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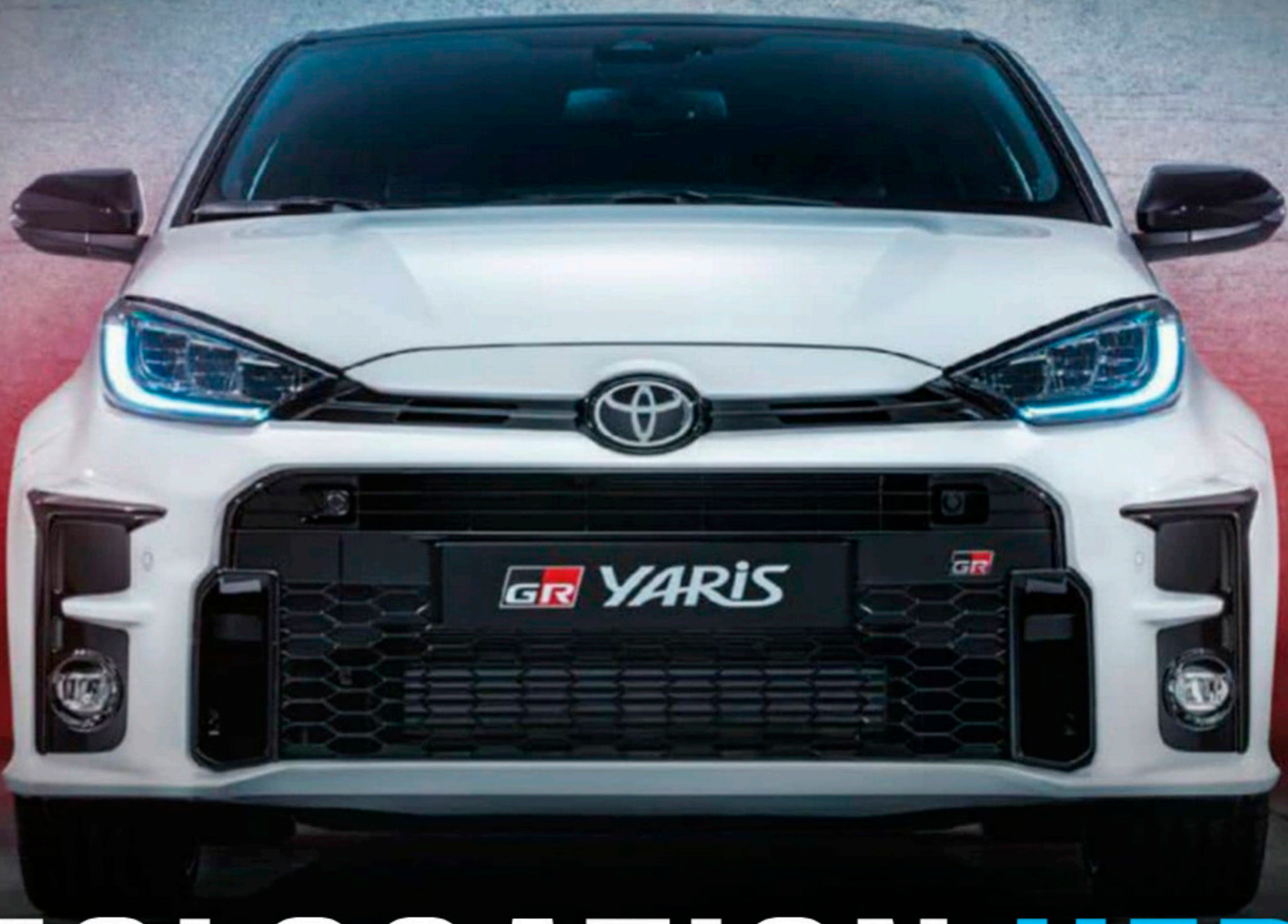

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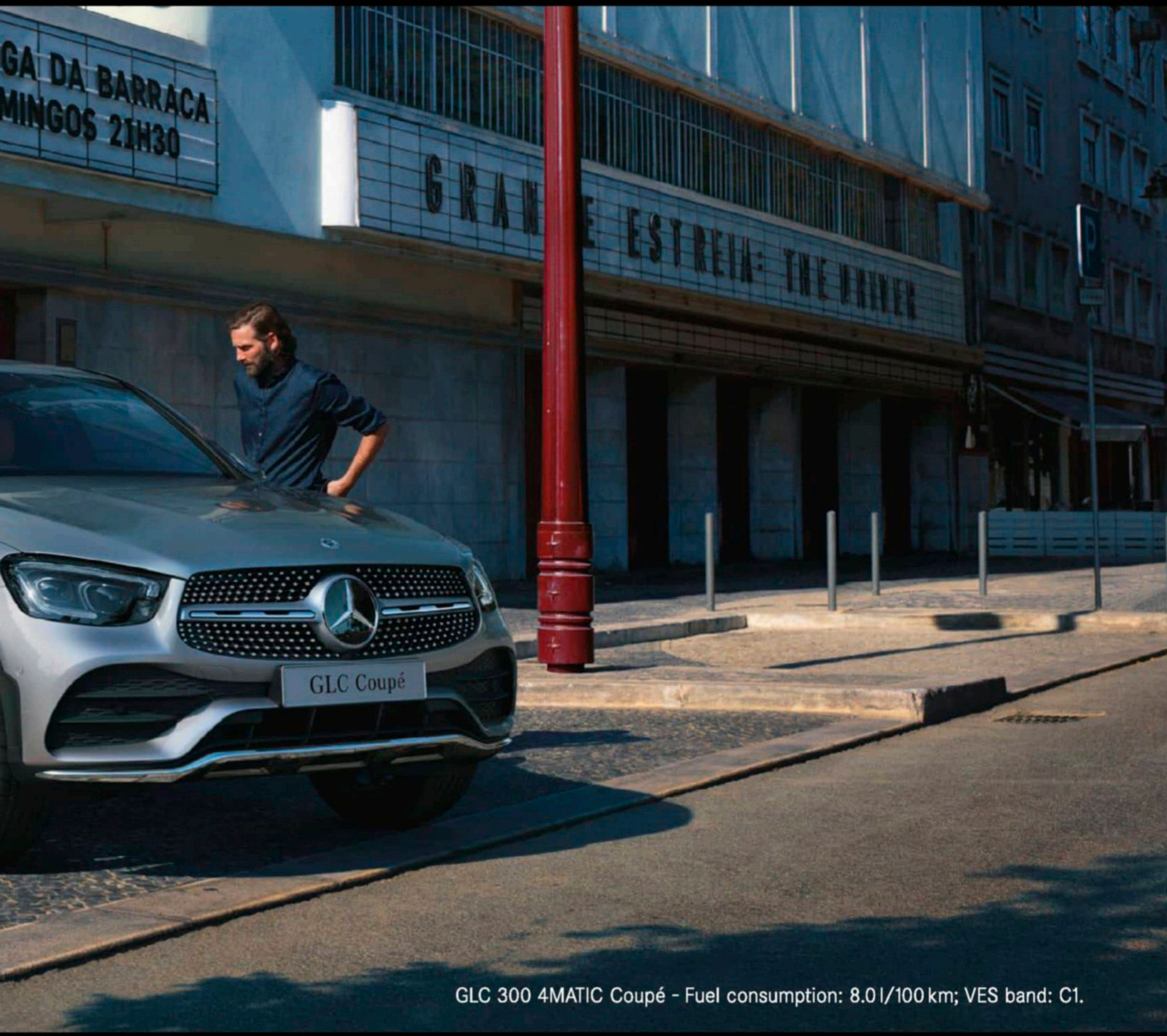

GLC 300 4MATIC Coupé - Fuel consumption: 8.0 l/100 km; VES band: C1.

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ED SPEAK

Longtime readers of my columns will know that towards the end of every year – coincidentally when we start discussing advertising contracts for the next 12 months – car companies tend to give us an outlook of doom and gloom. "Next year will be even worse for us," they say with certainty. Not even 'may' but 'will'. With such clairvoyance, no wonder they earn the big bucks and can afford Christmas ski vacations without fail...

This is of course, largely untrue because if it were, the automotive industry would be in continuous decline for the last 20 years that I have been reporting on. It would make the Irish Potato Famine look like a mere technical correction in comparison.

The way 2020 has been progressing however, is convincing me this time, these bosses may actually be right. The COVID-19 situation has brought the world to a virtual standstill and it has definitely hit the car industry hard – around the world.

Way before the virus struck, my new business partners and I saw a growing need for a concierge-based car servicing app that would take care of time-consuming car maintenance needs like servicing, LTA inspections and grooming. The need was really driven by the demand for convenience and saving time, a commodity that seems to get more precious every day.

As a result, we came up with AutoApp which you can read more about in this issue. Besides saving time and adding convenience, the nature of AutoApp can also help minimize exposure and maintain social distancing so we're glad to be able to help the car businesses and customers in these difficult times.

If there's a positive to take away from the COVID-19 pandemic, it has made many of us slow down our pace of life, spend more time at home and hopefully we can use it to relax and recover. May, the extra time on your hands find you reconnecting with simple pleasures such as reading a print magazine like this one and enjoy it in good health.

Sheldon Trollope,
Editorial Director

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Porsche 718 Boxster GTS 4.0

With the 4-litre flat-six from the 718 Spyder and a lower price tag, is the new Boxster GTS the one to go for?

THERE IS ONE SIMPLE REASON WHY Porsche appears to have shot itself in the foot somewhat by equipping the new Boxster GTS with the exact same engine as the pricier 718 Spyder and Cayman GT4: economics.

Fact is, turning the 911's 3-litre turbo motor into an atmospheric 4-litre engine has cost Porsche a not very small fortune. So Weissach's bean counters knew they couldn't realistically just use it in one car, the GT4/Spyder. Hence the reason why the new Boxster GTS, and the new Cayman GTS, are both powered by the same six-cylinder engine as their two big brothers. I'll say that again, just in case you missed the significance: the new GTS is propelled by a six-cylinder engine, not by a curiously uncharismatic, turbocharged four-cylinder. This in itself is cause for major celebration.

Why the change of heart? Officially Porsche says it has dropped the (nasty, but more fuel-efficient and less polluting) four-cylinder engine merely as a stage in the evolution of GTS history, pointing out that this particular range of cars has been powered by all sorts of different engines over the last 60-odd years. Unofficially you'd have to conclude that it could no longer stomach the criticism, and that sales were beginning to suffer as a result.

Either way, the Boxster GTS is back with a bang, and with a proper engine mounted behind its rear seats this time. And it really is some engine. The only difference between its installation here and in the Spyder/GT4 is that you lose 200rpm at the top end, which means you lose out on 20hp overall. Big deal. Torque is exactly the same at 420Nm, and the torque curve is also identical. In reality it's the same engine, attached to the same six-speed manual gearbox, with the same long gearing (137kmh in second), albeit with throws that aren't quite as short. A seven-speed PDK will become available at the end of the year – and will also be offered on the GT4 and Spyder – and will be specificed on over 80 per cent of GTSs in the UK, reckons Porsche.

The chassis, on the other hand, is not the same at all, because you don't get the Spyder/GT4's rose-jointed front end, which as you'll know was lifted pretty much lock-stock from the GT3. Nor do you get the extra stiffening bar at the back in the GTS. Chassis and suspension-wise the GTS is therefore more of a tuned S rather than a knocked-back GT4, although its brakes are bespoke: bigger than those of the S, smaller than you get on the Spyder/GT4, with optional carbon-ceramics available.

But subjectively at least, perhaps the biggest difference of all between the Spyder/GT4 and the

‘The GTS is back, with a proper engine mounted behind its rear seats this time’

two new GTS models is the tyres they wear. The more expensive 718s both come on bespoke Pilot Sport Cup 2s, while the GTS models ride on regular P Zeros. On a track, especially, this makes a massive difference. As in two to three seconds a lap around almost any circuit you'd care to mention beyond the very shortest ones.

Even on the road the more conservative tyres of the GTS, allied to the different front suspension design, can't help but make a quantifiable difference. In the dry the Cup 2s will give any car more bite and precision at both ends, particularly at the front. In the wet, however, you'd much prefer to be on the P Zeros of the GTS, so in this respect you pays your money, you makes your choice.

And to be honest that's how the GTS feels beside the Spyder/GT4, full stop. A tiny bit less focused, a little less manic, a touch more comfortable and, therefore, a fair bit more useable as a road car overall, but still with the same magnificent flat-six at its core. Not that any of us at **evo** would regard the GT4 or Spyder as anything other than magnificent cars as well. It's just that having spent some decent time driving the Boxster GTS on the road for a couple of days in Portugal (and the Cayman GTS on track at Estoril, more on which in a future issue), it's hard not to come away wondering whether the Spyder is really worth over seven grand more, given that at times – quite a lot of the time to be honest – you'd be hard-pushed to tell the dynamic differences between the two. That's how good a job Porsche has done on the Boxster GTS.

'The Boxster GTS is so similar dynamically to the Spyder, it has to be the better value car'

So what *are* the differences in the way the GTS drives compared with the Spyder? This car is fitted with the optional bucket sport seats (£2315; S$13,317 in Singapore) and carbon brakes (£5177; S$29,781 here), which means when you climb aboard, the driving position is near enough identical to that of the Spyder, which is just about perfect. The cabin lacks the Spyder's bespoke styling touches and its dials, of course, but is still a very sweet environment in which to find yourself, with big, clear dials and a 7-inch touchscreen in the centre of the console for the satnav and so on. You don't climb in and think: 'Where are the goodies?' You climb in and think: 'Blimey, how much stuff is there in here to play with?' Or get confused by, depending on your take on such things.

