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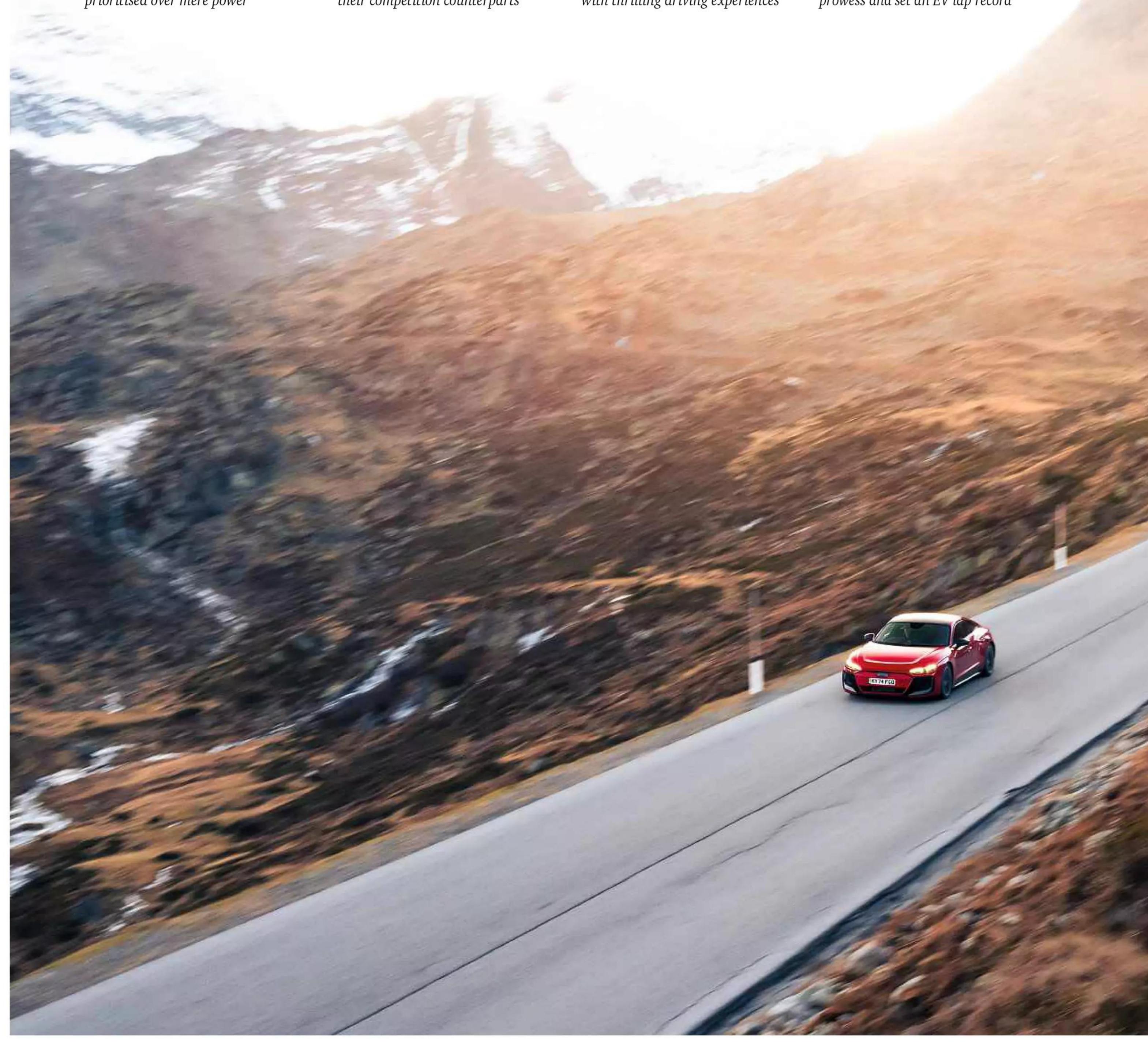
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by ADAM TOWLER PHOTOGRAPHY by RICH PEARCE

# THE KEY ELEMENT SWHATICALL IIII THEJEKYLLAND HYDE EFFECTSTEE CARALMAYSHAS

What truly defines an Audi RS model? From the visceral roar of a petrol engine to the spaceship hum of the latest EV, Audi Sport's Steffen Bamberger reveals the secrets behind crafting performance cars that thrill - and why chasing raw power isn't the whole story



T'S A SIMPLE QUESTION TO BREAK THE ICE, BUT ALWAYS an effective one to see whether a car company 'big cheese' can elucidate what their cars really stand for: 'Just exactly what makes an Audi RS an Audi RS, Herr Bamberger?'

Steffen Bamberger, Head of Technical Development and Project Management at Audi Sport GmbH, does not hesitate in his reply: 'It's not such a big secret. For sure, it's the exterior design; you have to see the difference. Then, when you open the door, you have to see at once that it's an Audi RS: the steering wheel, the seats, the materials, the way the stitchings are formed in the car.

'The next step is starting the engine – the starting process, even with an EV. Then the acceleration, how the car feels, how the car and the engine vibrates, is really, really important. And steering the car, the driving dynamics. It has to always be precise, always be safe, but... it has to always be fun, and that's our task in designing a car, that range between daily durability useage and sportiness. And the sound is really, really important: if you're driving a car really in a sporty way, the sound gives you a sense of orientation, of how you are moving the car. That doesn't matter whether it's a combustion engine or electric car.'

Plenty to unpack there, then, not least that, whether synthesised or not, Audi Sport places such a prominence on a car's audio signature from the perspective of a driver. What of the new spaceship-esque sound in the RS e-tron GT?

'It's always a big discussion how an electronic car has to sound,' responds Bamberger. 'Not like a V8, because that's not the way we want to go, and the V8 owners would be mad about the fake V8 sound as well! So we have a typical Audi electronic sound, and I think it gives you really good feedback from the car as to which kind of situation you're using it in.' Bamberger adds that in the earlier days of electrification, Audi Sport wasn't sure that having any sound at all was the way to go. That was until the company worked with the late Ken Block and took on board his feedback that the immense drift car it had built for him – the S1 Hoonitron was spinning wheels without him fully appreciating what the car was really doing. The actual sound itself is 'not a democratic decision', according to Bamberger, but rather the work of just three people in a dedicated department who have long-term experience in manipulating the sound of cars for dramatic effect.

In fact, the development and introduction of new ideas is one of the key roles an RS model holds within the overall Audi product portfolio. 'An RS [model] is always a good opportunity to bring new ideas into the car,' explains Bamberger. 'Components like that can be expensive and take a lot of time [to develop], and there is always some risk in introducing them. But for the RS models we have always done this and will continue to do so. The volumes are low, and we know our customers really, really well – how they are using their cars.' New ideas, it seems, are not in short supply. 'I have got many, many engineers in my department, and they have endless ideas; the biggest challenge is to bring these to market in the time and

budget constraints we might have on a project. But it never happens that we don't have ideas, and that's a really good thing! My guys at Audi Sport are developing all the combustion-engined cars, and these are the same guys who are developing the RS e-tron GT.

