

THE THRILL OF DRIVING

evo

ISSUE 094 WWW.EVOMAGSG.COM

FREE ISSUE!

DRIVEN

**NEW LAND ROVER
DEFENDER**

TESTED

**BMW Z4 M40i
v Toyota GR Supra**

S I N G A P O R E

THRILL SEEKERS

Driving 2020's sports car sensations

DBS Superleggera
v McLaren 600LT Spider

Porsche Cayman GTS 4.0
Rear-drive Audi R8



The Mercedes-AMG CLA 35 4MATIC.

FREEDOM NO

Master every mile with the charismatic Mercedes-AMG CLA 35 4MATIC. With a turbocharged AMG 2.0 litre four-cylinder engine, and supreme agility through the five AMG DYNAMIC SELECT drive programs, this bold addition will accommodate your chase of any lifestyle. www.mercedes-amg.com

Push your limits at the AMG Performance Center Singapore.

Cycle & Carriage (Authorised Dealer) • Sales Enquiries: 6298 1818.
AMG Performance Center Singapore, Level 3, Mercedes-Benz Center, 301 Alexandra Road, Singapore 159968.
Mon - Sat: 8.30 am - 7pm, Sun & PH: 10 am - 6 pm.

Mercedes-AMG CLA 35 4MATIC Coupé - Fuel consumption: 7.6 l/100 km; VES band: C1.

KNOWS BOUNDS.



AMG

Contents

06

LOTUS EVORA GT410

Seeking to recapture some of the original Evora's spirit, the new GT410 remains a brilliant driver's car – with a few caveats

12

PORSCHE 718 CAYMAN GTS 4.0

The new GTS captures so much of the GT4's magic, it may make you question your need for the real thing

16

MERC-AMG CLA 45 S 4MATIC+ PLUS COUPE

Its name may be a mouthful, but AMG's smallest coupe loses nothing to its A45 hot hatch sibling

18

BMW M8 COMPETITION

The \$720k BMW M8 Competition has all the power you'll ever need, but is it enough to make it a proper sports car?

20

BENTLEY FLYING SPUR

Bentley's latest Flying Spur is its best yet, but can it mix it as a driver's car with the leading supersaloons?

22

DRIVING BY NUMBERS

As road cameras become ever more widespread and sophisticated, and speed limits move up and down, is the drive for legal compliance putting motorists' lives at risk?

25

CAR MAKERS PITCH IN

Health services get a helping hand in their hour of need

26

MINI MARVEL

Want your Mk3 Mini Cooper with 3.5-litre V6 power? California's Gildred Racing can help

28

BLOOD BROTHERS

The last time the Germans and Japanese collaborated on something, it nearly resulted in World domination. This time around however, we get a pair of sports cars that driving enthusiasts can look forward to.

36

OPEN CONFLICT

McLaren's 600LT Spider and Aston Martin's DBS Superleggera Volante take very different approaches to the drop-top supercar formula. But is one necessarily better than the other? We drive them both to find out

50

BACK TO BASICS

Can forgoing performance-enhancing technology such as an auto gearbox or four-wheel drive make for a more engaging car? The new manual Aston Martin Vantage and rear-drive Audi R8 hold the answer



58

WHY MANUALS STILL MATTER

Automated gearboxes have their place, but nothing can beat a great manual shift for ultimate car and driver interaction

64

DEFENDER IN AFRICA

Land Rover's Defender can trace its roots back to the 1940s. Now there's a new one, built for the 21st century, but is it an evo car? We head to the Dark Continent to find out

72

ICON

France's answer to the Porsche 964 Carrera 2 is as enthralling today as it was back at its launch in 1991

82

GREAT ESTATES

Which 600hp wagon is the current super-estate king? It's time to find out as the new Audi RS6 Avant takes on Porsche Panamera Turbo S E-Hybrid Sport Turismo and Mercedes-AMG E63 S Estate

92

MOTORSPORT MOMENTS

Frenchman Jean Alesi's solitary victory, in a Ferrari 412 T2 at the 1995 Canadian Grand Prix, was to be the final hurrah for Formula 1's V12 era

95

EVO ARCHIVE

Our one-on-one with the one-off Lamborghini Aventador J was really anything but





SUBSCRIPTIONS

subs@evomag.com.sg
Telephone +65 6970 5873
www.evomagsg.com/subscribe

SINGAPORE EDITORIAL

Email info@evomag.com.sg
Magic Pen Publishing Pte Ltd,
1 Tampines North Drive 1
#06-32 T-Space
Singapore 528559

EDITORIAL DIRECTOR

Sheldon Trollope
sheldon@ignitionlabs.sg

DEPUTY EDITOR

Jonathan Lim

DESIGNERS

Joel Tam
Joseph Cervas
Taerin Kim

PHOTOGRAPHERS

Mark Bramley, James Lipman

UK EDITORIAL

EDITOR Stuart Gallagher

MANAGING EDITOR Ian Eveleigh

DEPUTY EDITOR Adam Towler

GROUP WEB EDITOR Steve Walker

ART EDITOR Rich Browne

ROAD TEST EDITOR James Disdale

SUBEDITOR Jonathan Baker

STAFF WRITER Antony Ingram

Jordan Katsianis

STAFF PHOTOGRAPHER Aston Parrott

EDITORIAL ASSISTANT Sam Jenkins

CONTRIBUTING EDITORS John Barker

Richard Meaden

Steve Sutcliffe

David Vivian

COLUMNIST Richard Porter

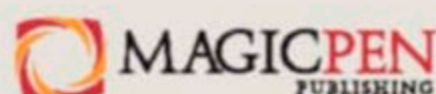
EDITORIAL DIRECTOR Steve Fowler

CONTRIBUTING WRITERS

Jethro Bovingdon, Henry Catchpole, Bob Harper,
C K Lim

PUBLISHING BOARD

Alvin Tan, Joel Tam, Sheldon Trollope



evo Singapore is published monthly under licence from and with the permission of Dennis Publishing Limited. All rights in the material and the title and trademark of this magazine belong to Dennis Publishing Limited absolutely and may not be reproduced, whether in whole or in part, without its prior written consent. MICA 024/10/2011 Printed by Toppan Security Pte. Ltd, 97 Ubi Ave 4, Singapore 408754. Distributed by Allscript Establishment Pte Ltd. Opinions expressed in evo Singapore are not necessarily those of the publisher. The claims made by its advertisers does not imply that the services or products are endorsed by Magic Pen Publishing Pte Ltd. While the publisher makes every effort to ensure that the magazine's contents are correct, it is not responsible for any errors or omissions.

ED SPEAK



Welcome to the first entirely digital issue of evo Singapore! With the Circuit Breaker still in effect, it makes no sense to print this issue. Firstly, our distributor is closed so there's no way to get the magazines to the newsstands even if it was printed. Next, many newsstands and retail outlets are also closed. So even if we found a way to distribute it, there still wouldn't be a way to sell them.

Since Day One, nine years ago, the newsstands in Changi Airport has been one of our biggest sellers. With travel practically at a standstill... you can see the point.

Just like the previous issue, we're making this one a free download as well. It's our way of encouraging our readers to stay home and hopefully do our bit to fight COVID-19.

To our subscribers, I apologize for the interruption of regular service. I hope you can find it in yourselves to understand our position which is extremely challenging, to say the least. If there's something we can do for you, drop me an email at sheldon@ignitionlabs.sg.

I hope you've been spending your time at home productively, as our team at Ignition Labs have. Besides putting evo Singapore together, we've also launched AutoApp.sg. This editorial-driven site is full of interesting content that makes car news as accessible as possible to an audience that are perhaps new, or not as into cars the way evo readers have always been. Call it a 'gateway' automotive website if you like...

This also allows evo Singapore to take an even deeper dive into The Thrill of Driving so petrolheads everywhere can read more about what they love.

Enjoy this issue in good health and take care.

Sheldon Trollope,
Editorial Director

FOLLOW US ON

FACEBOOK - www.facebook.com/evomagsg

ONLINE - www.evomagsg.com



COLLECTORS' EDITIONS

Every Porsche owner and Porsche Club Singapore member is entitled to subscribe to the exclusive Collectors' Edition of evo Singapore.

For more details, email subs@evomag.com.sg





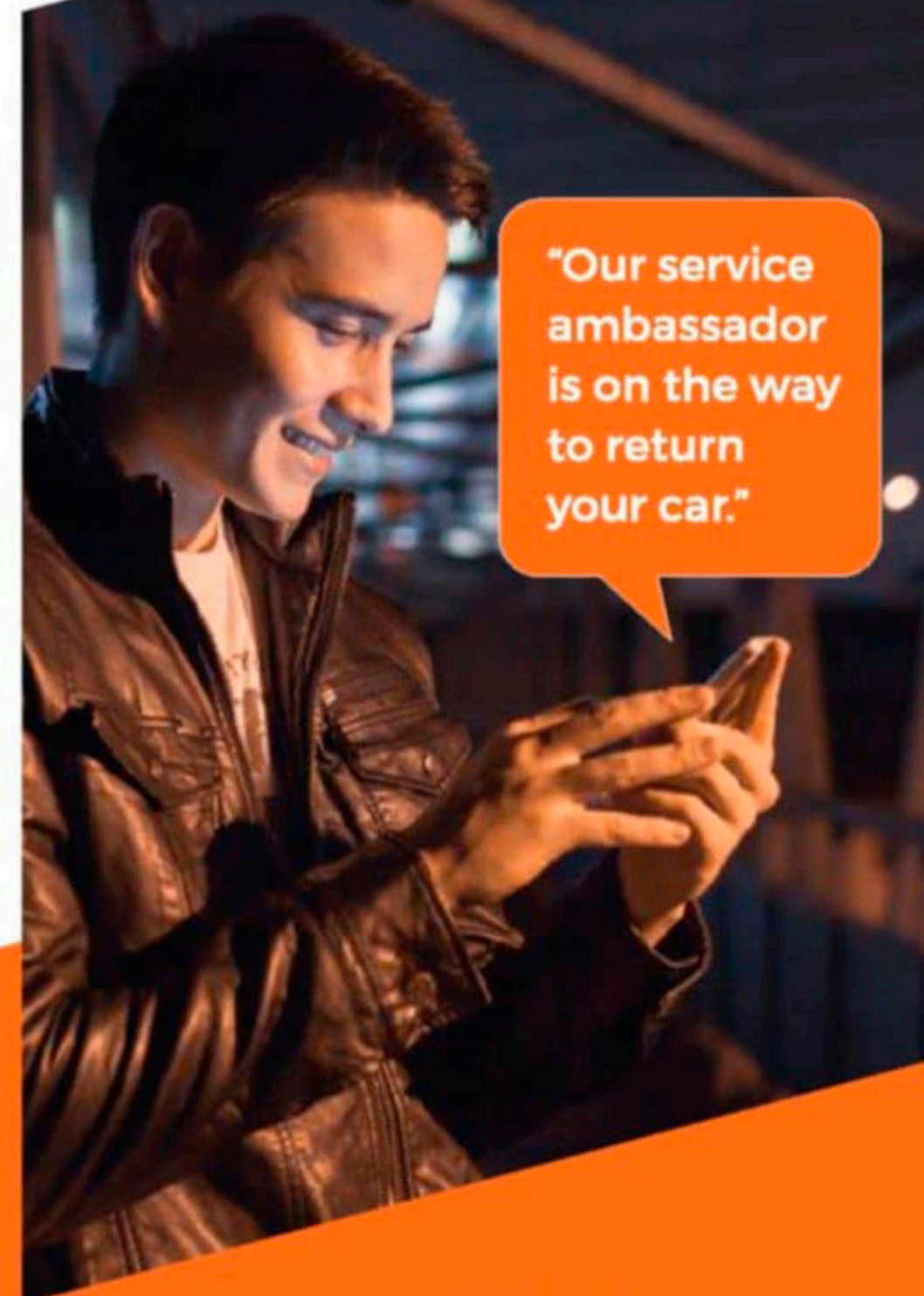
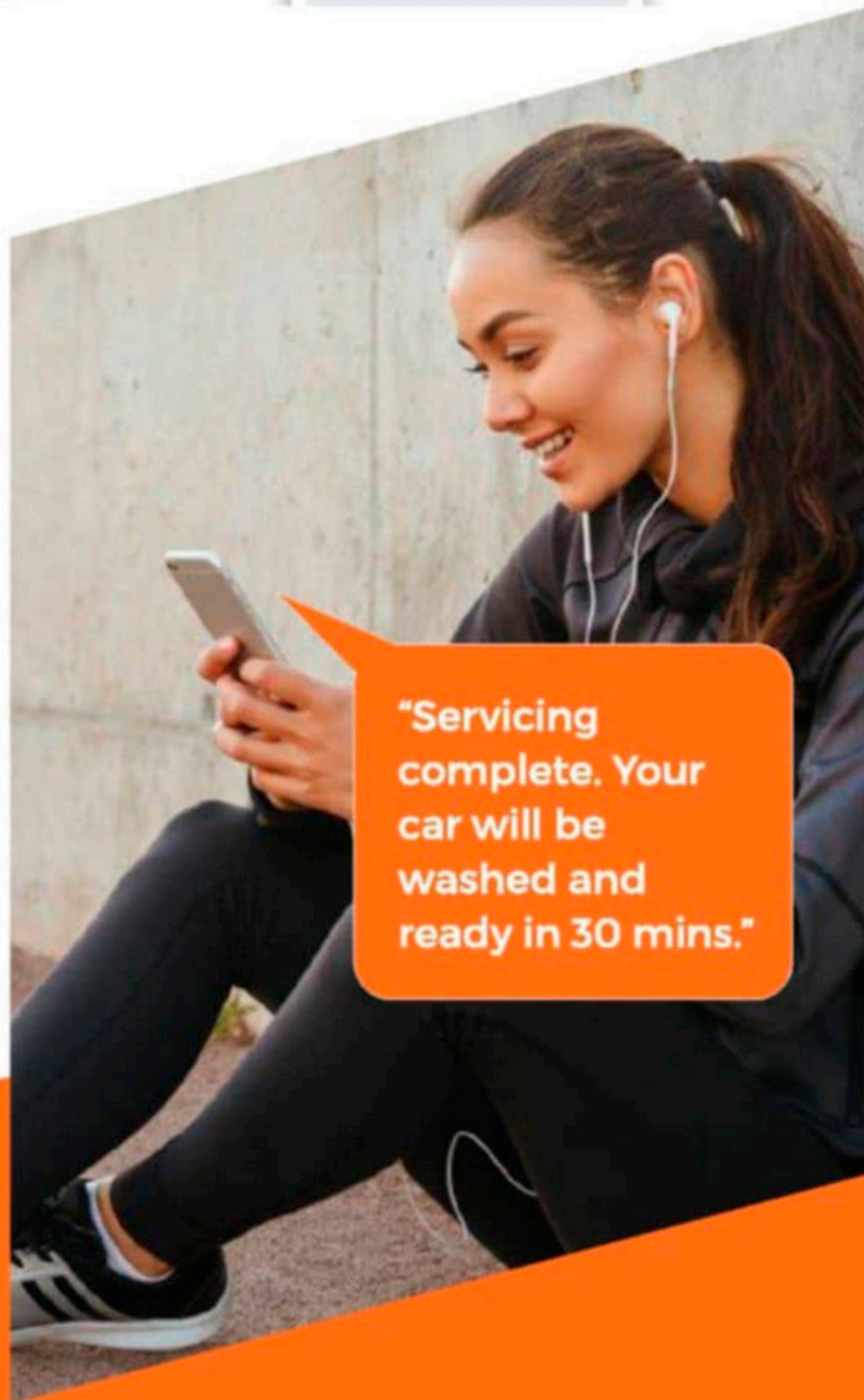
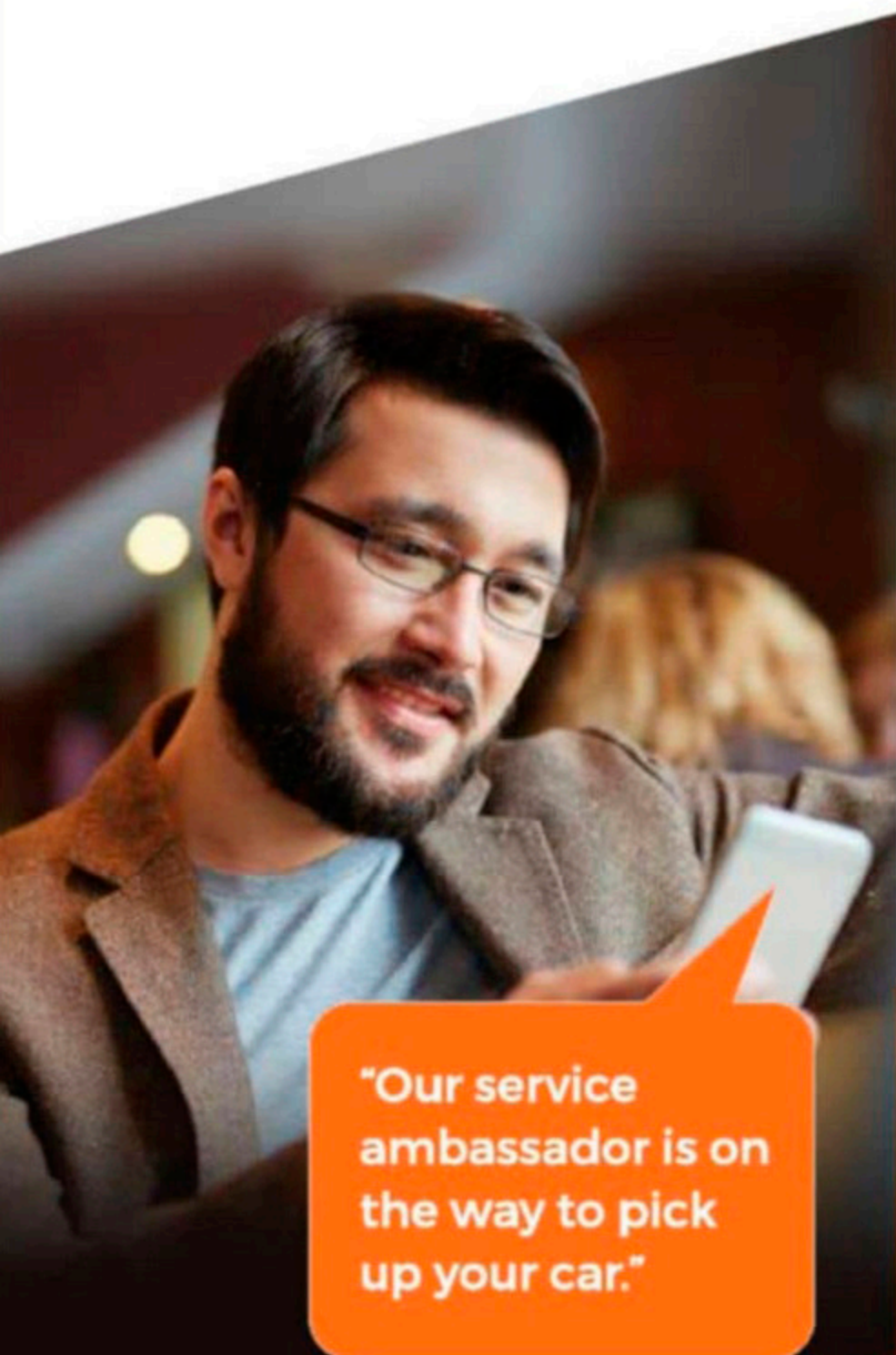
SINGAPORE'S FIRST TECH-ENABLED CAR SERVICING CONCIERGE.

FULL SUITE OF SERVICES • FULLY INSURED SERVICE STAFF

PICK UP •

REPAIR
MAINTAIN
SERVICE
GROOM
INSPECT

• DELIVER



SCAN THE QR CODE
TO FIND OUT MORE.



Driven





by ADAM TOWLER PHOTOGRAPHY by ASTON PARROTT

Lotus Evora GT410

Seeking to recapture some of the original Evora's spirit, the new GT410 remains a brilliant driver's car – with a few caveats

NO ONE LIKES TO MISS OUT. TOO FAR along the queue when the birthday cake is sliced up. Too late to the bar when a mate is getting the first round in. Yes, I missed out on our big Porsche 992 Carrera S group test last year because I was working on a different story, and I couldn't help but look on enviously as the 992, Audi R8, Vantage and the rest blatted around the Scottish Borders for a couple of days with the usual crew. Yet the real surprise on location,

so I'm told and have subsequently read, was the Lotus Evora GT410 Sport.

A wildcard entry, it reminded one and all of the particular magic that seems to radiate only from Hethel. And while its age and deficiencies in certain areas meant it wasn't in overall contention for the win, I've heard it said many times by those who were present that it was the car they enjoyed driving the most. Given the machinery vying for attention on that test, that's quite some achievement.



It's a reminder that the Evora, however chequered its career to date, is fundamentally a brilliant driver's car. It's an indisputable fact that I'm being vividly reminded of right now, as I drive the first few miles in this new GT410 model. Just how do they make it ride, steer and change direction this well? It is nothing less than a dynamics masterclass.

If this Evora has a familiar air about it, that's because its purer, unadorned form recalls the model as it was at launch, way back in 2008. Back then it was the bright young thing: the 2+2 (or 2+0 if you preferred to spec it that way) that would strike deep into Porsche territory; a different kind of Lotus, more grown up, more practical, and more upmarket, in terms of claimed ambience inside and out, and also in terms of price. We loved it, so much so that it scooped our eCoty gong at the end of 2009, elbowing the Porsche 997.2 GT3 into second place in the process, no less.

Unfortunately, that hoped-for chunk of

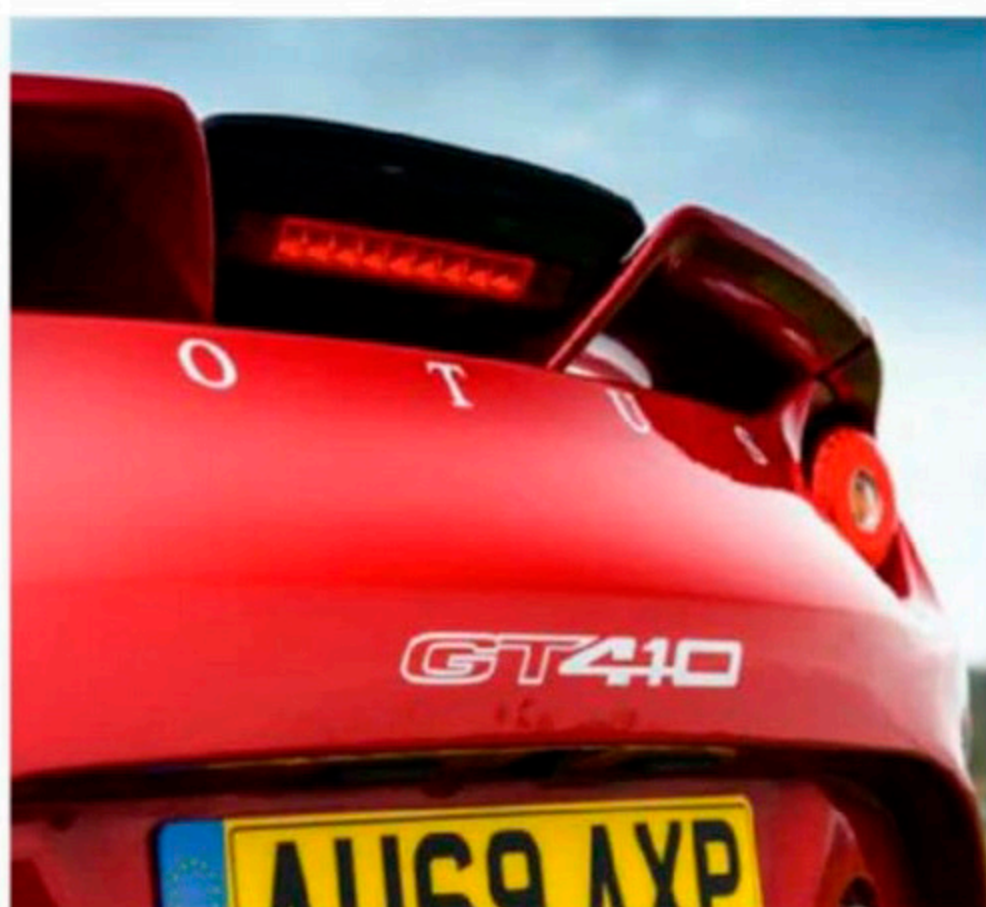
Porsche's market never really transpired, despite a gradual evolution of the model, and in more recent times the Evora was largely remoulded under then CEO Jean-Marc Gales into more of a GT3 rival, a procession of evermore performance-orientated limited-edition specials appearing, each with more carbonfibre, more aero and a little more oomph squeezed from the venerable supercharged Toyota V6. Many of those Evoras retailed for well over a hundred grand, a far cry from the original's £45,000 starting point, albeit 12 years on.

Now there's a new boss at the helm in Phil Popham, and he's decided to offer an Evora that takes the model back slightly in the direction whence it came. Yes, you can still buy a 410 Sport, the current most sportingly focused production Evora there is, but now you have the option of the GT410. As we detailed in Ignition (and drove in Australia) last issue, the GT410 keeps the same 410bhp V6 as the name implies, but adds back in air conditioning, more sound deadening,

'The Evora GT410 is nothing less than a dynamics masterclass'

storage bins and arm rests on the doors, and an infotainment system. The leather Sparco sports seats are heated, there's cruise control and rear parking sensors, and a glass rear window that, however small, means you can at least see out the back once again.

Crucially, the damper rates have been softened off (Lotus won't say by exactly how much), but the spring rates stay the same, and the GT runs on Michelin Pilot Sport 4 S tyres, not the Cup 2s of the Sport. You'll also pay over £5k (\$8,800) less, but a still substantial £82,900 (\$146,000), with a host of personalisation options available to spend your



money on, along with the ability to add the Sport's suspension and Cup 2 tyres back in if you so desire in the form of two sport packs.

The GT410 is never more rewarding, never richer or more textural than during those initial handful of miles, especially if they're on an enjoyable, challenging road. It's such a startling experience to drive a car with genuinely immersive, feelsome steering, the kind that relays information about what's going on at the tyres' contact patches in unfiltered real time. It's like when your eyes have adjusted to the dark and then you switch the lights on, and for a moment the retinas are overwhelmed by the sensory bombardment they're facing. It may be a cliché, but the GT's wheel tugs this way and that, the weighting ebbing and flowing depending on the loads, and resistance building on lock as though it's your own palms trying to compress the sidewalls of the tyres. If the road is heavily cambered you'll need to keep a firm hand on the wheel; drive over a poor surface and the kickback

Top: steering offers feedback levels rivalled by few others. **Above right:** 370mm front and 350mm rear brake discs sit behind 19 and 20-inch alloy wheels respectively; tyres are Michelin Pilot Sport 4 S

means you'll certainly know about it.