But what you do get is PASM adaptive suspension, the Sport Chrono package and the company's new rotational mode switch in the bottom right quarter of the steering wheel, all as standard. The wheel switch is great and allows you to scroll so easily from Normal to Sport, then to Sport+. Switchable drive programmes are a thing of debate at **evo**, true, but this one works as well as any, and it really does change the character of the car if you go from Normal straight to Sport+.

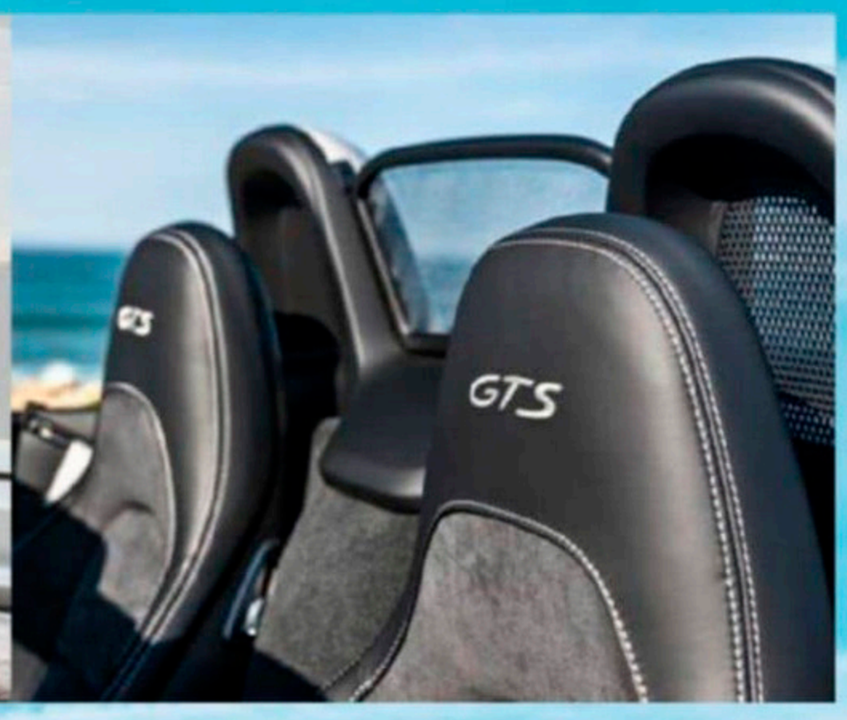
But we're getting ahead of ourselves. Twist the key and the flat-six fires up with a reasonable

level of decorum. It doesn't erupt into life with a neighbourhood-shuddering explosion, in other words, which is surely a good thing in 2020.

Even at idle you can hear the exhaust note change if you scroll up to Sport+, the revs rising a fraction, the exhaust changing in both timbre and volume. Dip the lightish clutch, select first gear via the still short-throw, Alcantara-covered gearlever, dial up some revs via the exact same wonderfully connected throttle pedal, and away you go.

Within the first ten feet you realise that the ride is a touch smoother than a Spyder's. It's still firm and precise and rather lovely beneath your backside, with that same 'I can feel every grain in the tarmac beneath my bum and via the steering wheel rim' quality, but without the slight jounce you get in the Spyder, and with less road noise, too. That's one key difference between the tyres and suspension of the GTS and Spyder, right there.

The steering feels very similar, however, and very lovely, the throttle response identical. Find a quiet,



Above from left: Alcantara features heavily inside; carbon-ceramic brake discs, as denoted by yellow callpers, are a £5177 option; unlike with the Spyder, open-top motoring is via the single push of a button

straight piece of road, open it up in second gear for the first time and – if you were a passenger and closed your eyes – I'm honestly not sure you could tell the difference between a Spyder and a GTS. In second gear, throttle wide open from 2000rpm, the GTS initially feels a touch flat, just initially. But as the revs begin to rise from 2500 to 3000rpm the acceleration begins to swell, and you start to think: 'Here we go, here it comes' – in exactly the same way you do in the Spyder and GT4. At this point the sound from the flat-six also begins to change, becoming both louder and sweeter in tone, although it still sounds menacingly guttural at these revs. You know there's something special in the post, though, even down at 3000rpm.

At 4000rpm the GTS really does start to pick up, but it's not until 5500rpm that it really, properly starts to go. By then the noise from the flat-six has pretty much doubled subjectively if you've dropped the roof – which you do entirely at the press of a button by the way, unlike the fiddly part-manual affair in the Spyder. Then from 5500rpm up to the 7800rpm cut-out what happens in the GTS is something else again. It's bloody marvellous, frankly, the level of thrust becoming much stronger, much more visceral, the sound from that motor and its exhausts filling the cabin, your ears and your heart with pure, child-like wonderment. Ultimately its performance is all but identical to the Spyder's, Porsche claiming 4.5sec to 100kmh and a 293kmh top speed, against the Spyder's 4.4sec and 301kmh.

And do you know what? The Boxster GTS also has the chassis, steering, brakes and gearchange to go with it. OK, it's not as precise in its ultimate chassis responses as the Spyder, not at the front end for sure. But it's sharp enough and steers sweetly enough for it almost not to matter. The turn-in is still crisp, the balance and grip mid-corner still absolutely delightful, if anything the GTS feeling a touch more approachable than the Spyder if you really lean on it, the P Zeros allowing a degree of extra movement that makes it not as edgy as the Spyder's rose joints and Cup 2s. And when you need to slow it all down the GTS stops every bit as good as it goes. Better than it goes, if anything, with typically fine Porsche feel through the pedal.

The gearchange isn't as swift or precise as a Spyder's, but you get the same brilliant auto-blip feature on downchanges (which you can switch off if you're a true purist) and the shift is still very, very good in isolation.

So here's the bottom line. Unless you value the Spyder's bespoke looks and are going to do lots and lots of trackdays, the Boxster GTS is so similar to it dynamically, and is so good to drive in isolation, it has to be the better value car, maybe even the better car full stop for pure road use. To all intents it feels like the *same* car from behind the wheel, give or take the last five per cent of the dynamic envelope. And that makes it quite some sports car.

Steve Sutcliffe

Engine Flat-six, 3995cc **Power** 400hp @ 7000rpm **Torque** 420Nm @ 5000-6500rpm **Transmission** 6-sp manual, rwd
Weight 1405kg (285hp/ton)
0-100kmh 4.5sec **Top speed** 293kmh
Basic price From $407,288 without COE
Contact: Porsche Centre Singapore, 6472 4433

\+ GT4 engine minus 200rpm; brakes, chassis, steering, looks
\- Gearshift not as crisp as a GT4's, not much else

evo rating ★★★★★

Mercedes-AMG GT R Roadster

Same 585hp V8, same muscular styling – but does losing the roof from AMG's mighty GT R make any sense?

IT'S A WHEELSPIN-IN-FOURTH KIND OF day, the Mercedes-AMG GT R Roadster is telling me. It's also telling me, through the rhythmic thump of catseyes under Cup 2s, that Bedfordshire isn't quite this car's preferred environment. The AMG rumbles busily over the surface, tyres roaring on the coarse asphalt and cabin plastics jiggling and squeaking as imperfections and road studs jostle and twist the open-topped shell.

These first impressions do call into question just who the GT R Roadster might be aimed at. Those who missed out on a Porsche 911 Speedster, McLaren 600LT Spider or Ferrari 488 Pista Spider, perhaps? Even so, it still seems slightly odd to chop the roof off the more focused version of AMG's supercar. Roadster types will surely be turned off by some of the car's more hardcore aspects, and serious drivers dissuaded by the concessions to poseurdom. Perhaps that's why AMG has committed to building only 750 units, to fit within the small intersection in the Venn diagram between Kensington and Kesselchen.

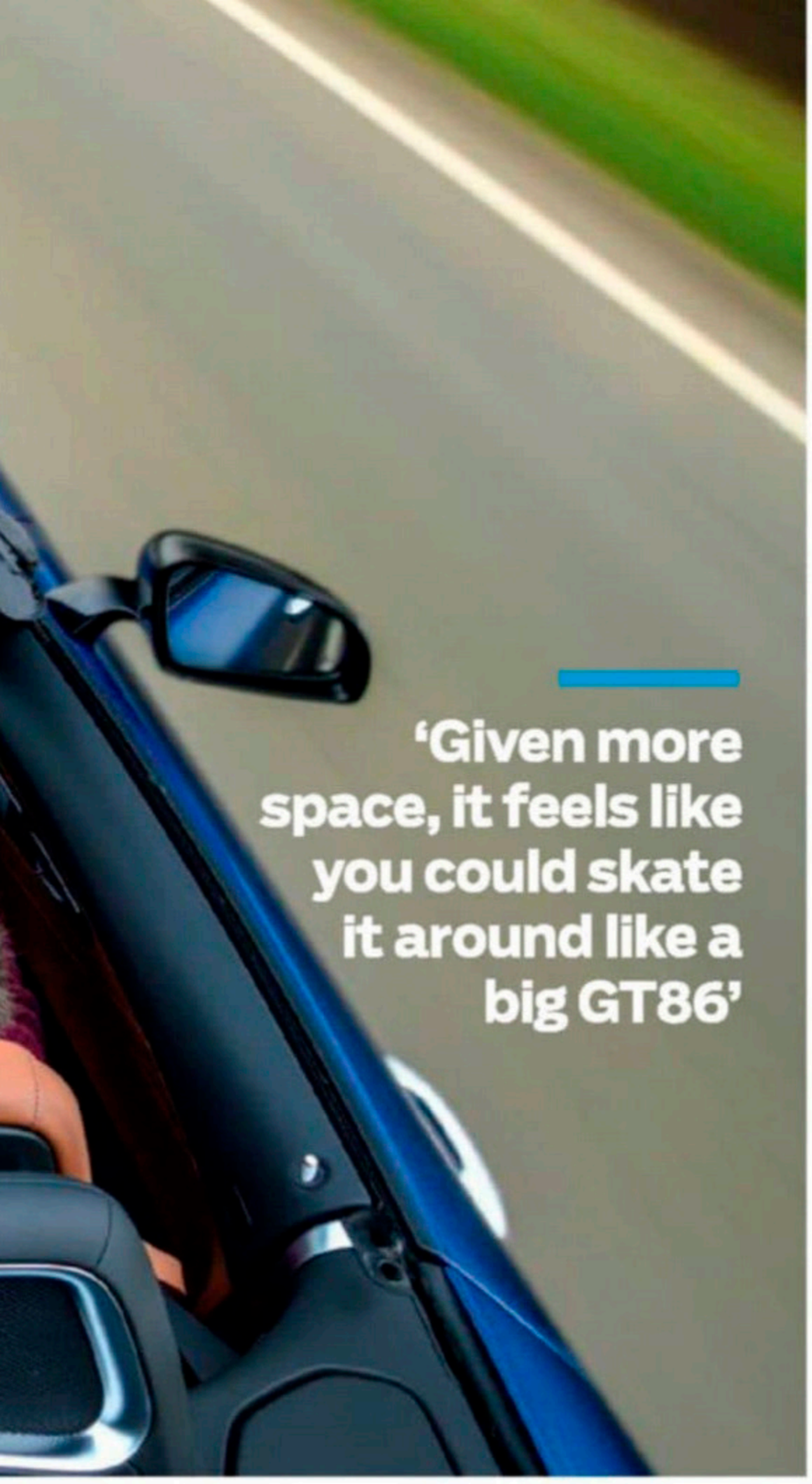
The car takes its mechanical specification from the coupe, which means a 585hp and 700Nm variant of AMG's 4-litre twin-turbocharged V8, but also four-wheel steering, adjustable suspension, active aerodynamics and the wider body that comes with AMG GTs from the GT C upward. It also retains the coupe's rear wing, or a variant of it, which looks incongruous perched upon the Roadster's rear deck, and ten-spoke forged wheels with chunky-sidewalled Michelin Cup 2s.

The key difference, clearly, is that the roof folds back. The little fabric tent looks nearly as strange as the wing when in place, but retracted the Roadster's hot-rod proportions are almost cartoonish. If you've ever doubted a front-engined car's credentials as a true supercar, then this could be the model to change your mind; it's every bit as striking as anything with its engine in the middle.

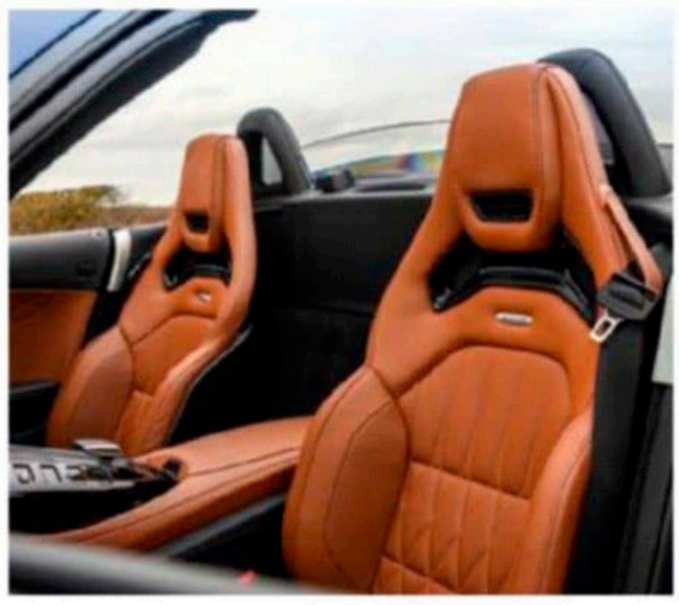
Another benefit to the front-engined layout is the sensation of sitting over the rear axle with an enormous bonnet stretching out in front. It's even more pronounced here than in the new Jaguar F-type, and the GT R's low-slung seating position, wide centre console and Alcantara-wrapped steering wheel feel as exotic as the exterior styling.

