.skillshack.co.uk/join](http://www.skillshack.co.uk/join)



## RIMSAVERS ALLOY WHEEL RIM PROTECTORS



PERFORMANCE, STYLE & PROTECTION  
A durable solution to the problem of  
damaged alloy wheel rims.



Buy Online

[www.RIMSAVERS.com](http://www.RIMSAVERS.com)

## CHIP EXPRESS™ tuning specialists

### Plug-in Diesel Upgrades

Enjoy up to 40% more **POWER**  
and 20% better **ECONOMY!**



**Diesel Tuning for Cars, Commercials, Tractors & Boats**  
Fit yourself in minutes - instantly improve drivability!



Easy to:  
- Fit  
- Remove  
- Transfer



The CHIP Express™ tuning system is without doubt the most advanced plug-in diesel upgrade available. It works in harmony with your engine, retaining all safety functions without needing to interfere with the vehicle's existing on-board computer. It can be self fitted in minutes, adjusted for more performance and easily removed. It will free your vehicle from its manufacturer's limits.

[www.chipexpress.com](http://www.chipexpress.com)

Visit our website, see your vehicle's  
true potential, order online.

e: [email@chipexpress.com](mailto:email@chipexpress.com) t: 01727 730 956





Car insurance as individual as you are

# Whoever you are, whatever you drive



Compare car insurance quotes and see  
if you can get covered for less with our  
Cheapest Price Guarantee\*

**mustard.co.uk** or call **0330 022 7406**

\*This offer is to beat your cheapest online car, van or motorbike insurance quote. The guarantee only applies to annual policies and to the basic policy price only. This offer excludes telephone quotations and only applies to permanent residents in the UK, excluding the Channel Islands. We reserve the right to request proof of, and validate, alternate quotes as well as proof of the information you provided to obtain the quotes (e.g. copy of driving licence or utility bill) before our guarantee is honoured.

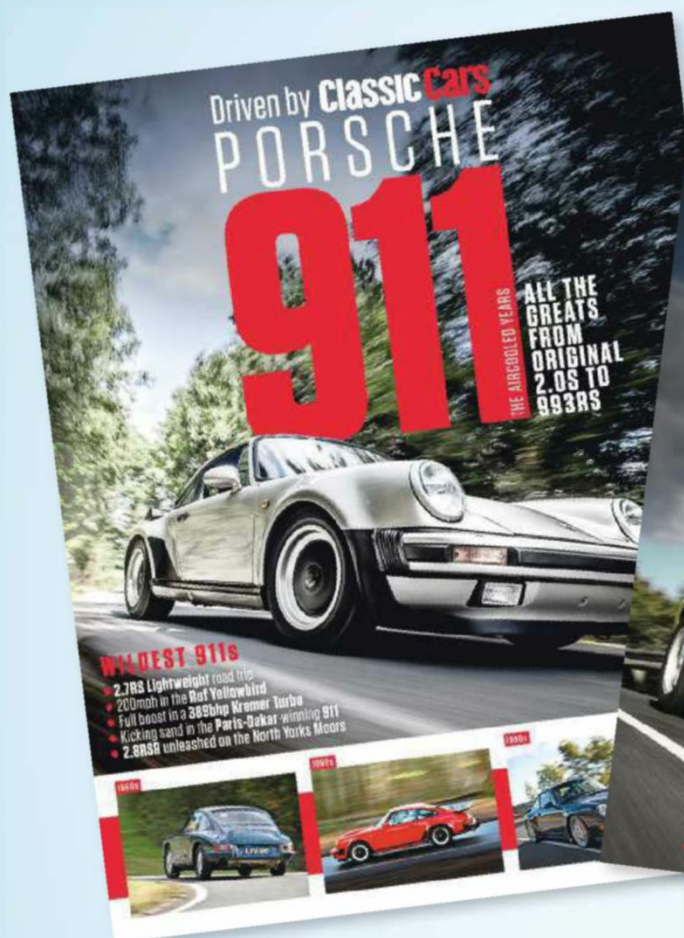
mustard.co.uk is a trading name of Bauer Consumer Media Limited who are an appointed representative of Vast Visibility Limited who are authorised and regulated by the Financial Conduct Authority under firm reference number 566973.