The Evora has always had that magical Lotus ride quality, but softening off the damper rates has given it the ability – like the early cars – to glide down a road as if suspended on a plump cushion of air. Yes, at low speed there's a certain stiff-limbed tautness, to be expected of a car with such high overall performance and passive damping, but as soon as you're above 30mph its ride comfort is truly something to behold.

Perhaps an inevitable effect of this is a notable amount of body roll, which in fact allows you to judge very clearly the loads going through the chassis. Work the car harder and it'll begin to overload the outer front tyre quite heavily, a safe 'soft play' area that bleeds away corner speed in a friendly manner. It's now that the inherent balance

of the Evora is laid bare – the feeling of sitting far forward in the chassis, relatively little mass over the front axle, and with an engine that's directly above the rear axle line, close to being fully rear-engined rather than mid.

That pendulous feeling of the weight in the rear beginning to move isn't switchblade snatchy like it can be in a true mid-engined car, but seems to happen at a more leisurely pace. Lift the throttle with the front heavily loaded and it'll bite and set the tail moving in turn, from where, with the ESP disabled, friendly oversteer is available. As you're probably by now sensing, the GT410 is a completely immersive driving experience.

If only judging the overall qualities of a car ended here – at least for Lotus's sake. Of course, they don't, and you're probably not surprised to hear that the rest of the Evora package is a little more varied in the merits or otherwise of its abilities.

The big V6 has a character all of its own, something ably described by its outputs of 410bhp

‘Things might be forgivable at \$80k are less so as you approach \$400k’



and 400Nm of torque. As they suggest, this is an engine with a linear delivery and a strong top end, rather than a massive hit of energy low down, borne through supercharging rather than turbocharging. In the car's default driver mode it is surprisingly hushed, with just a faint whine from the supercharger betraying its concealed energy, although the way it snaps the car forward instantly is proof enough of its potency.

On larger throttle openings, at higher revs, or with the valved exhaust open either by using the dash-mounted button or when in Sport or Race driver modes, it releases a yelp that must wake the local wildlife from its wintry slumber for miles around. In Sport the throttle response is much sharper, and the rev limit raised from 6500 to

7000rpm. It really feels like it wants those extra crank revolutions, too, spinning energetically to the redline.

It's in the nuances and more subjective qualities where the V6 begins to show its limitations. For me, its one-dimensional exhaust blare, like being shut in a phone box with a demented brass band, gets a bit wearisome after a while, and as ever there's something a bit odd about the throttle pedal's connection with the engine. If it were a cable throttle (it's not, it's electronic) you'd swear it was elasticated to some degree, as you can never be quite sure how much engine response you'll get. It's most obvious during heel-and-toe downchanges, where sometimes the engine doesn't seem to respond at all, and on another

occasion it'll scream like a cat that's just had its tail trodden on...

The six-speed manual 'box has a pleasingly mechanical feel, but doesn't like to be rushed and can balk if you're not careful with working it through the gate. It's a small but nevertheless keenly felt mismatch of control weighting and characteristics that make the process of driving not quite as instinctive as it could be.

Which brings us to the Evora's interior. The Sparco seats look fabulous but aren't quite as comfortable as they appear, and the rather upright driving position is, for a six-footer like me, a little high, a bit cramped. I feel like I'm sitting on the car rather than truly within it, which amplifies the aforementioned sometimes-awkwardness



with the controls.

Still, it's nothing like as cramped as the so-called seats over the shoulder, which a toddler would struggle to fit in, let alone an adult. They're little more than luggage bins. There's lots of leather-covered surfaces that are pleasing to the touch, but the switchgear is ageing, some of the details rather naive, and the aftermarket Alpine head unit looks like it might have come from 1993 (although with Apple CarPlay it works fine).

It feels so churlish, so un-**evo**, to gripe about infotainment systems and 'perceived quality' when the Evora is such an outstanding car in a dynamic sense, but at this price point, feeling that you've bought something of quality matters – or certainly matters to a good number of buyers. Hand on

heart, to me it just doesn't feel like the Evora can command its price tag. Or put another way, the things that might be forgivable at £50,000 are less so as you approach six figures. More fundamentally, I still have my reservations over the essential concept of the Evora. I understand the idea of creating a 2+2 911 rival, but to try to achieve that with what is still – just – a mid-engined car brings about enormous challenges from a packaging and aesthetic perspective that never quite feel resolved with the Evora. It has its great angles, and its rather more awkward ones...

Yet having said that, these are optimistic times for the firm, and while the way ahead for Popham and his team is no doubt full of challenges and tremendous hard work, the bottom line is

disarmingly simple: no one builds cars that drive quite like a Lotus, in the best possible sense, and if the company can maintain the wonderful qualities found in the Evora GT410 and apply them to a new car that leaves behind some outdated and flawed genes, the future should be blindingly bright. And that's one I certainly won't want to miss out on.

Engine V6, 3456cc, supercharger **Power** 410hp @ 7000rpm **Torque** 400Nm@ 3500rpm

Weight 1361kg (306hp/ton) **0-100kmh** 4.2sec

Top speed 300kmh

Price S\$470,000 without COE

Contact Wearnes Automotive, 6430 4923

+ Fully immersive driving experience, magical ride quality

- V6 has its limitations; so does the fit and finish

evo rating ★★★★★

Porsche 718 Cayman GTS 4.0

The new GTS captures so much of the GT4's magic, it may make you question your need for the real thing

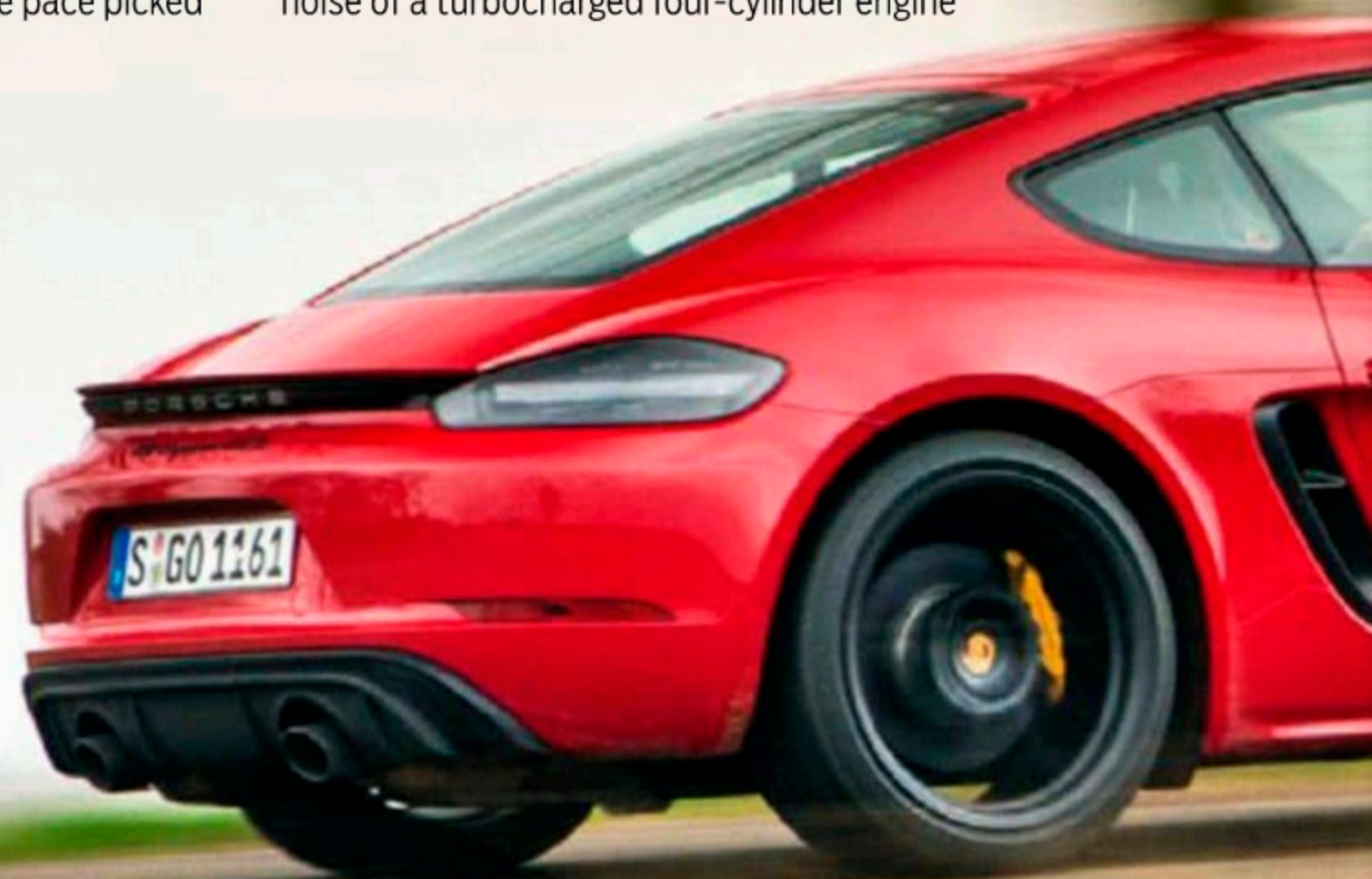
IT WAS THE NOISE THAT HIT YOU first and from that point on you felt disorientated and distracted, unsettled despite the knowledge that beneath you was one of the purest driver's cars you could buy. It was what lay over your shoulder that left you feeling uneasy.

The driving position was as expected.

Steering wheel in your chest, hips just above the catseyes, legs stretched out deep into the footwell, pedals kissing the soles of your shoes. Your shoulder, elbow and wrist perfectly angled to work that strange lever rising from the transmission tunnel. The ride was just so, too: compliant at low speed, locked down and focused as the pace picked

up. And there was a precision to the steering that allowed featherweight control, and brakes that required no second guessing when it came to pressure and modulation.

Yes, the speed was there. Pace across the ground was never an issue. But the noise that followed you everywhere you went... That noise of a turbocharged four-cylinder engine







killed the appeal of the 718 Cayman for us, and the Boxster too. Which was a crying shame because Porsche's mid-engined coupe and roadster remain dynamic benchmarks.

Thankfully Porsche has gone some considerable way to addressing this with its new GTS models. Previously available with a 2.5-litre four (which remains in the S), the GTS is now equipped with a detuned version of the GT4's 4-litre, naturally aspirated flat-six. And yes, it is as good a combination as you imagine it to be.

There's a GT4 vibe to how the GTS looks, with a lower chin spoiler and fixed rear spoiler. The door graphics read 'GTS 4.0', almost as if Porsche is proud rather than afraid to put an engine of this size in a car this small. Alcantara continues the GT department theme inside,

the optional bucket seats look as seductive as they are supportive, and that big central tachometer reads round to 9000rpm. Same great ergonomic layout. Same sense that this is a car for those who appreciate the details.

The 4-litre motor is down 20hp compared to its application in the GT4 (the only difference is its ECU map), though torque remains the same and really you barely notice (at 4.5sec it's a tenth slower to 100km/h). It ticks over with the same level of intent, revs as freely, and the size of your grin increases at a similar rate every time the rev needle sweeps around the tachometer. The gearing is still comical, with second good for a couple of hundred miles per hour, but that shift is so sweet, crisp and precise you don't mind changing gear for the sake of it, even if the engine doesn't

require you to do so because its torque curve is fat in all the right places.

Stretch the 4-litre to its limits and the howl and punch will put the frighteners on many an unsuspecting sports car from the class above. The particulate filter has robbed it of some fizz at the very top end, but on the road, at least, you won't notice the engine's 200rpm lower rev limit compared to the GT4's. In the 21st century its performance is a blend that allows you to make progress without drawing attention to yourself. It doesn't force you down a road with the subtlety of an Acme anvil falling from a precipice onto a bedraggled coyote, and neither does it leave a wake of destruction like a frantic blue bird.

What it does do is leave a deep, lasting impression that Porsche has solved one issue

'If you've never driven a GT4 you won't know what you're missing'

and created another. Having listened to the likes of us drone on about its drony engine, it has created a car that makes us question the need for a GT4. And that's a very strange position to be in.

So what doesn't it have that the more expensive GT4 does? That last ten per cent of precision and perfection. If you drove the two back to back you'd spot that the GTS isn't as quick to react to steering inputs, its suspension is a nanosecond slower taking up the slack, the 20-inch Pirelli P Zero tyres lacking that detail feedback and monster grip of the GT4's Michelin Cup 2s. But its mechanical diff provides similar levels of confidence-inspiring balance, the torque vectoring unobtrusive.

But if you've never driven a GT4 you won't know what you're missing, and the chances



Above right: GTS wears Pirelli P Zero tyres instead of the GT4's Michelin Cup 2s; carbon-ceramic brakes can be optioned for S\$29,781, although at 350mm front and rear they're smaller than the GT4's 410/390mm items

are you won't give it a second thought even if you have. The GTS is one of those cars that is becoming rarer by the day: a car that thrills on so many levels and for so many people. It makes a tedious commute across a roundabout-infested city a sequence of heel-and-toe adventures. Short blasts on a deserted road deliver a vivid reminder of why we get so much from the simple art of driving a great car on a good road.

A Cayman GT4 remains the pinnacle of the 718 Cayman family. It's the ultimate incarnation of the capabilities of Porsche's GT department.

It's a piece of precision engineering that's built solely for the driver to experience the very best at the very limit. And the new Cayman GTS 4.0 does that too, with only the thinnest layer of the finest polish removed. To a select few that will be justification enough to source a GT4. For the rest us, a GTS 4.0 will do just fine.

Stuart Gallagher (@stuartg917)

Engine Flat-six, 3995cc **Power** 400hp @ 7000rpm

Torque 420Nm @ 5000-6500rpm

Weight 1405kg (285hp/ton) **0-100kmh** 4.5sec

Top speed 293kmh **Basic price** From S\$402,488 without COE

Contact Porsche Centre Singapore, 6472 4433

+ 90 per cent of the GT4's magic

- Has us questioning an eCoty winner

evo rating ★★★★★



Mercedes-AMG CLA45 S 4Matic+ Plus Coupe

Its name may be a mouthful, but AMG's smallest coupe loses nothing to its A45 hot hatch sibling

WHERE DO YOU STAND ON THE WHOLE 'four-door coupe' thing? Not sure myself, but then I grew up in the 1990s when the roads were awash with proper coupes. They were different shapes and sizes, and there was fair variety under the bonnet too, but all stuck to broadly the same formula: four seats, two doors, and a luggage area separated from the cabin.

I'm prepared to make an exception for the Mercedes-AMG CLA45 S 4Matic+ Plus Coupe, even though I can feel my blood pressure rising typing out its full, long-winded name. For a start, it's based on the car that finished third in eCoty 2019, the A45 S. Secondly, while it has 100 per cent more doors than a proper coupe should, it does have the correct number of seats and features a proper boot rather than the glorified hatchback of some rivals. And thirdly, I think it looks rather fine. The previous-generation CLA was a droopy-looking thing, like someone had parked an A-class a little too close

to a radiator. The latest one, though, has real CLS vibes, looking substantial in photographs but feeling usefully compact in the metal.

There's an authentic lack of rear headroom too, so I suppose the CLA really is a proper coupe. Rear legroom is better and the boot's a decent size, but as with the car it's based on, the best place from which to experience the CLA45 is the driver's seat. We've not yet tired of the widescreen displays, the chunky steering wheel with its metal gearshift paddles, or even the ambient lighting, though the squeaky build quality may not age as well.

The UK only gets the CLA45 in S specification, as is the case with the A45, which means the full 421hp output. This test car also arrives in Plus trim, which comprises an aero package with an extended front splitter, dive planes, an extra diffuser blade and extended rear spoiler. Plus spec also adds adaptive damping, a panoramic sunroof, adaptive LED headlights, 19-inch forged alloy

wheels, electrically adjustable leather bucket seats and a Burmester sound system.

The full tally comes to £58,045 (\$102,205), or over ten per cent, or six grand more than the non-Plus versions. Not cheap, but had we brought it along to eCoty instead of the A45, it still would've been the most affordable car there. The glass half-full take is that it's still cheaper than Renault's feistiest Mégane...

As eCoty neatly demonstrated, the A45's real skill was in dealing with road conditions the Mégane wasn't quite prepared for. The CLA45 is, not unexpectedly, more of the same, and in isolation any differences wrought by its wider track and extended bodywork are undetectable.

Under the bonnet the 45s get an entirely different unit from the CLA35's 2-litre, turned through 180 degrees in the engine bay to put the turbocharger and its plumbing at the back. AMG has applied much of the knowledge from its 4-litre

‘Whoever set up these latest 45s has woven real tactility into their elevated abilities’



V8 to its M139 four-pot, and boy howdy does it show. Engines are rarely a defining feature of modern hot hatchbacks and their derivatives, with everything homogenised to the same four-cylinder turbocharged norm and differentiated largely by throttle maps. The CLA45's is different, though, bursting with character and delivering explosive performance from the first squeeze of the throttle to the final blat of the limiter.

There's little lag to contend with, a feeling neatly visualised by the boost gauge on one of the dozens of on-screen menus, which rockets up to maximum with even gentle throttle inputs. Left in auto the eight-speed dual-clutch gearbox is intelligent enough (in Sport and Sport+ modes at least) to be in the most useful gear, most of the time, but click the button for manual changes and the CLA has searing, angry straight-line pace dictated entirely by your right foot, your fingertips and your sense of social responsibility.

On UK roads the CLA45 has the same composure it did on the smoother asphalt of the international launch. The adaptive dampers no doubt play their part, and while there's the option to separate their three stages from your chosen driving mode – so you can combine Sport+ with the softest dampers, for instance – its ability to deal with nastier surfaces doesn't seem to diminish even in its firmest setting.

This allows you to concentrate on what's ahead, and the car's marvellous ability to decimate a road while engaging with its operator. The gradual separation of feedback from extreme speed is an increasing problem as performance cars get ever faster, but whoever set up these latest 45s has somehow woven real tactility into the cars' elevated abilities. The steering is intuitive, the brakes firm and progressive, and the all-wheel-drive set-up behaves just as you'd want it to, driving from the rear the moment you lean back into the

Top: electric leather bucket seats and a Burmester sound system are part of the 'Plus' trim level.

Above: red brake calipers help differentiate the CLA45 S from the 113bhp less powerful CLA35 model

power through a corner.

A 306hp CLA35 would get you down a road more or less as quickly, but surprisingly it's the 45's involvement and engagement that separates the pair more than their straight-line pace. Whatever you think of four-door coupes, Mercedes-AMG's smallest offering is one of the best you can buy.

Antony Ingram (@evoAntony)

Engine In-line 4-cyl, 1991cc, turbocharged
Power 421hp @ 6750rpm **Torque** 500Nm @ 5000-5250rpm
Weight 1600kg (264hp/ton) **0-100kmh** 4.0sec
Top speed 269kmh (limited) **Basic price** TBC
Contact Cycle & Carriage, 6298 1818
+ Speed, ability and involvement in equal measure
- CLA35 offers a similar experience for less outlay
evo rating ★★★★★



BMW M8 Competition Coupe

The S\$720k BMW M8 Competition has all the power you'll ever need, but is it enough to make it a proper sports car?

I'VE BEEN TRYING TO GAME OUT WHO might be the buyer for BMW's M8 Competition. It won't, I suspect, be the typical M-car fan, as those who want the involvement and balance of a road-and-track sports car won't be moved by the M8's 1885kg kerb weight or near 2-metre width shoulder to shoulder. Nor is it likely to be a traditional grand tourer customer, since the Competition bits give this 8-series too firm an edge for true continent-crossing comfort.

Additionally, you'd have to not be particularly interested in some of the other choices available at this level, from AMG GTs, Aston Martin Vantages, Audi R8s and Porsche 911s, to BMW's own i8 – less powerful, but more forward-looking and an appealing grand tourer in its own right.

The answer, after a bit of discussion in the office, is perhaps someone already loyal to the BMW and M brands and with various M3s, M4s and M5s in

their back catalogue. Their more exuberant days are behind them now, though, so they're seeking just a taste of the Motorsport flavour in a vehicle that's otherwise more laid-back. And, as an older customer, rear seat space is less important for offspring than it is for luggage (the M8's cabin is very much a plus-two – the Gran Coupe will be the choice for those happy with a little less rear-seat room than an M5...).

Interestingly, the M8 is available in the UK only in the more-focused Competition form. And that word is at least vaguely relevant on the M8, as the model has enjoyed a brief spell in endurance racing as the M8 GTE. If you've spent any time watching the WEC in recent years you'll be familiar with it, as it'll have occupied most of your TV whenever it appeared on screen.

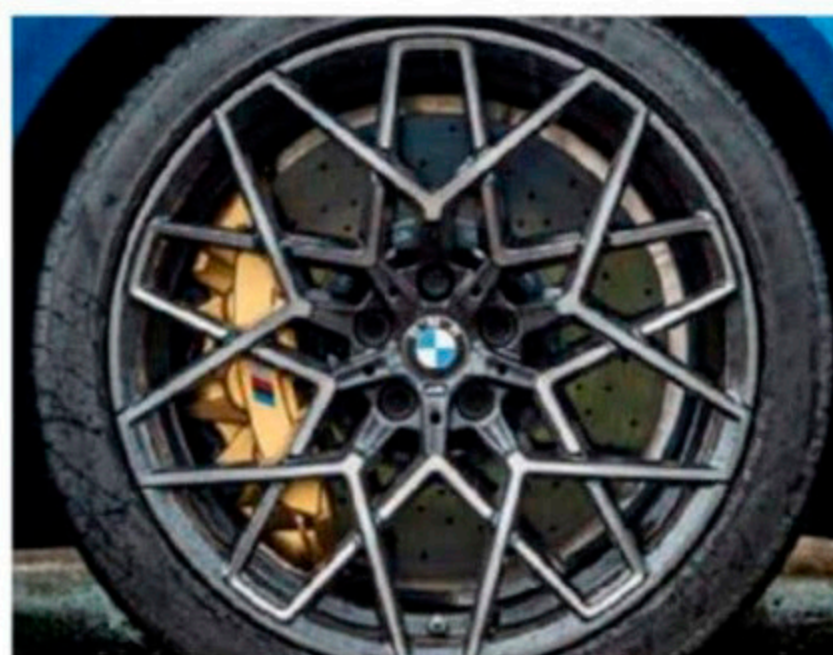
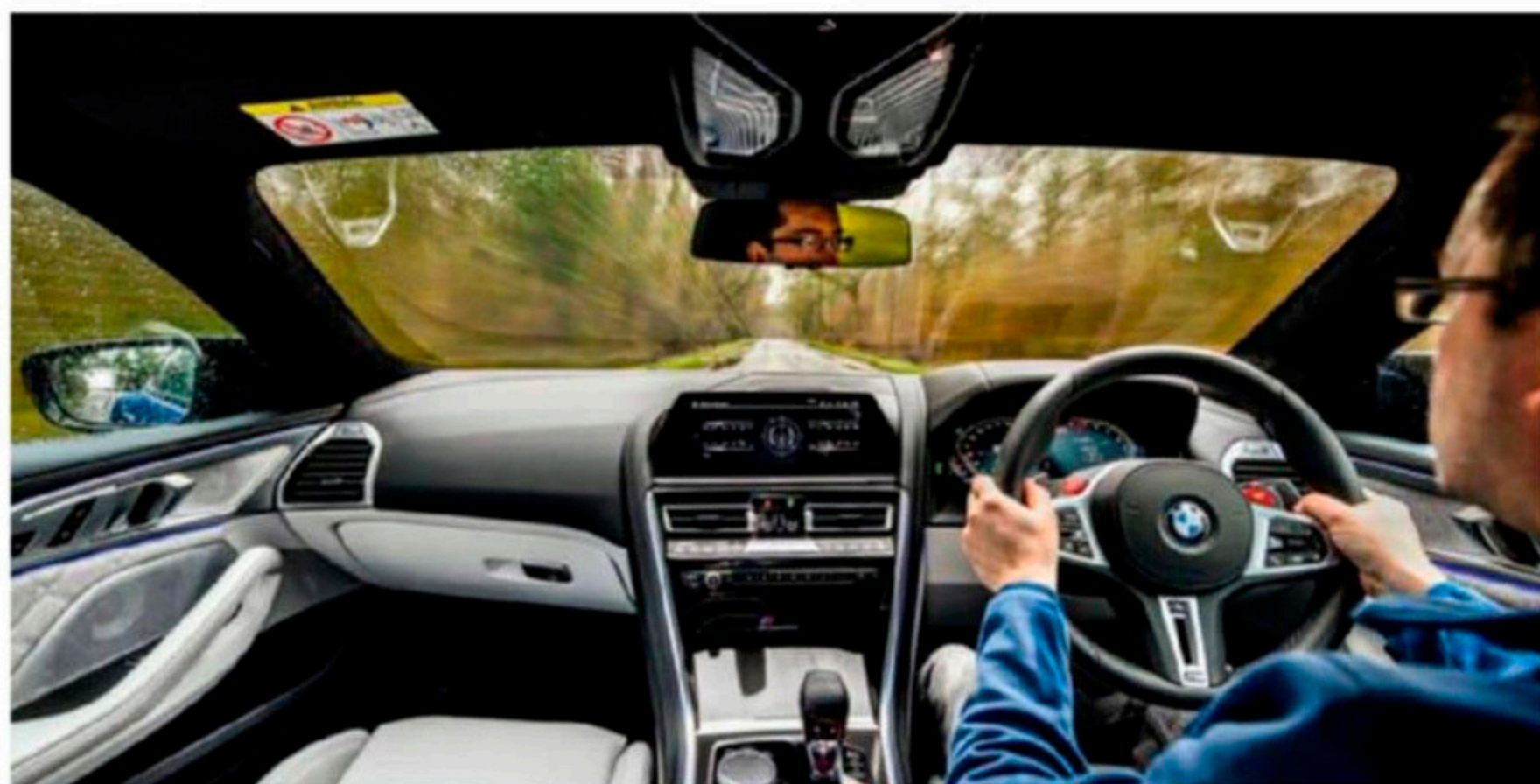
The road-going version is similarly large (it's nearly 4.9 metres long) and its bare ingredients are

much as you'll find in the M5. Power comes from a 4.4-litre twin-turbocharged V8, and in Competition form you get 625hp with 750Nm of torque, allowing for a 3.2sec 0-100kmh time and, optionally, a 304kmh top speed. M xDrive all-wheel drive is standard, with a rearward bias configurable through the car's menus, while switching off the DSC entirely enables drift mode, with power going to the rear tyres alone.

Chassis tuning is unique to the Competition, and differs from that of the M5 Competition, while M-specific adaptive suspension is standard. The breadth of configuration available is baffling – engine, dampers, gearshifts and even brake response can be adjusted, the last of those thanks to an electronic servo that lets you select between a softer road response and a firmer feel for the track.

We were unable to sample the coupe on the road at the car's Portugal launch, so the UK's back roads

‘The engine is little more engaging than you’d expect from a luxury limo’



are the unlikely arena for us to probe the Comp's everyday talents. It's apparent right from the off that the 'carbon core' structure gives the M8 real solidity, as while the ride quality is firm (even in Comfort mode), few disturbances make their way through to the finely trimmed cabin.