Thumbing a starter button seems less exotic these days. One day, I suspect, the supercar start-up procedure will once again resort to a bank of switches and the twist of an actual key in an effort to distance itself from the routine of superminis and electric crossovers. Press that button, though, and the resulting angry grumble is a long way from losing its appeal.

The R feels tense at low speeds. Tyres scud across the road surface on tight steering inputs, wheels crash over potholes, and as you pull to a halt there's an audible 'thunk' as the dual-clutch 'box discovers first gear. The four-wheel steering does make navigating tight streets remarkably easy (top down in central London, one assumes) but it's a car



‘Given more space, it feels like you could skate it around like a big GT86’



infinitely happier at speed.

Preferably quite large speeds. On damp middle-England roads you sometimes feel like you're at ground zero in a battle between biturbo V8, cold rubber and crumbling bitumen, and were it not for the electronic cavalry of traction and stability controls, the V8 would almost always emerge the victor.

Feeling the rear wheels breaking traction in the mid-range gears is certainly exciting, though, and electronic limitations or not the GT R accelerates like mortar fire (0 to 100v is the same as for the coupe, at 3.6sec, with top speed 1kmh down, at 317kmh). You'll probably want to direct the battle by switching the gearshift to manual mode – one of the steering wheel switches can be handily configured to enable this – which gives the most predictable throttle control.

It's also a chance to experience the spectacular speed at which the dual-clutch transaxle can swap cogs. I'm not sure AMG gets enough credit for this gearbox; the speed between clicking a metal paddle and getting a new gear, whether up or down the 'box, is immeasurable.

The chassis is more than up to the task of containing it all, too. The Roadster does suffer from scuttle shake on rougher roads, but it doesn't detract from the hyper-precision of the steering, nor the car's composure in quick corners. You'd probably never get to explore the car's abilities to the same degree in the dry, but on these damp roads the GT R has wonderful balance. The moment you get on the throttle after turning in, it becomes another way of adjusting the car's attitude. Given a track, with more space and fewer objects to collect if you get it wrong, it feels like you could skate it around like a big GT86.

It's definitely a car that feels like it needs this space, however. Fun though it is through Bedfordshire's gnarlier bits, the GT remains a wide and quite intimidating car. More A-road bruiser than B-road scratcher. It's still difficult to tell who might be tempted by the soft-top if their heart was already set on the GT R (at £178,675, or S$317,900, the Roadster's also a hefty £21,700, or S$38,600 more), but those 750 buyers will be getting something every bit as exciting and very nearly as capable as the coupe.

Antony Ingram *(@evoAntony)*

Above: GT R Roadster may be a tight squeeze on British country roads and exhibit some open-top shudders on rougher surfaces, but its chassis remains capable and its straight-line pace is equal to the coupe's

Engine V8, 3982cc, twin-turbo **Power** 585hp @ 6250rpm
Torque 700Nm @ 2100-5500rpm **Transmission** 7-sp double clutch automated, rwd **Weight** 1405kg (359hp/ton)
0-100kmh 3.6sec **Top speed** 317kmh **Price** POA
Contact: Cycle & Carriage, 6298 1818

\+ Spectacular engine and gearbox, engaging dynamics
− Structural compromise of Roadster body

evo rating ★★★★½

Nissan Leaf-Nismo RC

All-electric race car showcases elements that could find their way into Nissan's future EVs

THERE ARE CURRENTLY JUST SIX LEAF-Nismo RCs in existence – three of them in Japan, three in Europe. And that's all there will ever be, say the bosses at Nismo. So there will be no road car to follow, and despite the fact that the letters R and C apparently stand for 'Racing Competition', there will also be no one-make series, no racing of the car anywhere in fact, not even in the forthcoming electric touring car series.

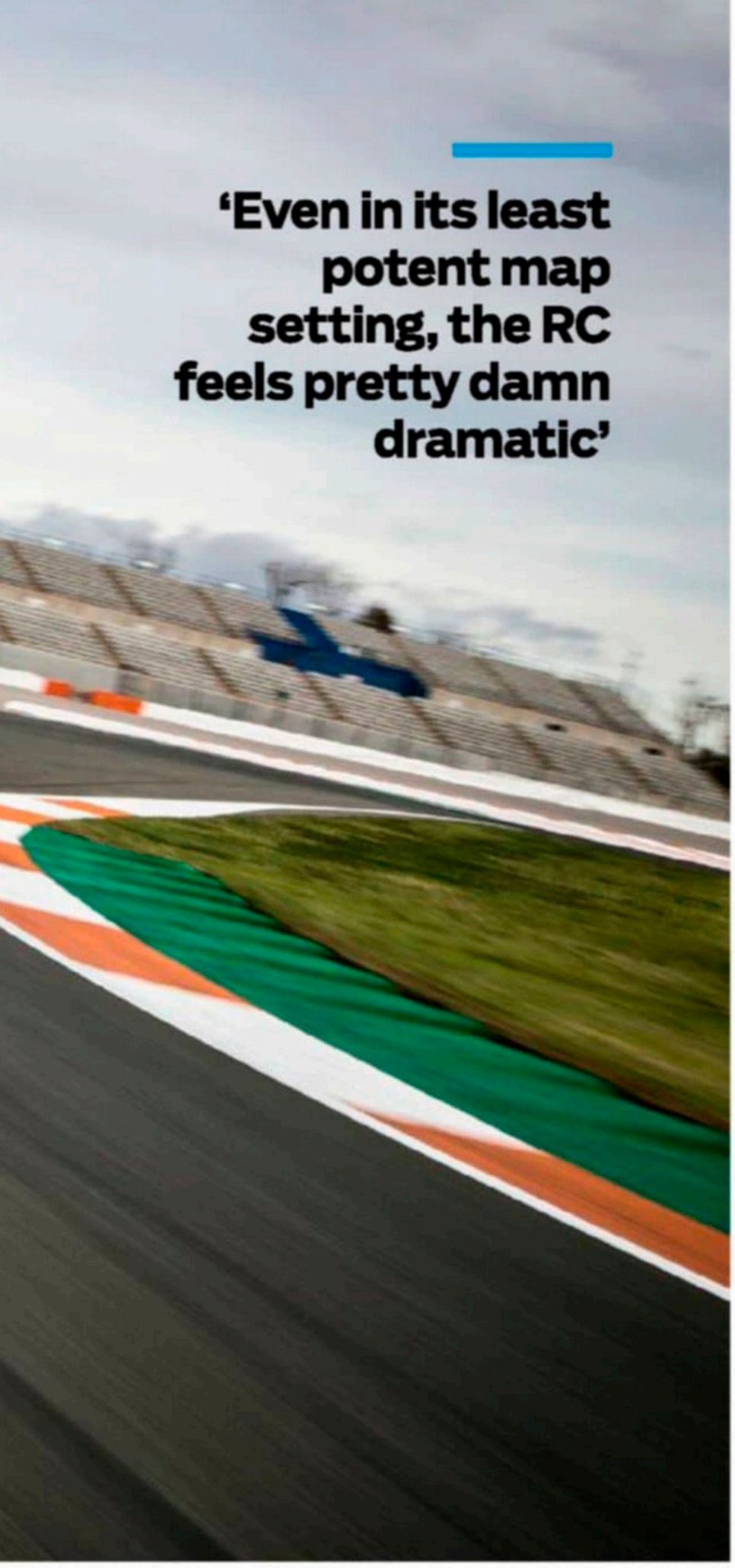
And if that makes the RC seem like one of the most expensive irrelevances in the history of the automobile, consider this: Nissan may have zero intention of taking this car any further as a whole, but certain bits of it will, it says, make their way into the company's road-going EVs of the future. So essentially the RC is a mobile test bed for all sorts of good stuff that may one day make production, and this in turn means it is quite an important machine, given how the EV market is beginning to pick up.

We'll come specifically to the more relevant aspects in a moment, but first some general info about the car itself. Even though it will never race, at its core the RC is a pure racing car, with a full carbonfibre tub, and a carbon subframe at each end. The suspension is by double wishbones with pushrods at all four corners, while the tyres are regular Michelin Pilot Sports, although in testing they tend to whack a set of slicks on to get the best times out of it.

The power unit is, of course, all-electric, while the gearbox is a straight-cut but single-spur racing item with a mechanical LSD at the back. So as with regular EVs there's no changing gear as such. Instead you just climb in, press the throttle and keep on going, even though there are paddles on either side of the steering wheel due to the fact it's been pinched out of a GT-R GT3 racer.

The RC uses just one lithium-ion battery, but a reasonably big one with 62kWh. This powers not one but two 120kW electric motors – one for the front axle, another for the rear. The combined maximum output is therefore 240kW, or 326hp, with 640Nm of torque. All up, the RC weighs 1220kg, so although the power-to-weight ratio isn't wild, the torque-to-weight ratio is quite tasty. And remember, that 640Nm is available from the moment you press the throttle, which initially makes the RC feel quite a lot like it's powered by a naturally aspirated 8-litre V8.

The front-to-rear weight distribution is 43:57, so effectively the RC feels like a nicely balanced mid-engined car. The brakes are huge steel rotors at each corner, but there's no ABS and no traction control. Plus, the RC has another trick up its sleeve in the form of a four-stage adjustable mapping system, tweakable via a simple dial on the steering wheel. This alters not just the power and torque outputs but also the proportion of drive that's directed



‘Even in its least potent map setting, the RC feels pretty damn dramatic’

Top: steering wheel taken from the GT-R GT3 houses a dial to control the four-stage mapping system.
Above: Leaf-Nismo RC is purely an EV test bed; there are no plans to build it in volume for road or track

through each axle. This is probably the most obvious piece of tech that might make it into Nissan's road-going EVs in the future. Or, possibly, the next GT-R.

In Map 1 the RC apportions the full 240kW exactly 50:50 between the axles. In Map 2 this drops to 200kW (272hp), with 90kW going to the front and 110 to the rear. In Map 3 it drops again, to 180kW (245hp), with 80 to the front, 100 to the rear. And in Map 4 you get 160kW (217bhp), with 60 to the front and still 100 to the rear.

Unfortunately it's hosing it down when we get to drive the car on the MotoGP circuit in Valencia, and the Nismo engineers are rather precious about their latest toy so I'm only allowed to drive it in Map 4 – with a somewhat tense Nismo driver as a passenger. Even so, and even in its least potent map setting, the RC feels pretty damn dramatic.

The way it accelerates so instantly, even with a mere 160kW, is so different to a petrol-engined racing car. The acceleration just happens, immediately, yet unlike in a road EV it doesn't then tail off. Instead the RC just keeps going, its gearbox and diff producing a quite phenomenal amount of din the faster you go. I can't imagine what it would feel and sound like in Map 1, but the car's chief engineer later admits that for most drivers the RC is actually quicker in Map 2 because it's so punchy, while Map 1 is so wild, even in bone-dry conditions.

I'd like to be able to tell you more about the handling balance, the way the RC slides on the exit of corners and so on, but the wet conditions and my nervous passenger mean some prudence is required during my allotted laps. But even at fairly moderate efforts it feels decently balanced mid-corner, very responsive on turn-in, and has 100 per cent traction at the exit due to it being four-wheel drive. The steering is light but also hyper-accurate. The brakes, however, are somewhat less impressive, with a tendency to lock up under even fairly mild application. But in the dry I'm sure they would be much better, much less twitchy.

The RC may appear to be little more than an impressive irrelevance, but even if just its switchable map control makes its way into a more potent road-going four-wheel-drive Leaf in the future, it will be worth it. E is starting to stand for 'exciting' as well as 'electric', no question, but we'd like more time in the Leaf-Nismo RC, just to establish how exciting it can be.

Steve Sutcliffe

Engine 2 x 120kW electric motors **Power** 326bhp
Torque 640Nm **Transmission** Single-gear, 4wd
0-100kmh 3.4sec **Top speed** 222kmh
Weight 1220kg (272hp/ton) **Basic price** n/a

+ Performance, clever mapping, potential as a rolling EV test bed
– Twitchy non-anti-lock brakes; you will never be able to buy one

evo rating ★★★★☆

DRIVEN

CENTRE STAGE

by ANTONY INGRAM

The homologation special is returning, in the unlikely form of Toyota's Yaris. We drive a prototype of the new 260hp, four-wheel-drive GR version to find out what we can expect

AH, THE 1990S. FORMULA 1 STILL HAD different cylinder counts, relatively simple aero and some memorable liveries. The decade perfectly encapsulated the thrilling Super Touring era of tin-top racing, too. And in rallying, Group A was king, giving us McRae, Burns, Sainz and Kankkunen. Their cars, built in their thousands to meet homologation requirements, became icons: Imprezas, Mitsubishi Evos, Escort Cosworths and Celica GT-Fours.