Opposite:
Bamberger with
the RS e-tron GT
Performance, Audi
Sport's 925 PS
flagship EV

They have the same feeling, the same thinking. They know what an RS needs to be a fantastic car.'

Nevertheless, it's hard not to be bamboozled by the 925 PS (912bhp) peak power figure of the new RS e-tron GT Performance. I wonder aloud just what has enabled such a big jump over the original 645 PS model.

'It's a really, really big effort to reach this [new figure],' says Bamberger. 'It starts from the cooling system, which has to be optimised, but the biggest change is inside the motor. The new gears reduce the weight on the rear axle by 10 kilograms, but we've also reduced the mass inside the engine itself; it makes it more sporty, respond faster, accelerate better. So many, many small changes we had to do, but the most important thing to go the next step is the battery system itself. We've now got a 105 kilowatt battery system, which is huge, but we need a really huge battery system to get the power to the rear axle. We have many, many components that had to be changed in detail to realise this performance. And for us, it's also important not to have a peak performance only once, but to be able to reproduce the acceleration whenever you want. It can't be endless, for sure, but I think for the normal customer we are really, really stable concerning this acceleration behaviour.

'It's interesting, because to get more power when driving, you have to have the perfect cooling system. If you want to charge fast, you get the same problem – you need great cooling. So we get two benefits with the optimisation in this new model.'

Given Audi Sport now has a flagship model with 925 PS, what might the future hold? Can power outputs really continue to climb? Bamberger prefers not to focus on 'simply' power: 'The key element is what I call the Jekyll and Hyde effect. The car always has to fascinate. That's the most important thing at the end of the day. Whether it has 200 horsepower, or more, or less, that doesn't define a fascinating thing with a car. So it's always our target to find a product which is going to fascinate, which gets you emotional; that's the most important thing, that we put our heart in all our products.'

THE GUYS DEVELOPING THE COMBUSTION CARS ARE THE SAME GUYS DEVELOPING THE RS E-TRON GT'







## THE WRC YEARS How four-wheel drive brought rallying and sales successes for Audi in the '80s

IT'S A WELL TOLD STORY, BUT NOT WITHOUT GOOD reason. Before the Audi quattro, four-wheel drive was for farmers. After it, to turn up to a rally without four driven wheels was to admit defeat even before the flag had fallen to commence the opening stage. When Audi introduced the quattro for the first round of the 1981 World Rally Championship, at the Monte Carlo rally no less, it not only began a new era for itself as a company, but also for the world of performance cars and the sport of rallying.

A four-wheel-drive Audi road car was originally proposed by engineer Jörg Bensinger in the late 1970s, during development of the Iltis military vehicle for Volkswagen. The idea was enthusiastically championed by newly appointed Audi boss Ferdinand Piëch as a way of establishing the marque alongside tough German opposition in the market – the original Vorsprung

durch Technik. WRC regulations of the time forbade the use of four-wheel drive, but when the other participating manufacturers agreed to relax those rules they had no idea that Audi had been working away behind the scenes on a muscular, turbocharged, four-wheel-drive super-coupe.

The resulting Audi quattro – now known as the Ur-quattro, 'Ur' translating to 'original' in German – was unveiled at the 1980 Geneva motor show, ahead of the model's debut for the 1981 rally season. Originally conceived as a true homologation special, demand soon evolved it into a flagship of the Audi range, selling more than 11,000 units during its 11-year production run.

The quattro was unique. It combined the sleek lines of the 80-based GT coupe with 2.1-litre five-cylinder turbo power and the new four-wheel-drive system, all topped off with blistered wheelarches, a deep front air dam and a boxy rear wing.











With 197bhp and superb traction, it brought a new level of all-weather performance to road cars. To drive one today is a revelation. The engine has that wonderful off-beat signature sound and pulls very lustily in the mid-range, imparting a surprising sense of speed. It's not as understeer-prone as you might fear, instead majoring on traction with surprisingly deft steering. It still feels capable; over 40 years ago it must have felt ballistic.

Audi wasn't just prepared to push the limits and go its own way on the technical front, it also blazed a trail with its driving squad, not only recruiting established star Hannu Mikkola, but then teaming him with Michèle Mouton and co-driver Fabrizia Pons as an all-female crew for the second entry. Three victories were recorded in that debut season (two for Mikkola, one to Mouton), but it was Mouton who would so nearly capture the championship the following season, just losing out to Opel's Walter Röhrl.

For 1983, Audi homologated its car for the new Group B formula, creating the quattro A1. This was replaced by the A2 later the same season, a marginally smaller engine displacement on the revised road car meaning that Audi could enter the rally version in a lower weight category. The A2 enabled Mikkola to become World Champion after a tense battle with the works Lancia squad. Audi followed up its triumph with another driver's crown in 1984, this time with Stig Blomqvist at the wheel, but by now the A2 was showing its age in a field that consisted of purpose-built Group B machines. Something new from Ingolstadt was required.

Revolution came in the form of the Sport quattro, one of the

most extreme homologation specials ever created. The aim was to make the quattro more agile on the stages, for Piëch insisted that Audi stick with a production-based entry. Some 32cm was chopped from the wheelbase, producing a truncated, hugely potent-looking beast. Producing 302bhp courtesy of a bigger turbo and a new 20-valve five-cylinder, it was one of the quickest vehicles on the road in 1984 – and the Tornado Red example here still feels mightily rapid now. In rallying trim, the Sport was soon delivering 500bhp, but while its power was exceptional, it was always something of a blunt instrument. To unlock its potential, Audi Sport went radical – so radical that it created one of the most unique, terrifying and beloved competition vehicles ever seen: the Sport quattro S1 E2.

No one really knows how much power the E2 made, but even today at Cadwell Park, on its lowest boost setting, it should be 500bhp, which in a car that weighs not much over a ton feels utterly outrageous. By moving some of the weight rearwards, and embracing aerodynamics, Audi Sport returned to the front of Group B rallying, famously winning the 1985 San Remo round with Walter Röhrl and co-driver Christian Geistdörfer. What an honour even to sit in this driving seat, let alone to run the engine to 9000rpm, the scream of the five-cylinder and urgent surge of acceleration leaving me completely frazzled after just a handful of laps.

There will never be another car like this, but for Audi Sport one era was closing and another opportunity beckoned: next, it would hit the track.

## THE EVOLUTION OF PERFORMANCE

The late '80s and '90s saw Audi shift its motorsport focus and pioneer the performance estate

IF AUDI SPORT'S EARLY REPUTATION WAS FORGED IN THE fire of international rallying, by the late 1980s it began to broaden its horizons. When the Group B rally formula was suddenly banned in 1986 after a spate of tragic accidents, the quattro S1 E2s fell silent for the last time and a new challenge beckoned. But where?