# PORSCHE 911

AIRCOOLED, driven by **Classic Cars**

An unmissable compilation of the best aircooled Porsche 911 features from *Classic Cars* magazine's back catalogue



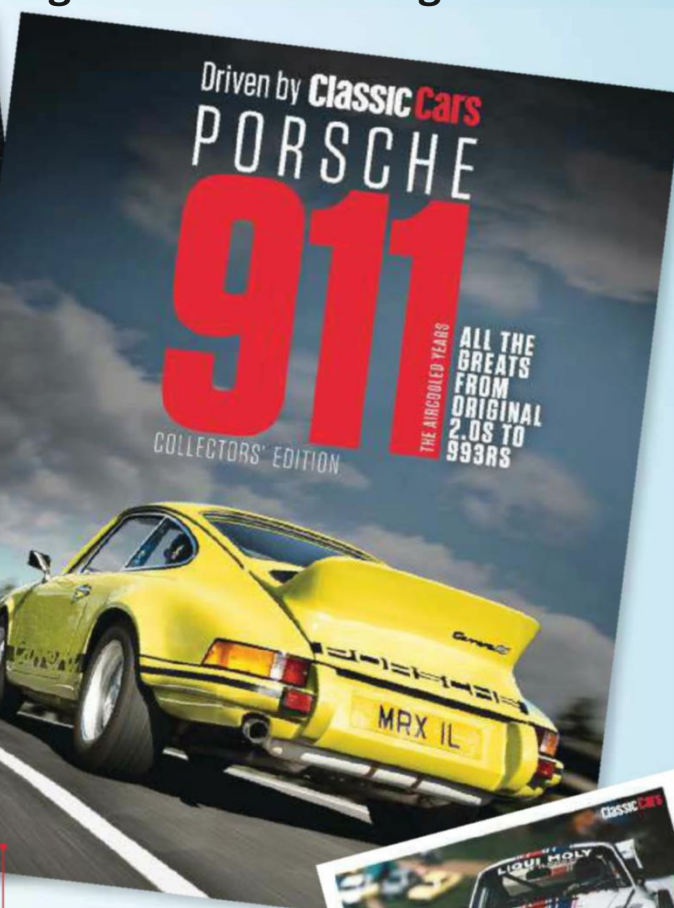
## Porsche 911 aircooled, driven by *Classic Cars*

is a new, 100-page collection of the best road tests from five decades of *Classic Cars* magazine.

It includes all generations of classic 911 road cars, from the original short wheelbase 2.0S to the 993RS, via popular models including the Turbo 3.3, SC, Carrera 3.2 and 964 Carrera 2.

And it's packed with road tests of legendary models, including 2.7 RS, 2.8RSR, Ruf CTR, Kremer Turbo and Paris-Dakar-winning Allrad.

**Buy your copy in stores or online at:**  
[www.greatmagazines.co.uk/Porsche](http://www.greatmagazines.co.uk/Porsche)



## The Collectors' Edition

Why not treat yourself to a souvenir edition?

Limited to just 300 copies, the Collectors' Edition shares the compelling package of features with the standard edition but includes:

- A special, individually numbered cover (#001 – 300) printed on high-quality paper.
- A historic 935 racing print signed by legendary Porsche driver Derek Bell.

**This limited edition is available exclusively online while stocks last at:** [www.greatmagazines.co.uk/Porsche](http://www.greatmagazines.co.uk/Porsche)

**BUY BOTH EDITIONS ONLINE NOW**  
at [www.greatmagazines.co.uk/Porsche](http://www.greatmagazines.co.uk/Porsche)



# Insurance solutions\* for competition cars and more.



**COVER AVAILABLE FOR:**  
SPECIALIST SPORTS CAR  
WITH TRACK DAYS  
RALLY CAR/COMPETITION VEHICLES  
WITH ROAD SECTION COVER  
SUPPORT VEHICLES WITH  
TOOLS AND SPARES  
TRACK DAYS + ON EVENT COVER  
STORAGE AND TRANSIT



Specialist motorsport insurance for individual competitors and sports car owners.

Build your policy with FJ+, choose from a wide range of cover options.\*

Call our friendly UK team for a quote.

**0333 207 6269**

or visit: **footmanjames.co.uk**



**POWERED BY**



Part of the Towergate Group

CLASSIC + MODERN CAR • CLASSIC + MODERN BIKE • MULTIVEHICLE • COLLECTORS • KIT CAR • MOTOR TRADE

PROUD PARTNERS OF:



\*All cover is subject to insurer's terms and conditions, which are available upon request.