But as the millennium turned, the homologation special waned. The machines appearing on the world's special stages looked less and less like the road cars that spawned them. So faint is the connection now between stage and road that we can no more relate to modern rallying than we can F1. Few could ever drive like McRae or Burns of course, but we could always take solace in driving the cars their sport had helped develop.

Maybe soon we will be able to once again. Later this year, Toyota will launch the GR Yaris: a genuine four-wheel-drive, turbocharged homologation special. The project started in 2016 and has been developed in-house by Toyota's performance arm, Gazoo Racing, led by chief engineer Naohiko Saito and born with close links to the WRC-winning rally team headed by Tommi Mäkinen. The aim is twofold. One, build upon Toyota's recent WRC successes. And two, offer drivers the chance to buy a car not unlike those driven by Messrs Ogier, Evans and Rovanpera.

The end result will, unsurprisingly, share little with the regular 2020 road-going Yaris models recently unveiled. Turns out it's tricky to marry the needs of the WRC and those of your average supermini buyer in the same five-door body style, so Gazoo Racing took the drastic step of creating a new three-door shell specifically for the rally car. The badge may read Yaris, but the rest of it could hardly be more different.

Take the roofline: it's lower than that of the five-door, with a steeper rake to its trailing edge, to the benefit of aerodynamics. The arches are wider too – adding 60mm to the car's width to accommodate its wider track. Suffice to say the visual transformation is of Impreza 22B proportions.

The GR's platform is derived from that of the regular Yaris, but rather than being steel, the upper shell is formed from carbonfibre, the first time Toyota has worked with the material. Onto this

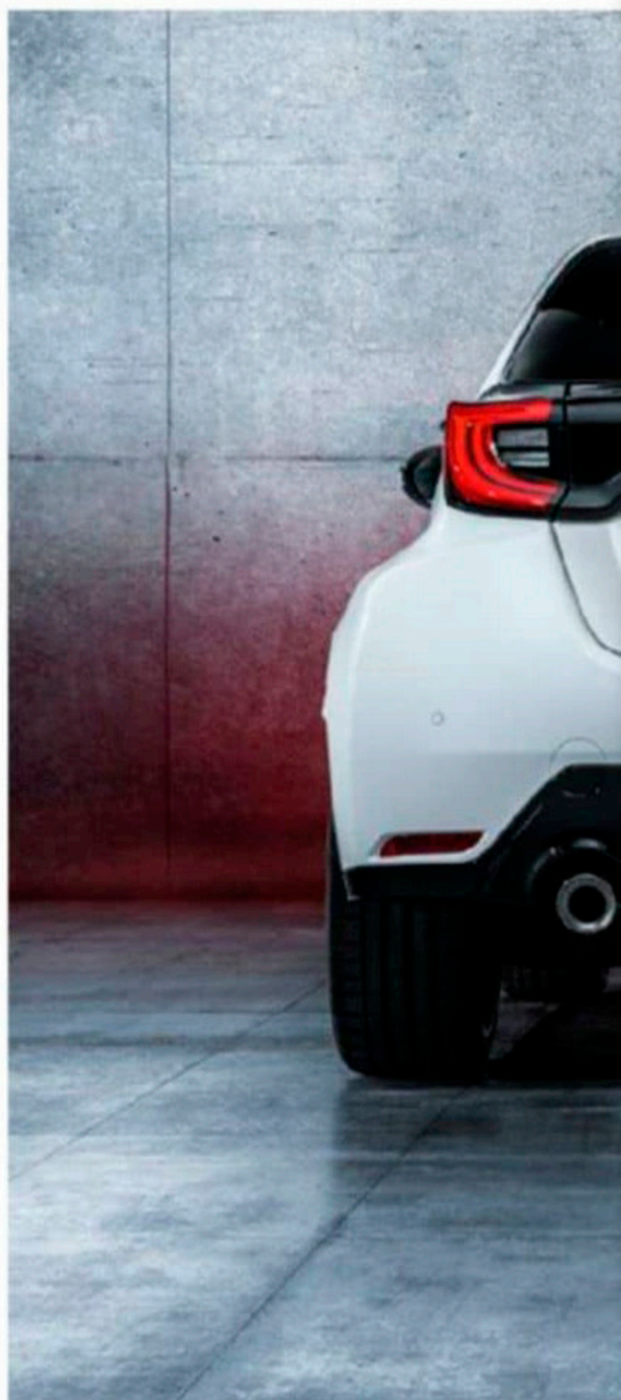
Top left: driving the GR Yaris prototype at Estoril. **Above and left:** how the production version will look when it hits the roads later this year

carbon structure fit several aluminium panels, including the roof, tailgate, bonnet, doors and front wings. In all, the body in white is said to be 38kg lighter than the five-door body, at 263kg. If that seems insignificant, consider also that the use of carbon has other benefits – its stiffness is important for a car designed for the stages, and beneficial in road cars too for everything from refinement to suspension kinematics.

The three-door layout was also chosen to give the rally team greater freedom with aero. As well as more bodywork-sculpting space for the rally folks, the car also gets a unique front bumper, incorporating cut-outs for the radiator and front-mounted intercooler, and, on the prototype at least, slots to the side of the main grille to feed cool air to the brakes.

The GR Yaris is suspended on MacPherson struts at the front and a new bespoke multi-link axle at the rear, necessary to accommodate the rear differential of the four-wheel-drive system. Dampers are passive and the ride height is fixed, while substantial


GR 4



‘WITH 272HP IT IS THE MOST POWERFUL ENGINE OF ITS CAPACITY IN THE WORLD’

suspension travel was a priority, both for the WRC team and those wishing to take the GR Yaris to the stages themselves.

Another clue to the rallying remit is the engine. It’s a newly developed 1.6-litre, three-cylinder turbocharged unit, and the aluminium head and block have been homologated for rallying’s R5 class. Toyota says it is the most powerful and the lightest of its capacity in the world, and at the very least the first of those appears to be true, as with 272hp and 370Nm of torque it outperforms the previous ‘most powerful 1.6’ claimant, the four-cylinder in Peugeot’s 308 GTi by Peugeot Sport, by 13hp and 30Nm. For reference, the supercharged 1.8-litre four-cylinder in the limited-run Yaris GRMN of 2018 produced 212hp and 250Nm.

There’s no rally-style paddleshift here. Instead you get a six-speed manual gearbox (and, refreshingly, a traditional manual handbrake), which in turn sends power through a lightweight, permanent four-wheel-drive system. In contrast to many cars in this arena – including the Imprezas and Evos that Gazoo Racing’s engineers pulled apart when developing the GR, and Toyota’s own Celica GT-Four, whose blueprints the team raided – the GR Yaris doesn’t use a centre differential; it’s deemed too heavy. Instead, there’s a clutch-pack limited-slip diff at each axle, with planetary gearsets to shuffle power fore and aft as necessary. The system is electronically controlled, but Toyota hasn’t gone mad with the options available to the driver. There are just three modes, controlled via a rotary dial ahead of the gearlever. Normal is designed for road use and has a 60:40 front-rear split, Sport pushes 70 per cent of torque to the rear wheels, and Track has a 50:50 split, designed for track use (obviously) but also ‘dirt’ driving.

A Circuit Pack brings mechanical Torsen diffs front and rear (plus forged alloy wheels and Michelin Pilot Sport 4 S tyres), but there’ll be no 100 per cent rear ‘drift mode’, because as Saito points out, if you really want to go everywhere sideways, a traditional front-engined, rear-drive sports car such as the GT86 is a better starting point. More relevant is how the car behaves on the road – preferably the slippery and imperfectly surfaced type over which Imprezas and Evos could comfortably drop anything else on four wheels.

Important, too, is that the GR Yaris, like its spiritual predecessors, has its own individual character. Our opportunity to drive a disguised prototype should reveal if it has, though there are a few caveats first. Neither the Portuguese road route nor our laps of the Estoril race circuit are what we’d call ideal – the former a little too heavily trafficked and short on truly testing sections, the latter just too fast and open for a car designed for much tighter tarmac. Worth noting also is that,

Top left: on track the GR Yaris’s brakes are particularly impressive, with no drop in performance despite repeated use

as a prototype, the car's dynamics haven't yet been signed off.

Still, there's plenty of promise. Aside from a relatively high driving position and lousy rear visibility – the rally boys clearly don't look backwards that often – everything else from the driver's seat seems about right, with good seat comfort, control spacing and weights, and decent instrument clarity from a nice pair of analogue dials.

The engine sounds unmistakably like a triple at low speeds, but the gruff noise elsewhere sounds quite unlike any other three-cylinder we've tried. There seems to be a complete absence of artificial enhancement or even any real exhaust tuning. Instead, the sound is mechanical and purposeful – not unlike that of old Evos and Celica GT-Fours, which were more businesslike than they were tuneful.

There's no doubting its performance, certainly. Exposure to today's mainstream performance cars means it's not as startling as those earlier homologation cars were in context, but in the lower gears it really moves, and only really runs out of steam 500rpm or so before the 7000rpm red line. Response is good too – at anything over around 2000rpm it picks up cleanly and has relatively little lag – while the six-speed's shift feels not unlike the short, notchy gearchanges of a GT86. Meanwhile throttle and clutch are light, and the brakes are a treat – there's certainly motorsport influence in the firm and progressive pedal, and there is no sign of fade even after numerous hard-driven laps on track.

A proper B-road will be the final test, but on track the GR feels nicely balanced, turning in positively and resisting understeer even around longer corners, though a slippery surface means it isn't beyond washing wide if you use too much power too soon. We're driving cars with and without the Circuit Pack, and both grip and steering feel improved with the latter fitted.

What the busy road route uncovers is a car with surprising maturity to its ride. Not only is the prototype free from rattles and squeaks, but like several other cars that use carbon in their construction, the use of the material seems to have allowed Toyota to get away with a relatively firm suspension set-up without road imperfections impacting on noise, vibration and harshness. Think Golf R rather than Focus RS – firm, but not busy.

The GR Yaris will be priced from £29,995 when it goes on sale later this year (rougly equivalent to a Renault Megane RS, which costs just over S$160k in Singapore - Ed.) Toyota will make as many as it can sell, too, and the UK is expected to get at least a four-figure allocation.

Formula 1's V12s and Super Touring may be gone for good, but with the return of the homologation special in the form of the GR Yaris, there's still plenty to be excited about. ◘

Toyota GR Yaris

Engine In-line 3-cyl, 1618cc, turbocharger **Power** 272hp **Torque** 370Nm **Transmission** 6-sp manual, 4wd **Weight** 1280kg **Power-to-weight** 203hp/ton **0-100kmh** 5.5sec (estimated) **Top speed** 230kmh (limited) **Basic price** TBC **Contact** Borneo Motors, 6631 1188

'TOYOTA WILL MAKE AS MANY AS IT CAN SELL, AND THE UK IS EXPECTED TO GET AT LEAST A FOUR-FIGURE ALLOCATION'

EVO'S FAVOURITE HOMOLOGATION SPECIALS

DODGE CHARGER DAYTONA

NASCAR's stock cars were originally just that, so a better road car meant a better racer, and brick-like 1960s aero was far from ideal for high-speed ovals. Dodge's response was the 1969 Daytona, with a wind-cheating nose cone and 23-inch-tall rear wing, among other tweaks. It won in its first ever race.

PORSCHE 911 GT1

Porsche built 23 road-going variants of its 911 GT1 across three years of racing, all of them powered by a detuned version of the 3.2-litre, twin-turbocharged flat-six from the racer. It made for a tactile and dramatic road car, and with 47 victories it was also a hugely successful endurance racer.

MERCEDES 190E 2.5-16 EVOLUTION II

In the 1980s, DTM was king, and few were as successful in the German series as Mercedes-Benz. First came the 190E 'Cosworth', then the Evolution in 1989. The 1990 Evolution II, with its barmy aero kit, adjustable suspension and 17-inch alloy wheels, brought the car, and the series, screaming into the high-tech 1990s.