The answer lay across the Atlantic. Not that Audi was going to simply throw aside the astonishing developments that had delivered so much success on the world's rally stages; its new challenger was the 200 quattro Trans-Am developed for the 1988 Trans Am series. Utilising the powerful turbocharged five-cylinder engine mated to a quattro four-wheel-drive system, this now familiar recipe created a sensation, capturing the championship and in the process helping to establish the Audi brand in North America.

The following year was even more spectacular, with Audi entering the IMSA GTO series with the fearsome, 720bhp 90 quattro IMSA

GTO, and narrowly missing out on the title at its first attempt despite taking seven wins. Having rocked the establishment, Audi then withdrew from US motorsport; Europe's premier series, in the form of the German Touring Car Championship (DTM), beckoned.

The shock for DTM stalwarts BMW and Mercedes-Benz was the nature of Audi's challenger. The mighty Audi V8 quattro simply had too much performance and grip for the opposition. Catching the established players off-guard it took Audi Sport to championship glory in its first season, and this inaugural success was followed up with another title for the Evolution model in 1991, a golden age of the series.

Meanwhile, with this on-track success as a backdrop, it was finally time for Audi to replace the iconic Ur-quattro after 11 years in production. In ultimate 20V form it had matured into a genuine performance hero of future-classic status, and following



in its wheel tracks would never be an easy task. Enter the Audi Coupé S2 complete with the now legendary 20-valve five-cylinder turbocharged engine – producing 217bhp at launch in 1991, later 227bhp – and quattro drivetrain. A stylish machine of considerable quality, it faced formidable opposition in the market and at the same time expanded Audi's appeal.

However, Dr Ferdinand Piëch and Audi Sport knew that if they were to continue Audi's advancement in road car technology, something radical needed to be done. Thankfully, the doctor knew just the people down the road in Stuttgart who could help.

Porsche, then in financial difficulty, was thankful for the work, and certainly set about the project with gusto. Their modifications created a performance classic, but Audi's decision to use the Avant S2 as the basis for what would become the Avant RS2 was an inspired step. It created a new subgenre of performance motoring – the fast estate car – and it would be a sector that Audi would dominate for decades to come.

Today, due to its reputation, initial preconceptions are sky high, and actually, in the metal the RS2 is remarkably reserved, even with its distinctive RS Blue paint. The same applies to the driving experience: by today's standards it's not as bombastic as some might expect, but in 1994 this was a family car with genuine supercar performance. The 20v, 315bhp, 2226cc fivepot is surprisingly quiet, and the steering overly light. Stick with it, though, and you're rewarded with a turn of pace that feels entirely modern once that big turbo is blowing hard, and there's terrific mid-corner grip and stability too. Essentially, the harder you drive the RS2, the more it seems to like it...

In the UK, the RS2 rapidly became a legend, and it was also over here where Audi Sport's next touring car success had the

greatest impact. The British Touring Car Championship was at the height of its popularity in the mid-'90s, the premier Super Touring series in the world, and the A4 quattro steamrollered the opposition during the 1996 season, easily clinching the crown – even despite the organiser's best efforts to slow the four-wheel-drive cars down. Once again, Audi had proved that its quattro drivetrain was superior, even without its legendary five-cylinder engine in the nose on this occasion.

Over the next decade Audi gradually refined the recipe of the fast estate, including the wild B5 RS4 Avant of 2000, with its 375bhp biturbo V6. However, our next legend arrived in 2006 in the form of the B7 Audi RS4. No longer was Audi Sport working in partnership with other constructors or specialists; this was all its own work - and available in saloon, estate and even convertible variants for the first time, as well. There was a new V8 engine, too: a spectacular, direct-injected, high-revving, naturally aspirated unit, mated to a manual transmission. The B7 RS4 Avant is sublime: comfortable, flexible and an effortless cruiser when you're not in the mood, then transforming into a roaring muscle car the next moment with a press of the 'S' button on the steering wheel. The quality of its steering, the poise and handling balance of its chassis and the sheer involvement of the driving experience made it a firm **evo** favourite, an accolade once inevitably reserved for Audi's Munich rivals.

Audi Sport had truly refined the idea of the rapid estate car, but in the company as a whole there was soon a car that really illustrated the scope of Ferdinand Piëch's aspirations. The original TT was unveiled in 1998 and suddenly an Audi sports car was creating headlines. It wouldn't be long before such Audi models were rewriting the rules on road and track.









AS THE NEW MILLENNIUM DAWNED, AUDI SPORT embarked upon its next challenge. It had achieved unprecedented success in a variety of motorsport disciplines, but now the biggest prize of all beckoned: the Le Mans 24 Hours. And once again, transferring technology from the track to the road was at the epicentre of its objectives.

As has been the case with many legendary racing cars, the R8 project had a challenging birth that masked the true potential that lay beneath the surface. The original R8R made its 24 Hours of Le Mans debut in 1999 powered by an all-new twin-turbo 3.6-litre V8. It was Audi's first purpose-built racing engine since the 1930s and its centrepiece was its use of direct fuel injection technology.

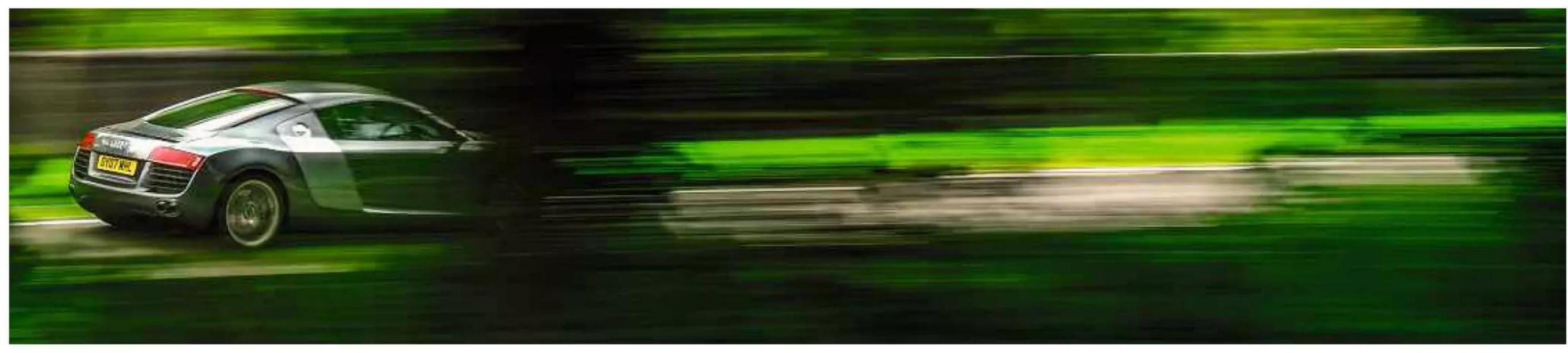
The R8Rs finished third and fourth, yet this was only Audi's

opening salvo. The team had learnt a lot in a short space of time, and for 2000 developed an all-new chassis and the first evolution of its V8 motor. The new car was known simply as R8, and its slender, crisp, open-top bodywork would become synonymous with the race over the first half of the new decade, in no small part due to its dominance that resulted in five Le Mans victories (in 2000, 2001, 2002, 2004 and 2005). In just a handful of years Audi had gone from inexperienced newcomer to the dominant force of sports car racing, on both sides of the Atlantic.