Misgivings do start to appear early, though. The bumps never really fade away from the M8 experience, whether they're the rhythmic thud of catseyes, the occasional thunk of a pothole or expansion joint, or the rocking motion of the car's bulk dealing with uneven surfaces. Winding up the damper settings starts to control the movements better, but this can leave the M8 feeling a bit out of sorts on the average B-road surface, even ignoring the sheer size of the thing. Fast A-roads are much more pleasant, and here the car finally starts to develop a flow – though as we discovered first time around in Portugal, compressions and crests can betray the M8's mass as 1.9 tons of metal asks questions the suspension can't quite answer.

On streaming-wet roads the all-wheel-drive system is easy to appreciate. Traction is mighty despite the huge whack of torque fighting its way through Michelin's finest, and the rear bias doesn't get out of hand if you lean into the throttle early on in

Above middle: 20-inch lightweight wheels encircle 395 and 380mm discs front and rear respectively as standard, with the 400/380mm carbon-ceramic items, as fitted on our test car, a £7995 (\$\$14,000) option

a corner. There's plenty of turn-in grip too, and even a bit of feedback at your fingertips.

Modern regulations have stymied BMW's V8 somewhat, though. Not in terms of pure speed – there's more than enough of that, and the smart shifts of the eight-speed auto are appreciated too – but in the somewhat characterless and muted soundtrack. The occasional pop or crackle can't make up for the engine being little more engaging than you'd expect from a luxury limo.

And ultimately, the M8 Competition does feel more like a well-sorted limo than it does a sports car, and more like a grand tourer than the Competition

badge on the bootlid would have you believe. There's undoubted ability here, but weight, size and luxury all chip away at its credibility as a pure-bred M-car.

So if you're considering trading up from an M4, maybe hang on to it for a little longer until we've seen what its successor has in store.

Antony Ingram (@evoAntony)

Engine V8, 4395cc, twin-turbo **Power** 625hp @ 6000rpm
Torque 750Nm @ 1800-5860rpm **Weight** 1885kg (332hp/ton)
0-100kmh 3.2sec **Top speed** 304kmh (option)
Price From \$5721,888 with COE
Contact Performance Munich Autos, 6333 3933
 + A fast and fine grand tourer
 - M-car fizz factor is in short supply
evo rating ★★★★★



Bentley Flying Spur

Bentley's latest Flying Spur is its best yet, but can it mix it as a driver's car with the leading supersaloons?

TO SUGGEST BENTLEY'S NEW FLYING Spur is merely a stretched Continental GT, with an additional pair of doors and rear seats that put any first-class airline cabin to shame, would be to undersell Crewe's most sophisticated four-door saloon to date by a huge margin – to the point where you would be dangerously close to being one of those types who suggests you could buy a Skoda Superb instead and save yourself six figures. 'They're both large saloons from the VW Group. How much space and quilted leather do you need?' Well, quite a lot when it's this good.

You see, the Flying Spur, and the new Conti GT, are so much more advanced than the cars they replaced that they feel like the engineers skipped a generation and have landed at Version 3.0. And like the Conti, the new Flying Spur is such a step forward that owners of the new car may want to consider an alternative way of explaining which Bentley it is they own to avoid people thinking they

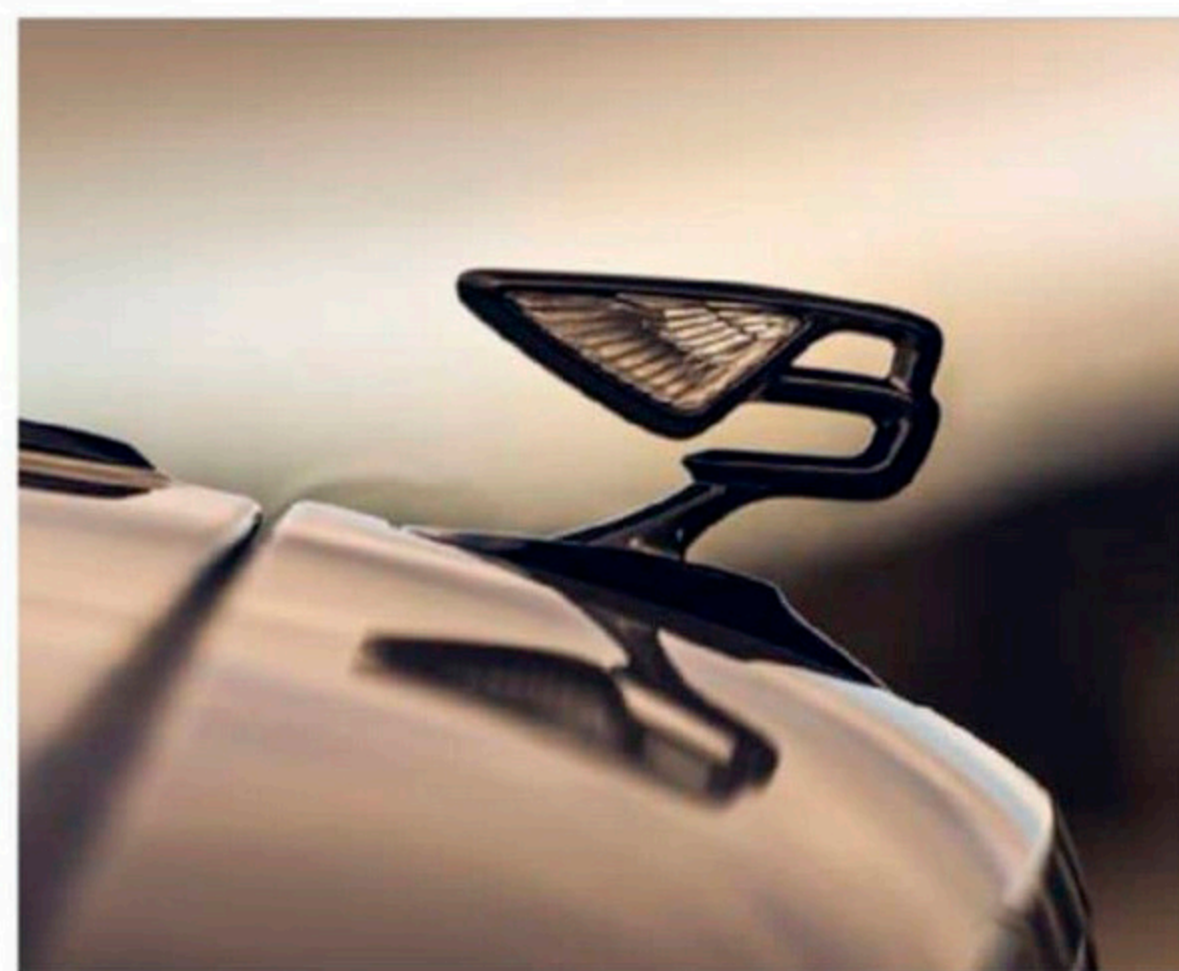
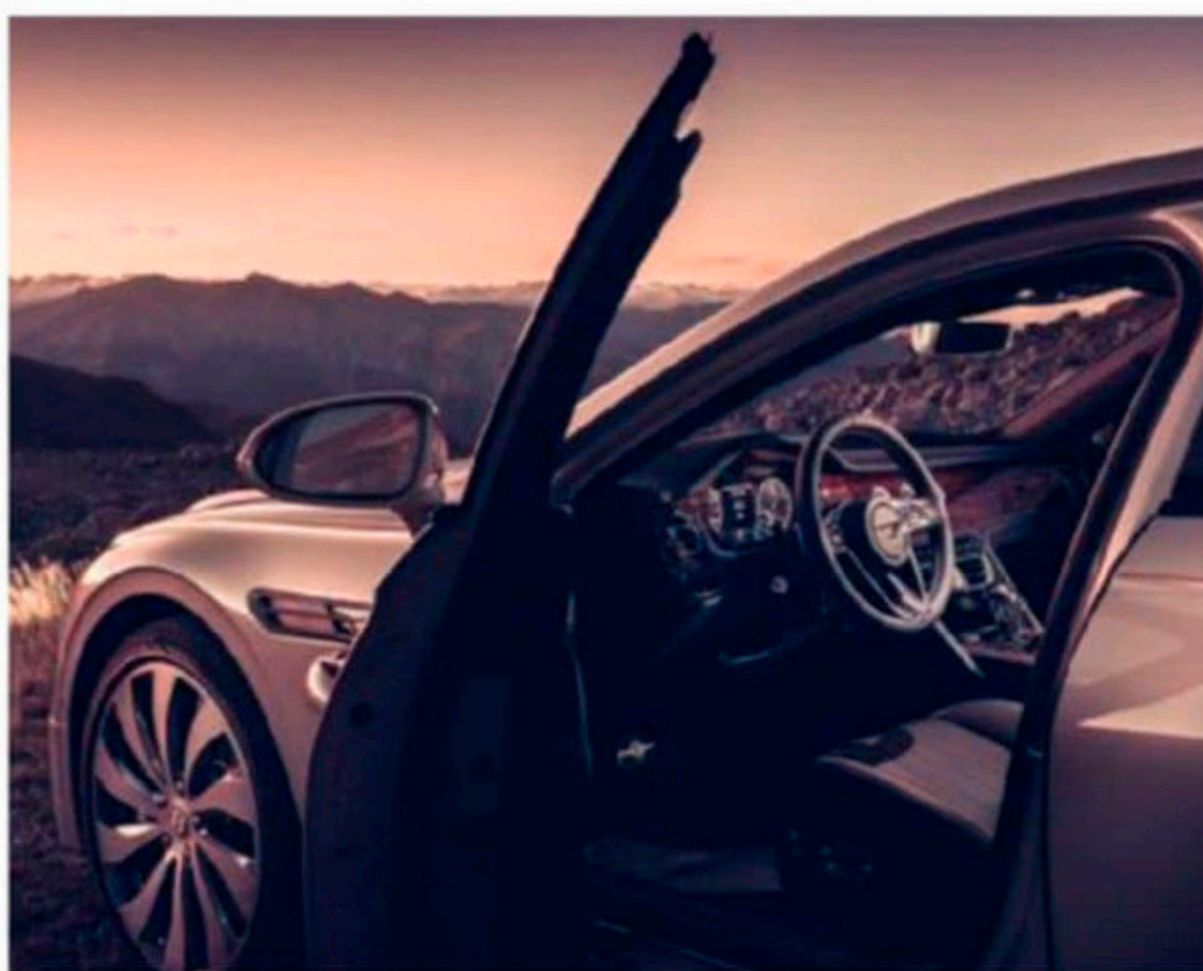
have the model that's rather too closely related to a VW Phaeton.

Being part of the VW Group does mean that Bentley can't have it all its own way, however. But whereas in the past, and as was the case with the Bentayga, it had to do the best it could with what was available – which, considering this was often from a much lower starting point compared to the high standards Crewe sets itself, is to be applauded – with the new Flying Spur Bentley was involved at the very beginning of the development programme across the Group, securing what it needed to build the cars that it wanted to build.

To this end, Crewe worked with Weissach on the design and development of the platform that underpins both the Flying Spur and the current Panamera. This guaranteed Bentley had what it needed in terms of track widths, wheelbase lengths and engine positions (for the W12, and the twin-turbo V8 to come later this year)

for its models. It worked with Porsche on the development of the three-chamber air suspension system, too, so it suited the Bentley as much as the Porsche (actually, it works infinitely better on the British car). It also worked alongside Audi way back in 2017 on the 48V electrical system that would be integral to the new active anti-roll control system. And all this before you get to the heavily revised 6-litre W12 engine, eight-speed ZF automatic gearbox (the first time a Bentley has featured a dual-clutch unit, allowing it to handle maximum torque from a standing start), four-wheel-drive system and, perhaps the most crucial tech for the new Spur, four-wheel-steering system.

All this is fitted to a chassis made from aluminium, steel and composite, and wrapped in a superformed aluminium body, with an interior fit and finish remarkably close in quality to that of the Mulsanne, the company's last handmade car. Yes, an Audiphile will spot some familiar switchgear,



‘You soon start hustling the Spur along like an RS6’

albeit dressed with a chrome bezelled finish, and the infotainment system is pure VW Group. But if it ain't broke, why spend a couple of hundred million euros developing a bespoke system?

At 5.3 metres long, dressed in that much metal and stuffed with that much leather, the new Flying Spur still has a bit of a weight issue, but while its 2437kg at the kerb is obscene, there are smaller and crudely built SUVs that weigh as much and don't have a 635hp, 900Nm twin-turbo W12 engine living behind their grotesque grilles.

All that mass does make the new Flying Spur a paragon of refinement, though, and an exciting

place to spend hours behind the wheel. If time isn't an issue, a Spur renders short-haul flights redundant. In lazy terms we'd call it a wafter, but that would be doing it a huge injustice, because it drives in such a polished way that even if you consider a windscreen on a Caterham a luxury item you would appreciate the Flying Spur's approach to driving.

Much of the credit is down to the air suspension and those active anti-roll bars. Not only does the former do a meticulous job of managing the car's bulk, but it also does so without isolating the driver from the act of driving. There's no wallow, just directness, with a level of precision totally unexpected but oh-so welcome. The steering wheel no longer rolls away in your hands, the ride doesn't patter constantly like air systems often do, and the dynamics are all the better for it. Once you're comfortable with its footprint you soon start hustling the Spur along like an RS6, albeit

Above: air suspension does a good job of hiding the Flying Spur's bulk and keeping the driver entertained. **Top right:** illuminated Bentley mascot retracts beneath the bonnet surface when the car is locked

perhaps in less of a feral state, giggling at how a car this heavy and this long can feel as at home being pushed around a B-road as it does pulling up outside the Hôtel de Paris in Monaco.

It's a stretch to say it's on a par with today's best supersaloons – it doesn't have those detailed layers of interaction or a naughty side – but as a limo that's designed to be driven, few do it better.

Stuart Gallagher (@stuartg917)

Engine W12, 5950cc, twin-turbo **Power** 635hp @ 6000rpm
Torque 900Nm @ 1350-4500rpm **Weight** 2437kg (261hp/ton) **0-100kmh** 3.8sec **Top speed** 333kmh **Basic price** From S\$969,000 without COE

Contact Wearnes Automotive, 6378 2628
+ The best limo for those who enjoy driving
- Needs to lose a few hundred kilos
evo rating ★★★★★

Driving by numbers

As road cameras become ever more widespread and sophisticated, and speed limits move up and down, is the drive for legal compliance putting motorists' lives at risk?

I MAGINE: YOU'RE DRIVING ALONG AND suddenly your speedometer breaks. The dial reads zero and the needle's not moving. You have absolutely no idea of the exact speed you're travelling at. One question: can you still drive safely? The answer's rather obvious, isn't it? There are probably not too many drivers who would stop immediately and put in a panic call to the AA. And if they did, they'd be more concerned with legality than safety. After all, no one wants a £100 fine and six points (S\$150 and four points in Singapore) through the post.

But if you can drive safely and you're no more likely to crash or hit a pedestrian with no speedo, why do we place such a reliance on speed limits as road safety tools? And why do we now talk about speed limits with an almost talismanic reverence?

For example, this is from the South Yorkshire Safety Camera Partnership's website: 'You can help us to achieve our aim – and reduce the number of deaths and collisions on our roads. All you have to do is keep to the speed limit.' No need to worry about all that tedious anticipation, planning, hazard perception, reading the road or car control. Just match the magic number on the stick to the magic number on the dial and you'll be as safe as houses.

On Britain's roads the growing presence of cameras means drivers are constantly having to concentrate on making sure they don't stray above the limit – even for a moment. But if you can drive safely with no speedo, that leaves the whole question of hard-line, automated speed limit enforcement rather hanging. That's because speed limits are legal, not physical absolutes. Driving at 55kmh isn't – by itself – any more dangerous than driving at 50kmh; it depends on a whole set of complex circumstances.

The police recognise this and record the causes of crashes on a 'STATS19' form that even differentiates between going too fast for the

conditions and exceeding a limit. Examine the data and it's very hard indeed to find a crash that's caused by a licensed and insured, sober, drug-free driver who's strayed a few mph above a limit. Yet these are the people now being prosecuted in their millions by cameras.

This has been facilitated by technology that has evolved well beyond the old film-loaded boxes that measured fixed speed at a single point. Today's most sophisticated camera systems can tabulate your average speed over miles and have your fine generated, printed and in the post without a human even being involved.

Since Sergeant Roger Reynolds switched on the UK's first speed camera in 1992, this increasing sophistication means speed enforcement is now an industry. It's responsible for thousands of jobs and millions of pounds in revenue. There are now nearly 6600 cameras just waiting to slap a ticket on anyone who loses at Speed Limit Bingo.

In parts of England, Robocop has pretty much replaced traffic officers for this job. In south Wales, Northamptonshire, Avon and Somerset, Bedfordshire and Greater Manchester in 2018, every single speeding fine was spat automatically from a camera. Some forces saw the number of tickets rise by 400 per cent as they installed more cameras. In the same year 2.2million drivers heard a brown envelope hit the doormat, demanding at least £100 and adding three points to their licences.

It's hardly surprising. By comparison with modern kit, Sgt Reynolds' grey Gatso cameras – once so feared and hated – are unsophisticated and almost friendly. Named after their inventor, rally driver Maurice Gatsonides, they measure speed at one fixed point. Your transgression is captured on a roll of wet film that needs someone to collect and reload it, develop it, print it and check it. Once the 800 exposures are used up, the unit will still flash drivers, it just can't capture them on film.

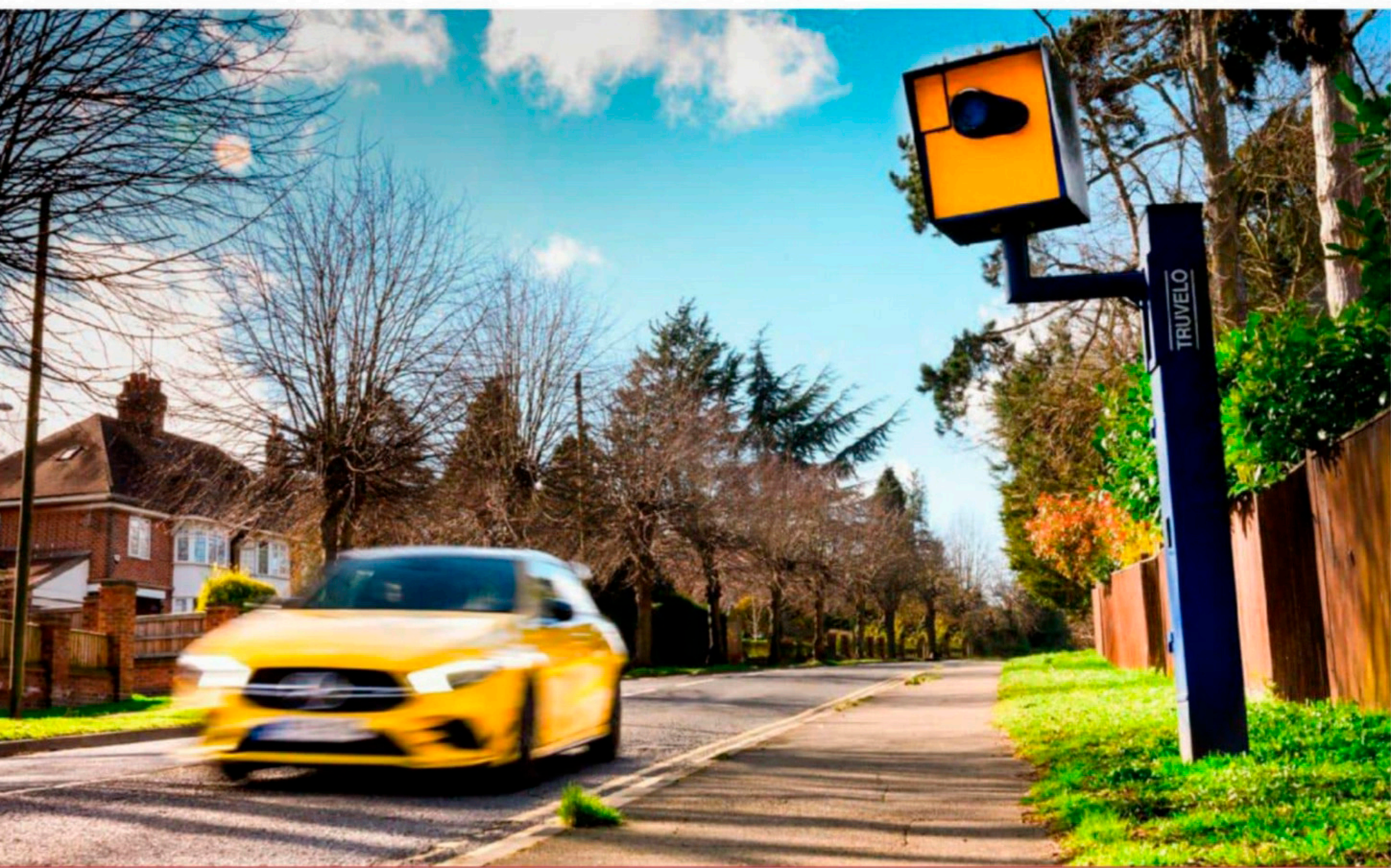




SPEED CAMERA SAFETY

by MARK McARTHUR-CHRISTIE

**'ROBOCOP HAS
PRETTY MUCH
REPLACED
TRAFFIC
OFFICERS'**



Contrast this with today's cameras, like those from RedSpeed, which says: 'Our systems operate 24/7 with no requirement for operator input. The offence data is automatically transmitted to a back office location.' No film, no developing, no operator – just a stream of 'offence data'.

On the new 'smart' motorways, drivers face the new HADECS 3 cameras. These are far harder to spot than conventional cameras, even though they're often coloured yellow. That's partly because they're far smaller than Gatso cameras, but mostly because they're mounted on gantries already packed with signs and equipment and well out of the sight line of most drivers. As the limits flick up and down, so does the trigger speed of the cameras – and they're often active even when variable limits are turned off. Avon and Somerset Police has admitted its HADECS cameras run constantly.

RedSpeed and HADECS cameras capture speed at a fixed point. Slow down before you pass the camera – as dangerous as that can be for following traffic – and you're fine rather than fined. Average speed cameras, on the other hand, force drivers to focus on a speed limit for miles. Often that limit can be artificially low for the road – the 40mph (64kmh) three-lane A40 into London, for example – and average speed cameras are now being used to

enforce limits that have nothing to do with safety. In Essex, on part of Basildon's A127 dual carriageway, the county council has lowered the limit from 70 to 50mph (113 to 80kmh), backing it up with average speed cameras, to supposedly improve air quality, although it seems no one's measuring increased pollution from speeding up and slowing down because of the new limit. The Welsh Assembly is also using cameras for the same reason on the A470 near Pontypridd, the A483 in Wrexham and the A494 in Deeside.

With lowered limits, drivers are having to invest far more concentration on limit compliance than anticipation, observation or hazard management. Alternatively, just turn on the cruise control, turn off your brain and watch the scenery scroll by.

The makers of average speed cameras sometimes boast that their products are capable of rather more than simple speed enforcement. Camberley-based manufacturer Jenoptik proclaims one of its machines 'can optionally unobtrusively gather big ITS [Intelligent Transportation Systems] data for all passing vehicles'. Roadside Big Brother carrying a big stick.

Given the massive reliance on technology for speed enforcement, it's hardly surprising you're more likely to spot a dodo than a marked traffic

car on the UK's roads. Traffic officer numbers have dropped from 3472 in 2012 to just 2643 in 2017, and they're set to fall further still.

So we're back where we started – being concerned with legality rather than safety. You could drive perfectly safely with no speedo, but you might struggle to drive legally. This means we've simply equated compliance with safety and backed it with unyielding, high-tech automated enforcement. In essence, more than ever before the UK's drivers are being made to drive by numbers as limits lurch up and, mostly, down, with the cameras waiting to pounce. And like painting by numbers, it's a bad facsimile of the real thing – just a great deal more dangerous. ☒

SPEEDING BY NUMBERS

Number of accidents where exceeding the speed limit was the only contributory factor

Year	Fatal	Serious
2011	9 (0.5%)	21 (0.1%)
2012	4 (0.2%)	35 (0.17%)
2013	3 (0.12%)	12 (0.06%)
2014	6 (0.36%)	26 (0.13%)
2015	4 (0.24%)	26 (0.13%)

Source: DfT STATS19



Car industry pitches in

Health services get a helping hand in their hour of need

THE COVID-19 CRISIS IS ALREADY emerging as an unprecedented challenge for the car industry, with a fallout far greater than those of other major catastrophes, including the 2008 financial crisis and the economic slowdown following 2001's terrorist attacks.

Car companies including Bentley, Aston Martin, JLR, Nissan, Toyota and Vauxhall all suspended UK production as the country went into lockdown, while big events on the motoring calendar, from Formula 1 races to the Goodwood Festival of Speed, have been universally cancelled or postponed.

While the impact will be felt for some time to come, it's also demonstrating the industry's more human side as dozens of firms support aid and healthcare organisations when they need it most.

Seven British F1 teams have come together to work on reverse engineering, scaling production and rapid design and prototyping of vital medical equipment. Known as Project Pitlane, the group is already turning up results. Mercedes-AMG Petronas, one of the seven teams, is working with University College London to reverse-engineer CPAP breathing aids for use in hospitals, and the incredible speed at which F1 teams work resulted in the first units being manufactured less than 100 hours after the initial meeting to discuss it.

Ford has also geared up to produce ventilators for the NHS, while Jaguar Land Rover and MG



have both dispatched vehicles to healthcare organisations, including 27 new Defenders from the UK press fleet for use by the British Red Cross. And Aston Martin Works has offered its technicians for emergency servicing of vehicles operated by NHS personnel.

With cars being vital transport for some in order to maintain social distancing, travel around London has also been opened up, with the congestion charge and ULEZ (ultra low emission zone) fee both suspended until further notice. Drivers with MOTs due from 30 March also get a six-month extension.

WATCHES



Autodromo Group B Series 2 'Safari'

\$975 (\$\$1,380) autodromo.com

Another striking variant for Autodromo's Group B. This one is inspired by 1980s Paris-Dakar machines and gets a green dial and semi-matt green plating for its case and bracelet.



Tissot Heritage Navigator Chrono Auto 1973

€1990 (\$\$3,070) tissotwatches.com

Hot on the heels of last year's limited-edition 1973 model comes a non-limited take. With a white dial it's virtually unchanged, but it's now joined by new black and blue alternatives.



Hublot Big Bang Integral

From £17,300 (\$\$30,500) hublot.com

Fifteen years after it launched, the Big Bang is now offered with an integrated bracelet for the first time. It's available in titanium (pictured), black ceramic or gold.

Mini marvel

Want your Mk3 Mini Cooper with 3.5-litre V6 power? California's Gildred Racing can help

MINIS OF OLD ARE FAMED FOR THEIR featherlight kerb weight, tiny dimensions and resulting kart-like handling.