MITSUBISHI LANCER EVOLUTION

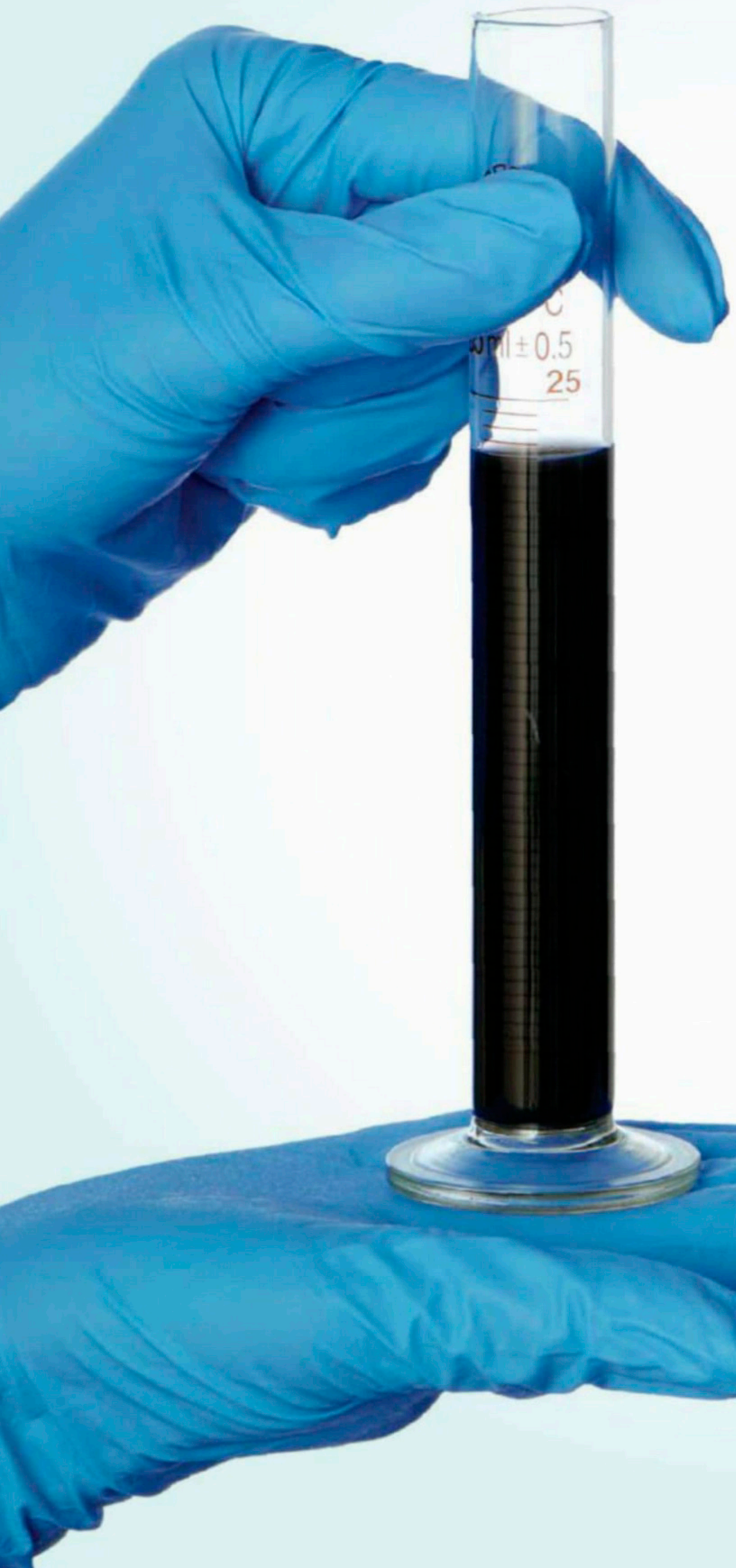
Few homologation specials illustrated the link between road and competition so effectively as the Lancer Evolution. New models were launched almost every year throughout the mid to late 1990s as the factory searched for – and often found – a competitive advantage. Buyers enjoyed a fabulous driver's car as a bonus.

FORD RS200

Group B was banned before the RS200 could fulfil its true potential, but with a custom, lightweight mid-engined chassis and a BDA-based turbocharged in-line four, it's among Ford's most iconic performance cars. Many of the 200 built ended up in rallycross, while road cars need muscle to drive.

FORD SIERRA RS500 COSWORTH

RS in Ford parlance means Rallye Sport, but the Sierra RS500 made its name in circuit racing. It won (and often dominated) the British, Australian, Japanese and World touring car series, DTM, and the Bathurst 1000 (twice). Some 500 road cars were made – hence the name – each with a claimed 224bhp.



The ICE plan cometh

Could carbon-neutral synthetic fuels save the internal combustion engine and safeguard the future of the cars we love?

THE ANNOUNCEMENT BY THE UK government that it hopes to bring the ban on the sale of petrol, diesel and hybrid new cars forward by five years to 2035 raises many questions, some of them practical. Will we have the infrastructure to support this rapid and large shift to electric cars? Can the car industry supply them? Will we have the required charge points and the capacity to power them, and will this electricity come from carbon-neutral, renewable sources – wind, solar, nuclear – rather than from power stations burning fossil fuels such as coal and gas?

The rise of EVs (Electric Vehicles) is seemingly irresistible, partly because of their efficient use of energy, which is far superior to ICE (Internal Combustion Engine) alternatives and hydrogen fuel cell vehicles too. Even if the electricity EVs use comes from fossil-fuel power stations, their effective CO2 emissions are still usefully lower. There is some argument over how 'clean' EVs are over their lifetime, though, including the impacts of mining the materials to create their batteries.

by JOHN BARKER

However, despite all the virtues, the unavoidable truth is that some forms of transport do not suit electrification. These are heavy load and long distance: container shipping, long-haul aircraft and long-distance road transport. The fundamental issue is that the energy density of current battery technology is poor compared to the liquid fuels currently used – diesel, bunker fuel and jet fuel – and would require such a volume and mass of batteries that they would be infeasible. For instance, according to Airbus, even with batteries 30 times more energy dense, an electric-powered A320 would only be able to fly for a fifth of the range of the current jet-engined A320 while carrying half its payload.

Aviation, long-distance shipping and road haulage aren't going to go away, and even with improved fuel efficiencies they will still burn fossil fuels and generate CO2. This is why developments in carbon-neutral synthetic fuels could be so valuable, and the benefits could be enjoyed by petrol, diesel and hybrid cars too.

One of the companies developing carbon-neutral synthetic fuels is Bosch. It points out that around half the cars that will be on the road in 2030 have already been sold, most with petrol or diesel engines. 'These legacy vehicles will also have their part to play in cutting CO2 emissions,' it says. Even if volumes of carbon-neutral fuels are still ramping up, they are completely compatible with current fossil fuels and can be added to reduce the CO2 emissions, helping achieve climate change objectives. And for enthusiasts it offers hope that we can continue to use cars with internal combustion engines long after sales of new ICE cars have been banned.

Processes for creating synthetic liquid fuels have been with us for around 100 years and production is ongoing, stocks being derived from coal and natural gas. Carbon-neutral synthetic fuels can be manufactured in two ways. The first is using captured carbon dioxide or carbon monoxide from the atmosphere or an industrial process such as steel making, and synthesising it with hydrogen obtained from water via electrolysis. These are called efuels. The second category is synthetic biofuels, and these are created from biomass (such as waste from forestry) that is gasified before being catalysed with hydrogen using chemical or thermal processes.

There are many benefits and advantages to these sustainable synthetic fuels. They can directly replace their fossil fuel equivalents or 'drop in', because their volume and energy density are very similar. This means they will work with current petrol and diesel engine technology and can use the established fuel infrastructure for storage and distribution. They are also cleaner than fossil fuel equivalents, creating fewer particulates and nitrogen oxides.

There are some downsides. They are currently much more expensive – around £4 ($7) per litre for efuel diesel and £0.80 ($1.40) per litre for biofuel petrol – though there is potential for reducing costs through innovative development. The other issue is that the many processes in creating synthetic fuels – extracting hydrogen from water and carbon capture from the atmosphere and synthesis – require energy, which must be from renewable sources if the fuel is to be carbon-neutral.

The driving force behind sustainable synthetic fuels will most likely come from aviation, shipping and road haulage. It could happen voluntarily or come about due to environmental pressure, but it will require development and upscaling. A report by The Royal Society, 'Sustainable synthetic carbon based fuels for transport', estimates that the additional sustainable power requirements to make jet efuel for Europe would be between 1400 and 2100 TWh per year. For context, in 2016 the total electricity generated in the EU was around 3000 TWh, of which 51 per cent was from sustainable sources.

It also concludes that bulk production of efuels will most likely be concentrated where sustainable

'EFUELS CAN DIRECTLY REPLACE THEIR FOSSIL FUEL EQUIVALENTS'

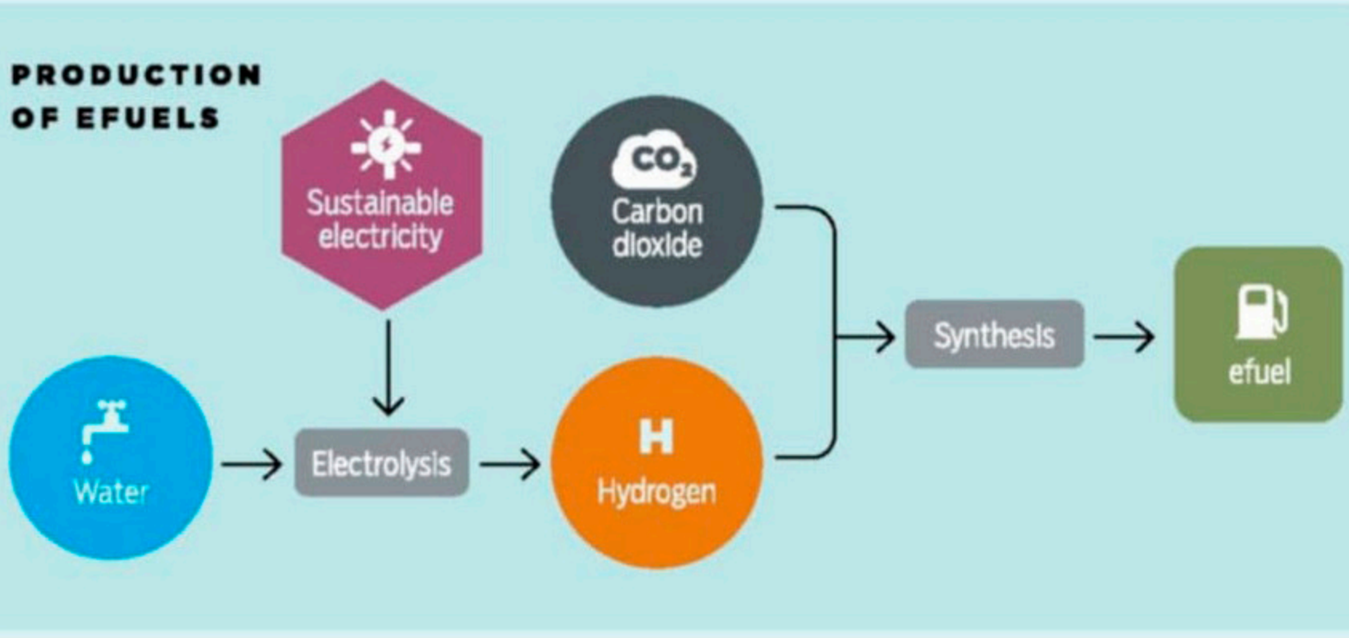
A brief history of synthetic fuels

The first process for creating synthetic fuels, converting coal directly to liquid fuel, was developed in Germany in 1913 by Friedrich Bergius. Ten years later Franz Fischer and Hans Tropsch created a process for converting coal indirectly into liquid fuel. Both the Bergius process and the Fischer-Tropsch process are in use today.

Industrialisation of synthetic fuels was speeded in the 1930s under Hitler, who recognised that he could convert Germany's ample coal reserves into liquid fuel, negating its lack of oil. During the Second World War some 25 plants produced up to 124,000 barrels of synthetic fuel a day, supplying most of Germany's aviation gasoline and half of its petroleum. Strategic bombing late in the war severely disrupted production and is cited as one of the reasons for Germany losing WWII.

The US had conducted its own experiments into making liquid fuel from coal, and after the war, with information from German plants and extracted German scientists, it intensified its efforts. By the late '50s the project hadn't produced large volumes reliably or cheaply, at which point vast oil reserves were discovered in the Middle East and interest waned.

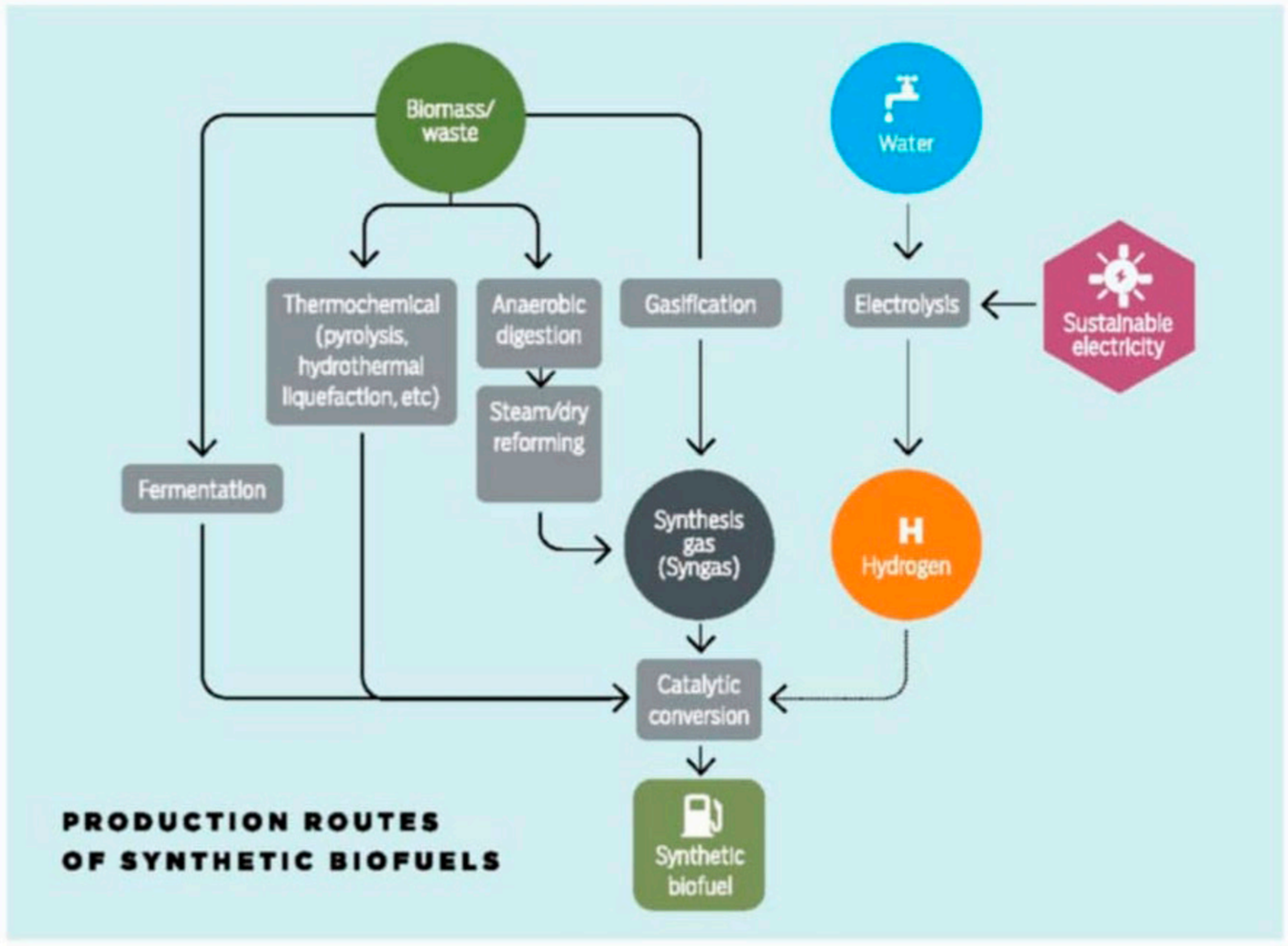
Since then interest has been cyclical, fluctuating largely in line with each oil crisis. Only recently have efforts moved on to creating sustainable synthetic fuels.