Road car buyers didn't have to wait long for the fruits of this hard-won experience to make it into the showroom. Audi's direct injection technology was soon to be found on its road car engines, including the 4.2-litre V8 in the B7 RS4, which arrived in 2006.









The latest internal-combustion-engined Audis still benefit from the technology too, including the descendent of the B7, the V6powered B9 RS4 Avant, which retired in 2024.

Just 12 months after the arrival of that mid-noughties RS4, the same engine was fitted to an all-new supercar that would once again transform Audi's image: the R8. Not to be confused with the racer, the mid-engined, all-aluminium, quattro R8 exceeded all expectations, offering sensational styling, a beautifully free-revving V8 and wonderfully resolved handling in an exotic package. Audi Sport was now a winner at the highest level of racing, and the R8 road car was the ideal showcase for this prowess on the road. Even today its silky V8 and brilliantly tactile gated manual gearshift offer an experience that epitomises the **evo** doctrine.

Rather than rest on its laurels, Audi Sport responded to the competition on track in the most radical of ways imaginable: it introduced a diesel-powered sports racing car. In creating the R10TDI, with its immense, 5.5-litre, twin-turbo V12, it introduced a world first: a purpose-built diesel racing engine. Audi had long been a proponent of diesel technology, something that stemmed from Ferdinand Piëch himself, and the Le Mans programme was seen as a way of furthering Audi's expertise while promoting TDI technology to new markets, such as the USA. Already in Europe, one in every two Audis sold featured a TDI engine.

The R10 made 650bhp and over 800lb ft of torque. It was truly a monster, only to be tamed by the best drivers in the sport,

which Audi certainly had in the likes of Tom Kristensen and Allan McNish, among others. The R10's hat-trick of wins (2006, 2007 and 2008) is testament to the engineering talent of the Audi Sport team, who designed a racing diesel so clean that the insides of the exhausts could be wiped with a white cloth after 24 hours of racing and impart no sooty residue whatsoever.

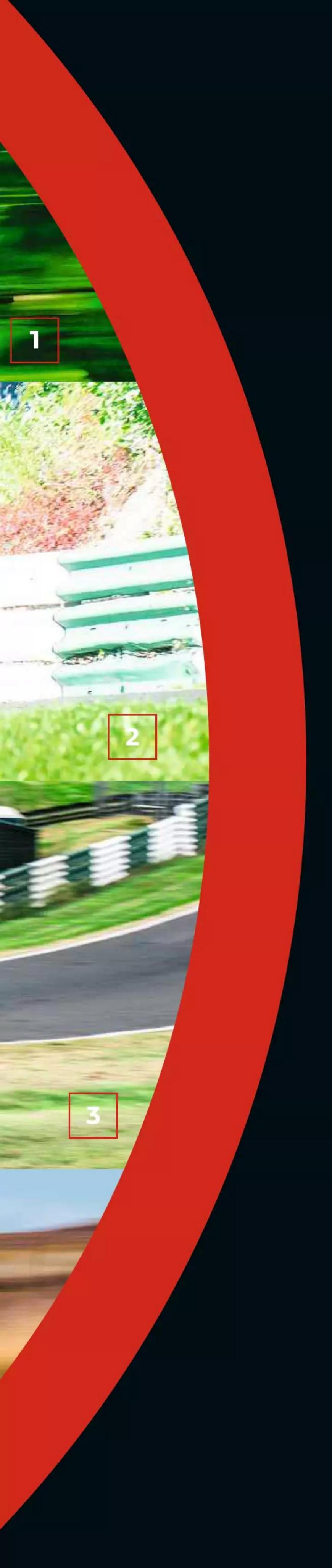
The R15 TDI followed the R10, with a 5.5-litre diesel V10, and notched up another Le Mans victory in 2010, before making way for the first of Audi Sport's Le Mans coupes, the R18 TDI. Now powered by a much smaller and highly efficient V6 turbodiesel, the R18 duly took a Le Mans win in 2011. Updated for 2012 as the R18 e-tron quattro, this version added an electrified front axle, and it was this racer that secured another 24 Hours of Le Mans hat-trick in 2012, 2013 and 2014, showcasing Audi's involvement with hybrid powertrains.

It was in the last of these races that Audi introduced yet another new piece of technology to help its star racing drivers. New laser headlight technology made a huge difference to visibility at night-time – always such a dangerous part of the race, particularly in traffic. And true to its mission to promote technological transfer, laser lights made their road car debut that same year with the launch of the Audi R8 V10 LMX. With quattro four-wheel drive, a powerful V10 engine and its laser light technology, this stunning 562bhp supercar was the roadgoing embodiment of how Audi Sport had conquered the world's race circuits over the past 15 years.

## 'THE R8 LMX WAS THE ROAD-GOING EMBODIMENT OF HOW AUDI SPORT HAD CONQUERED THE WORLD'S RACE CIRCUITS'







For more than four decades,
Audi Sport has forged a legacy of exceptional petrol and electric driver's cars

- 1. Ur-quattro With a pioneering four-wheel-drive powertrain and deft penwork by Martin Smith, the Ur-quattro swiftly achieved icon status. In both its original (1980) 2.1-litre 10-valve and later (1987) 2.2-litre 20-valve forms, it dominated rally stages and public roads alike. The 20V quattro in particular was a match for any supercar point-to-point, using its all-wheel-drive system to maximise the advantage of its turbocharged five-cylinder engine. It's as desirable today as it was groundbreaking when new.
- **2. Avant RS2** Estate cars were never cool. Practical, yes, but cool? No, that was never their objective. Then Audi made a phone call to Porsche and before you could say 'fast dog-carrier' the RS2 redefined the term 'practical performance'. Retaining Audi Sport's core DNA a quattro drivetrain and a five-cylinder, turbocharged engine and leaning on Porsche's expertise, the result, which launched in 1994, was a family estate car that could outrun Porsche's own 911 in all weathers.
- Sport's design and engineering prowess, such were its arresting looks and abilities that delivered far beyond anyone's expectations. In top-line 225 quattro guise (1998) the TT was primed to tackle rival premium marques head on, its 2-litre four-cylinder engine featuring five valves per cylinder and its quattro four-wheel-drive system employing Haldex technology. In 2005 the 225 would form the basis for the Audi Sport-developed TT quattro Sport special edition the Mk1's final hoorah, with 237bhp and a 75kg weight saving while S and RS variants would be regular fixtures throughout the TT's two subsequent generations.
- 4. B7 RS4 One of the truly special performance cars to be launched in the last 25 years, the B7 RS4 was a sensation. There had been similar fast Audis in the past: the RS2 and B5 RS4, both of which were created with some outside assistance (Porsche with the former, and Cosworth for the V6 biturbo engine in the latter), but the B7 (2006) was resolutely Audi Sport's own work. Available as a saloon, estate and cabriolet, the RS4 was defined not only by its high-revving, naturally aspirated V8 engine, but also by a chassis that worked well everywhere from racetrack to country B-road. Options included lightweight carbon-ceramic brakes and supersupportive bucket seats, and today the car stands out as one of the last of its breed: a sports four-seater with a thunderous V8 and a manual gearbox.
- 5. C5 RS6 The RS2 created the fast estate genre but the C5-generation RS6 (2002) entered a segment with very established rivals. Such was the confidence within Audi Sport it tackled the challenge head-on. An all-aluminium 4.2-litre twin-turbo V8 sat between the RS6's blistered arches, with a five-speed automatic transmission linked to the Torsen-based quattro four-wheel-drive system. It was a formidable package, one that gave the RS6 a level of performance to make supercars sweat. But it wasn't all about outright speed: the RS6 proved to be an engaging drive too, one you could enjoy as much up in the hills as you could exploiting its (limited) 155mph maximum on the autobahn. Perhaps more significantly, the C5 RS6 was the originator of what would become one of Audi Sport's most revered models.