However, due to ever-increasing safety, space and equipment demands, even the most compact and weight-conscious modern-day superminis are much larger and heavier, making a potent powertrain all the more important. But what happens when you combine the compactness of the former with outputs that far exceed the latter? California-based Gildred Racing has the answer.

Working primarily on pre-BMW Mini Coopers, Gildred offers everything from a simple restoration to a 200bhp Type R-powered conversion, via a Mini Cooper pickup. But above all of this sits something far more extreme: the Super Cooper Type S.

At first glance you'd be forgiven for thinking the limited-edition Type S was little more than a

tastefully modified Mk3 Mini Cooper. The exact specification can be altered to suit the customer's requirements, but the example pictured here features moderately flared arches, 13-inch two-tone Minilite wheels and a few other subtle aesthetic tweaks. However, take a closer look under its skin and you'll begin to understand the true scale of this conversion.

You can forget the Mini's traditional front-engine, front-wheel-drive configuration for a start, as the Type S completely turns this around, sending power to the rear wheels from a rear-mounted engine. Fed by NACA ducts in the rear side windows is a 3.5-litre Honda V6, fitted with a Rotrex supercharger for an output of 502 wheel horsepower (which should translate to over 550bhp at the engine) and 519Nm of torque. Consider the car's 900kg kerb weight and you're

looking at a power-to-weight ratio that exceeds a Bugatti Veyron's.

This power is translated to speed through a six-speed manual gearbox, a limited-slip differential, and wide, sticky Toyo R888 tyres. Although exact figures haven't been recorded, Gildred Racing quotes a 0-96kmh sprint of under four seconds. Top speed is also yet to be tested, but we can't say we blame Gildred for shying away from very high speeds with such a short wheelbase...

Fast lap times aren't high on the agenda for this car either, but in order to handle the additional performance, fully adjustable QA1 suspension is included, alongside an uprated Wilwood braking system and extensive structural strengthening to increase torsional rigidity.

Aside from the neatly packaged supercharged V6 behind the seats – of which there are now



by SAM JENKINS



only two – you'll find a raft of tasteful modern additions inside. The optional Sport interior package adds Recaros, a suede headliner, a custom centre console and more. Meanwhile the Premium entertainment package shoehorns an uprated seven-speaker Alpine system into the cabin, complete with a subwoofer, amplifier and 9.7-inch Apple iPad Pro screen. The likes of electric windows and push-button start all come as standard, and you even get air conditioning, with all the componentry mounted at the front of the car in an effort to improve its weight distribution.

Ready to get your wallet out? You'll need a large one. Though prices for a Gildred build start at \$45,000 (\$\$64k), the flagship Type S will set you back a hefty \$150,000 (\$\$212k), a sum that would afford you almost three C8 Chevrolet Corvettes.

Should you decide to splash your cash, the first stage of the process is to source a donor car, either from Gildred's inventory or via your own means.

Anywhere from \$15,000 to \$25,000 (\$\$21-28k) will get you a suitable donor vehicle already in the US, ready to be stripped of its original parts ahead of the conversion. Only ten per cent of the factory components remain in the final product, with the vast majority of parts being brand new.

The donor car is subjected to a 200-point inspection to ensure it meets Gildred's standards for safety and longevity. Panels with rust or damage are either repaired or replaced with new items, before additional strengthening takes place. This follows the all-important specification process, where buyers can opt to have their custom creation visualised in a render before it's brought to life.

Further down the line is a test fit of vital components, and bench testing of the hydraulic and electrical systems, before everything is stripped down for the respray. Once assembled and operational post-paint, interior fabrication

commences, and each build ends with a rigorous 150-mile test programme to ensure everything is working in harmony.


Due to the nut-and-bolt nature of the conversion, each build typically takes around six months to complete, but based on the outcome, we'd say it's probably worth the wait.

SPECIFICATION

Engine	V6, 3.5-litre, supercharged
Power	500whp
Torque	519Nm
Weight	900kg
Power-to-weight	c567whp/ton
0-96kmh	<4.0sec
Top speed	n/a
Basic price	US\$150,000

BLOOD B



by 



by 

The last time the Germans and Japanese collaborated on something, it nearly resulted in World domination. This time around however, we get a pair of sports cars that driving enthusiasts can look forward to.

ROTHERS



Everyone loves an underdog story. The idea of the little guy taking on the giant and winning has been told countless times and is still timelessly endearing. In some ways, the new Toyota Supra reminds me of the Ford v Ferrari saga that was immortalized by the eponymous Oscar-winning film.

Just like Ford, Toyota is ironically, the car-making giant, setting out to prove a point to The Establishment. However in the world of sports cars, the Japanese automaker is the David to the Goliaths like Porsche and Ferrari.

Instead of Ferrari – we'll get to that later – the Japanese manufacturer perhaps has its sights closer to the likes of the Porsche 718 Cayman, Audi TT and certainly the taproot of this car, the BMW Z4.

This brings us neatly to the other car here. While it was widely known for some time that the Toyota Supra would be co-developed along with the Z4, the result of this partnership feels overwhelmingly like BMW did most of the heavy lifting.

To be fair, this is probably a good thing considering that it has been over 25 years

since the last Supra was launched; and since then Toyota has been better known for Multi-Purpose Vehicles (MPVs) and Sport Utility Vehicles (SUVs) than outright sports cars.

The Japanese sports car is an increasingly rare but important commodity in the minds of car enthusiasts. The promise of reliability and value is an irresistible combination that speaks to the working class and puts their performance aspirations tantalisingly within their reach.

SEPARATED AT BIRTH

Now into its third generation, this roadster's origins can be traced even further back – all the way from the quirky fibreglass-bodied Z1 to the underwhelming Z3 and even the iconic Z8. While these forebears were mostly produced in limited numbers, the Z4 has established itself as a staple in BMW's line-up.

The Toyota Supra on the other hand, has been a long-awaited return for fans of Japanese sports cars. In this case, it has been about 25 years since the last Supra was launched. So this Z4-based follow-up has some big shoes to fill. This time around, the GR prefix (Gazoo Racing, in case you were wondering) has been tacked on.





‘THE PROMISE OF RELIABILITY AND VALUE IS AN IRRESISTIBLE COMBINATION’

Over time, there will be more performance models that bear these initials such as the rally-inspired GR Yaris that appeared on last issue's cover. Think BMW's M division and you'll get the idea.

Indeed, the version of the Z4 driven here also has links to its maker's go-faster division. The M40i variant currently is the most potent of the range, packing 340hp under that long, sculpted bonnet. The Supra tested here is fitted with an identical power plant except that for some reason, it is rated at 335hp. In the real world, no one is going to notice the five horsepower deficit.

While the Z4 continues to be a convertible, Toyota has elected to build the Supra as a fixed roof two-seater, for now at least. One of the benefits of building a car that was intended as an open-top car from the outset is an inherently stiff chassis and creating a Supra roadster wouldn't be too difficult

from an engineering standpoint. 'Supra Spyder' has a nice ring to it, don't you think?

It is probably just as well however, that the Supra currently only exists as a hardtop. This way, there's a clear differentiation between it and the BMW Z4. Perhaps a clearer differentiation in the local market however, is the whopping \$70k premium that the German car commands over its Japanese twin.

That's a lot of money for a folding roof but of course, there's also more than that. While everyone is entitled to their opinion on which is the prettier of the two, there's no denying that the Z4's interior design feels more open as there isn't the big central cowl in the Supra that separates the driver's half of the cockpit from the passenger's side. As a result, the BMW feels like it has more elbow room for its occupants.

Perhaps just as significantly these days, the wireless charging tray for smartphones is better oriented in the Z4 than in the Supra. In the BMW, the absence of the central cowl means that when your iPhone is in the tray, it is possible to glance at the screen.

The East-West orientation of the wireless charging tray in the Toyota is not so much the problem. Instead, it is the plastic wedge that presses the smartphone to





the tray. There's really no need for it as the compartment is already really snug if you're rocking a plus-sized device such as an iPhone 11 Pro Max or anything with a screen larger than 6-inches. It's crammed so tightly in there, that considerable force has to be applied to get it out – to the point where it feels like you might break or bend the mobile device.

That one-sided centre cowl is a point of contention in the Supra. Mainly because it feels it's on the wrong side. If this feature had draped towards the passenger side, the interior would feel much more driver-centric, which would be especially appropriate for a sports car.

With that evocative double-bubble roof, the Supra feels the racier of the two. From the inside, it looks like you're peering out of a gunner's pillbox over the beach of Normandy. Except in this car, the driver is scanning for the next corner apex to shoot the car into.

When you drive the Z4 and Supra back-to-back, it is impossible to resist playing "spot the BMW bits" in the Toyota. Indeed it feels much more a Bimmer than it does a 'yota.

The GT 86 was a previous collaborative effort that was more convincing. Although that car's 'boxer' engine is unmistakably Subaru's, elsewhere it is harder to figure out where Toyota's input began and ended.

However, it is only when you get more seat time in the Supra that the BMW-ness of this car fades into the background. After a while, the nuances that Toyota has engineered in to make this car feel more 'Japanese' becomes apparent.

The steering, for example, is less weighted while the power delivery feels more linear than in the lively BMW.

The German manufacturer however, really should get most of the credit since it's the drivetrain, suspension and all the other bits that make both cars drive the way they do. In this sense, Toyota has merely put the icing on the Supra cake. However, for some, the icing is the best part!

The Supra may be accomplished in its own right and is arguably the best drive this side of \$300k. Still, there's a part of me that feels a tinge of disappointment when you consider that its predecessor the A80 Supra was hailed as a cut-price Ferrari-challenger. This shows how much technology has moved on as today's Supra would have to see off a 488 but now competes in quite a few divisions down. You only need to look at the Honda NSX to see



why today's Supra punches in a lower weight class. To match a million-dollar Ferrari, you would need a million-dollar Toyota. But how many customers would pay seven figures for the latter?

When the driver commits, the Z4 will oblige with sports car finesse as well, but it doesn't come as naturally as it does for the Supra. Perhaps this is because the BMW feels more relaxing of the two to drive when the roof is down and the driver just wants to cruise.

To this end, the BMW shows a broader breadth of talent, capable of being a better all-round car. At times it can really feel like you're getting two cars in one.

Perhaps this is also why BMW feels justified in charging the price difference that could

Above: Above: It's auto-only if you want a 3-litre Z4 or Supra. A manual gearbox in the entry 2-litre Z4 is a possibility, but it remains to be seen if Toyota will offer it in theirs. **Opp page:** Z4 has the better laid out interior of the pair. Central cowl on the driver's side impairs access to the wireless smartphone charging tray. Removing a plus-sized device such as an iPhone 11 Pro Max is a challenge in the Toyota.



Above: Don't let the engine covers fool you, they're identical in here. The Supra does without the diagonal silver brace bar as its fixed roof provides sufficient stiffness. **Opp page:** Sheldon chats with video director, Tommy Fok. Check our video of this feature with bonus content at <https://youtu.be/Jol8G65LccM> or scan the QR code to view it from your mobile device.



buy you an extra car over the Toyota. In the Bavarian carmaker's defence, the Z4 is much better equipped than the Supra if you're into all the bells and whistles like BMW connected drive, Intelligent Personal Assistant and customisable interior lighting, to name a few.

For seventy grand less, I could quite happily live with the comparative lack of features as I find most of BMW's techno-wizardry rather distracting anyway. The entertainment system in the Supra might be rubbish but that also means that I would be far less conflicted to upgrade the stereo in the Toyota than I would in the BMW where there's no way to fit an aftermarket head unit.

So the Supra is the car that I would take home if I could. The savings alone are reason enough for most, but the appeal goes even further than the comparative bargain to be had. Try to project 10, maybe even 20 years from now. The Z4 would be just another old BMW as by then, the next two or even three succeeding generations of this roadster would be on sale. The Supra however, may only come once a generation.

TOO MUCH POWER?

In 3-litre turbocharged guise, both cars here have more than enough power. We've driven the Z4 M40i to its limits on several occasions overseas and believe me, at times 340hp can actually feel excessive for its chassis – but in a good way.

I've always maintained that a good sports car is one that can scare its driver if it is taken for granted and doesn't respect it on the limit. In this sense, the Z4 M40i is capable of waking its driver up. Try overtaking on a two-way road for example and you give it full acceleration, the back end shimmies under that surge of torque and the steering lightens up and demands some corrective steering.

The Supra will do this on the limit, but the power delivery doesn't feel as violent. The driver is able to feed in just the right amount of power as needed and ultimately feels more involved in the process.

Both cars are also available in 2-litre versions and promise a potentially sweeter experience with less weight in the nose that would make for more responsive handling. Round 2? Bring it on!

BMW Z4 M40i V TOYOTA GR SUPRA



Toyota GR Supra 3.0

Engine 2,998cc in-line 6-cyl
turbocharged
Power 335hp @ 5,000-6,500rpm
Torque 500Nm @ 4,500rpm
Gearbox 8-speed automatic, RWD
Weight 1,570kg
0-100kmh 4.3 seconds
Top speed 250km/h
Basic price \$256,888 with COE
VES C1 (\$10,000)
Contact: Borneo Motors, 6631 1188

BMW Z4 M40i

Engine 2,998cc in-line 6-cyl
turbocharged
Power 340hp @ 5,000-6,500rpm
Torque 500Nm @ 1,600-4,500rpm
Gearbox 8-speed automatic, RWD
Weight 1,610kg
0-100kmh 4.5 seconds
Top speed 250km/h
Basic price \$342,888 with COE
VES C1(\$10,000)
Contact: Performance Munich
Autos, 6333 3933




OPEN CO

McLaren's 600LT Spider and Aston Martin's DBS Superleggera Volante take very different approaches to



by 

by 

NFLICT

the drop-top supercar formula. But is one necessarily better than the other? We drive them both to find out





A

S MARKED CONTRASTS GO, YOU'D DO WELL TO FIND one more striking than McLaren's 600LT Spider and Aston Martin's DBS Superleggera Volante. Though they share a similar price point and tilt at the same objective, they come at it from entirely opposite ends of the spectrum.

In the red corner, the mid-engined, 1404kg 600LT Spider is the epitome of lightweight build, extensive aerodynamics and hardcore intent. McLaren's high-revving 3.8-litre twin-turbo V8 is lightly tweaked to belt out just shy of 600hp and 620Nm of torque, and is mated to the familiar seven-speed twin-clutch gearbox.

The folding hard-top adds around 50kg compared to the regular 600LT, but the Spider remains an ultra-focused machine first and foremost. Indeed, it seems the option of folding back the roof is simply provided as a means of further intensifying the already explicit driving experience without any compromise to the dynamics or dilution of McLaren's 'Longtail' mantra. This is no soft option.

In the blue corner we have the DBS Superleggera Volante. Front-engined and sporting a folding fabric roof, it's a more traditional yet no less impressive means

of messing up your hairstyle. Aston couches the DBS coupe as a super-GT, so it stands to reason the DBS Volante follows that same beefy blueprint. At 1863kg dry, the Superleggera tag is something of a misnomer, but propelled by a colossally potent 725hp twin-turbo V12 that develops 900Nm of torque from just 1800rpm, the DBS is a monolithic machine.

Two such special cars deserve an equally exceptional stage on which to perform, so we're pointing the pair north and heading for the spectacular roads of the Pennines and Yorkshire Dales. It's a fair old schlep from **evo's** Bedfordshire HQ, but not only is the destination worth the effort, the journey will be a revealing test of how each eats miles too.

I start in the McLaren. What do I think of the way it looks? I'm still not sure. I love the overall shape and size, and there are some lovely details – such as the gill-like vents sliced into the tops of the front wheelarches. But as a whole? And in this mix of red and exposed carbonfibre? It just seems a bit fussy and like it's trying a bit too hard.

Push the little rubber button to release the door and it swings up in dramatic style. You can feel a bit self-





conscious doing it on a petrol station forecourt, but I'd be lying if I said it didn't also deliver a flash of childish glee.

I feel a little bit ashamed to say it, but spending three hours-plus on motorways in a pared-back, carbon-tubbed 600LT sounds like a recipe for a bad back and a headache. Especially when you look into the cockpit and see a pair of 'Senna' seats. Getting in requires a bit of contortion, for the sill is wide and the hard-edged seat is set low. Once in though, the padding strategically positioned on the bare carbon shell is actually very comfortable.

Ignore if you will the brash interior combination of black and orange (which clashes horribly with the body colour) and instead take a look at the cockpit architecture. It really is something special and rather cleaner and more confident than the exterior. The driving position is exceptional, with perfect alignment of seat and steering wheel. The pedals are in line too, though only if you're prepared to use your left foot to brake.

McLaren's V8 has always been immensely effective, but it's never been blessed with anything more than a somewhat industrial soundtrack. On start-up it thrums busily, sending assorted tingles and vibrations through the firmer engine mounts into the tub and ultimately your seat. A glance in the mirror reveals two plumes of exhaust vapour exiting from the rear deck. If we're lucky those plumes will be jets of flame come sundown.

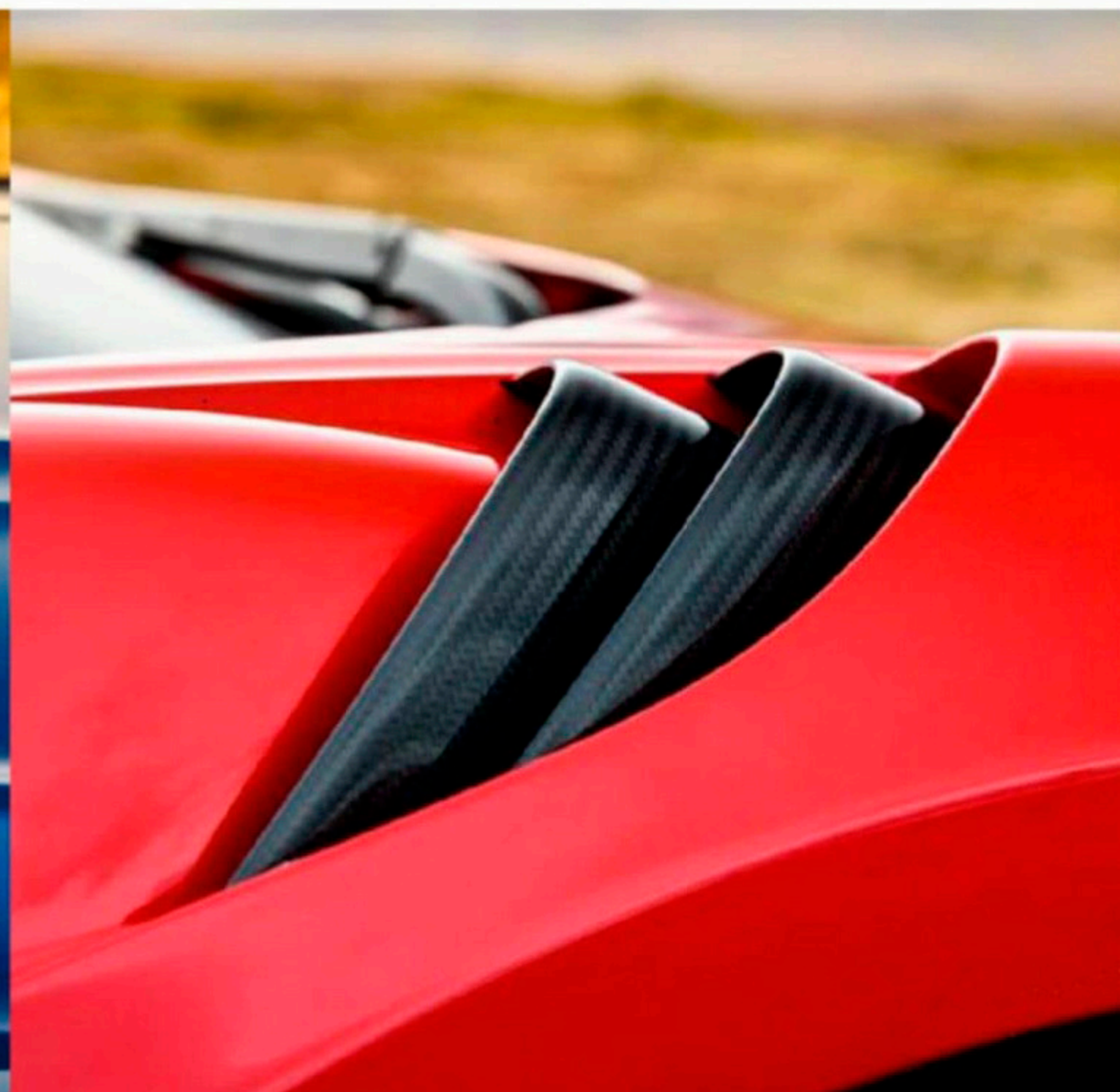
Rather unexpectedly the Spider settles well at motorway

speeds. Granted, it's hard to rein it back to sensible pace as its natural gait seems to be 95 or so, but the tallest of the seven-speed transmission's ratios allows for a nicely subdued low-rev cruise. The Active Dynamics settings offer finely judged Handling and Powertrain modes, which reveal the 600LT Spider's damping to be both beautifully supple and brilliantly controlled. Normal/Normal yields the most laid-back style for long-distance work, but Sport/Sport is also perfectly acceptable on motorway legs.

With the roof in place there's considerable road and tyre noise, but no more than in the 600LT coupe. You have to turn the stereo up quite loud to drown it out, which means long drives expose you to more decibels than is ideal. The upside is a car that feels special and connects with you on a sensory and emotional level, even when you're not doing anything special in it. This is something McLaren struggled with in the early days, but from the moment the 600LT's wheels start to turn it feels brilliantly together and brims with just the right amount of feedback. Its feel-good factor is off the scale.


Having formed an unexpectedly strong bond with the McLaren, I'm still feeling pretty chipper when I switch to the sanctuary of the DBS Volante. It's no secret I have a soft spot for Astons, a feeling that's rooted in a childhood love of those big '80s V8 Vantages. The DBS channels those classics strongly. Not necessarily in specific styling nods, but in its larger-than-life presence and impressively

Above and right: Aston's super-GT produces 725hp from a front-mounted twin-turbo V12, while McLaren's super-focused supercar puts out 600hp from its midships twin-turbo V8



**'YOU CAN REALLY LEAN
ON THE McLAREN'S
ASTONISHING GRIP AND
INSPIRATIONAL POISE'**





**‘WORK THE ASTON’S V12
TOWARDS ITS LIMITER
AND IT REVEALS ITSELF
TO BE A VERY FIERCE
CREATURE INDEED’**





muscled physique. Favourite details are the bonnet vents fringed by super-sexy chrome 'Superleggera' script, and the vaned 'curlicue' that directs escaping air from the front wheelarches along the car's flanks.

After the mild exertion of clambering in and out of the McLaren and the race car ambience of its overtly sporty cockpit, the DBS is far more conventional and immediately cossetting. You still sit pretty low, though not as tucked down in the car as in the 600LT. The scuttle is high, as are the tops of the doors, and when you look in the mirror your view out is through the roof's letterbox-shaped rear window. Being a GT Aston the interior is sporting, but with an impressive sense of luxury to go with it. Like the McLaren, the interior detailing of this press car isn't to my taste (especially the embroidery), but the hide is beautifully soft and gently aromatic.

Once awoken, the Aston's V12 engine is a palpable but more distant presence than McLaren's all-consuming V8. It simmers gently but insistently, with a smooth burble not dissimilar to that of a Riva boat guttering from the quad exhausts, but a prod of the throttle spits a fusillade of pops and crackles and makes the car twitch impatiently on its suspension. That'll be 900Nm of twist action chomping at the bit.

Thanks to its near-bottomless reserves of propulsion, the DBS Volante is a natural-born mile-eater. The eight-speed ZF automatic transmission shuffles through the gears effortlessly, and once in top the DBS adjusts its pace with elastic ease. Every now and again there's a very small tremor of the rear-view mirror that betrays a slight loss in structural rigidity, but the adaptive dampers offer a very soothing ride in their softest setting and the whole demeanour of the car is satisfyingly majestic for multi-hour stints.

The motorway is a revealing warm-up, but it's the fine roads across and around the Pennines where we hope to explore the performance of both these cars. It's also time to put the roofs down and experience them as their makers intended.

Jumping back into the 600LT feels like even more of a culture shock. The hard-panel roof flicks up and folds away in just 15 seconds. With the side and rear windows up, the rising buttresses create a tremendous sense of being cocooned, with just the top of your head exposed to some breeze. It actually feels like more of a targa top than a truly open-cockpit car, but immediately there's a sense of closer proximity to the action.

With Sport modes engaged there's a feral edge to the engine and a welcome degree of additional control to



the damping, but still with some useful compliance to soak up the bumps and crests and enable you to really lean on the astonishing front-end grip, tenacious traction and inspirational poise.

On some of the gnarlier roads that wriggle their way across the rugged moorland the Spider is absolutely sensational. You need to relax the ESP's hold a little by switching it to Track, for otherwise you feel it holding the 600LT back from putting everything it has into the tarmac. The system isn't intrusive as such, but you notice its subtle restraining measures well into fourth gear and sometimes fifth if the road starts to duck and dive.

In Track it is utterly blistering, with short, sharp flares of revs when the car goes light and a delicious sense of fractional over-rotation under full throttle in the intermediate gears. Such is the grip it musters, the Spider manages to pull the granite chippings from the surface and leave two faint trails of expensive rubber on the road.

It feels so well tied down and so well within itself that even when you begin to stretch it it remains incredibly communicative, consistent and confidence inspiring. In fact it's one of the most intuitive supercars you'll ever drive. There's no doubt it's one of those cars that makes

Top and above: 600LT's carbon-shell seats look minimalist but are surprisingly comfortable; DBS's cockpit is more luxurious, befitting the model's super-GT status

**'THE DBS HAS POISE
AND PRECISION TO
SPARE, SO YOU CAN
FIND A FLOW AND
PLACE IT JUST SO'**

Opposite page, bottom: DBS's carbon-ceramic discs trump the McLaren's for size, at 410mm versus 390mm up front, but then the Aston is at least 550kg heavier overall...

a hero of you, but when you truly extend it you need a high level of skill and a level of judgment just to be able to process the rate at which the road is coming at you.

We've become used to McLarens all being insanely quick across the ground, but beyond the sheer mouth-parching pace, the quality of the steering is the thing you enjoy most. The 600LT has a slightly quicker rack than the 570S, but thankfully it resists being stupidly darty. Weight of assistance, rate of response and the amount of input you need to negotiate any given corner are all just about perfect. You feel completely and utterly connected to the front wheels, in a way I'm struggling to think of any other brand can match. Considering the 12C was aloof and strangely disconnected when it arrived less than a decade ago, the way McLaren has come to define great steering is a huge achievement.