energy is cheap and plentiful, such as west Africa with wind on the coast and solar in the desert. In Europe, Sunfire has an efuels plant in Norway using hydroelectric power to make what it calls 'Blue Crude', which it is aiming to produce at under €2 per litre. Sunfire also makes the point that its crude can be used to make not just carbon-neutral fuels but also any of 3000 products currently derived from fossil crude, from chewing gums and credit cards to trainers and smartphones.

Despite the UK government's plans to pull forward the date for the ban on petrol, diesel and hybrid cars, some groups believe the switch to electric-powered vehicles is not going to be quick enough to meet its environmental objectives. Supplying carbon-neutral fuel for ICE cars, trucks and planes would be a useful step towards its carbon-neutral objective.

So it's not necessarily game over for the internal combustion engine. Efuels and synthetic biofuels mean we could still be enjoying the unique character and appeal of the internal combustion engine, guilt-free, for many years.



PRODUCTION ROUTES OF SYNTHETIC BIOFUELS

Where synthetic fuels are most needed

Synthetic fuels could be the answer to achieving carbon-neutral emissions in the following sectors. Based on current developments, it will be a long time before there are long-haul aeroplanes or huge container ships powered by electric, and maybe heavy goods vehicles too.

PLANES

'Alice' could be the first electric-powered commercial aeroplane. It's a nine-seater from Israeli company Eviation and features three electric motors. It has a claimed range of 965km and should be in production later this year.

Scaling up to a full-size airliner is currently impractical because of the size and weight of the required battery pack; the numbers just don't add up. Much more likely is the emergence of the hybrid aeroplane for short-haul and regional use. Airbus, Rolls-Royce and Siemens are collaborating on such a development project, using a BAe 146. One of the aircraft's four Lycoming turbofan engines has been replaced by a 2700bhp Siemens electric motor hooked up to 2000kg of batteries. The hope is that electric power can be used for take-off, leading to less emissions and noise pollution.

However, long haul accounts for 80 per cent of aviation emissions and existing technologies cannot deliver the European Commission's goals for aviation by 2050, which include a 75 per cent reduction in CO2 and 90 per cent in NOx. Carbon-neutral jet fuel would, though.

ELECTRIC TRUCKS

Companies in Europe, the US and China are developing prototype electric trucks to replace diesel for short- and medium-haul duties. Currently, only Tesla believes in electrification for long-distance road haulage. In 2017 it revealed the Tesla Semi, an impressively aerodynamic rig with an all-electric tractor unit. Tesla claimed a range of 800km (about half that of a diesel truck) and said that with the company's proposed solar-powered 'Megacharger' network, the Semi would be able to top up its batteries for 645km in just 30 minutes.

However, the boss of Mercedes' truck division said the Semi's numbers defied the laws of physics, while a number of studies concluded that in the medium term at least, EV is not feasible for long-distance haulage because the mass of batteries required would amount to a third of the payload, and also because the charging infrastructure was not in place. In mid-2019 Tesla said it had 2000 orders for the Semi and would start low-volume production in late 2020, so we might not have to wait long to see if Tesla delivers on its claims.

SHIPS

The world's first electric container ship, the Yara Birkeland, commissioned by a Norwegian fertiliser manufacturer, should be operational by 2022. However, with a capacity of 120 containers it's a relatively small ship and it will travel slowly on a commute of just 50km between ports in Norway.

In comparison, today's diesel container vessels can carry 4000 containers (150 times more) over distances 400 times greater at three to four times the speed. To sail non-stop from Asia to Europe in 31 days, such a ship burns through over 4500 metric tons of bunker fuel. For an electric ship to make the same trip it would need to carry about 100,000 tons of lithium-ion batteries, which would take up about 40 per cent of the cargo space.

CAR SERVICING CONVENIENCE WITH AUTOAPP

The concierge style service aims to remove the hassles of car repair, maintenance and inspections

IF YOU CAN'T IMAGINE DOING without app-based door-to-door services such as online shopping, or ordering your meals delivered and ride sharing, now you can add car maintenance to the list of services that can be done from your smartphone.

AutoApp is the first tech-enabled car care concierge of it kind to save car owners from mundane, time-wasting but necessary tasks such as servicing, LTA inspections or repairs. Previously, these chores necessitated taking time off from work or precious weekends where owners had to drive their cars to the workshops or inspection centres, wait for the repairs to be done or find their way back to the garages when their cars were ready.

With AutoApp, it's as simple as waiting for their trained and insured Service Ambassadors show up at your doorstep or carpark, collect your car keys and settle what needs to be done. Simple as that. Upon completion, your car will be delivered to any location you choose in Singapore.

The concept of AutoApp is the brainchild of two motoring journalists, evo's Sheldon Trollope and Burnpavement.com's Joel Tam, along with their longtime friend Alvin Tan who brings with him more than 10 years of experience in the automotive aftersales industry.

"Our relatives and friends rely on us for car advice all the time," says Tam who founded Ignition Labs, the holding company of AutoApp whom he founded along with Tan and Trollope.

"SO WE IDENTIFIED A NEED FOR A ONE-STOP SERVICE THAT CAR OWNERS THAT SAVES THEM TIME AND ADDS CONVENIENCE"

Although AutoApp works with a network of workshops that are curated from the considerable collective experience of the founding team, customers also have the option of arranging for their cars sent to a workshop of their choice or authorised dealership.

"We are also working with several automotive verticals such as car dealerships to compliment their services," said Alvin Tan who at this time declined to reveal more specific details as negotiations were on-going.

Although putting AutoApp together was a process that was more than two years in the making, Sheldon Trollope feels that the launch of this service couldn't be more timely. "It wasn't easy to put all the pieces together as there are many variables to consider," he says. "But we now have a product that can help the car businesses while also bringing an unparalleled level of convenience to customers, especially in these challenging times".

For more information, turn to *page 85*.

IGNITION

ECC USHERS IN THE YEAR OF THE RAT IN STYLE

Upon the arrival of 40 supercars from the ExotiCars Club (ECC) at the Parkroyal Collection Marina Bay, a rousing lion dance welcomed ECC members and ushered in the Year of the Golden Rat. This was followed by an auspicious War Drum performance and a cheerful Lo Hei led by the beautiful Macy Chen and bubbly Gaomei. What promised to be a typical ECC fanfare turned out to be the supercars club's most hilarious CNY event in its 11-year history, thanks to a surprise rip roaring entertainment by the Guest of Honor Jack Neo. Supported by the two lovely emcees, the trio kept the ECC members and guests clapping and cheering all night long. ECC committee members paid a touching surprise tribute to club president Chia Boon Teck for his inimitable leadership. The sumptuous menu included such delicacies as suckling pig, abalone, lobster, and birds nest. Once again ECC has raised the bar a notch higher for its future committee members to surpass. This ECC event will certainly be the talk of the town for a while. evo Singapore is a proud partner of ECC and wishes the club an eventful 2020.

Hethel ready

New Evora variant leads Lotus's plans to increase sales, with electrification aplenty and an all-new sports car set to follow

IN THE 18 MONTHS THAT PHIL POPHAM, the former boss of Sunseeker, has been walking through the gates at Lotus's Hethel HQ (complete with new flags for the long-time naked poles), he's launched two new models: the Evija hypercar and this, the new Evora GT410. And it's the latter that he's had the most direct input with.

'I was driving an Evora 410 in the US,' explains Popham, sitting in the company's new Warwickshire technical office that's home to 80 of Lotus's latest recruits to its engineering team, 'and I took a call on the car's Bluetooth. After a few minutes it dawned on me that I could hear what the other person was saying, rather than having to second guess as I do in my own Evora.

'I raised it with my US team and they explained that, while we have been stripping back the Evora over the last couple of years to make it a purer Lotus – which was absolutely the right thing to do – we had gone a little far for some of our customers in certain markets. So our colleagues across the Atlantic made sure that a percentage of Evoras they ordered had a few of these comforts added back in to improve the usability of the car. It worked so well I decided we should offer the same across all our markets and the GT410 was born.'

The other Lotus to appear under Popham's tenure has been an altogether different animal, the Evija. A Lotus like no other, but an electric hypercar like a few others with its claim of circa 2000hp and a £2million ($3.5million) price tag. 'Evija won't transform the company,' says Popham, 'but it will set a template for the company to build on – innovators of design, technology and performance.' In short, Popham wants the Evija to build on the traditional Lotus principles of light weight and intelligent engineering, but better suited to the 21st century.

In terms of Evija development there are currently four cars undergoing testing, which is being led by Matt Windle, who is responsible for all of Lotus's sports car engineering. The target is to make the Evija the best of its kind. Which is? The best power-weight ratio in its class, with a target of 1200bhp/ton, and a 0-290v time of 8.8sec, which will be achieved by the use of a single-speed transmission.

While Windle's team crunch the numbers and Gavan Kershaw turns his hand to delivering a 2000hp electric hypercar that will drive and feel like a Lotus, the company's Norfolk home has also been undergoing a transformation. The building that will produce the 130 Evija models is now complete and has been handed over to the manufacturing and engineering teams to fit out. 'We'll deliver the first Evijas in the second half of 2020,' confirms Popham.

Talking of car deliveries, Popham is acutely aware that Lotus has work to do here. In 2018 it delivered 1600 cars, and 200 fewer in 2019. The target for 2020 is to return to 2018 levels or more. Staffing levels in 2019 increased by 300 from 2018's

by STUART GALLAGHER

head count of 1012, and this will need to increase again in 2020. 'Our ten-year plan – Vision 80 – requires me to make Lotus deliver improved results year on year,' explains Popham. 'Geely will provide the investment [to the tune of more than a billion pounds] and we need to deliver the success.

'How will we do this? We'll expand our portfolio of products, transforming them from the cars a small number of drivers enjoy today to a wider range of sports cars that will appeal to a much larger audience tomorrow. And electrification will be key to this. Lotus will offer a level of electrification on all future cars and it's our learnings from Evija that will allow us to do this.'

Hethel could, theoretically, produce ten times the volume it currently does, but not with a three-car line-up and 130 hypercars. Therefore, next year Lotus will announce a fourth, all-new sports car – one that isn't based on an Elise. It's a move that will also trigger the company's product offensive, which will see the iconic roadster and Exige both replaced and an Evora that, we suspect, will be very different from the car we know today.

Away from the production cars will be an expansion of the dealer network and a motorsport programme that starts with the Evora GT410 GT racing in the US and China, the two markets that Popham has identified as key to the firm's growth. They are, after all, the two markets that support British sports car brands like few others.

If all goes to plan there will be plenty more Lotus cars leaving through the Hethel gates as Phil Popham makes his way in each day.

Below: new non-Sport version of the Evora GT410 is designed to be more habitable, with more creature comforts inside and a proper rear window (below left)

At a glance – Evora GT410

While the 410hp 3.5-litre supercharged V6 from the Evora GT410 Sport remains, the new non-Sport GT410 adds the little luxuries that have been ditched over the previous few years.

So back in goes air conditioning, the Sparco seats are now heated, and there's an armrest on each door. There is also an upgrade to the infotainment, with satnav and Apple CarPlay now included. More sound insulation has been fitted, too, and a glass window replaces the carbonfibre engine cover.

Chassis-wise the Sport's Cup 2 tyres are replaced with Michelin Pilot Sport 4s, while damper rates have been softened for a more compliant ride.

These additions result in a £3000 reduction in price compared to the Sport, with the Evora GT410 starting from £82,900 ($147,500).