- 6. R8 With Audi dominating sports car racing on both sides of the Atlantic during the 2000s, it seemed only natural that the marque should launch a new road-going model to celebrate that success. The TT had demonstrated Audi had an audience for sports cars, but the path was still clear for the company to add a genuine flagship super-sports car to its line-up. The result was first seen in 2003: the Le Mans quattro concept. The clue for the model's inspiration was in the name, and by 2005 Audi's management had given the project the green light. The production version arrived in 2007 and adopted the 'R8' name that had been used for the five-time Le Mans-winning racer. That first R8 road car, with its V8 engine and six-speed manual transmission complete with open-gate gearshift was the beginning of a glorious lineage that has changed the face of the supercar market.
- 7. RS3 Audi's A3 has been a phenomenal global success and this success continued when Audi Sport created the RS3 in 2015. Its unique five-cylinder turbocharged engine and Haldex quattro four-wheel-drive system propelled the hyperhatch to instant acclaim, and its evolution has resulted in a model that has been at the forefront of the performance car sector ever since, offering a unique dynamic experience that's unmatched by its rivals. In today's example, launched in 2017 and updated last year, the advanced Torque Splitter rear differential adds a further layer of driver interaction and polish of dynamic brilliance.
- 8. B9 RS5 Audi Sport's increasing strength in the performance car market resulted in a confidence that saw the team create models to go toe-to-toe with any rival. In the B9 RS5 (2017), Audi Sport delivered highly desirable two-and four-door coupes that further enhanced the appeal of the brand. Taking the proven turbocharged V6 powertrain from the formidable RS4, the RS5 has provided a unique offering for those who didn't require the practicality of the RS4 Avant but yearned for the pace and dynamic capability of the Audi Sport's do-everything performance car wrapped in a sleek design that was pure Audi.
- attributes as its foundations, the RS7 further demonstrated Audi Sport's talent for meeting diverse customer desires. The streamlined design of the RS7 incorporated Audi Sport's signature design cues blistered wheelarches, aerodynamic upgrades, larger lightweight alloy wheels within a unique bodystyle. The 2023 Performance version was the best yet: slick, precise and tightly controlled, it's a unique model within the Audi Sport family, blending mighty performance with ultimate luxury.
- **10. RS6 Avant GT** As with the RS4 Avant Competition and Edition 25 Years, the RS6 Avant GT (2024) is the result of every piece of Audi Sport know-how condensed into the ultimate super-estate package. Reworking the RS6 chassis to include adjustable coilover suspension and stiffer spring rates and anti-roll bars, alongside upgrades to its Sport Differential, the result was the greatest RS6 of all time.

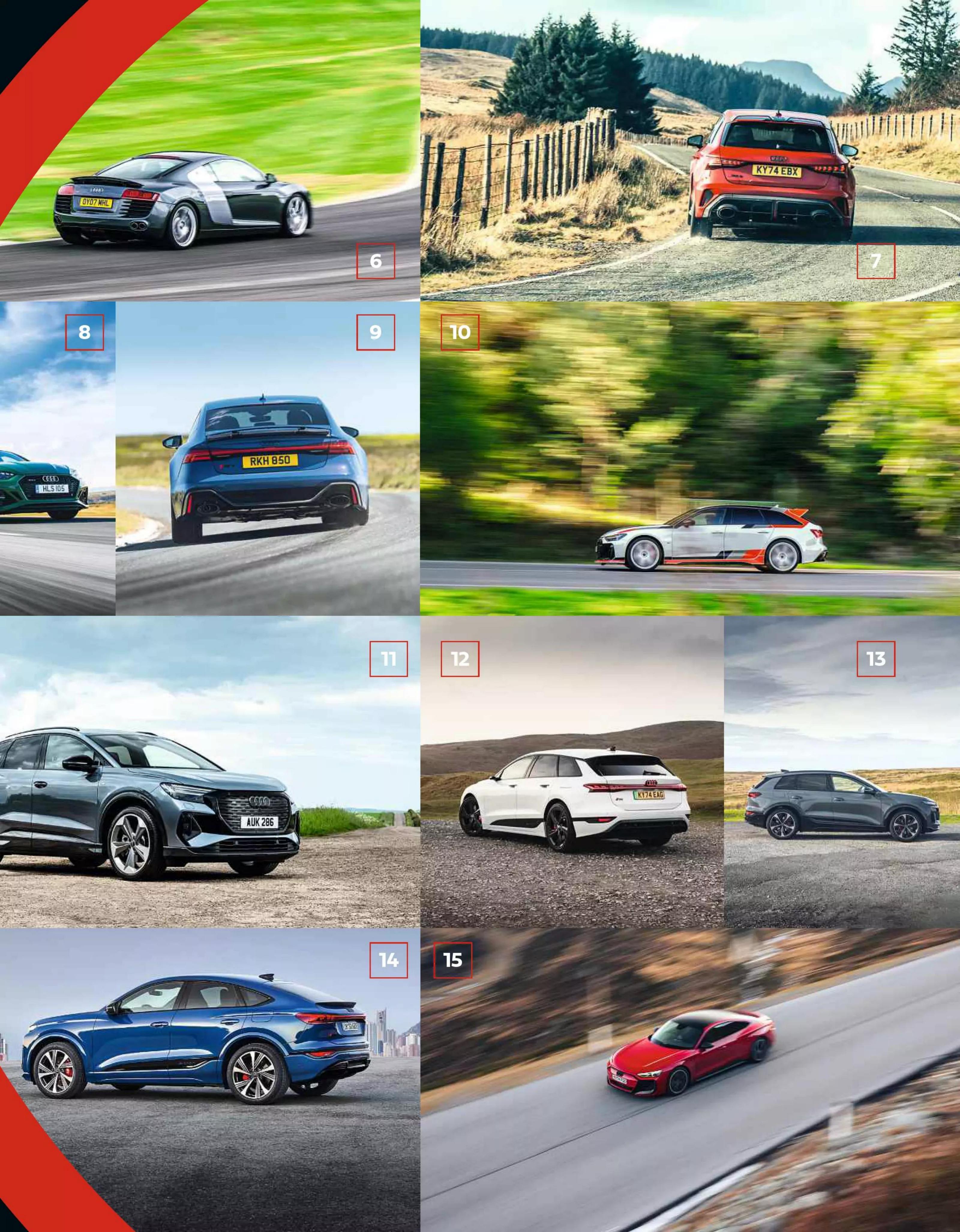
Building on the already mesmerising experience that an RS6 Performance delivers, it drives with a purebred clarity previously only experienced in the R8 supercar. As a car to mark the end of the RS6 of today, the Avant GT is a fitting send-off for an all-time Audi Sport great and one of the best driver's cars of a generation.