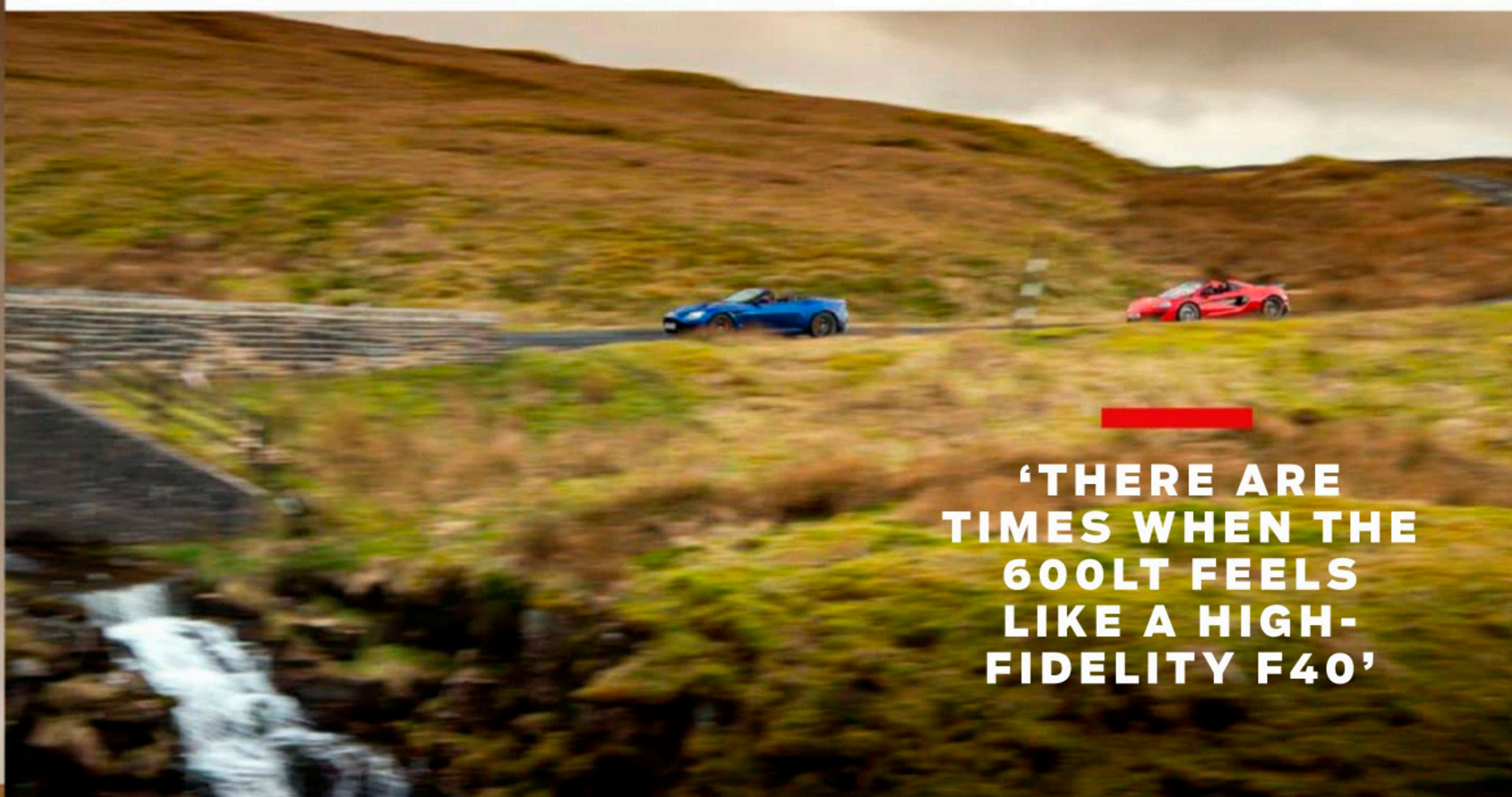
Some people might criticise there being some turbo lag, but it never gets in the way or wrong-foots the car. And if anything, the fractional pause before the torrent of boost actually makes the performance all the more enjoyable. In fact there are times when it feels like a high-fidelity F40.

If there's one area that takes a little getting used to it's the brakes. And it's all down to the commitment to

positioning the pedal for left-foot braking. You can use your right foot, but it's a slightly awkward twist for your ankle, whereas your left foot drops straight onto the pedal. It's a technique that takes a while to refine, especially gaining the sensitivity not to have yourself snapping into the seatbelt whenever you stab at the pedal. I think this explains the slight dead travel in the pedal before the pads squeeze into the discs. Brake conventionally – and probably more progressively – with your right foot and you always notice the initial lack of braking response. However, use your left foot and you seem to push straight through this dead zone, with the first millimetre or two of dead travel serving as a useful way of finessing your initial application.

Those same gnarly, high-tempo moorland sections feel very different in the DBS. In truth they don't suit it, nor would you expect them to in all honesty, the sharp crests and tight compressions asking too much of its body control. The need to mitigate vertical movement tempers your pace, but it's not necessarily bad news because in appreciating there's more physics at work you immediately begin reading the road and planning your inputs further ahead. Managing the car's behaviour also extends to deploying the V12's rippling torque, which will wrench the rear tyres





**‘THERE ARE
TIMES WHEN THE
600LT FEELS
LIKE A HIGH-
FIDELITY F40’**

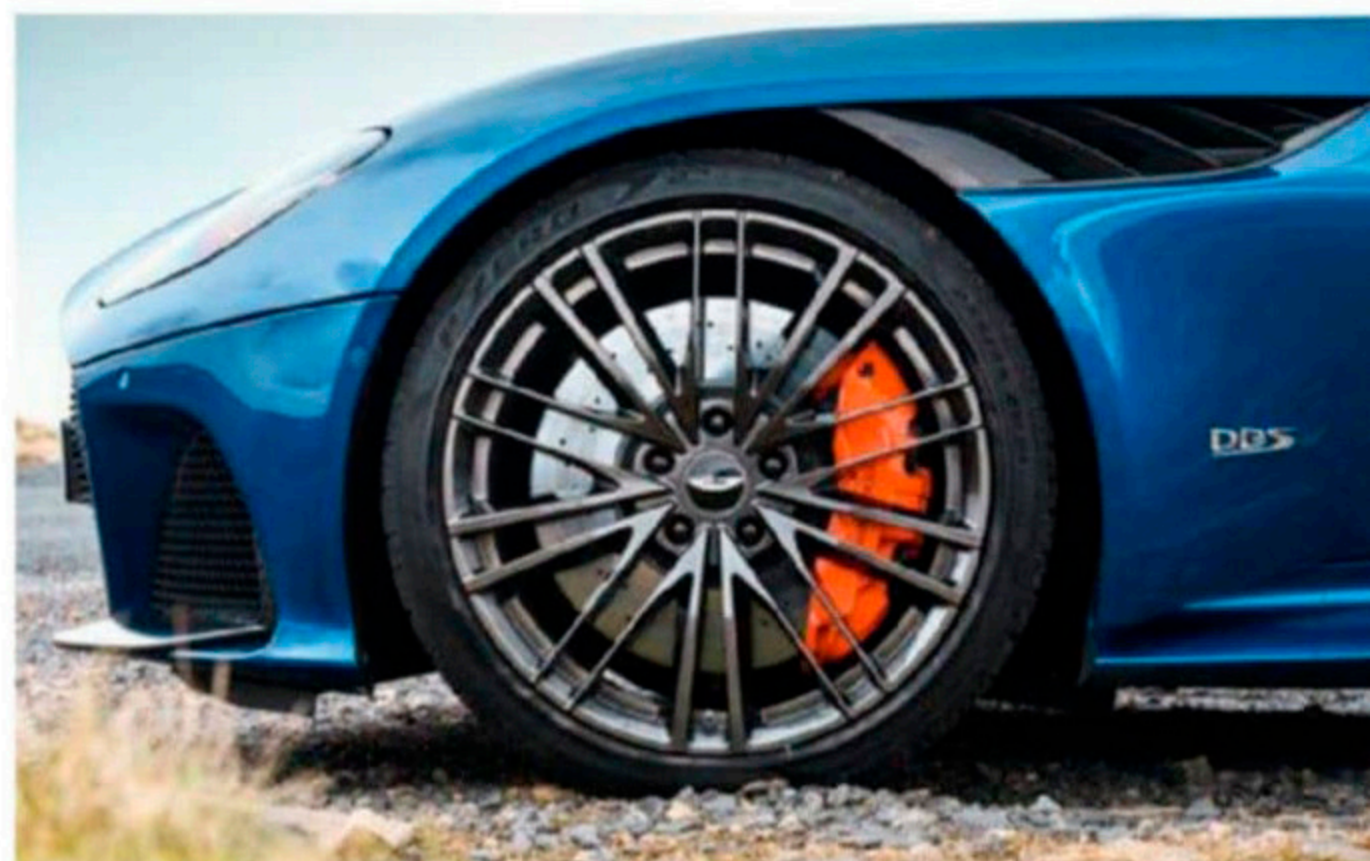
into wheelspin if you're oafish or greedy with your throttle inputs.

Again, it requires you to drive the DBS with more empathy than the McLaren, which seems all but impervious to everything that's thrown at it. Where the 600LT delivers dizzying degrees of near-instant gratification, the DBS is more of a slow-burn experience, requiring time and miles to peel back its layers. Make this investment and you find the DBS is an exceptionally generous character, with a broad spread of abilities unlocked simply by having empathy with what the Aston is trying to do and how it prefers to do it.

When this clicks, the DBS is hugely enjoyable to drive. It has poise and precision to spare, so you can find a flow and place it just so. The massive brakes have abundant stopping power, but respond a little too sharply to your initial pedal input. It's impressive that a car with such brute force can be so sweetly nuanced, but it's equally stirring to find it can also be pretty wild when you really grab hold of it.

Being front-engined and rear-wheel drive makes it a more expressive car than the McLaren. As you might expect, if you put all that torque to work things get much more serious. You really need to be on the ball, especially if you relax or disable the traction control, but it's a challenge that comes with sizeable rewards. And considerable slip angles.

Where the DBS Volante really shines is on the slightly wider and smoother road that runs from Penrith towards Hexham. It has a cadence that suits the Aston to a tee, the flow of corners, mix of inclines and descents and regular straights allowing you to settle into the DBS's poise and enjoy the steering feel and response, which is lighter and softer than the hardcore 600LT's, but still feelsome and precise enough to hustle the Aston with absolute confidence.



A blue Aston Martin DBS Superleggera Volante is shown from a rear three-quarter view, parked on a gravel road. The car's rear lights are illuminated, and its top is down. In the background, a red sports car is partially visible on the right. The scene is set against a dramatic sunset sky with orange and red clouds. Road signs and a stone wall are visible in the distance.

Aston Martin DBS Superleggera Volante

Engine V12, 5204cc, twin-turbo **Power** 725hp @ 6500rpm **Torque** 900Nm @ 1800-5000rpm
Weight (dry) 1863kg **Power-to-weight (dry)** 389 hp/ton
0-100kmh 3.6sec **Top speed** 340kmh
Basic price \$1.3million w/o COE
evo rating ★★★★★

It's fascinating to follow the 600LT, which snaps through corners like a speeded-up film and lunges into braking in a blur of brake lights and rifle-shot downshifts. When the light fades and night falls, those Bunsen-burner exhausts emit jet-fighter flames to surreal effect.

The DBS can't match its aggressive work rate or wild pyrotechnics, but it carries plenty of speed through the turns and absolutely romps out of them and along the straights. The massive spread of torque has most eventualities covered, but chasing the McLaren requires you to work the V12 towards its rev limiter, at which point the DBS reveals itself to be a very fierce creature indeed.

In outright terms and with a suspension of all traffic laws, the knife-sharp McLaren would sprint away from the Aston, but both these cars are so fast that you simply can't use all their accelerative performance for more than fleeting moments, and you certainly don't commit to corner after corner anywhere near the absolute limits of the tyres, brakes or chassis. As a consequence the 600LT and DBS run in fast formation, well within themselves but extended enough to be totally absorbing and hugely entertaining.

Preference? Honestly, these are such different characters it's very hard to make the call. In a magazine test

environment, where you drive to a set of specific locations and then charge around for the camera and for fun – sorry, for the purposes of detailed appraisal – the 600LT Spider is an intense and immediate hit of adrenaline. That it also has sensational steering and damping proves yet again that McLaren has a clear understanding of how to build ultra-fast cars that are about more than just speed.

And the Aston? If you want to experience towering performance there are few better cars in which to do so than the DBS Volante. It really does have an endless sense of propulsion. One that pushes you into the seat and makes you feel like your brain needs baffles to stop all the fluid sloshing to the back of your skull.

If you're a purist you tend to consider open-top cars as a compromise. What these two illustrate is that not only is this a flawed premise, but it also ignores the fact that with their roofs down they deliver a deeper and more vivid sensory experience. One that immerses you in moments a coupe simply can't deliver.

As we now live through the claustrophobic measures to contain the hateful Covid-19 virus, the notion of enjoying fresh air, freedom and fantastic roads in cars of this calibre is something to cherish. ☒




McLaren 600LT Spider

Engine V8, 3799cc, twin-turbo Power 600hp @ 7500rpm Torque 620Nm @ 5500-6500rpm Weight 1404kg Power-to-weight 427hp/ton 0-100kmh 2.9sec Top speed 328kmh Basic price Discontinued

evo rating ★★★★★

by 

by 

BACK TO BASICS

Can forgoing performance-enhancing technology such as an auto gearbox or four-wheel drive make for a more engaging car? The new manual Aston Martin Vantage and rear-drive Audi R8 hold the answer





S

SOMETIMES I WONDER IF I ONLY IMAGINED THAT

in the early 2000s, Porsche GB sent **evo** a basic 911 for a few weeks. I like to think that it was because they never had any bookings on it, everyone wanting the faster, sportier models. It was completely standard, toting the smallest engine and the manual gearbox, the smallest wheels and tallest tyres, and the discreet, standard exhaust. It was white, so even the paint was bog-standard. And it was wonderful: tactile and characterful and easy to get along with, with a lovely gearshift and comfortable ride, but superb when pushed too, its dynamics engaging and adjustable. It was also fast, the delivery of its guttural flat-six ramping up to a thrilling climax.

Given that this was the time of the C4S, the GT3 and GT3 RS, the Turbo and GT2, I and a few others were surprised and delighted to find that this bum-basic 911 was all the 911 you'd ever need. It wasn't that the more potent 911s necessarily conformed to the law of diminishing returns – they were complete cars, whole different characters – but that the entry-level 911 showed that it wasn't all about speed, about getting there as fast as possible. It was about enjoying the process of driving, savouring the journey.

There can be no other explanation for Aston Martin fitting a manual gearbox to the Vantage. The seven-speed Graziano manual 'box is 60kg lighter than the eight-speed ZF automatic, but that is of little consequence; it doesn't drop the 0-100kmh time because there's a lot more work for the driver to do, to make the perfect launch and then nail the first-to-second shift that is unhelpfully a dog-leg. Aston's own figures suggest a deficit of almost half a second compared to the auto – 4.0sec versus 3.6sec. The upsides? It may give a fractional improvement in in-gear response, but the primary reason for hooking up the 510hp Mercedes biturbo V8 to a manual gearbox is driver engagement and involvement.

Below: manual Vantage swaps the eight-speed ZF auto for a seven-speed stick-shift, with a dog-leg first and the odd-numbered gears across the bottom



The same is true of Audi's decision to follow up its recent limited-edition R8 RWS (for Rear Wheel Series), with a regular production version, the more accurately titled R8 V10 RWD. This too comes with a weight saving of around 60kg, which, again, does not translate into a reduced 0-100kmh time. In this instance it's because the deleted parts that save this weight – the centre diff, driveshafts and front diff – are the parts that help the all-wheel-drive R8 put down all of its power off the line. Again, what we're being sold is a car that's not faster or more capable, but one that's more engaging and rewarding.

Is this an emerging trend? We hope so. As explained in our feature 'The evo Blueprint' in our previous issue, cars are now so potent, so grippy and so fast they're difficult to exploit on the roads we love – winding A-roads and dramatic B-roads. So it's interesting to see cars aimed at increasing the level of interaction.

In the past few weeks, Honda announced a couple of new Civic Type R variants, one of which was a 100-unit, lightened quasi-racer, the other, intriguingly, a less hardcore Sportline model. It has 19 instead of 20-inch wheels that are shod with deeper sidewalled, more supple tyres, plus improved sound deadening and a more subtle rear wing. It's still a wild-looking car but should be even better suited to our roads. There is a precedent for this approach, of course, in the form of cars such as the 911 GT3 Touring.

Aston's decision to fit a manual gearbox to the Vantage is more interesting. The popularity of the manual 'box for sports, GT and supercars in particular has been in decline for many years now, for some good reasons. Manual gearboxes capable of handling large amounts of torque often have a heavy and unwieldy shift action and come with a thigh-pumping clutch. What has also hastened the manual's demise is the roll-out of the dual-clutch transmission (DCT), which offers the ease of use of a traditional auto with the direct throttle-to-driven-wheels connection of the manual.

I confess that I lied earlier when I said that there was no reason for Aston fitting a manual gearbox other than driver engagement. The US market, which, as you'd expect, buys relatively few manual gearbox cars, also demands them for nebulous reasons of credibility; ergo a proper sporting car needs to have a manual option. This explains why BMW's V10-engined E60 M5 was offered only in the US with a six-speed manual. By all accounts it wasn't a great 'box, but for those of us here in Europe who loathed the clunky, desperately unintuitive seven-speed SMG III automated manual, it might still have made the V10 M5 more appealing.

It also explains why Jaguar went to the trouble of creating a manual F-type. It wasn't a popular option, partly because it wasn't a very sporty shift. I was involved in its development when I worked at JLR, having in mind some great shifters for target setting, including the light, swift and tactile six-speeder in the 997-generation 911.





● ● ● ● ● ● ● ●

**'DROPPING DRIVE TO
THE FRONT WHEELS
HAS ALTERED THE R8'S
WEIGHT DISTRIBUTION'**



So I knew that despite working with the various teams and improving and refining what we'd started out with, in the end it was only OK. The effort-to-reward ratio wasn't sufficiently positive.

The experience gave me a vivid appreciation of just how many tunables or variables there are in a 'simple' manual shift. Refining the behaviour of a DCT through its mapping is an art, but this seems simple compared with finessing a manual shift. From the top, there's the shape and mass of the gearknob, the length and throw of the lever, the friction in the shifter rails, the strength of the detent action that tells you the gear has gone home, the strength of the cross-gate springing and even the tension in the gaiter. Then there's the geometry of the driving position, the leverage you can muster (especially for reverse, which might be awkward and require a higher effort), the amount of elbow room the centre console and seat bolsters allow, the space for the third pedal and its relation to the others pedals, the travel of said pedal, its weighting and the positivity and position of the clutch bite point. And all of this has to work harmoniously in both lazy shifting and all-out performance testing.

So I come to the Aston with an appreciation of the challenges. I've also spent a couple of days in editor Stuart Gallagher's auto Vantage long-term and enjoyed it, though the sharp throttle that can make manoeuvring alarmingly abrupt, especially when combined with the cold-start high idle, demonstrated that it's not a transmission that doesn't sometimes require finessing by the driver.

First impressions of the manual? Boy, they don't make liking this car easy. Given that it has a thundering, torque-rich V8, why does it need seven gears? And why is the gate 'upside down', with the odd gears – 1-3-5-7 – at the bottom (unlike Porsche's seven-speed manual, which takes a regular double-H configuration and then adds seventh gear top-right)? Go to engage first out on the dog-leg and, oh dear, it feels like you're articulating a leg attached to a chicken carcass. And the clutch seems short-travelled. First is a long gear too, so you will need to use it.

More positively, initially the gear indicator in the instrument pack is very useful and away from first the throw and efforts are good. What's really unexpected, though, is that within a few miles I'm really enjoying it, and for the reason you expect: control – though control of pace rather than of power arriving at the rear wheels. I'd probably be travelling quicker in the auto, but the manual adds punctuation to your progress and makes you consider how you're using the engine. The V8 is so torque-rich that it will haul healthily from tickover off boost and you can then feel the surge when the turbos kick in at around 2000rpm. Using more of the engine's bandwidth reveals more of its character and makes the experience richer and more nuanced.

Once you recognise that the cross-gate springing centres the lever in the 4/5 plane at rest, you can navigate the 2-7 part of the gate with some finesse. In fact, I was enjoying using it so much that it was some time before I noticed that rev-matching was turned on. The ZF auto feels pretty direct,

Above and opposite: RWD R8 is 30hp down on the base quattro model; manual Aston produces the same 510hp as the auto version, but torque is down 60Nm to 625Nm

but the fidelity of throttle response in the manual is sublime and it matches the direct, feelsome steering and dynamics that, after some low-speed toughness, have a relaxed tautness and precision. I'm not sure that the direct throttle connection makes balancing the Vantage in a slide much easier, mainly because the engine's turbos spool up once the rear tyres start overspeeding. It's a far from perfect shift, as revealed when you have to make a hurried downshift and get lost in the gate, but it's properly engaging.

Being just rear drive, the Audi is more fundamentally altered. Yet if you didn't know, you probably wouldn't guess either from its appearance (there is no badging, only body-coloured lower side blades) or from how it drives, because most of the time it feels just like the regular all-wheel-drive V10.

I was lucky enough to drive a rear-drive R8 way back in 2011, in Germany, and it was exciting and pretty exhausting. It came with a ten-position traction control system that I had dialled almost back to zero by my fourth stint, but you can do that on warm slicks, with downforce and inspired by the prospect of a top 20 finish at the Nürburgring 24 Hours...

The R8 LMS is cited as the inspiration for the road-going, rear-drive R8 and that's fair enough. As a bonus, the

● ● ● ● ● ● ● ●

**'THE BETTER BALANCED
V8 R8 WOULD HAVE BEEN
A BETTER CANDIDATE
FOR REAR DRIVE'**

540hp R8 RWD is also the entry-level model, costing £114k (\$\$200k), about £14k (\$\$24.6k) less than the basic 570hp all-wheel-drive model. As well as body-colour sides, the RWD comes with gloss black, 19-inch forged wheels that look quite small in the arches, while inside, the uniformly grey trim is neat if a little plain.

After the Aston with its shallow windows, high waistline and bombastic V8, the Audi feels low-slung yet wonderfully airy, and more sophisticated, its V10 firing up with a yowl like a pair of super-smooth Ur-Quattros. Pull the stumpy T-bar shifter into D, give the throttle a tickle and the R8 sets off effortlessly, its ride sensationally supple. This is not the edgy, race-inspired car you might have been expecting.

It's almost all too easy, the dual-clutch, seven-speed S-tronic gearbox shuffling the gears seamlessly, and I can't

Audi R8 V10 RWD

Engine V10, 5204cc Power 540hp @ 7900rpm
Torque 540Nm @ 6400rpm Weight 1595kg
Power-to-weight 339hp/ton 0-100kmh 3.7sec
Top speed 320kmh Basic price £114,490 (POA in
Singapore)
evo rating ★★★★★



help being reminded of the original Honda NSX. However, it all changes the first time you pin the throttle to the carpet. In an instant you're caught in a hurricane of V10 fury, fired off down the road by a solid, neck-testing shove, the cockpit filled with the urgent, offbeat bark of ten cylinders keening to 8000rpm. This may be the tamest version of the V10, but it's still the full 5.2 litres, well over 500hp and it loves to rev. It's every bit as punchy as the Aston, just in a different way.

It's very different dynamically, too. Dropping drive to the front wheels has rebalanced the weight distribution so that it's now 40:60 front to rear. You feel it too, especially at speed, the nose hanging for just a fraction when you want it to turn, the rear settling heavily into the direction change a moment later. There's lots of grip so it's not an issue, but the RWD lacks adaptive dampers and is not as resolutely controlled as it could be. I can't help thinking that the sadly long-since dropped V8, which was better balanced, would have been a better candidate for rear drive.

The Audi has a limited-slip diff and, apparently, if you select Sport mode and ESC there's a drift mode. Maybe if you're on track it's handy. On a wet (or indeed dry) road, a little tickle of oversteer is all you want, just to help define the limit. Both the R8 and Vantage give up their rear grip reluctantly, the Vantage the more easily provoked in the

wet, a modicum of boost gently pushing the rear out, the R8 better in the dry, not straying too far out of line when grip is breached.

So, do they deliver on their promise, this pair? Do they increase your interaction and your satisfaction? I love lots about the R8 RWD. Trouble is, all of it applies equally to the four-wheel-drive version, a car that sends so little torque to its front axle that it feels rear drive most of the time and then exploits its four-wheel drive when there's a performance advantage to be had, without you even noticing. The R8 RWD is a good car, it's just that it offers no real advantage except cost. In this instance, less is less.