HIGHWAY TO HEAVEN

by JONATHAN LIM PHOTOG RAPHY *by* MARK BRAMLEY & JONATHAN LIM

Lots of Trouble, Usually Serious is the label unkindly foisted upon Lotuses of yore. After a 500km road trip from Bathurst to Bondi Beach and back in the current Lotus lineup though, we humbly offer an alternative: Lots of Thrills, Usually Spectacular

"Wow, I can't believe how responsive these cars are!" Our travelling companion Jun is no stranger to speed (he owns an F10 BMW M5), yet he's wide-eyed, grinning, and almost struggling to find the words to describe the liveliness, speed, and sensory overload of his virgin Lotus experience.

But then again that's precisely why we love these cars, right? Lotus is one of the few manufacturers still making cars that feel visceral, that haven't succumbed to the numbing engineering solutions that the modern demands of safety, comfort, and emissions require of new cars. In other words, Lotuses still fully encapsulate what "the thrill of driving" is all about.

However, cars like these are not long for this world, we fear. Given the increasingly draconian traffic laws and environmental fervour everywhere, it feels like it'll only be so long before a performance car that isn't boosted by response-sapping turbos or weight-adding hybrid drive becomes an impossibility. Not to mention spirited driving becoming outlawed altogether...

That's why we're having a little romp across New South Wales, to celebrate the sort of cars and driving that petrolheads love before they become too un-PC for everyone else. No distractions, no touristy stops, just five journalists, five Lotuses, and some of the best driving roads Down Under. An extended road trip in the most hardcore cars you can buy today, in one of the most speed-hating countries in the world? There's a delicious irony to all this...

The itinerary Lotus Cars Australia lined up for us has me wondering how saintly I was in a previous life to deserve this. Three days and 500km over the Blue Mountains from Bathurst to Sydney and back again, in basically Lotus's entire range: the Elise Sport 220, Exige Sport 410, and Evora GT410 Sport in both manual and auto guise. As a little bonus, a pristine original 2010 Evora Launch Edition has also been rolled out as contrast, and to show a decade's worth of Lotus progress.

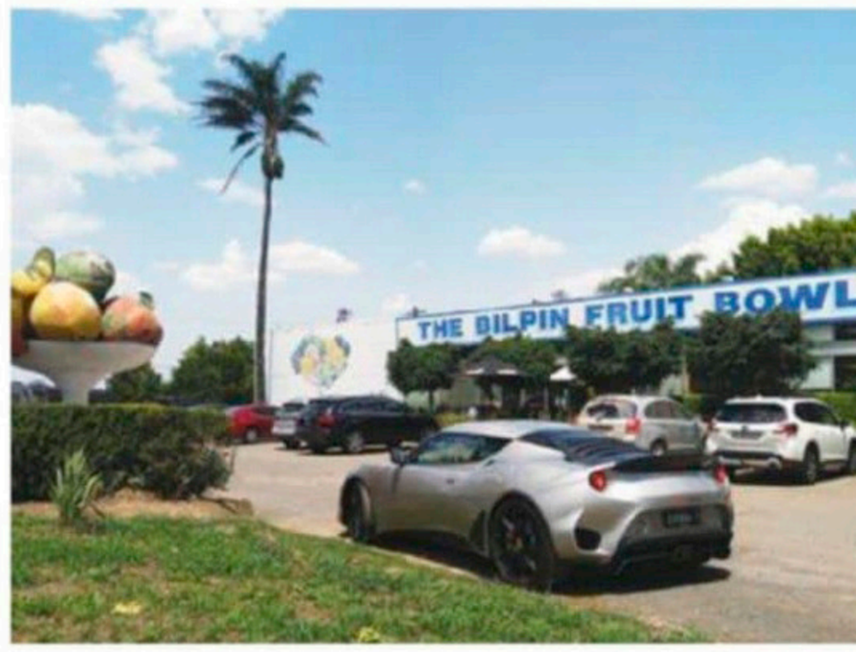
A PROVERBIAL ROLL OF THE DICE puts me in the Elise first, and before the pleasure of the journey comes a little bit of pain. It's midday on one of the hottest Australian summers on record (barely a month after the worst of the bushfires), and the Elise has been sitting with the top down all morning.

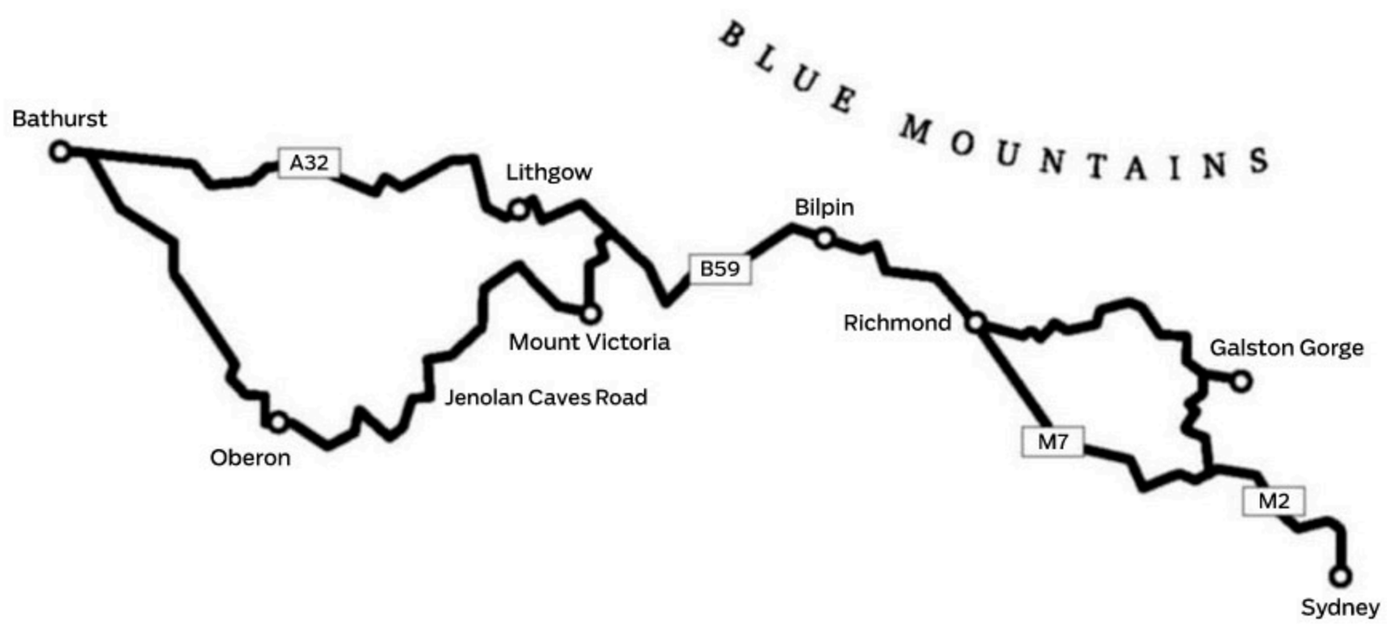
Though the roof is replaced and the air conditioning set to full whack before i get in (it boggles my mind that you can even still buy a Lotus without air con - why would you?!), it's pretty clear once i fold myself aboard that there's zero hope of the Elise overcoming the insane 40ish degree Celsius heat.

Moving off, there's a comfort to the familiarity of the Elise's cabin, mostly because it's almost completely identical to the previous generation Elise from 2002. There's one significant improvement though, and it truly makes a difference. Car enthusiasts often pine for and lust over the open-gated shifters of classic Ferraris and Lamborghinis, but Lotus one-ups that, with an exposed linkage shifter. Not only is it beautiful to look at, in an intricately industrial way, but it's also a tactile delight. Shifts are as clean and precise as the machining on each aluminium component piece, and it clack-

‘THE LANDSCAPE IS A STARK BLACK AND WHITE OF CHARRED, LEAFLESS TREES, AND GROUND THAT LOOKS MORE ASH THAN SOIL’

Right: A shifter as artistic as this needs to be celebrated.
Far right: The fresh-baked apple pies in Bilpin are apparently legendary.
Below right: An overview of our route; the must-drives are Bells Line of Road (B59) between Bilpin and Lithgow, and Jenolan Caves Road





clacks through the gears as evocatively as any Italian thoroughbred's.

Out on the relatively straight roads heading towards the Blue Mountains, it's clear that the Elise has some serious touring chops; riding in it is not as arduous as its looks suggest. The suspension is as pliant as an exec sedan's, especially when it comes to large impacts, and the racy-looking seats offer remarkable support. Combine that with the ample pulling power from the supercharged 1.8-litre engine (220hp and 250Nm), and the Elise actually makes for a surprisingly unfussed cruiser.

As we approach the town of Lithgow, my anticipation grows. It's situated right on the western edge of the mountains, and according to Google Maps, the road starts snaking and climbing immediately after the town. This is where the Elise can properly shine...

... Or it could, if I gave it a chance. The twisting ribbon of tarmac looks like heaven, but I'm distracted by what's either side of it. The lush green vegetation suddenly turns a rusty brown halfway up the hillside, the transition as sharp as if a giant ran a highlighter across the terrain. This marks the threshold of just one of the many devastating bushfires that raged across Australia in recent months. This particular one, which got to within 500 metres of Lithgow, consumed 837,000 hectares of forest in total; slightly larger than the entire state of Selangor, and over 80 percent of the Blue Mountains World Heritage Area.

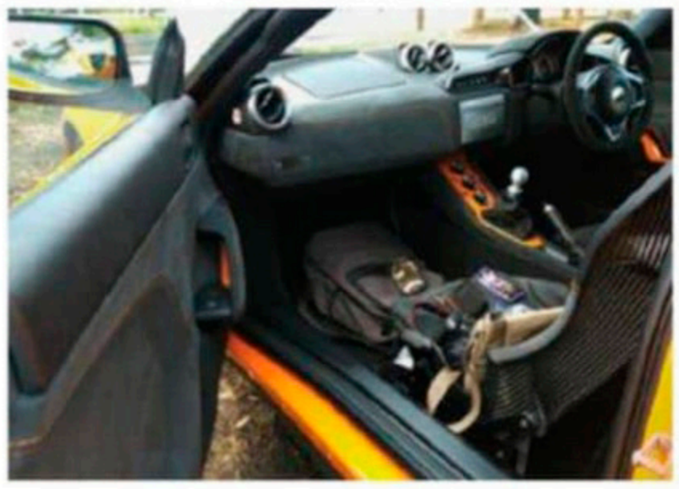
Travelling a bit further still, the scorched vegetation quickly disappears altogether. Now instead of a uniform brown, the landscape is a stark black and white of charred, leafless trees, and ground that looks more ash than soil. Most road signs are burnt as well, but tellingly, it's the speed limit ones that have been reinstated first. Literally the only visible greenery for miles around is the little emerald Elise.

The bushfires dominated plenty of headlines, sure, but passing through the heart of the destruction - and seeing the blackened, empty husks of various homes and businesses - drives home the scale of the disaster far harder than any news report could.

This road - Bells Line of Road, one of the two primary routes over the Blue Mountains - is beautiful, climbing, dipping, and sweeping across the landscape, but the bleak scenery has imparted a pensiveness that tempers my desire for hard driving. In any case, it's a Sunday, there's traffic around, and I don't want to take too many chances in a country with a fearsome hatred for speed.

The stop for photos and my contemplation of Mother Nature's wrath mean I show up at our midway rest point long after the others. Blipin Fruit Bowl is a pick-your-own fruits (apples and peaches) farm with a shop that sells a wide variety of local produce and kickass apple pies - an institution the locals absolutely swear by. I'm more thirsty than hungry though, so I opt for a milkshake instead, when too late I realise my folly: Lotuses don't have cup-holders. So while the others are already haring off, I'm left trying to manage my splitting brain freeze from trying to quaff the icy beverage.

THE NEXT STAGE OF THE JOURNEY is a highway trudge into Sydney, and mercifully, the silver automatic Evora GT410 Sport I'm now driving has a USB port (in the glovebox) and a head unit with Android Auto - the only car so equipped. Though the Elise might be comfortable and frugal enough for daily schlepping, its woeful charging facilities (there's only one port, all the way over by the passenger's door, and so recessed it's practically useless) shows its most obvious disconnect with 21st Century lifestyles.
With navigation sorted, I gun the Evora once back on the road, and *wow* can this thing move. The 410hp supercharged V6 is the second-most powerful Lotus engine ever (there's a 430hp variant available), and it provides unrelenting surge (0-100kmh in 4.1 seconds), with a raucous,



Above: Driving the GT410 hard means having to dodge stuff flying around the cabin. At least the old Evora can hold items in the doors. **Opposite middle:** Small car, meet Big Fish

blaring soundtrack to match when you pop the exhaust into "naughty" mode. Highly antisocial for sure, but boy is it fun.

There's precious little opportunity to indulge in the loud pedal however, as we quickly reach more populous roads, and this is where some of the magic starts to unravel for me. Being a bigger, softer, more day-to-day sort of machine, you'd think an Evora would be the most ideal car amongst us for the urban grind - particularly an automatic one - but there are too many flies in this particular ointment.

It starts the moment you get in; the Evora GT410 has nicer trimmings, but there's less meat on the bone too. For example, though the Alcantara-lined interior looks great, there is absolutely nowhere to store loose items, unlike the under-dashboard tray and side sill cubbies in the Elise and Exige. Armrests are also glaringly absent, even on the doors. The seats aren't particularly comfortable either, despite being visibly plusher.