## **AUDI E-TRON**

#### The electric future of Audi performance

- 11. Q4 Sportback e-tron One of the most significant cars of Audi's electric portfolio, the Q4 Sportback e-tron will do for the brand what the A3 did for it over 20 years ago. Built on an all-new platform and available with a choice of power outputs ranging from 168bhp to 335bhp, the Q4 Sportback e-tron forms the bedrock of Audi's current electric-vehicle line-up.
- **12. S6 Sportback e-tron & Avant e-tron** The latest addition to the e-tron family is the most aerodynamically efficient car in Audi's history. The company is a pioneer when it comes to aerodynamics, and a ground-breaking design helps the S6 Sportback and Avant take this front-running spirit to the next level. With 543bhp from its dual-motor setup, plus an advanced, rear-biased quattro four-wheel-drive system, the latest S6 models follow in the e-tron GT's tyre tracks in providing a dynamic and thrilling electric drive.
- 13. SQ6 SUV e-tron Audi's SQ6 SUV e-tron continues the brand's performance journey as it expands its electric-vehicle portfolio. With 510bhp, the SQ6 SUV doesn't compromise usability and luxury for performance, rather it combines these attributes with an electric powertrain that excites on every level a powertrain that can also complete up to 360 miles on a single charge.
- 14. SQ6 Sportback e-tron For those looking for the ultimate blend of performance, practicality and style, the SQ6 Sportback e-tron provides an alternative to the SQ6 SUV by incorporating the elegant motifs of Audi's distinctive Sportback design language. Premium luxury and technology are givens, and the SQ6 Sportback backs up its standout looks with a dual-motor electric powertrain that delivers the performance expected of every Audi S model.
- pioneer, the e-tron GT is the 21st-century remake. Combining unique design with ultimate engineering expertise, the e-tron GT is the pinnacle of Audi Sport's electrified product offensive. Whether it's an S, RS or RS Performance model with outputs stretching from 680 to 925 PS (671 to 912bhp) the e-tron GT takes everything Audi Sport has learned during its first 40-plus years to create a performance car fit for tomorrow. Exhilarating and thrilling when you're enjoying its performance, luxurious and refined when driven as a GT car, Audi Sport's flagship is just the beginning of its electrified performance future.













headlines – 925 PS (912bhp) to be precise – it can be hard to look past it, but the first impression is of serene comfort. That's inevitable given the propulsion system perhaps, but it's also very much due to the new active suspension system, with its electro-hydraulic control of each individual damper. It announces its presence even before a wheel has turned, when, upon opening the door, the whole car suddenly leaps into the air to make ingress easier, like a loveable Labrador offering its paw for a handshake. Such bizarre behaviour is entirely in tune with the car's tech-heavy, mysterious character: its extraordinary silent power is verging on otherworldly for a middle-aged petrolhead such as myself, and I wonder how – or if – I'll bond with it as the week progresses.

We soon arrive at our first stop, Audi Sport's Böllinger Höfe production facility, for our interview with the genial Steffen Bamberger, head of technical development at Audi Sport GmbH (see page 4). While our creative types are being all creative, I make the most of my temporary swipe pass to explore the factory floor with the boss. I'd be lying if I said I didn't miss seeing rows of R8s, because until recently this was the home of the mid-engined supercar, but it's still fascinating to see a production line suspended in animation after all the workers have gone home for the night, the rows of silent e-tron GTs in various states of build nearing that moment – in my imagination – when their Terminator-esque eyes suddenly glow red. Downstairs, another facility is where the special bits get attached to RS6 Avant GTs, and several million quids' worth of the white super-estate fill the car park, which is quite a sight.

It's dusk by the time we get back on the road, and it's hammering down with rain for good measure. Traffic on the autobahn is heavy, and there's the prospect of deep snow in Austria. Oh dear. I realise that it's now or never where the RS e-tron GT's credentials as a grand tourer will shine or flicker inadequately.

Immediately though, the car impresses: that pliant ride, fine directional stability, low-slung driving position and superbly comfortable seats create an effortlessly long-legged vibe, and the miles fly by, my brain subconsciously registering the lack of engine NVH as well. The background whoosh of air and gentle swish of winter tyres on wet tarmac are the only sounds if the audio system is switched off. Much of the A7 autobahn is derestricted, but I don't dare raise the speed too high as there's driving rain and lots of surface water. I'd been looking forward to maxing the GT, but that'll have to wait.

We've scheduled a recharging stop, and the GT's ability to plan charging into your selected route, plus the availability of 350kW Ionity chargers on the autobahn we're travelling along, make it both straightforward and brief. An advantage of the e-tron's new 105kW battery and its corresponding electronics (other than supreme power and torque) is that battery charging times have improved significantly: 10 up to 80 per cent takes as little as 18 minutes.

It's sub-zero in temperature and after midnight when we reach our next hotel, having battled with icy roads as we crossed the border into Austria near Füssen. As we plug the GT in for an overnight charge and crunch across the frosted gravel, the prospect of a bed for the night is very welcome. Less welcome is the early doors start tomorrow, but it's imperative to maximise driving time, and as soon as the sheer scale and majesty of the landscapes ahead become clear, I won't be complaining.