The manual-gearbox Vantage is more complicated. It has more gears than it needs and, overall, it's not a great shift, the feel into first being particularly poor. The busy pattern and ease of wrong-slotting under pressure count against it too... and yet it reveals more of the Vantage's character than the auto, good as it is, ever could. The way you can work the engine, the way you can set the pace, and the extra depth and nuance this brings to the Vantage experience is unexpectedly remarkable. There's more for the driver to do, and if you're up for the challenge, more is emphatically more. ✕

Aston Martin Vantage (manual)

Engine V8, 3982cc, twin-turbo Power 510hp @ 6000rpm

Torque 625Nm @ 2000-5000rpm Weight (dry) c1470kg

Power-to-weight (dry) c348hp/ton

0-100kmh 4.0sec Top speed 314kmh Basic price c£120,000
(POA in Singapore)

evo rating ★★★★★





WHY

Automated gearboxes have their place,

MANUALS

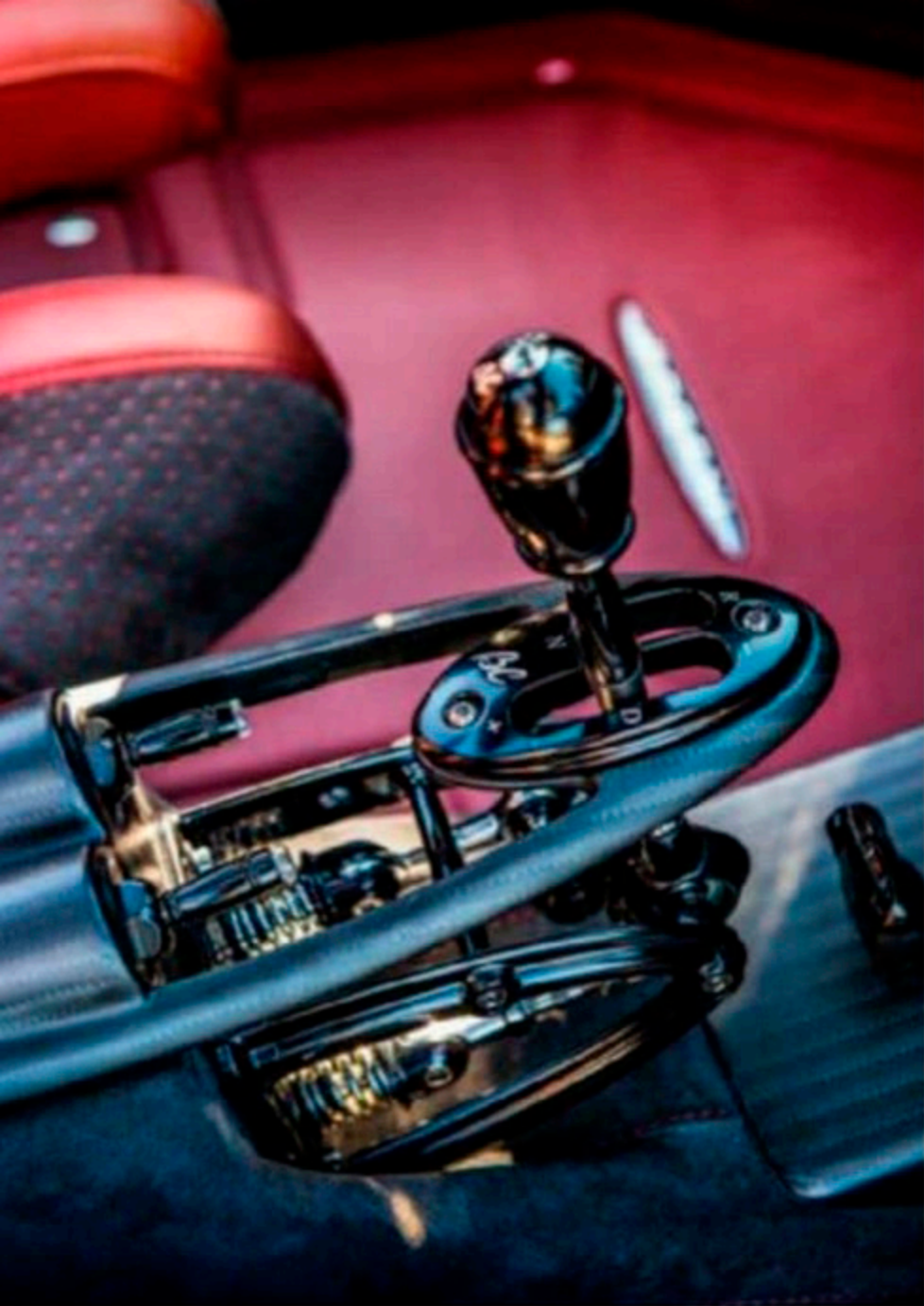
but nothing can beat a great manual shift

STILL

for ultimate car and driver interaction

MATTER

by 



S 'SNICKETY' THE MOST DESIRABLE ADJECTIVE?

'Slick' and 'positive' are oft-used, but I think 'snickety' is reserved for special occasions. Is 'sloppy' less desirable than 'agricultural' or 'obstructive'? If I said 'knuckly', which manufacturer would you think of? 'Click-clack' used to instantly summon images of Ferraris until Audi realised there was no copyright.

The manual gearbox has a very definite language. You can still select a gear with a paddle, but you can't 'slot' second or 'punch' into third. The exploratory waggle to check for neutral is only available with a stick. Resorting to first while moving is always worthy of mention. 'Heel-and-toe', 'power shift', 'dog-leg'... all things that are banished from write-ups on two-pedal cars.

Why mention this? Well, I think it shows just how much a manual shift brings to the driving experience in a car. I don't want this to be seen as an article that is negative towards paddles. A world without the theatre of a Ferrari 812 Superfast's rapid-fire downshifts would be a much poorer place. And if you're trying to set a lap time then there is no question that PDK, DCT, DSG and their ilk allow you to shave crucial tenths and will help get most of us closer to mimicking the sort of metronomic precision that is desirable lap after lap. They're easier in traffic too.

But as good as paddleshifts are, manuals still matter. They are the vinyl to music's Spotify. The log fire to the electric radiator. The mechanical instead of the quartz watch. The magazine feature to the online article. It's about more than the end result of a changed gear, music heard, heat produced, time told or information imparted.

When you ponder what the simple pull of a paddle is replacing, it's quite astounding. The actual movement of a gearstick from one gear to another is only a small part of the feel and dance of a shift. For a start, there is the way that you dip the clutch. Is that left-hand pedal hefty enough to require gym visits or so light that you stamp the carpet first time out? Does the clutch have a high or low biting point? Engagement like a light switch or worryingly slurry? And how much pedal travel do you have to play with?

Then there is the throttle pedal that requires lifting and reapplying (or perhaps doesn't if you're a road tester trying to shave another tenth from a 0-100kmh run). Right foot timed, of course, with the action of left foot, while speed and aggression are appropriately matched with the swiftness of the lever across the gate. Different shifts will require different lengths of time and consequently this might have an impact on your decision to even make them. Last gasp into a corner while braking hard you might think that slamming forward from fourth to third in a six-speed 'box is possible, whereas pulling back and across from third to second with the need to change vertical plane is not.

The specific car and 'box will have a bearing on this too – some shifts can be flashed through, some need patience and care. Adjusting to each individual shift pattern and the associated springing is always interesting. Third to fourth is arguably marginally easier or slicker in a six-speed layout than in a four-speed, because the lever is naturally centred. And it's the addition of an extra plane further away from the centre point that can make seven-speed 'boxes tricky.

Each shift in each 'box has a movement and pressure

pattern all its own. Something that certainly can't be said for paddles. My favourite shifts are generally a second to third or fourth to third in a six-speed box. Third to second is generally more enjoyable in a left-hand-drive car as the lever is being pulled towards you rather than pushed away. Sometimes there's the more fundamental question of how many gears there are at your disposal. That moment not long after picking up a hire car when you are flat out in fifth and wondering if a pull back will find sixth or reverse...

Talking of being flat out in fifth, the manual gearbox can certainly heighten your awareness of speed. I've been lucky enough to experience both a 991 GT3 RS and 991 911 R at high speed on the autobahn. Differing aerodynamics aside, it feels like a considerably more considered moment when you take one hand off the wheel to change from fifth to sixth at over 8000rpm and 160mph than when you extend a finger to flick a paddle.

Of course, a good manual gearbox is also a delight when you're not going quickly. A simple blip to match the revs on a downchange, or a slow but perfectly smooth upchange are things that can be enjoyed at any speed and leave you feeling more connected to the engine. However, the low-speed heel-and-toe must be one of the trickiest actions to perform in a car and I think it's why it can be off-putting to learn. It's much easier when you are leaning hard on the brake pedal and have a relatively firm platform from which to articulate your foot across to the throttle pedal.

At slow speed a knob can also remain a delight to fondle (please do stop sniggering at the back). Many different shapes and sizes (seriously now, just pack it in) have been tried over the years, but the simple sphere is still the benchmark in many people's palms. Part of the reason must be that no matter what the direction of the lever's travel or how it is held, the ergonomics of the knob are identical.

Now, this article wouldn't be complete without a few specifics. Some case studies. A little idle contemplation of the best manual shifts **evo** has experienced. My personal highlights begin with the short, tight throw of a Honda S2000. The Japanese brand has had many excellent shifts, but this always sticks out for me. Snickability through and through. Sticking with Honda, the latest Ariel Atom has a tremendously quick, precise shift. In fact, for pure speed around the gate it is probably only bettered by Prodrive's masterpiece of a H-pattern dog 'box in its Impreza rally cars. The N2009 iteration was just sensational in the way it could be flicked around a gate that felt no bigger than a small box of matches. It was as though the lever knew as soon as you put pressure on it where you were trying to send it and then flew across to the next ratio.

**'PRICING NEEDN'T
INHIBIT AN
ENJOYABLE 'BOX,
AS THE FORD
SPORTKA SHOWED'**

WHY MANUALS STILL MATTER

The six-speed from a 997 911 and various Boxsters has been praised on numerous occasions and is an absolute cracker. It has the most wonderfully smooth and perfectly spaced throw. It's just a shame it's a little tall in the actual gearing. The Boxster's bigger mid-engined cousin, the Carrera GT, often gets cited as having one of the best shifts, and while it is perfectly placed – easily to hand, high up near the wheel – I think it is arguably a little light in its action. However, what is brilliant is that this lightness, while not as tactile as even in the aforementioned Boxster, suits the drivetrain it is attached to perfectly. The lack of inertia in the way the V10 revs requires a shift that is almost ethereally light and the birch-topped lever delivers.

To that extent an old Land Rover with revs that rise and fall in time with the passing of the seasons also has the perfect gearbox, in the sense that it requires long pauses and much patience to snag a clean shift. The long pudding stirrer of a gearlever which has the vagueness of a late-night cocktail recipe is perfectly befitting of the machine it's in and the mien of the journeys you expect to undertake.

Anyway, back to some more conventional praise. A V8 Audi R8's gearchange is wonderful for the sense that you are drawing a sword from a scabbard and then sliding it into another. The diamond-knurled lever is pleasing too and the weighting is satisfying, although it isn't a shift to rush across the gate. Price needn't inhibit an enjoyable gearbox either, as the Ford SportKa showed. The five-speed in the early R50 Mini Cooper is a peach too, and a Mk1 MX-5 provides a lovely shift for not a lot of money.

My top two gearshifts, however, are both in Ferraris. The first is the F50's. Like the Boxster, it gets the weighting of both pedal and shift absolutely right, while the sphere on top of the lever is classically perfect in the way it sits in the palm. There is the added thrill of the open gate too, but with a touch more creaminess than in the R8. It is just sublime.

The other Ferrari is emblazoned on my mind really on the basis of a single shift. A 250 Testa Rossa is all about the drivetrain, and the gearshift (see page 58, middle right) has the mechanical tactility of turning a big, well oiled key in an old church door. Why one particular shift? Well, you need to double de-clutch for most of them, but from first straight back to second is just a dip of the clutch and brief lift of the centre throttle(!) as you pull firmly back on the tall, straight lever. It's a short action and an abrupt stop, like a sequential shift but without the return. The fact that it is changing the pitch of the most fabulous 3-litre V12 soundtrack certainly helps it stick in the mind, but the positivity and sense of connection to the meshing cogs is unrivalled in my experience.

Of course, all this praise is in danger of becoming a wistful reminiscence before too long, because the manual is rather an endangered species amongst new cars. However, the fact that Aston Martin still sees fit to produce a manual for the Vantage (see page 48), the fact that the biggest criticism of the brilliant Alpine A110 is the lack of an H-pattern, and the fact that Porsche decided to reintroduce a manual option to the GT3, surely shows that the importance of three pedals is still felt strongly. May that feeling last as long as it takes to get second gear in a cold Ferrari 348. ✕



**‘THERE
ARE SIGNS
THAT THE
IMPORTANCE
OF THREE
PEDALS IS
STILL FELT
STRONGLY’**

RETURN



by 

DEFENDER

Land Rover's Defender can trace its roots back to the 1940s. Now there's a new one, built for the 21st century, but is it an evo car? We head to Africa to find out

CAN SENSE THE HACKLES RISING. AN off-roader in **evo**. For some it will be like Conor McGregor stepping into a boxing ring. Or people claiming to enjoy both cars and bicycles. Some readers will feel the world is out of joint, the thrill of driving tilted on its axis. The new Defender does not belong here. But, respectfully, I disagree. It just depends how you use it. A Defender on the road? Not so interesting. A Defender used to access Kaokoland and the world's oldest desert? That's a different story...

THE COLOUR OF THE SAND BENEATH THE 110'S TYRES changes from a rich, rusty red to a coffee crème caramel and then to a Caribbean white. Almost in harmony the speed climbs past the UK's national limit, then pushes past 130 and on towards 150kmh. The steering is light, partly because that's how the EPAS has been tuned, partly because of the speed and the shifting surface that we're on. But there is more than enough accuracy through the wheel to be confident in letting the Defender drift surprisingly deftly through the turns. All two-and-a-half tons of it.

It's not just a brief foray into this sort of driving either. We will be kicking up dust like this for hours today. The Marienfluss valley in the very north-west corner of Namibia, up by Angola, is enormous (namib, as in the Namib desert, actually means vast place in the local Nama language) and even after we have crossed it there is still plenty of distance left to cover until we reach our stop for the night. It feels like driving on a completely different scale to anything I have experienced before. It might be as close as I ever get to realising a dream of doing the Dakar, driving flat out across what is essentially wilderness (Kaokoland, after Mongolia, is the second least densely populated region in the world) with a sense of freedom but also endless concentration.

This morning the mental focus was amped up just as

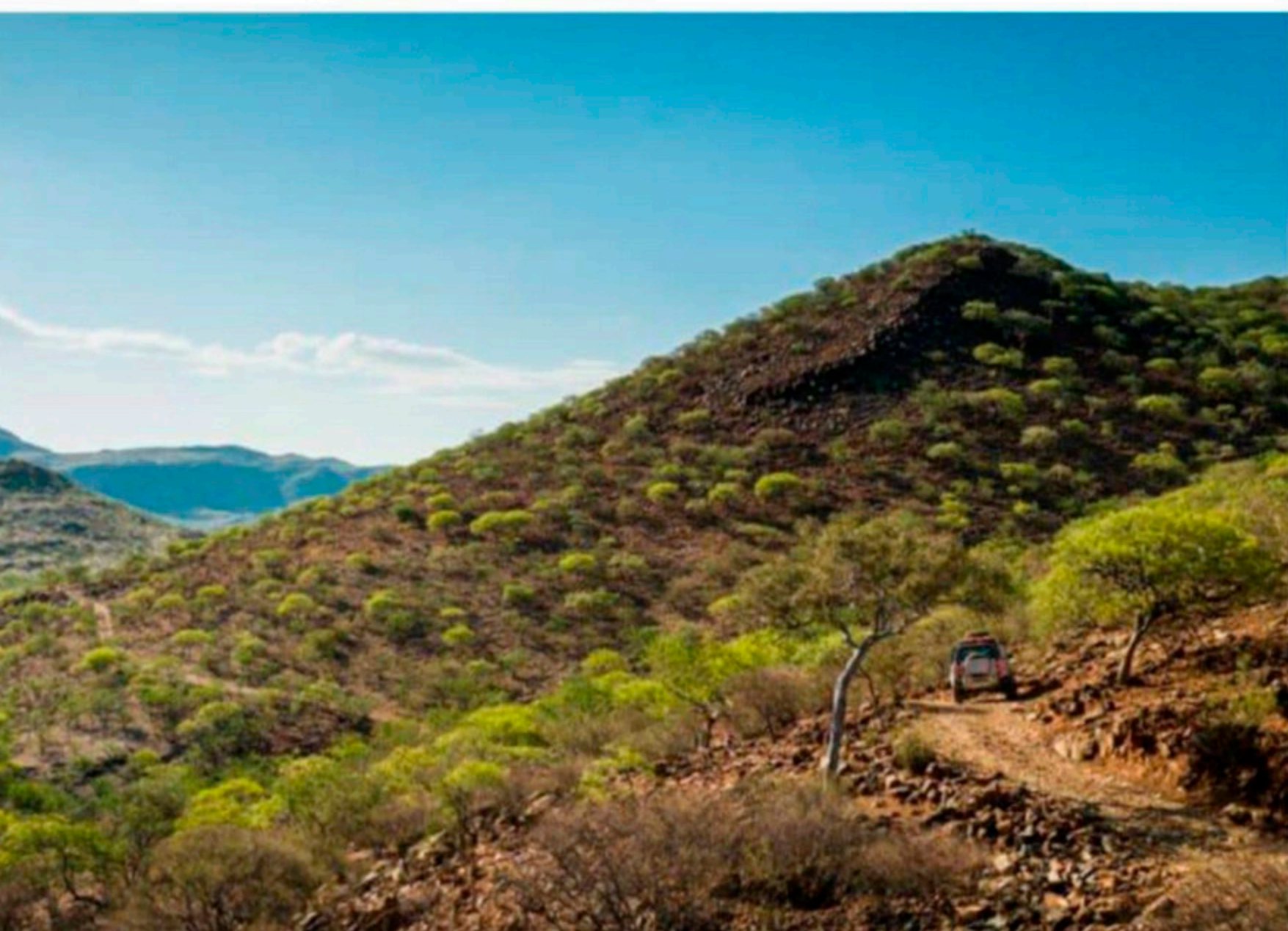
'CRUCIALLY, THE DEFENDER HAS RETAINED ITS ABILITY TO MAKE YOU FEEL ADVENTUROUS'

high but we were moving much more slowly. At times I was inching the Defender forward with all the pace of someone looking for a lost dust cap on a gravel driveway. Van Zyl's Pass, which leads down to the Marienfluss, is the most technical trail in this part of Africa, something attested to by occasional vehicular carcasses representing a lack of care or capability.

At the top of its steepest, rockiest section, I had the same pit-of-the-stomach feeling that an average skier might possess upon finding themselves at the top of an ungroomed black run with no other way down. Aided by hand signals from outside the car, I became very well acquainted with the feel of the brake pedal and its ability to let minuscule amounts of disc slip slowly, oh so slowly, between the pads. The Defender, with centre and rear diffs locked in Rock Crawl mode, low ratio engaged and suspension extended to the full 291mm of ride height, negotiated the descent (sometimes with only two tyres in contact with the ground) with far more calm than me.

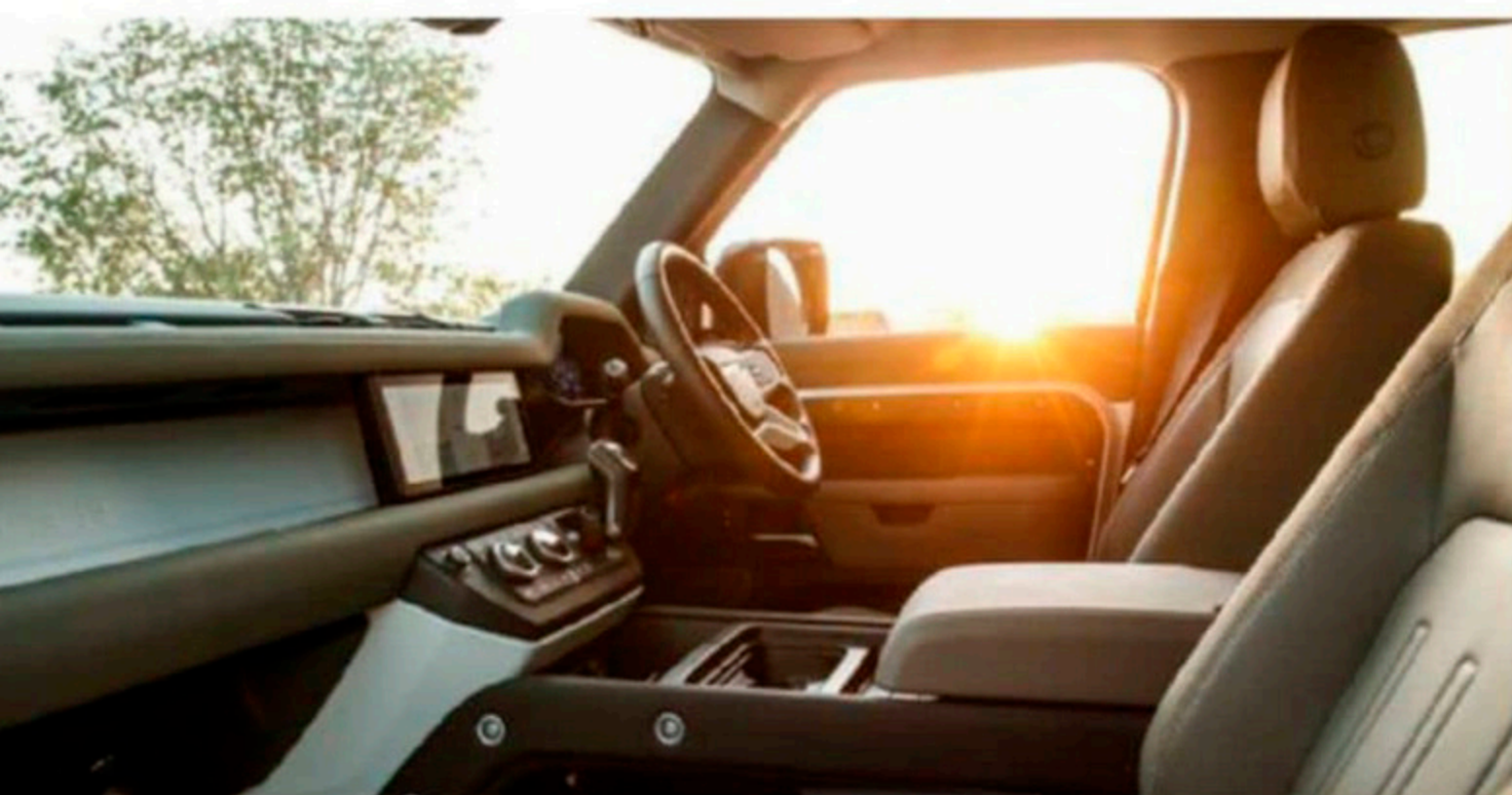
To be honest, that sort of off-road driving is not really my bag. There is a satisfaction to it and it is every bit as hold-your-breath engaging as taking Fordwater flat. But creeping along with painstaking precision is not, for me, exciting. In golfing terms, it's putting versus driving. However, I can also see that it is a Defender's bread and butter, one of the areas where it has to perform in order for it to accrue its kudos and attain its fundamental level of engineering-based desirability. And if you need to get the ball in the hole to get to the next tee, then so be it. The contrast of the slow and steady also arguably makes

Below: like the old Defender, the new one is built to go places most other vehicles can't. **Below right:** cabin is still workmanlike, but more comfortable too





**'ON DUSTY ROADS
IT DRIVES MUCH
MORE LIKE A BIG
HOT HATCH THAN A
LUMBERING 4x4'**





you appreciate the faster and flowing stuff, such as the Marienfluss, even more.

Given the opportunity, this P400 model is quick too. Certainly quicker than I was expecting a new Defender to be. Under the bonnet is a 400hp turbocharged 3-litre straight-six with mild hybrid assistance through an electric supercharger. This results in very impressive throttle response (unless you're in a Terrain mode that dictates such a thing is undesirable) and the claimed 0-100kmh time is a hot hatch-worrying 6.4sec.

In terms of the independent suspension, every model other than a base 90 gets air rather than steel springs and the ride is commensurately cossetting. Even allowing for the tyres being run at just over 30 psi to help with traction off-road, the sense of isolation and comfort while travelling at 100kmh over rough roads is incredible. This is partly due to the adoption of a unibody design rather than a body-on-frame like the old Defender. Then there is the fact that the interior, while still possessing a nicely utilitarian vibe, is much more ergonomic, no longer requiring you to rub shoulders with the windows.

And this brings me to the rather thorny issue of character. There is no denying that travelling in an old Defender would put you more in touch with the landscape you're travelling over, both through the seat of your shorts and the kickback through the steering wheel. You would feel less detached from the country you're moving through because the fluctuations in temperature would be more apparent, sounds would be less damped and the smells would permeate more freely. Detachment was not a facet of driving the old Defender.

And for some people that character is integral to the driving experience of a Defender. I understand that. I love old cars. I love manual gearboxes. I love being intimately involved in the driving experience. However, I also appreciate that this new one is meant to be a Defender for

the 21st century and those who want to use it as a tool do not really look for character, they look for capability.

Also, crucially, what I think the Defender has retained is its ability to make you feel adventurous. Rather as the new (BMW) Mini was nothing like the old one but still instilled a spritely sense of fun like its forebear, so the Defender still has a rugged character that makes you look for off-road opportunities more than an SUV would. Particularly with the Explorer Pack fitted, because regardless of any real use for it, the ability to unhitch a ladder and climb onto the roof of your vehicle surely brings out the excitable, tree-climbing inner-child in everyone.

This sort of demeanour is largely what sets Defender apart from Discovery. Having said that, while the Disco can do most of what the Defender does, it can't quite do it all. The approach and departure angles are much better in the Defender and the general robustness of its D7x chassis (the Discovery has a D7u chassis) is a step up, meaning that it can take more of a sustained pounding. It is probably akin to the improvement in a GT3 RS's track chops when compared to a GT3.

Talking of robustness, I'm relieved and not a little amazed to report that there isn't a single squeak or rattle, let alone a warning light, in our Defender during three days of almost constant abuse. I would have expected the washboard nature of the tracks, let alone the bigger impacts on the rougher stuff, to shake something loose, but no.

While pausing for breath at one point, probably to let some giraffe nibble on a leaf or an elephant frolic around a muddy hole, I enquired what would happen if something did go wrong out in the wilderness. Obviously the new car needs its computers in order to meet emissions standards around the world and generally feel like a modern vehicle, but that surely brings complications that could leave you high and dry? The answer was that it's capable of over-the-air software updates and diagnostics (you may need

Opposite page, middle: 400hp mild-hybrid turbocharged straight-six enables 0-100kmh in 6.4sec on tarmac – just keep a look out for local wildlife

a sat phone...) but, in extremis, the 'limp home' modes have been specially developed so that you should be able to extricate yourself from extreme situations. The elephant looked impressed.

One thing that will stop you in your tracks is a puncture. A bit like (apparently) not hearing the bullet that kills you, you generally never see the rock that deflates a tyre, because you can guarantee it will appear the moment you take your eyes off the track. I have three such lapses, which might be some sort of record (in mitigation, I think the 19-inch wheels on our P400 mean the sidewalls are more susceptible than on the 18-inch items; or maybe it's just me). And one of those punctures comes in the Hoarasib River, during possibly the most intense non-competitive driving I have ever done...

EVEN THOUGH THE DEFENDER IN FRONT IS RUNNING with fog lights on, the dust cloud is so thick that it instantly obscures everything. I back off but try to keep moving blindly forward to avoid bogging down in the soft sand. Gradually the particles clear. Which way did they go? Over there. Four hundred yards away, rounding a bend in the river. But which route did they take to get there? A quick scan of the surroundings suggests some tracks to follow. We drop down off a sandy shelf, then accelerate hard to get through a muddy section, slithering this way and that, wheels spinning. Slow again to traverse some rocks nearer the bank, then plunge across the river, remembering to turn the windscreen wipers on and look out of the side windows to avoid becoming disorientated.

A big bank, in fact more of a small wall, rears up. Raise the suspension, but don't stop. Scrabble for grip and the diffs automatically lock. Clear ground on top and it's back up to speed. Seventy miles per hour just as I spot the depression; the straights don't mean you can stay off the brakes.

And it keeps coming. Rocks, sand, river, mud, river, rocks, mud, sand, mud, river and on and on and on. By the time we reach the rough, unsealed road, I am mentally

exhausted. I don't feel like I've blinked for hours.

Even as we travel on the dusty D3707 there is still entertainment (and the occasional threat to sidewall) to be found. One sequence of corners sticks in the mind particularly vividly. A dozen or so bends, speed about 60mph, loosely linked together so that you can get into a real flow. It's clear for miles ahead and the Defender is soon drifting one way then the other. There are no big heroic angles of lock, it's just a lift to get the nose in and then let the momentum carry the tail of the 110 round so that all four tyres are straight but sliding as you angle towards the apex. Then you smoothly pick up the throttle, drive through the second half of the corner and do it all again the other way.