Footman James is a trading name of Towergate Underwriting Group Limited. Registered in England No. 4043759. Registered Address: Towergate House, Eclipse Park, Sittingbourne Road, Maidstone, Kent ME14 3EN. Authorised and regulated by the Financial Conduct Authority. Telephone calls may be monitored or recorded. Sign up to our newsletter at [footmanjames.co.uk](http://footmanjames.co.uk) to receive updates on all the latest news, events, offers and competitions. FP ADGE691.9.16



# WORRIED ABOUT EXPENSIVE CAR REPAIR BILLS?

15 years  
ONLINE

30 DAYS  
MONEY BACK  
GUARANTEE

95%  
POSITIVE  
FEEDBACK

multi  
AWARD  
WINNING

Auto  
EXPRESS  
RECOMMENDED

If your car goes wrong, you could be faced with wallet busting repair bills. Not to mention the hassle of dealing with the garage and being without your motor for days, or even weeks on end.

**An award-winning car repair plan from Warrantywise gives you total peace of mind when your car goes bang!** All of our plans include car hire, hotel & onwards travel expenses as well as recovery as standard. You can also take your car to any VAT registered garage in the UK or Europe for repairs!

**Prices start from just £19 per month.** Best of all its been designed by motoring consumer champion, Quentin Willson.

*Quentin Willson*  
Designed by Quentin Willson



## QUENTIN WILLSON'S VIDEO GUIDE

Watch as motoring expert, Quentin Willson, explains the benefits of a used car warranty.

Watch Quentin's Video Guide  
[www.warrantywise.co.uk/guide](http://www.warrantywise.co.uk/guide)



Terms and conditions apply. Accurate at the time of printing.



Get a Quote Online

[warrantywise.co.uk](http://warrantywise.co.uk)