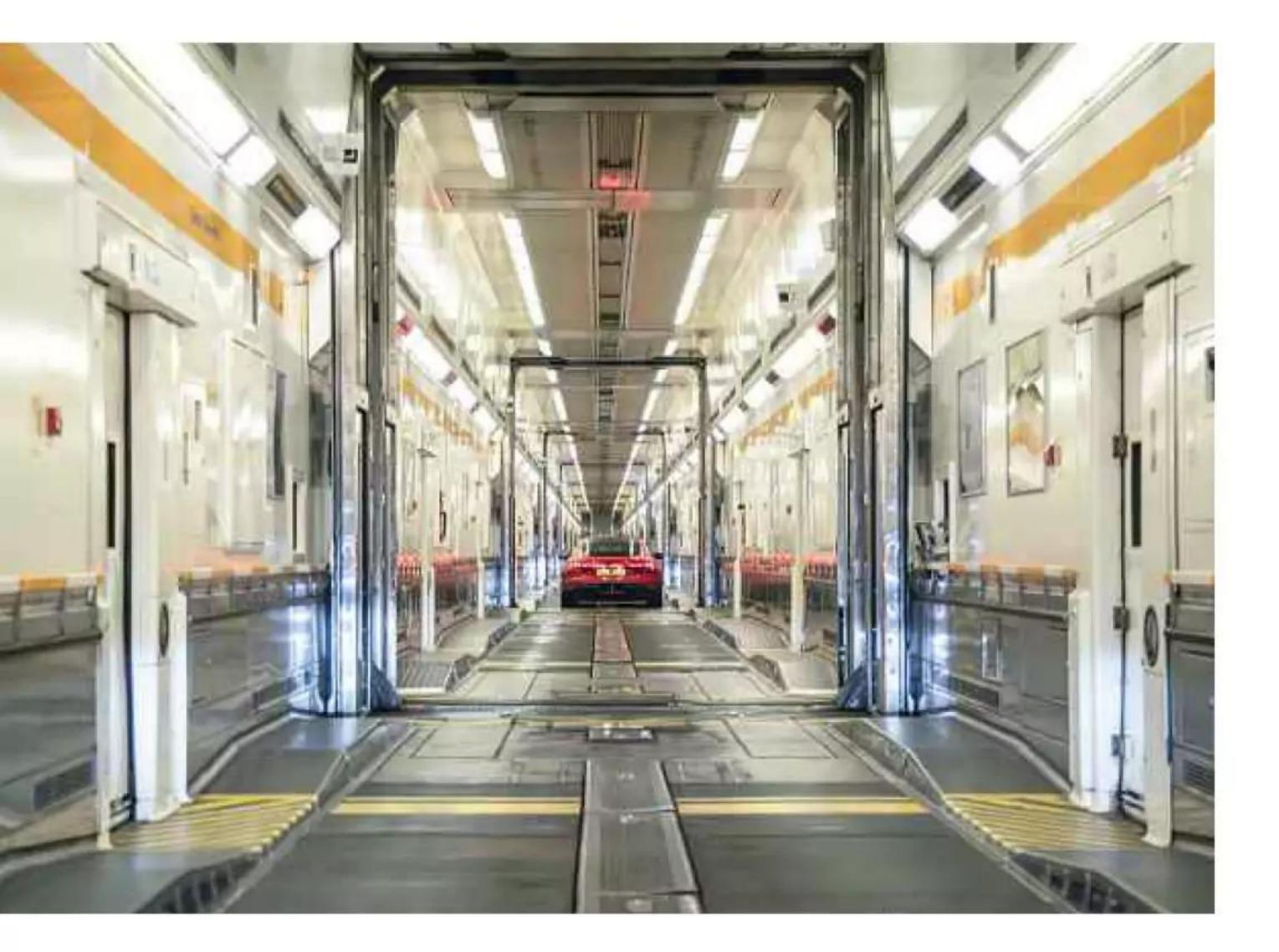




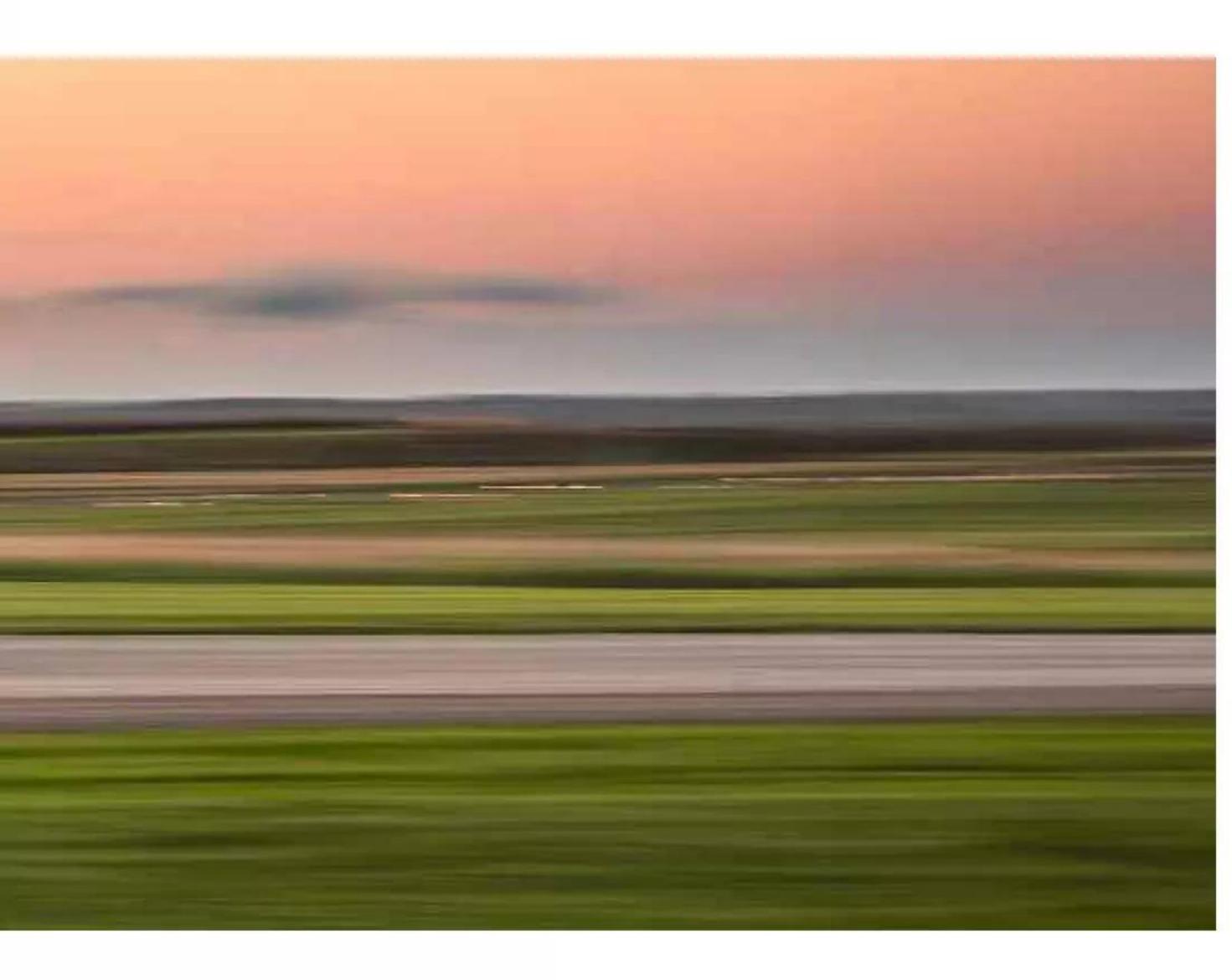












I HAVEN'T BEEN TO THIS CORNER OF AUSTRIA BEFORE, and apart from idle curiosity, its selection had as much to do with the fact that it remains open during the winter months as the presence of squiggly bits on the map. Nevertheless, it doesn't disappoint: cutting through the valley floor at first, slowly gaining height (while the temperature drops), the road begins to climb the mountain before running past the Gepatsch Stausee lake with its dam at one end. From here, a series of hairpin bends lead to a dramatic increase in altitude, and then it's a brilliant driver's road all the way to the summit, with the ski resort dead ahead, and to your left the Wildspitze, Austria's second highest mountain. Throw a stone due south and you'd almost breach the Italian border.