From my experiences of driving and even competing in old Defenders, this is not something you would have done in the past. Sure, it would be even more fun in an Ariel Nomad, no question, but a Nomad wouldn't have been able to tackle everything that the Defender has on its way here, and the latest Land Rover is surprisingly responsive to inputs and willing to play. On this surface it drives much more like a big hot hatch than a lumbering 4x4.

In isolation the Defender won't be to every **evo** reader's taste, and I completely understand that. But an Aventador SVJ or a BAC Mono won't tickle everyone's fancy either. However, driving enjoyment is so often as much about context as the specific machinery you're in, so it pays to be open-minded. And if your driving daydreams usually consist of circuits and spectacular mountain passes, I'd suggest you add tenuous tracks and no roads at all to the list. ☒

Land Rover Defender 110 (P400)

Engine In-line 6-cyl, 2996cc, turbocharger, plus 7kW electric supercharger **Power** 400hp (combined) @ 5500rpm **Torque** 550Nm (combined) @ 2000rpm **Weight** 2388kg **Power-to-weight** 168hp/ton **0-100kmh** 6.4sec

Top speed 208kmh **Basic price** TBC in Singapore

evo rating ★★★★★

**'DRIVING ENJOYMENT
IS SO OFTEN AS MUCH
ABOUT CONTEXT AS THE
SPECIFIC MACHINERY
YOU'RE IN'**



ICON

ALPINE A610 TURBO

France's answer to the
Porsche 964 Carrera 2 is as
enthalling today as it was
back at its launch in 1991

by

by

by

by







Y

OU CAN'T ESCAPE THE ALPINE. IT'S very much the car of the moment. The Porsche alternative made in Dieppe has been the subject of numerous comparison tests and drive stories and, unsurprisingly, starred in our 2018 Car of the Year gathering too, only just missing out on the win. But this isn't about the new A110. This is what happened in the early '90s when Alpine launched

the A610 Turbo.

It's probably hard to believe that the A610 Turbo was as feted then as the A110 is now, because despite all the positive press very few were sold here. I haven't seen one for over a decade and it's been more than 25 years since I drove one. Yet I have a vivid recollection that dynamically it was really special, even though it had its engine hanging out the back.

Few car makers have taken on the 911 on its terms, but Alpine has a long history of skirmishes with Porsche, in competition and in the marketplace. Like the 911, the A610's six-cylinder engine occupies that unlikely space between the rear axle and the rear bumper, and in the Alpine it's a tall V6 with a single turbo and 247bhp. It sounds like a challenge just to get that combination to work, let alone make the A610 better to drive than the 911 of the day: the 964 Carrera 2 with

its 247bhp, 3.6-litre, air-cooled flat-six. We'd had plenty of exposure to the Carrera and reckoned it was the best 911 yet, so we were quite unprepared for the A610 to come along and blow our socks off.

At *Performance Car* we loved the A610. I drove a yellow one to Land's End in a feature woefully titled 'Cornish Fasty', and another starred in a massive coupe group test in south Wales with a 968, RX-7, Esprit, 300ZX and a few oddities including the Subaru SVX and MVS Venturi (what a great time for coupes the early '90s was!). We bagged a long-termer for six months too.

Back then, *PC's* Car of the Year contest was a much more personal affair. One of our columnists came up with the idea of us each picking our favourite car, then meeting up and deriding everyone else's choice. We gathered at a chilly Bruntingthorpe for that first CotY in 1990, which was won by the Audi Quattro 20V, suspiciously the choice of said columnist (Jeffery Clarkson, I think it was). It was beginner's luck; he never picked another winner and a few years later disappeared off to work in TV and obscurity.

The contest was upgraded and in following years took place at Cadwell Park, Lincolnshire. In '91 I chose the Lotus Carlton and it came second to the Honda NSX. I bagged my first win in '93 with the 968 Club Sport, and to celebrate, piled it into the tyre wall down by the Gooseneck. But I digress. In '92 I chose the A610 and remarkably, given that other contenders included the Integrale Evo II, Escort



Left: the earlier GTA's 2.5-litre V6 grew to 3 litres for the A610, producing 247bhp, although this example makes around 280bhp

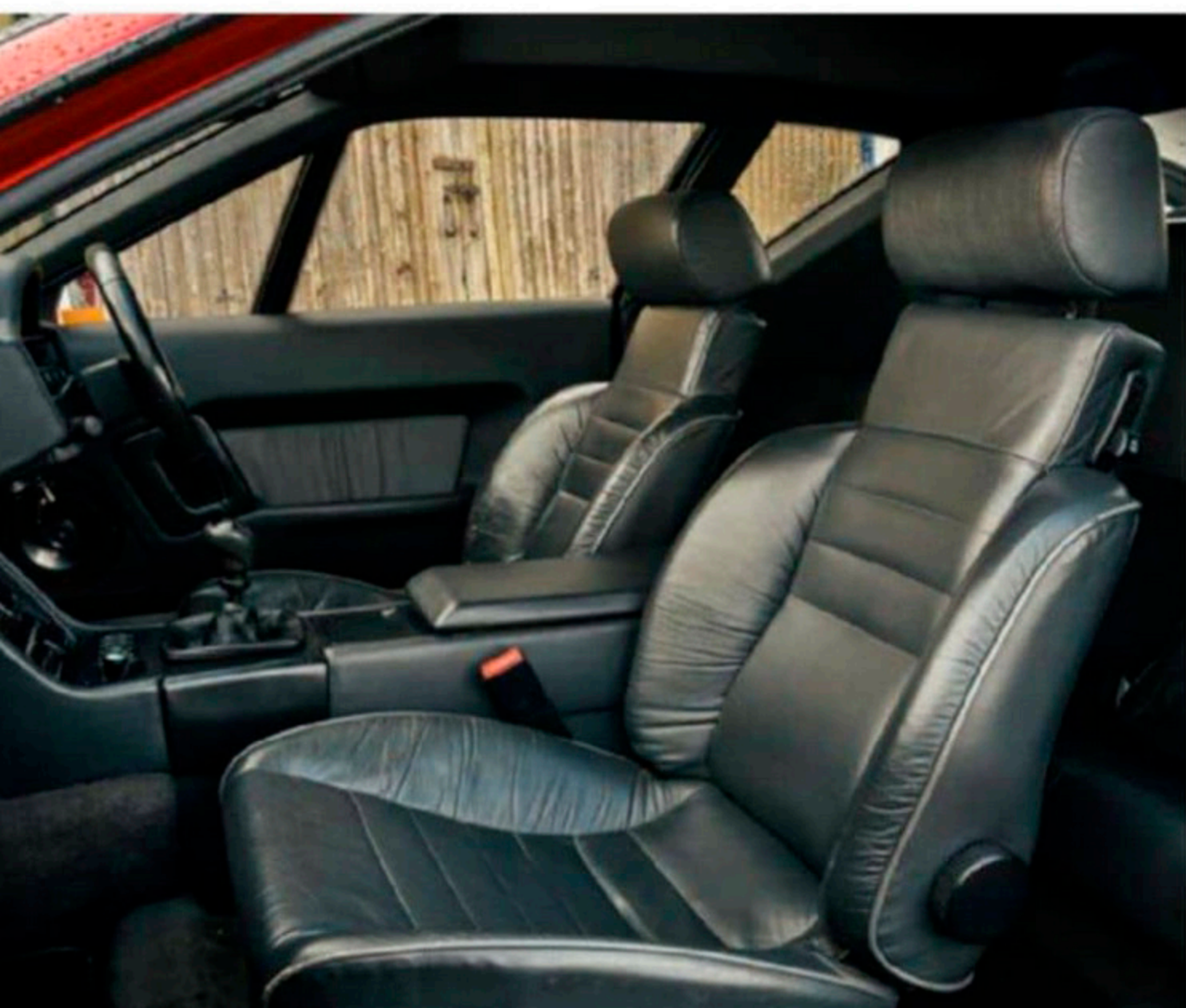
Cosworth and TVR Griffith 4.3, it came home a strong second. And not to a 911! The winner was the BMW M5, the 3.8 E34 model. Clarkson had brought along the Aston Martin Virage, which handled Cadwell's dips and curves with all the finesse and agility of a stately home.

Amazingly, given the A610's drivetrain configuration and the trickiness of Cadwell, the Alpine proved as accurate, absorbing and faithful on track as on the road, which cemented its brilliance for me. Obviously it impressed the other judges too, though not all. Contributor Kevin Blick (who would go on to edit niche title *Top Gear*) summed it up thus: 'Well, it's plastic and it's French and the engine's at the wrong end and it's very poor and I don't like it at all.' And then placed it fifth out of ten, ahead of the Lancia and TVR.

Despite positive coverage in almost all motoring mags, sales were slow. In the end, just 68 right-hand-drive cars were made out of a total of 818. Clarkson's CotY summing up identified a couple of reasons why the Alpine struggled to convert its ability and critical acclaim into sales: the cheap interior and the fact that it came from the same stable as the Renault 5 Campus. There wasn't a Renault badge on it because by the time it was launched in mid-'91, the dispute with Chrysler/Talbot over using the Alpine name in the UK had been resolved. But it



**‘IT WAS AN
UNUSUAL-LOOKING
CAR BACK THEN
AND TIME HAS
NOT DULLED
ITS IMPACT’**





did look a lot like the car it replaced, the Renault GTA V6.

As with the 911, the A610 was the product of a long and sustained developmental evolution. This really got going with the original, teeny A110 and its rear-mounted, Renault in-line four, which won the World Rally Championship outright in '73. The A110 was superseded by the bigger A310 with the same running gear, and then (more successfully) with a V6. Then came a further upscaling to make the GTA, initially with the V6, and later (again, more successfully) with a turbocharged V6.

It's obvious that there's much of the GTA in the A610. The stepped glasshouse is shared and the looks are changed only by adding pop-up quad headlamps and lower body scoops and skirts. But there were much more significant changes beneath the glassfibre and polyester panels. The backbone chassis was strengthened, there was new computer-designed suspension, and to help weight distribution as many components as practical were moved to the front. The result was that the front end's share of the 1420kg kerb weight went up from just 37 per cent to a much better 43 per cent, making a significant contribution to a dynamic transformation that was every bit as complete as with the Phase 1 to Phase 2 Renault Sport Clio V6 a decade later.

Meanwhile, the power-to-weight ratio got a massive boost too, the stroke of the 2.5-litre V6 being increased by 10mm, raising its capacity from 2.5 to 3 litres and helping lift power from 197 to 247bhp, a competitive figure for the time. How does it feel 30 years later? Indeed, how does it *all* feel three decades on?

It was an unusual-looking car back then and time has not dulled its impact. Like chocolate bars, cars from your youth are always smaller than you recall and the A610 is no exception, though what looks more odd today is how short the wheelbase is, or alternatively how large the overhangs are. The glasshouse sits quite tall too, yet the GTA was very aerodynamic (Cd 0.28) and the A610 with its wider front tyres still managed Cd 0.30.

It's a big car compared with the 964 Carrera 2, casting a much bigger shadow, yet it offers little more interior space. I'd forgotten this. I'm only average sized but dropping into the driver's seat, which is as avant-garde as a swivel chair from the 1975 Habitat catalogue, I find my knees up against the steering column. The best that can be said of the interior fittings, trimmed and moulded in 50 shades of grey, is that they haven't fallen apart as their appearance suggested they might. Even the vulnerable, sill-mounted bobble of a mirror adjuster is intact.

It was vexatious mechanical issues that dogged enjoyment of the A610, as Jonathan Butterworth, owner of this very well-presented example explains. UK cars suffered with a random cutting out issue that was never resolved by the factory and was eventually identified as a poor signal from overheating wiring from the crank sensor. To cure all potential ills in one go, and integrate a replacement turbo (originals are unavailable) and a stainless steel exhaust, Butterworth's car has an Emerald ECU and makes about 280bhp.

The non-availability of parts is the greatest threat to the survival of A610s. Butterworth's is kept in fine fettle by skilled specialist John Law Engineering in Dunmow, near Stansted airport, and he has also benefited from the unstinting help of Stephen Dell at the Renault Alpine Owners' Club, a man exceptionally skilled in tracking down new old stock.

Left: new air intakes (along with pop-up headlamps) helped distinguish the A610 from its GTA predecessor

Butterworth is passionate about the A610, of course, and as is so often the case, his obsession can be traced back to a childhood encounter. Aged 11, he was on a family holiday

in Italy, and emerging from a pizzeria in Rimini in the early evening they found parked in the square a mysterious black coupe with wide arches, badged only with an enigmatic 'A'. 'Locals were walking round it, jabbering and taking photos with disposable cameras,' Butterworth recalls. 'They didn't know what it was and neither did we.' Later they identified it as an Alpine A310, and that was the moment that the hook went in, when the seed was sown.


Fast forward more than 20 years and Butterworth is driving through Portsmouth at midnight in his Renault 21 Turbo when he spots this very A610 spot-lit in the Renault dealer's showroom. 'I parked up, walked back and pressed my nose against the glass. Next day I went in and asked about it. The salesman said it was for sale for £40k, which was daft because it was a couple of years old and the price of new ones had just been dropped to £32k to stimulate sales.'

It was out of his price range then, but he kept tabs on the car. It went to Leatherhead and then, in an amazing fluke, he found it was for sale

in Norwich. 'I was looking in the salvage section of *Exchange and Mart* for a new turbo for the 21 and the for-sale ad for the A610 had been put in the wrong section. I recognised the registration of course.' That was 2011. 'The seller was honest and told me it cut out.' Butterworth paid £12.5k and since then has invested a lot of time and money getting the car to its current state, including a full respray, full suspension rebuild, air conditioning overhaul...

We meet on the B660, just outside Kimbolton, and I'm transported back to '92 when I rented a house with a car-savvy girlfriend just a stone's throw away. I chose it mostly because it had the equivalent of a slip road onto the B660, a road I used for road testing and which led to PC's office in Peterborough. I was also racing a Caterham Seven, and so this year into which the A610 was woven was a very good one.

Turns out it's not just the cramped cockpit that has slipped my memory. The floor-hinged pedals are strongly offset to the left and the steering wheel is smaller than I recall too. The vibe is definitely



**'THERE'S A
SATISFYING,
CONSISTENT HEFT TO
ALL THE CONTROLS.
I'M BEING WON OVER
ALL OVER AGAIN'**

more Lotus than Porsche, a realisation prompted by the oddly familiar gearknob, which I think I've wielded more times in Lotus Esprits. Butterworth hops into the passenger seat for the run to the first photo location.

Dob the immobiliser (how '90s!), give the key a twist and the V6 catches gently and idles slowly and smoothly with a low, bassy rumble, like the distant throb from the engine room of a cross-channel ferry. The lever moves with a slick weightiness and engages more positively than in most Lotuses I've driven. In fact, there's a satisfying, consistent heft to all the controls – gearshift and steering, clutch, brake and throttle. I'm being won over all over again.

Initially, the performance feels relaxed, thanks to long gearing and an engine that comes on boost very gradually, as if it's supercharged rather than turbocharged. The shove from behind builds like a wave, with none of the usual indicators of a turbo drawing breath until you're heading past 3000rpm. Then the hissing and whistling join the

motor's strengthening V6 burr and the Alpine starts gaining speed like a snowball rolling down a hill.

It's a big shove, quieter and more stealthy than the one delivered by the similarly powerful Carrera, but utterly irresistible. Butterworth's car feels good for the claimed 280bhp, the character of its delivery unchanged from standard, at once lazy and relaxed but also insistent in that delicious way that big-capacity turbo engines are when you give them long gearing or a steep gradient to work against.

The dynamics are in sharp contrast to this, though even before you've pressed the A610 you're struck by how terrifically well-built it feels, how solidly constructed; it's shake and rattle-free over the trickiest of surfaces.

Given where the engine is, the crispness of the A610's front-end response is remarkable. You somehow expect it to be protective of the mass behind, to not provoke it, with maybe a touch of understeer as you commit the nose to the turn, but it's not, and nor does it need to be. It's



direct but not nervous, grippy and well balanced front to rear. The steering feel, weight and gearing is superb. 'You can't beat non-assisted steering,' I say to Butterworth, who reminds me that they went to power steering for the A610...

Before heading for Land's End in that *PC* feature, we stopped off at our favourite corner on the B660 to grab an action shot, and in it the A610 looks planted and poised, with the inside front wheel just off the deck. And all these years later, we're bearing down on that same corner. I mention this so that it doesn't come as a complete surprise to Butterworth, and then drop his car in with some commitment. On the exit the tail kicks out a bit and it's easily and neatly gathered up with a single input.

I wrote at the time that the A610 was better handling than the Carrera and that still stands. I love the 964 and loved it then. It was one of the firmer, more positive 911s, all slack seemingly eradicated, front wheels there for the lifting mid-corner on the power. But Alpine absolutely nailed the dynamics of the A610; it manages to harness the traction advantages of the rear-engined layout while at the same time giving a positive front end and balanced handling.

I'm falling in love with the A610 all over again. How good is it? Well, after a stirring drive all the way up the B660, enjoying the grip, poise and relentless performance, we pop over the A1 to where the fens start and park the car up to shoot statics and details. It's here that I make the discovery that the Toyos fitted are, um, a bit old; the date stamps reveal that the fronts will have their 13th birthday in a couple of weeks' time, and the rears aren't much younger. Treated to a set of new Michelins, this A610 would be sensational, and that's exactly what Butterworth has planned. I envy him greatly. It really is that good. ☒

Alpine A610 Turbo

Engine V6, 2975cc, turbocharged **Power** 247bhp @ 5750rpm

Torque 258lb ft @ 2900rpm **Weight** 1420kg

Power-to-weight 177bhp/ton **0-62mph** 5.7sec **Top speed** 166mph

Price when new c£40,000 **Value today** £24,000-43,000

evo rating ★★★★★





**‘THE A610 WAS BETTER
HANDLING THAN THE
CARRERA AND THAT
STILL STANDS’**

S ALP

Which 600hp wagon is the current super-estate king? It's time to find out as the new Audi RS6 Avant takes on Porsche Panamera Turbo S E-Hybrid Sport Turismo and Mercedes-AMG E63 S Estate

THE



by 

by 

RACE





**'THE RS6
STILL LOOKS
MENACING, LIKE
SOMETHING
BATMAN WOULD
DRIVE'**

I GET THE APPEAL OF SUVs. WHO DOESN'T LIKE to go upstairs on a double-decker bus and sit at the front? I wouldn't want to do the Col de Turini in one, though, or hack across the North York Moors. Yet ingenious chassis engineers have managed to coax dynamic ability from tall-built SUVs using clever tech such as active anti-roll bars, and basic engineering such as enormous wheels and tyres.

There's a place for the multi-purpose SUV of course, it's the ones that are just jacked up sports saloons that baffle us, especially the 'coupe' versions. Compromised dynamics and hopeless space efficiency in a single package. Why would you, when there are cars such as the Mercedes-AMG E63 S, Porsche Panamera Turbo and the new Audi RS6, all available in super practical, super cool five-door estate form?

There's a clue, maybe, half way up the A1, when we're overtaken by a BMW X5 M50d that's being used as a sort of snow plough, encouraging traffic across to the left-hand lane by driving so close that only the twin kidney grille is visible in the rear-view mirror.

Our trio of big German load-luggers all have four-wheel drive and 4-litre, biturbo V8s with about 600hp, but they're as different to drive as they are to look at. We're big fans of the E63 S, which has managed to blend the spirit of its rear-drive predecessor with fantastic traction. The Panamera is shot through with star quality too. We'd have preferred the regular Turbo but none was available, so it's the E-Hybrid and thus the most powerful car here, with 550hp from its V8 and 134bhp of electrical drive for a total of 680. The RS6 makes 600hp and the E63 604bhp. Hardly shabby.

The Panamera churns out a thumping 850Nm of combined torque too, which you might imagine is also the best here, yet the E63 matches it. The RS6 makes do with a trifling 800Nm. The downside for the Porsche is that the battery pack and motor add 300kg, and that's a lot even in a 2000kg supersaloon.

You can get the new RS6 in much bolder colours, including red, but they seem to make the enormous 22-inch Whizzwheels-style alloys (standard on this Launch Edition example) look cartoonish. Dark blue downplays them, and the gaping front grilles, but the RS6



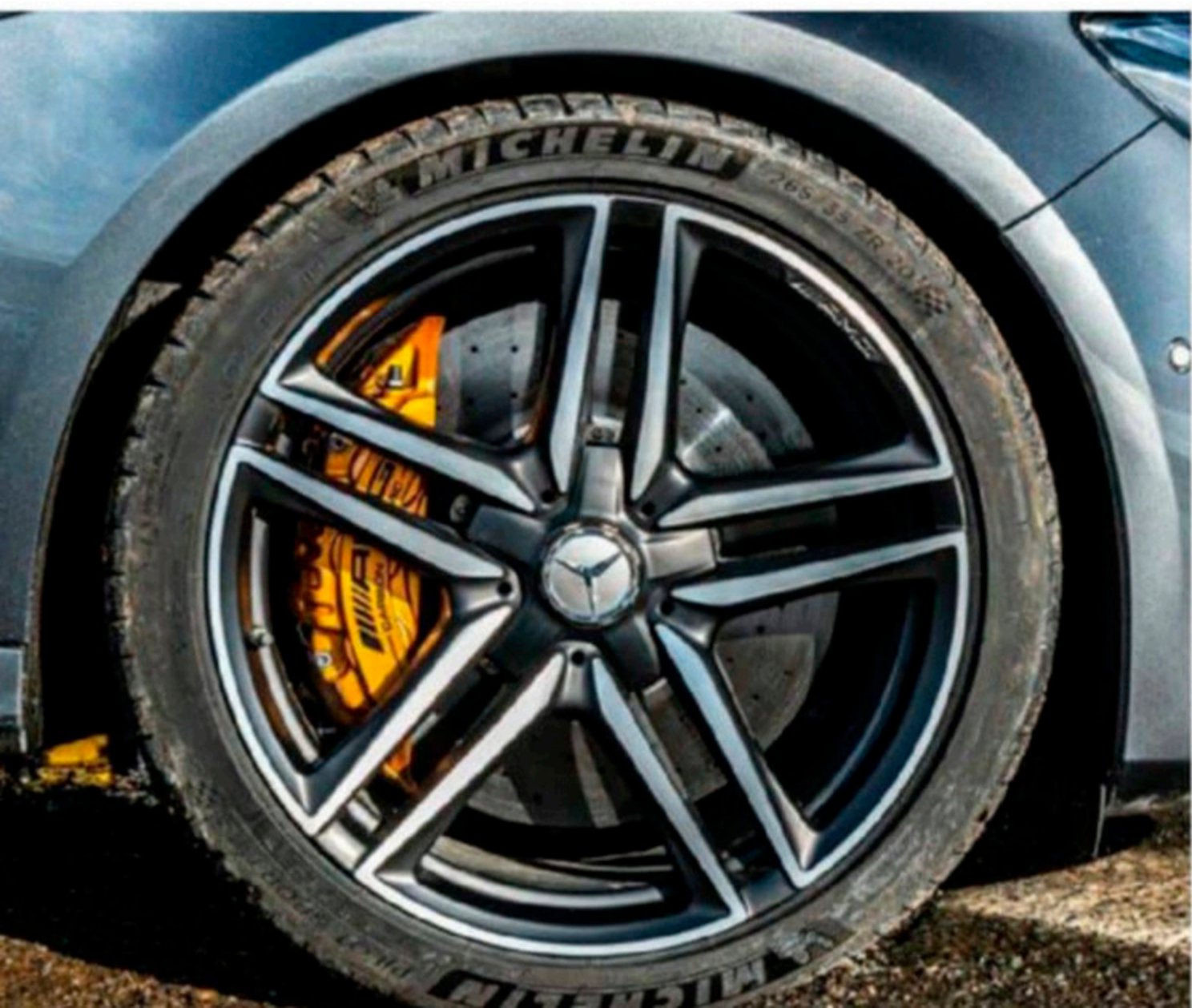
Left: our trio of superstates head onto the North York Moors – always a tough test for a performance car, and especially for ones weighing 2000kg-plus

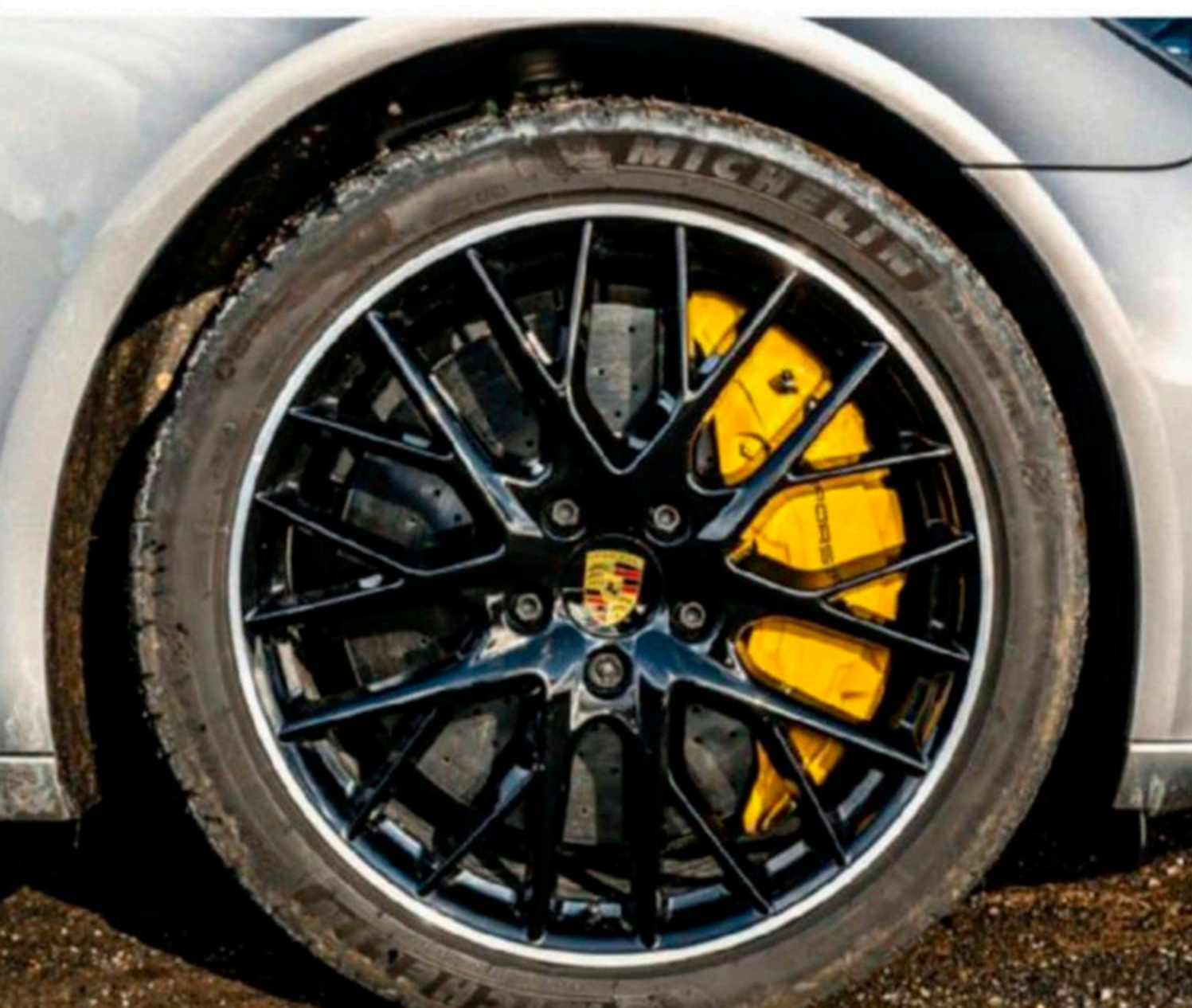
still looks menacing in the rear-view mirror, like something Batman would drive, with its bulky, muscular outline and beady headlamps.