Call us on Freephone

0800 121 4801



**Warrantywise**

Simply the Best in the Business

Audemars Piguet

BREITLING

Cartier

FRANCK MULLER  
GENEVE

HUBLOT

IWC

JAEGGER-LECOULTRE

OMEGA

PATEK PHILIPPE

ROLEX

TAG Heuer

bqwatches.com

# WE WANT TO BUY YOUR ROLEX

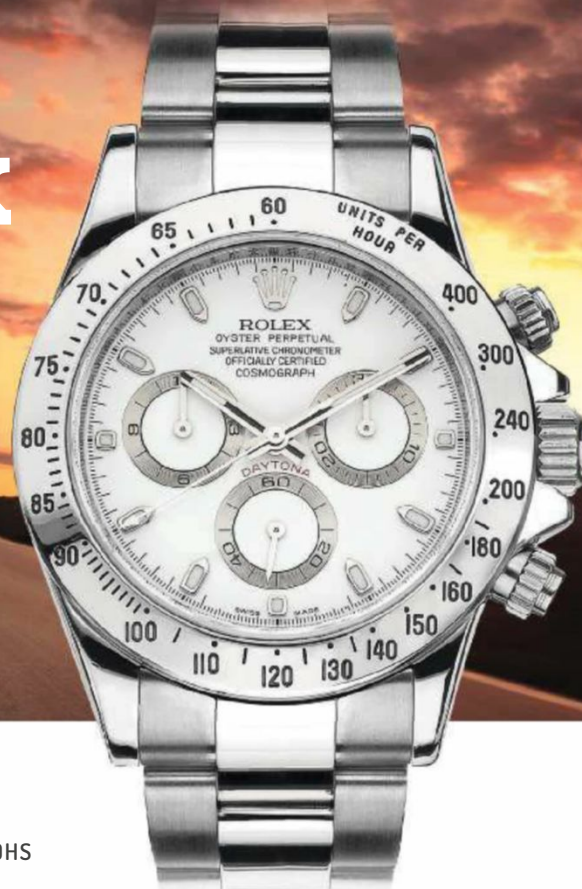
... and all luxury watches

**Why Sell it to BQW?**

Personal & Confidential Customer Service

Pre-paid Delivery Insured up to £15k

Prompt Decision / Same day payment



rolex specialist  
**bqw**

**Call: +44 (0)203 747 9326**

**Email: [info@bqwatches.com](mailto:info@bqwatches.com)**



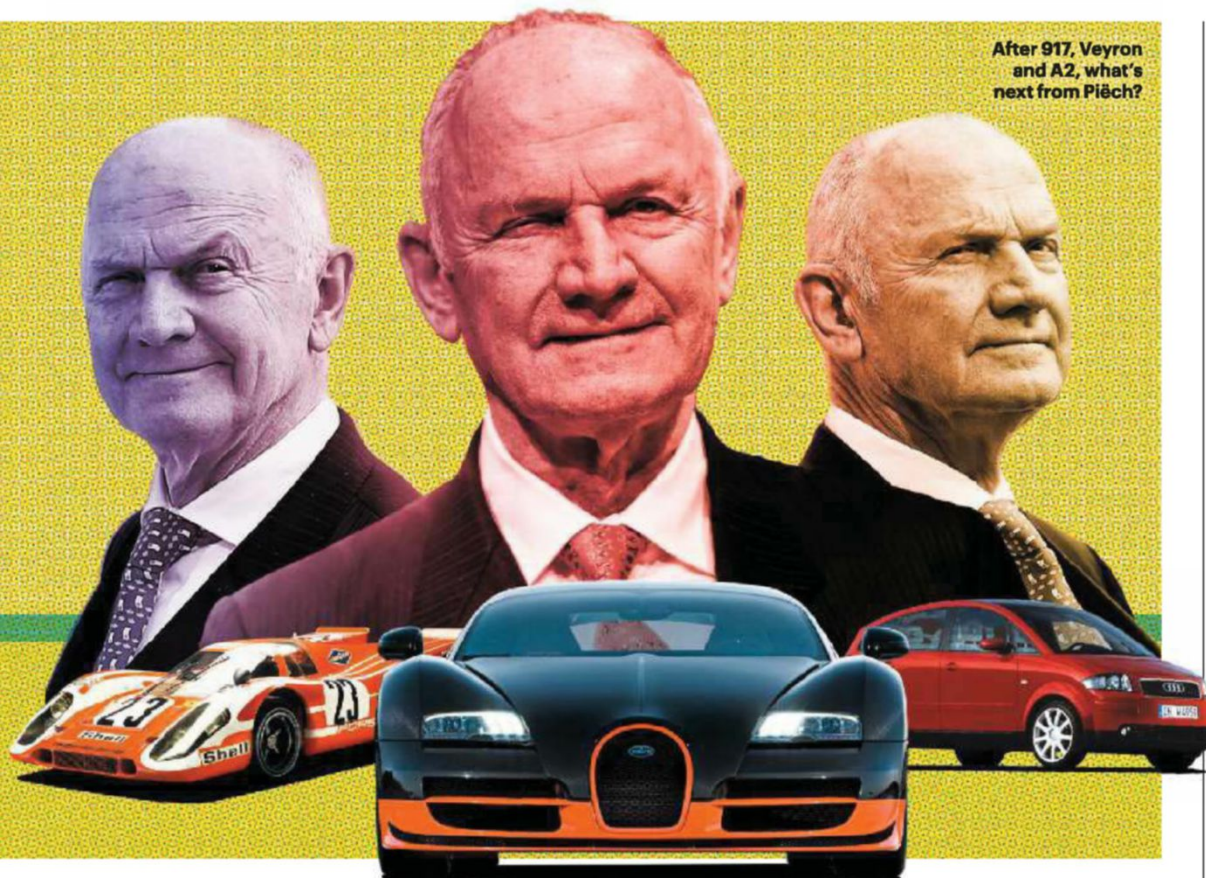
BQ Watches, BQW House, 1 Back Lane, Edgware, Middlesex, HA8 0HS



# The **car** TOP 10.

## Ferdinand Piëch moments

Engineering visionary, monosyllabic master tactician, Porsche patriarch, billionaire: no car boss has innovated as ruthlessly as the ex-VW chairman. **By Gavin Green**



After 917, Veyron and A2, what's next from Piëch?

### 1 **PORSCHE 917**

This kick-started the Porsche racing legend, and elevated Porsche into the top-tier sports car pantheon, alongside Ferrari. Masterminded by Piëch, the 917 was probably the most iconic sports racer of all time. After it stopped winning Le Mans, an open-top turbo version, the 917/30, dominated the Can-Am series.

### 2 **AUDI QUATTRO**

Before Quattro, Audi was a name plate with no kudos, a maker of tinselled VWs. New boss Piëch knew that 'statement' cars were crucial, and there have been few statements bolder than the Quattro. It won rallies, pioneered all-wheel-drive

sports cars and elevated Audi into the BMW and Mercedes league.

### 3 **BUGATTI VEYRON**

As an engineer, Piëch pushes boundaries. 'Impossible' is a challenge, not a barrier. Why not engineer a 250mph supercar? Detractors say Piëch has had too many such unprofitable vanity projects. Yet such dreams spur progress and build brands better than any marketing campaign.