The new 'RS' satellite button on the GT's steering wheel is a handy way of shifting drive modes, but there's no need to sweat the process too much: although there's some configurability to the car's settings, the road surface is so perfectly smooth up here that simply triggering maximum-attack Performance mode which sits above the usual Efficiency, Comfort and Dynamic and is exclusive to the Performance model – is the way to go.

The first uphill hairpin approaches and I instinctively reach to turn the ESP off, then remember that there's 925 PS on offer - or more specifically 748 PS most of the time, with an uplift to 843 PS available for 10 seconds if you press the other new satellite button, labelled 'Boost'; the full 925 PS is reserved for launch-control starts only. For a split second I consider my life choices... before indeed switching it off. It's a wide hairpin – the sort where with care it'll be possible to stop the car on the brakes if things get a bit too rowdy. To be honest, I don't have any idea how things might develop at all.

Thankfully the run up to the ski resort has plenty of hairpins, and soon a picture of driving the RS with some enthusiasm emerges. The speed between corners is colossal, so much so that going flat out everywhere is not an option. This is where Audi Sport's work on the motor's delivery has paid dividends, as you can meter out the acceleration accurately, given enough sensitivity with your right foot. You really have to *drive* it – the RS e-tron GT is far from a one-pedal wonder.

It feels very secure on the road, and without provocation the traction is supreme, while the active suspension manages the weight transfer with aplomb. What surprises me is how there's an undeniable thrill from balancing something with such immense power on the edge of grip.

Audi Sport has done an amazing job at masking the fact it weighs 2.4 tons. In extremis you sense that weight, naturally, but compared to a conventional grand tourer such as a Bentley Continental GT, at a comparable weight, it is an intriguing and entirely relevant alternative. It matches the British car's longdistance capabilities in many areas, and actually offers a driving experience that's more throttle adjustable, albeit without the bellowing soundtrack and interaction of gears. Essentially, it's simply a new 'thing', a new experience that I feel I'm beginning to understand – and enjoy.

Having spent a day on the mountain until dusk, it feels like a long way home from Kaunertal – and it is. Retracing our wheel tracks, we're back into Germany for the night, then arrive bright and early the next morning at Audi Centre Pforzheim to have the winter tyres taken off and replaced with a set of summers, which will be better suited to our laps of Thruxton later.

Having indulged in numerous free coffees we then hit the road again, and at last there's a chance to get some high-speed running

on the autobahn. I lose count of the times we nudge the 155mph speed limiter, and the ease with which the GT gets there is frankly surreal – it truly is an autobahn monster, able to stretch a gap against anything else running at high speed we encounter. Eventually, we arrive at the Nürburgring, and an overnight stop at the classic Hotel am Tiergarten for the inimitable steak-on-the-stone and fine German beer, surrounded by authentic motorsport memorabilia. Heaven.

Slightly less satisfying is the mist-bound drive through Belgium the next day, with further stops for charging. If it wasn't for the speed with which the battery can be replenished, these would have got on my nerves by now, but after using the facilities and grabbing a sandwich the car is practically on 80 per cent again. While devouring yet another plate of Schnitzel – why can't British service stations do food as good as European ones? – I also find myself pondering the GT's aesthetics through the plate glass window of the restaurant. It's a handsome thing, I'll give it that. More aggressive in some ways than its Porsche relative.

THE WEATHER IS QUITE DIFFERENT WHEN WE REACH Thruxton early on the final day. The rain has gone, and the sky is now a perfect blue, but such high pressure at this time of year inevitably means cold temperatures and it's below zero as the GT glides into the paddock. A quick walk onto the circuit unearths a chunk of ice large enough to be a medieval dagger; I feel a mounting sense of unease at the task ahead, most of which centres around the prospect of arriving at the final Club Chicane at warp speed and finding sheet ice in the braking zone, for if there's one thing Thruxton is known for, it's speed. It is a breathtakingly fast circuit, and a deceptively difficult one to get right, too.

The objective is to set a lap time – an unofficial EV lap record. There is no other time in the books, and technically a record can only be set during an actual race, but this will be a new yardstick, a fresh line in the sand. The sensible tactic is to let the sun do its best for most of the day while we work on capturing images and video, and then use a brief window towards the end of the schedule when the track is at its warmest to go for a time. Unfortunately, it doesn't quite work out like that for various reasons, and by the time I'm waved out of the pitlane it's getting dark, and the temperature has fallen from the dizzy heights of six degrees to back near zero. There's an ethereal quality to the whole experience, amplified – if that's the right word – by the lack of noise from the car.



I already know that it's the tyres that are the weak link for the RS around here. Although bespoke to the car, they're still aimed at a mix of efficiency, comfort and dynamics. Thruxton puts enormous loads through them, particularly on the left-hand side of the car.

Into Allard and I feel like I've been too conservative the moment I've turned in, but the long right-hander is deceptive, and seems to suck you out wide. I position the car for the Campbell and Cobb complex and then hit the brakes hard, wiping off three-figure speed effortlessly. Given the weight of the car you might expect the brakes to soon cry enough, but the massive carbon-ceramic discs are up for the challenge, and show no signs of wilting.

I've learnt that there's all the oversteer you could want through the complex, but it's important to keep it tidy now, working the accelerator as you might in an ICE car. I let it run wide at Seagrave then find a leisurely apex for Noble, before the first of the real hold-on-tight corners that is Goodwood. Feeling of force being put through the outer front tyre around this long, fast right-hand curve makes me twitch. Then it's hard back on the power, which feels strange as the GT seems to accelerate at 80mph like you'd expect a car to do at 30mph.

The biggest test is Church, and I point-and-squirt it,

settling for a respectable effort but knowing that I have all the power in the world for the final run down to the Club Chicane. The GT doesn't disappoint, surging to its speed limiter (indicating over 160mph) before I stamp on the brakes hard with a gulp and feel my nails dig into the wheel's rim. It feels naughty but nice to assault the kerbs here, and with a car-shaking whoomp we're through and running out to the edge of the track and over the finish line in an instant.

It's been a new experience for me. Not having an engine sound to judge your speed by, no revs, no gears, places so much emphasis on judging speed by visual interpretation alone. In some ways it's a form of sensory deprivation, and just like if you're forced to listen in a pitch black room, so your other senses compensate. I realise I've been tuned into every slight movement of the GT's body, intently trying to read its body language for clues to how close to the limit we have become. The time is 1min 26sec. Anecdotally that appears to be comparable with a Porsche 991 Turbo S, and would put you in contention for the podium at the recent Audi TT Cup race held around here. Not bad for a grand tourer that's effortlessly whisked us across Europe for the last two days, and entertained on a stunning mountain road. Not bad at all. ×