The interior looks expensive, a classy cocktail of black leather, faux carbonfibre, satin chrome and glossy piano black. The last of those matches a centre console and screen with flush, haptic buttons. Thus far, much as expected, then. The difference this time, we are promised, is that the RS6 has nailed the finer points of dynamic deportment.

Before we've reached the end of the lumpy driveway from the **evo** office, it's clear that the RS6 rides really well. Yes, even on 22s with skinny Pirelli tyres. Then there's the RS's secret weapon: four-wheel steering. You can see the rear wheels changing angle swinging around the car park. Once you're rolling, if you weave the wheel from side to side it feels a bit overeager, but there is, literally, a better test just around the corner.

We are heading for the North York Moors, and the first part of the route chosen by the satnav is on country roads we know well. They've





‘THE PANAMERA NEVER FEELS AS TIED DOWN AND FOCUSED AS THE OTHERS’

undone many a car with their pronounced crowns, crests, dips and patchy surfaces, but the Audi doesn't even acknowledge many of the challenges. Just as impressively, the roads' high-hedged, unsighted narrowness means you have to keep tight to your side, so you need a car that is accurate and easy to place. The broad-shouldered RS6 aces it. In fact, after just a mile or so, I've forgotten how wide it is and that it has four-wheel steering. Genuinely, this RS6 feels no bigger than an RS4.

Refinement is excellent, too. If anything, the engine is a little too muted, so that at first you're not sure how many cylinders it's got. It picks up when you give the throttle a decent squeeze, at which point it's clear that despite weighing in at just over two tons, 800Nm of torque from 2050rpm gets it moving pretty sharpish. So the RS6 also disguises its weight. Are there any flaws, any chinks in its armour? Well, the HMI isn't as intuitive now and very occasionally you can feel the mass of one of those 22-inch wheel and tyre assemblies resisting the control of its spring and damper, as you might in an SUV.

Half an hour up the A1, I swap into the Panamera. While the Audi looks like a car that's been beefed up, the big Porsche looks wide but flat-sided, like its extra width was added down its centre line. It's a bit better looking in Sport Turismo form, but even on black 21s with diamond-cut rims, it's a subtle thing. The Mercedes falls somewhere between the two, its arches distended sweetly, its nose gappy with intakes, but in Salesman Grey – sorry, Selenite Grey – it takes a stock E220d estate alongside to reveal all of the upgrades.

Lime green detailing hints that this Panamera is the E-Hybrid model, and initially it's a very different experience. Turn it on and a faint electrical hum indicates it's ready to go. It starts in 'E' by default and with a full charge can go for 20 miles or so on electric power before shifting into 'H', hybrid mode, the V8 kicking in smoothly. Initial impressions are that the ride is noisy and a bit coarser than the Audi's, yet that overall ride control is a bit looser too, feeling underdamped at the front. A press of the damper button gives tauter control but with increased road noise.

On the plus side, the Panamera's range of seat adjustment is remarkable, the driver's seat seeming to go down an extra floor compared with the other pair, and the steering has an on-centre pick-up and precision that the Audi's lacks. You need to get used to the

Porsche 'sailing' though. On the motorway, back out of the throttle and the tachometer drops and there's no engine braking. This seems to be a strategy to preserve momentum and get the driver to use the brakes; up to a point, retardation is provided by regenerative

From far left: E63's optional carbon-ceramic brakes; RS6's standard cast-iron items; Panamera's standard-fit carbon-ceramics



**THE AUDI STRIDES
ACROSS THE
LANDSCAPE LIKE IT
OWNS IT, PLANTED
AND CONFIDENT'**

resistance, feeding energy back into the battery pack.

The Mercedes feels a bit old school after the other pair. It's a more traditionally shaped estate (and thus the most practical here) and looks and feels somehow narrower (at 1907mm wide it's 30mm and 44mm slimmer than the Porsche and Audi respectively). It has 4Matic+ all-wheel drive, but it's the only one here that allows you to select a rear-drive 'drift' mode, something I can only imagine the tiniest percentage of owners will ever do. And journalists. It's really not necessary though, because when shown a decent set of bends, the E63 S reveals that it has a biddable chassis balance and outstanding traction.

This is a relief, because up to this point the E63 has been a little disappointing, being by far the least refined, with strong road noise and a ride in Comfort mode that is both the busiest and the least poised. Switching up to Sport improves things, the ride becoming more consistent and calmer, with no increase in road noise. It should be the default. Sport+ has the nine-speed auto hanging on to high revs and uncorks a rolling thunder soundtrack and overrun crackles and pops. It's like a classic race V8 has been dropped under the bonnet.

Skirting around York, the weather is now dry and bright, but within a few miles of Pickering there is patchy snow on the verges, and the whiteness increases as we head up onto the moors. Happily the roads are mostly dry and the temperature is higher than the view would suggest at around 7deg C. This is a relief because four-wheel drive would be of very limited use without winter tyres.

The E63 feels at home here, its ride calm and flat despite a busy surface, its grip strong and its power energising the driveline so that there's a satisfying sense that all corners are doing their bit, with just a little more going through the rear tyres. It's a very fast car. Every now and then you pop over a crest and the road sets off for the horizon some distance away, and if you kept your foot in you wouldn't run out of shove before you got there. Annoyances remain, though. Who thought a flat-sided steering wheel was a good idea? And why, given the range of tuneables, is steering weight not among them? It's a little heavy in anything but Comfort.

Above: being the newest car here, the Audi's cabin is correspondingly sleek; steering wheel houses a new programmable RS driver mode button



Corners combined with bumps seem to trouble the Panamera, occasionally inducing an odd, diagonal float, and even in Sport the nose seems to hang over crests too. It certainly has the pace, its instant throttle response with a full charge becoming a relentless push for the red line, unhindered by pauses to change gear. Yet even in Sport+, at its most tied-down, you can't escape the influence of the extra 300kg, which even corrupts the fidelity of the steering.

In contrast, the RS6 strides across the landscape like it owns it. You can pre-program a pair of set-ups and access them via the 'RS' button on the steering wheel, and with everything set to its sportiest you can feel the car lower on its air springs. This doesn't seem to compromise its ride, so the RS6's dynamic character is helpfully consistent across all modes. It's planted and confident, soaking up lumps and bumps without deflection, its steering accurate. In common with its rivals, it's only when the RS6 tackles a sharp crest that the amount of metal in motion is fully revealed, though unlike the E63, the RS resists the feeling that the front struts have run out of travel.

It's been a day of revelations, most of them surrounding the Audi. 'That traditional nose-heavy cornering stance is all but eradicated, making this

not only the most agile RS6 but the most agile Audi Sport model this side of an R8,' says editor Stuart Gallagher. 'The rear-steer helps transform it from a point-and-squirt machine into a genuine driver's car.'

Antony Ingram, who has driven the RS6 before in Germany, agrees. 'Four-wheel steering is the killer app. You can trust that the nose will go where you point it but also that the tail won't do anything silly, and that makes it such a great point-to-point car even on wet or greasy surfaces.'

We're warming to the Mercedes. Dynamically, it's not instantly gratifying, but put it to work and it starts to shine. 'The quicker you go, the more the car comes to you,' says Gallagher. 'The steering delivers more feel, the ride finds a balanced fluency and that V8 proves the most charismatic and exciting here.' Ingram agrees: 'It's an absolute cracker! Less cultured than the others and all the better for it. Subjectively the AMG feels faster I reckon, simply because you get a bit more noise and a bit more energy fizzing through the car. The Porsche is very slick and the Audi so competent that using all its power feels quite natural, but the Merc maintains that slightly

unhinged feeling of its predecessors...'

Not a description you could level at the Porsche. It can feel just as fast as the others but it never feels as tied down and focused. 'The three-chamber air suspension feels too clever for its own good, trying to second-guess what's happening rather than reacting to the situation,' says Gallagher. 'The knock-on effect is a lack of confidence. You don't commit because there's a nagging doubt the Panamera isn't going to do what you want.'

Ingram isn't getting on with the Porsche's 'sailing'. 'It drives me nuts! Unless you're in Sport or Sport+ at high revs, the lack of engine braking or regen is quite disconcerting in something that feels so big and heavy. You're forced to use the brakes more, and Porsche hasn't quite nailed the blending of regen and friction brakes.'

EARLY NEXT MORNING, I START OFF IN THE PORSCHE. THE pristine sky is just starting to brighten, and although the Panamera arrived last night with minimal electrical power and didn't get plugged in, it manages to defrost the screen and warm the driver's seat, steering wheel and interior without firing the engine. Only as I select drive does the V8 kick in, quietly.

The twisting coastal road from Whitby to Scarborough gives the Panamera another chance to impress, and it does. It has fine steering, connected, feelsome and accurate through the slim, round rim. But as the pace picks up and the road gets twistier, the ride starts to feel less composed, the mass less controlled. Firming the dampers helps, but you have to wonder whether the

hybridisation is worth it.

The proposition itself seems a little absurd: a two-ton-plus, 680hp, 308kmh five-door with 300kg of hybrid kit. Fuel economy and CO2 figures should correlate, but the Porsche's 76g/km rating did not result in it being three times more economical than the Mercedes (246g/km). All three were helped by our steady run up here, the Porsche returning 11.7km/l, the Mercedes 9.6km/l and the Audi (least fancied on 263g/km) managing 10.6km/l.

The Audi and Mercedes have their own fuel-saving strategies, the RS6 having a separate 48V electrical circuit that charges up under mild braking. It also prompts the driver with a little pulse of the throttle to lift off approaching junctions and lower speed limits. The Mercedes, meanwhile, becomes a 'four' on a light throttle. Even so, it will come as no surprise that if you're really enjoying them, all three will drop into the low 20s... or even the mid-teens.

Unexpectedly, the Porsche reveals some of the old Stuttgart magic in the corners. With cars such as these, it's not so much about hanging the tail out as finding a satisfying balance, one that might be exploited. And despite the extra mass (2325kg to the Audi's 2075kg and Merc's 1995kg), the Panamera is predictable and adjustable. In Hybrid mode it turns keenly but is balanced, safe. In Sport there's more drive to the rear, so you can balance the car, and in Sport+ a little twist of oversteer (or more) is there for the taking, the car composed, calm and transparent. The Audi takes its driver on the same journey, the difference being that when really pushing on you can still feel that it's a nose-heavy

Porsche Panamera Turbo S E-Hybrid Sport Turismo

Engine V8, 3996cc, twin-turbo, plus 100kW electric motor
Power 680hp (combined) Torque 850Nm (combined)
Weight 2325kg Power-to-weight 293hp/ton
0-100kmh 3.4sec Top speed 308kmh Basic price S\$847,488
w/o COE

evo rating ★★★★★

Mercedes-AMG E63 S 4Matic+ Estate

Engine V8, 3982cc, twin-turbo Power 612hp @ 5750-6500rpm
Torque 850Nm @ 2500-4500rpm Weight 1995kg
Power-to-weight 308hp/ton 0-100kmh 3.5sec Top speed 300kmh
Basic price POA

evo rating ★★★★★



car. Ask for a slug of power mid-turn in Comfort and the front will edge wide like a big hot hatch. Cycle up the modes and you can feel the drivetrain bringing the rear axle increasingly into play, and although it's effective and exploitable, the Panamera remains more natural and nuanced.

The E63 seems initially to sit somewhere between the two: less compromised than the RS6, but not quite as fluent as the Panamera. Hustle the E63 and it can feel like the old rear-drive car is lurking just below the surface, but if it feels like that, you're not driving to its strengths. Dive into a series of bends letting the front get almost to each apex before gassing it and then the grip will impress and the traction will astound you. In these moments the E63 feels more like an Impreza STI than a two-ton, five-metre estate.

'Before this test, the E63 S was my favourite,' says Gallagher, 'and it's still the purest to drive when you're able to enjoy all of its performance. The Panamera is a bit frustrating because you know there's a good car in there. And the RS6? It was an icon that rarely delivered dynamically but had a cult car appeal...'

Well, the RS6 delivers now. Yes, the E63 can conjure up moments of dynamic brilliance to outshine the RS6, and the Panamera has the best steering, but they have both spent most of this contest coming from behind. 'All three make you question why you'd ever need a performance SUV,' says Gallagher, 'but Audi has retained all the RS6's cult car appeal while adding an unprecedented level of driver appeal. It finally delivers on its promises with no excuses.'

'THE RS6 FINALLY DELIVERS ON ITS PROMISES WITH NO EXCUSES'

Moments of cornering joy make up a small part of the repertoire of the super-estate. Audi has moved the game on where it matters and moved it on significantly. This is a different kind of RS6.

'I really admire the work Audi has done behind the scenes to turn a car whose shtick was straight-line speed and all-weather security into a car that's engaging to drive,' says Ingram. 'The RS6 feels much lighter and more agile than you'd infer from its size and weight. It's genuinely good fun.'

It demonstrates real flair where before there has been little. It's on the biggest wheels here but has the best ride and composure, integrates four-wheel steer almost imperceptibly, feeling naturally agile and responsive right away, and it's superbly refined, too. In the RS6 you don't have to go looking for the magic, it's right there, ready to be enjoyed from the get-go.

It's the new King of the Hill, close to being the perfect all-purpose, all-duty, go anywhere super-estate. A car properly deserving of the description 'sports utility vehicle'. ✕

Audi RS6 Avant

Engine V8, 3996cc, twin-turbo Power 600hp @ 6000-6250rpm
Torque 800Nm @ 2050-4500rpm Weight 2075kg Power-to-weight 290hp/
ton 0-100kmh 3.6sec Top speed 280kmh (option) Basic price POA

evo rating ★★★★★





MOTORSPORT MOMENT

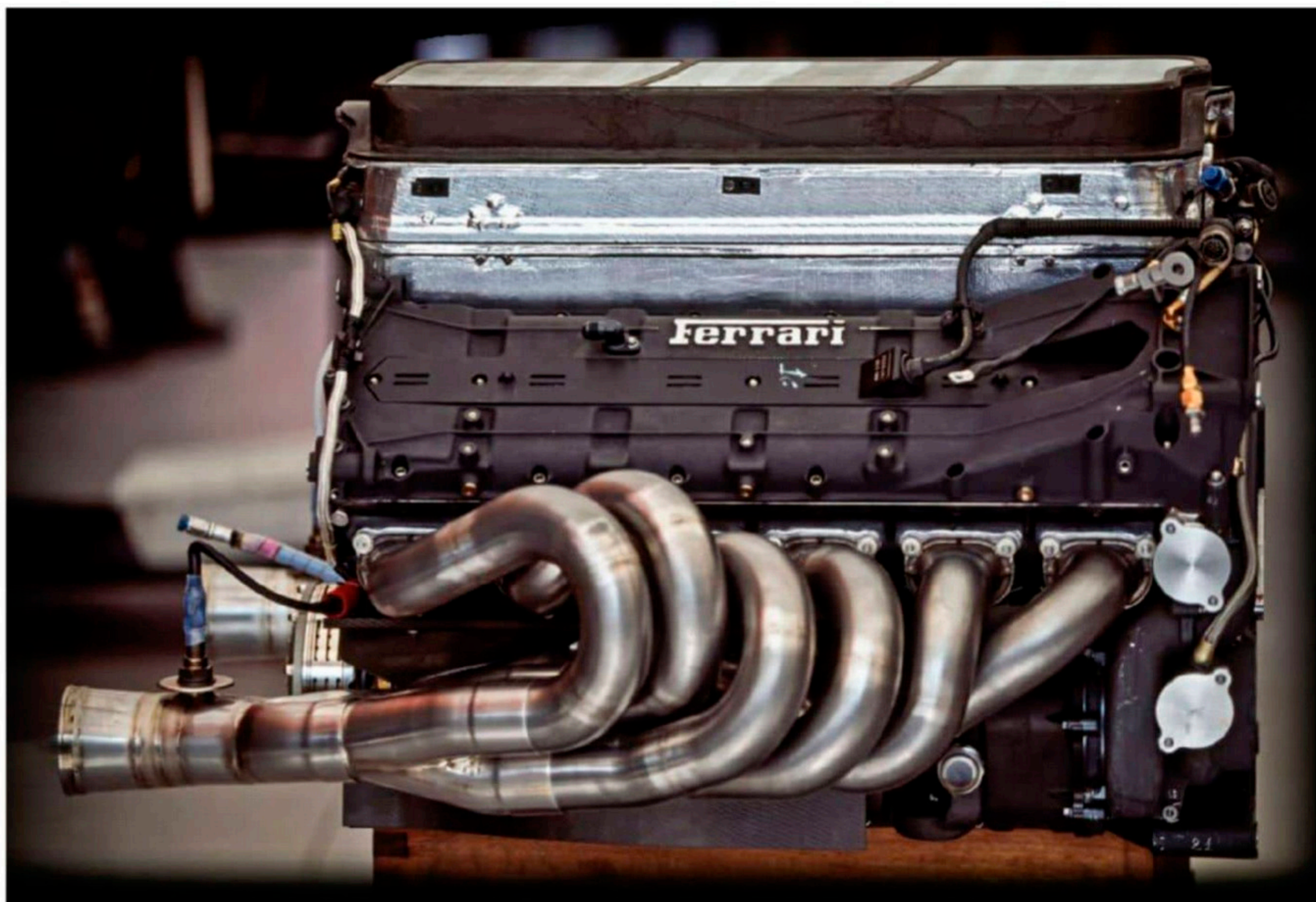
Jean Alesi and the last V12 win in F1

Frenchman Jean Alesi's solitary victory, in a Ferrari 412 T2 at the 1995 Canadian Grand Prix, was to be the final hurrah for Formula 1's V12 era

IN AN ERA WHERE THE MONOTONE, SYNTHETIC drone of the hybridised small-capacity V6 defines Formula 1's soundtrack, it's not uncommon for fans of F1 to reminisce about the previous 2.4-litre, naturally aspirated V8 screamers. Yet I think it's fair to say those little torque-lite motors had nothing on the larger ten- and 12-cylinder engines that powered the sport, along with the trusty V8s of course, between 1989 and 2005. These were engines with unique voices, shattering exhaust notes and a very real physical projection of power. And none more so than Ferrari's V12.

When F1's first turbo epoch came to a close at the end of 1988, Ferrari reverted to its beloved V12 configuration as it has so many times across all forms of motorsport, and the shrill, operatic note once again became a feature of Grand Prix weekends.

by ADAM TOWLER
 PICTURES by ALAMY & MOTORSPORT IMAGES



After a dismal 1993, 1994 had been a year of improvement for the Scuderia, with Jean Alesi and Gerhard Berger finishing 5th and 3rd respectively. Just as Ferrari's road cars were being transformed – think 456 GT, F355 and, later, 550M – under new boss but old hand and Ferrari legend Luca di Montezemolo, so the F1 team, under LDM's chosen man, Jean Todt, were also on the march. But 1995 was to be a year of significant change in F1, following the tragic deaths of Roland Ratzenberger and then Ayrton Senna at Imola the previous year. A number of rule changes were introduced to slow the cars and make the sport safer, including a contraction in engine displacement from 3.5 to 3 litres as well as a reduction in downforce.

Enter the evocatively named Ferrari 412 T2. While it was John Barnard's sublime 1990 Ferrari 641 that was displayed in the New York Museum of Modern Art, I would humbly suggest his 412 T2 was its equal. For a start, yes, it was simply beautiful; it just looked 'right', exactly like a race car should. But it was also a car of significant milestones: the last F1 Ferrari to feature a 'low nose' design philosophy, inherently more attractive than anything on stilts; the last F1 Ferrari to run on Agip fuel; the last to bear the numbers 27 and 28 that stretched back to the 1970s; the penultimate to be proper Ferrari red, not a shade of

'WHAT A NOISE: PIERCING, VICIOUS, INTIMIDATING'

Marlboro-infused orange. And most of all, the last to feature a V12. The following year would see many changes again, and a realisation that the added weight and thirst of a V12 was not the best solution.

The 412 T2 was powered by the new Tipo 044 engine, a 75-degree V12 of 2997cc producing nearly 700bhp in ultimate spec, at 16,800rpm (and pushing 595kg, remember). That lofty figure put it higher up the rpm scale than its largely V10 rivals, although in later years those V10s would breach 19,000rpm and the ultimate 2.4-litre V8s would go even higher than that. But in 1995, a high-pitched scream meant only one thing: a Ferrari V12. And what a noise: pure, piercing, vicious, intimidating.

From the start it was obvious the T2 was fast, in what was a classic Grand Prix year by any standards: Schumacher in the Benetton-Renault, Damon Hill in the Williams-Renault,

Above: the Ferrari V12 would make its last appearance at the 1995 Australian Grand Prix in Adelaide, before making way for the V10 in 1996

'THERE'S SOMETHING HEROIC ABOUT FERRARI OF THE 1995 VINTAGE'



the Ferraris, the emergent Jordan-Peugeot team, and so on. It turned out to be a torrid year for Hill, despite him seemingly holding many of the cards, and another title for Schuey.

Over 17 races Alesi had the edge on Berger. The Frenchman narrowly lost to Schumacher at the Ring, retired through wheel bearing failure while leading the Italian Grand Prix with just eight laps to go, and suffered driveshaft failure at Suzuka after a blistering drive back through the field. All in, it was eight retirements, four second places and, at last, one victory for Alesi.

That win came in Canada, where the number 27 on Alesi's car matched the number on the Ferrari of the late Gilles Villeneuve, a true national hero. Jean Alesi probably deserved many more F1 victories, but his do-or-die driving style and loyalty to the Scuderia even through its troubled years meant this would be the only time he made it to the top step of the podium. Fittingly, it's his name that will forever be remembered as giving the V12 its final victory.

When Schumacher tested the T2 after his move to Maranello for 1996 he is quoted as saying it was 'good enough to win a world championship'. Was that the honest truth, a motivational quip or a slight dig at the outgoing driver pairing? Whatever, *he* was good enough, of course, along with Todt, Ross Brawn and Rory Byrne, and all the other individuals who then built an F1 juggernaut. It took time, yes, with 1996 bringing a new V10, 1997 a near miss after a not near miss with Villeneuve's Williams, and the Häkkinen-McLaren-Mercedes partnership in '98 and '99,



but five straight titles from 2000 was the reward.

Yet there's something heroic, slightly chaotic and most of all overwhelmingly passionate about Ferrari of the 1995 vintage. Truly, the end of an era. So if you want a YouTube wormhole this month courtesy of Motorsport Moment, I urge you to search for Jean Alesi in 1995, preferably in the wet. He may have only won once, like the T2, but if there's a more vivid demonstration of man and machine forged as one furious entity, I've yet to see it.

Above: Jean Alesi's win in Montreal would be his and the 412 T2's only triumph, although he and Gerhard Berger clocked up 11 podium finishes between them in 1995



Open all hours

Our one-on-one with the one-off Aventador J was really anything but

IT PROBABLY HASN'T ESCAPED YOUR notice that the 2020 Geneva motor show was cancelled. With Covid-19 on the rampage it was the only sensible thing to do, but the proverbial finger was only drawn across the proverbial throat by the Organisation Internationale des Constructeurs d'Automobiles at the eleventh hour. As a result there were lots of images doing the rounds of the huge halls littered with half-built or part-demolished stands. Cranes, scaffolding, rolled-up carpets and boxes everywhere. It reminded me of a night in 2012.

Tuesday, the first day of the show, is always press day at Geneva. It's when the wraps are taken off and, these days, when editors hit the big 'go' button on pre-prepared stories that have lain secure on servers until the embargo arrives. It is rather hectic in the halls and trying to take photos or talk to a video camera is about as easy as painting a watercolour on the Tube in rush hour. So, in 2012 we asked Lamborghini if we could come back after hours to get some quality time

with its star of the show, the Aventador J.

The J (for Jota) was a one-off. Not a concept, because it was a fully working car with a V12. Just the only one. It still is. Nowadays it would be seen as following a trend for supercar speedsters, rolling along in the tyre tracks of the Bentley Bacalar, McLaren Elva and the Aston Martin V12 Speedster that should have been at the Swiss show this year. But in 2012 it was slim pickings for those with a love of many cylinders but an aversion to windcreens, with just the Mercedes SLR Stirling Moss edition to choose from.

Anyhow, the nod came from Sant'Agata that we could spend a few hours with the J after the hoards had retreated to hotel bars, so snapper Dean Smith (who abhors motor shows like Twitter hates Instagram), filmmaker Sam Riley and I duly returned to the stand later in the evening. I had envisioned a crypt-like peace and quiet. A few security guards pacing perhaps, but otherwise nothing save the automotive stars of the show slumbering under silk shrouds. I was wrong.

It was carnage. It turns out that most of the stands are completely rearranged between the press day on the Tuesday and the VIP day on the Wednesday. As a result, there were people everywhere and the place rang to the sounds of drills, shouted instructions and hammers. A reverent meeting with an Aventador it was not.

Nonetheless, Dean, who I remember was wearing a pink T-shirt that clashed like a fuchsia with the red paint of the Lamborghini, did a fantastic job of making it look like we were the only ones there. Armed with no more than a couple of small flashes he created the impression of lonely, late night contemplation (although if you look closely on page 82 of issue 169 you might notice a ladder and a crane that couldn't be completely concealed).

There is one photo of me sitting, apparently in blissful contemplative solitude, in the car, and I remember that this also took some time to organise. The trouble was that the J had already been sold, sight unseen, for £1.75million, and no one seemed quite sure if the owner would be happy with someone else's buttocks sinking into the Alcantara, however briefly. In the end I took my shoes off and sat on my jumper. Probably should have used some antibacterial hand gel too.



CRAFTED FOR POWER. SELF-CHARGING FOR EFFICIENCY.

EXPERIENCE THE LEXUS ES HYBRID

Purchase your new Lexus Hybrid through our contact-less purchase journey, Lexus Remote. Visit lexus.com.sg/LexusRemote today.



Fuel Consumption: 4.6-6.6L/100km
VES banding: B



Borneo Motors

33 Leng Kee Road (S) 159102 | Call 66-31-1388 | Lexus.com.sg