### 4 **PLATFORM SHARING**

We had platform sharing well before Piëch, from the Japanese, Americans and even VW – remember the Beetle-based Karmann Ghia? But VW under

Piëch took the concept to a new level, slashing development costs and revolutionising the car industry.

### 5 **VOLKSWAGEN XL1**

Another Piëch 'vanity project'. Who else would think to sell a two-seat microcar for £98,000? That's the price of progress. Just as the Veyron proved a production car could do 250mph-plus, so the XL1 proved a car sold to the public could achieve fuel economy of one litre per 100km, or 280mpg.

### 6 **SAVING VOLKSWAGEN**

When Piëch became CEO in 1993, Volkswagen was nearly bankrupt. When he stepped down as chairman

in 2015, Volkswagen was a global automotive powerhouse of eight car brands, on the brink of becoming the world's top-selling auto maker. Mind you, VW without Piëch felt a bit like Apple without Steve Jobs. It still does, really.

### 7 **AUDI A2**

Another magnificent loss leader, the A2 may well be the most intelligently engineered small car of the past 20 years. It was light, aerodynamic, spacious and made of aluminium. Pity the A1 and A3 that followed were steps backwards.

### 8 **DUAL-CLUTCH TRANSMISSIONS**

A few makers had been experimenting with this for years. Porsche and Audi first made it successful, winning in motorsport. Volkswagen was first to put it on sale. Now widespread, it gives better performance and smoothness than a normal manual, and better efficiency than a torque converter auto.

### 9 **A THRIVING LAMBORGHINI**

Lamborghini has always danced close to the red zone. Neither founder Ferruccio Lamborghini, nor Chrysler or Malaysian investors could make any money. Now under the ownership of Volkswagen, it's a strong, Ferrari-rivalling business. Plus the cars, while still exhilarating to drive and thrilling to view, are now built like Audis, not kit cars.

### 10 **DODGING DIESELGATE**

Piëch cleverly schemed to hold on to power at VW for decades. Rumours persist that he may have masterminded his own departure in 2015, a few months before the VW Dieselgate scandal broke, leaving CEO Martin Winterkorn holding the bag. At 80, he may even seek a comeback to save VW. Again.





# A car repair that works harder for you

At motoreasy, we want to save you time,  
money and hassle, allowing you to enjoy  
the better things in your life.

Your car **repairs** with motoreasy looks like this:

- ✓ Benefit from up to 40% savings on your repairs.
- ✓ Our technicians monitor specialist workshops ensuring quality work is carried out.
- ✓ Local workshops near you, with 10,000 across the UK.
- ✓ No waiting time, your car is collected and delivered back to you once complete.

Relax - with all of your car hassles taken care of, *what will you do?*

Get an instant quote and save more at **motoreasy.com**



Duncan McClure Fisher  
Founder and CEO

WARRANTY | SERVICE | MOT | REPAIRS | GAP | TYRES

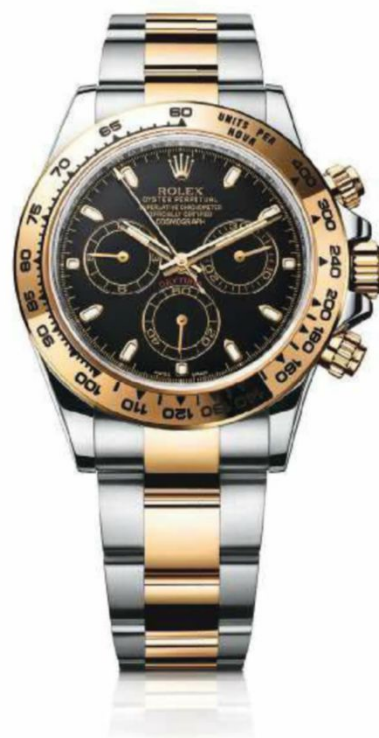






WHEN YOUR  
REPUTATION FOR  
ENDURANCE IS  
UNSURPASSED,  
YOU'VE MADE  
HISTORY.

This watch is a witness to legendary  
feats of endurance. Worn by those  
who test their limits at the world's  
oldest sports car race. It doesn't just  
tell time. It tells history.



OYSTER PERPETUAL COSMOGRAPH DAYTONA



24 HOURS OF LE MANS  
CIRCUIT DE LA SARTHE, LE MANS, FRANCE  
JUNE 17TH TO 18TH, 2017