Then there's the car's biggest drawback, the 6-speed Aisin auto gearbox. It creeps at too high a speed in traffic, necessitating frequent dabs of the brake to avoid rear-ending other cars, yet its gearshifts are agonisingly languid at full throttle. Next to the current cream of the automatic crop, ZF's 8-speeder found in BMWs and Jaguars, it just feels clumsy and slow-witted.

The problem stems, I think, from the auto GT410's confusion over what it wants to be. Since its 2015 update, the model moved away from its GT roots and has transformed into an out-and-out sports car. In that context, its stripped-down, harder-edged nature makes sense, but trying to "add comfort" back into the package with just a two-pedal 'box, sat nav, and plush seats is a gulf too wide for the car's setup to bridge. That said, this part of the journey didn't favour the car's strengths, so I make a mental note to give it another try later on.

THOUGH THEY'RE FUNDAMENTALLY the same car, there's a stark contrast between the Evora GT410 Sport and the 2010 Launch Edition (LE) model I hop into the next morning. Here's a car that's more sure of itself, its rounder, cheerier styling clueing you into the car's character.

For context, being built on a new platform, the Evora was Lotus's most serious attempt at making a more practical GT car since the Esprit ended production. Lotus had attempted to move into that role with the 2006-10 Europa, but as it was spun-off the Elise platform, it couldn't be made refined enough.

As such, the original Evora is probably the most conventional-feeling Lotus in recent memory. Smooth leather and cool satin aluminium covers all the major surfaces, there are actual places in the interior to put stuff (the door pockets are big enough for a couple of bottles), and it features all the accoutrements you'd expect a premium sports car of its day to have. That said however, build quality certainly feels more kit car than supercar (one improvement in the new Evora), with cheap plastics, indecipherable switchgear, and intermittent squeaks and rattles. Not helping stereotypes either was a driver's door handle that became more uncooperative as the road trip went on, eventually giving up altogether and necessitating a less-than-dignified act of contortion out the window to reach the exterior handle.

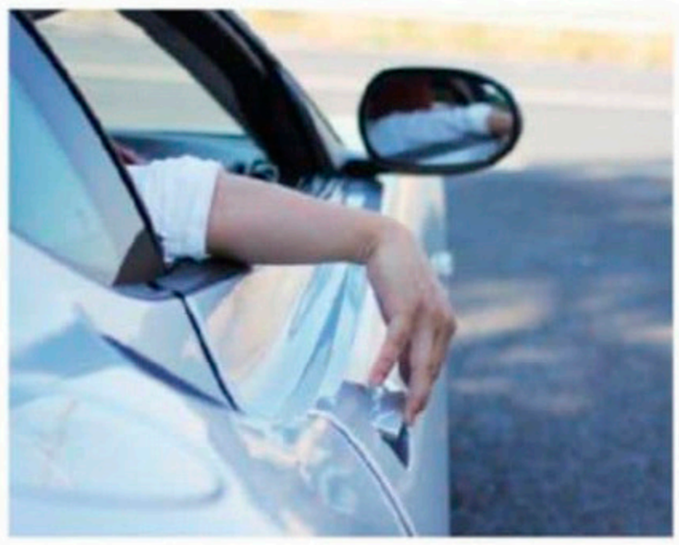
As we head out of Sydney in weather that's more British summer than an Aussie one, I'm glad to be driving the softest, friendliest car here. The Evora was widely lauded by the press when it debuted, and it's not hard to see why.

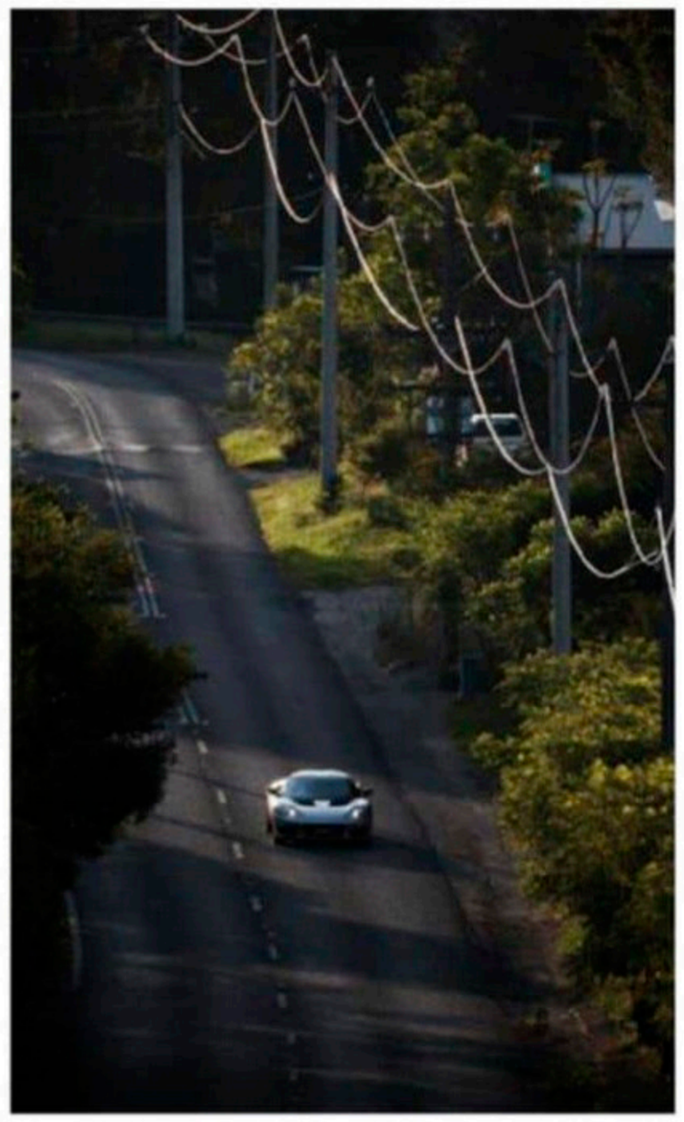
Its interior may have fell short of premium standards, but its ride and handling are undoubtedly pukka. Navigating the morning rush hour, the Evora LE is completely unfazed by everything Sydney throws at it. No matter whether it's tram lines, humps or construction zones, the ups and downs of urban travel never seem to reach your bum.

It's got a beautifully balanced chassis too, one that's eager to dive into a corner, stable while going round it, and forgiving if you make a mistake. The Evora gained hydraulic power steering, and although it doesn't wriggle and writhe anywhere as animatedly as an Elise's does, the way the weight loads and ebbs inspires plenty of confidence.

So much in fact, that on a three lane-wide 90 degree corner with no one else around, I decide to get a bit cheeky, take the racing line and tip it in with fervour. Right after the nose heads for the apex, I feel the rear starting to break loose on the wet tarmac, and rather than killing the slide like I would in most cars, I instead blip the throttle, and the tail arcs wide in the most graceful of powerslides. Bliss.

It helps too that the Evora LE is naturally aspirated, allowing for more measured throttle inputs. Alright, so the 280hp and 350Nm from its V6 engine aren't groundbreaking numbers (not even when new), but it's a pleasantly brisk performer that gels well with the car's laid back nature, and a stark contrast to the brasher, more in-your-face machine that the GT410 Sport has become. Being slower means you get to savour the more cultured noises coming from the LE too, a raspier and more layered baritone intake growl compared to the cacophony of the GT410's active exhaust.





I SWAP FROM THE EVORA LE INTO the manual GT410 Sport after lunch, and it's clear the two are very different animals. In all respects, there's a significantly harder edge to the GT410, from the throttle response, to the performance, to the gear shift, to the ride, to the cabin, and even down to the gorgeous (if difficult to egress) Sparco bucket seats.

With curvier roads, the Evora GT410 can finally shine. Though the car tends to sniff out every lump, dip, and camber in the road, there's magic elsewhere: the steering is telepathically responsive, roll is well suppressed, and the manual gearbox provides a more immediate and engaging connection with the razor-sharp drivetrain. The GT410 finally feels natural and far more at ease with itself than the silver two-pedal car.

We make a special detour to Galston Road, which cuts across Galston Gorge, a little valley that's popular with hikers and mountain bikers. It's insanely tight and narrow, bounded by craggy rock faces on one side and a guardrail on the other, and features six hairpin turns that wouldn't look out of place in Initial D. Imagine some of the stages of the Monte Carlo Rally, except shrunk down and condensed to just 5km.

Though the Evora GT410 is far too powerful for a road which in some places has only a car's width and a half between hillside and guardrail, there's immense fun to be had in mashing the throttle, slowing to a crawl and then launching off again, all just to hear the blaring exhaust note reverberating off the cliff face and into your eardrums. Oh, how I'll miss moments like this when the turbos and hybrids fully take over...

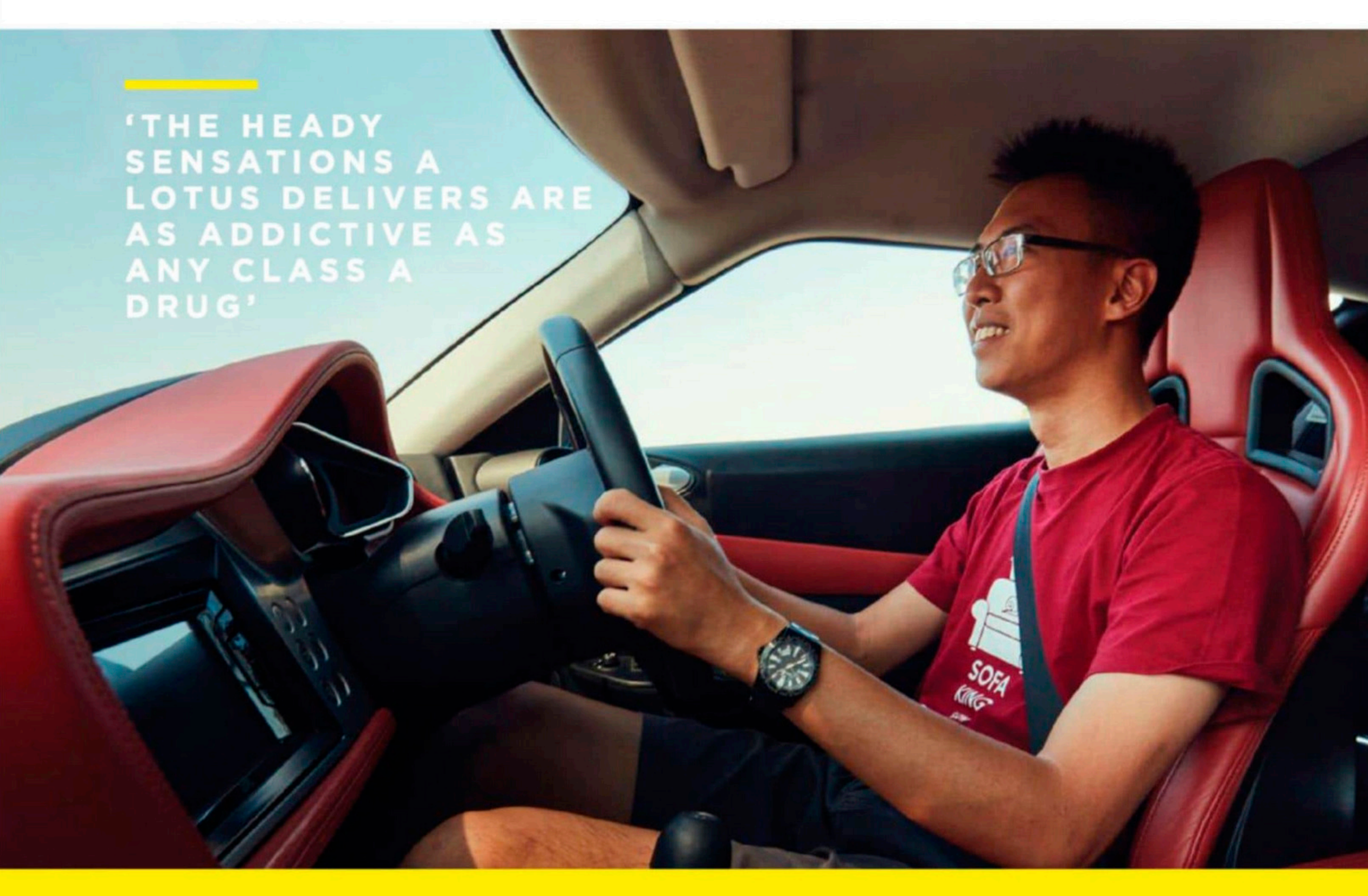
Immature as such thrills are, I suppose they're entirely appropriate for a junior supercar, which is what the Evora has now evolved into. It certainly looks the part, with its gorgeous carbonfibre engine cover and ducktail spoiler, aluminium diffuser, and eye-searing orange paint. The locals seem to approve too - passing through the town of Richmond, I stop at the lights near a high school. Almost instantly a bunch of teens point and gawk, while others whip out their phones. One of the boys yells, "Oi, give it some welly, mate!" and I happily oblige: *VRRRAAAAP!* A couple of the girls jump, and another boy is so preoccupied filming he nearly walks into oncoming traffic, but there are grins and thumbs ups all around. I'm pretty sure Lotus gained a few new fans that day...

ONE ATTRIBUTE OF OUR LOTUSES that constantly keeps coming up in conversation is their usability. They may be relatively extreme sports cars, but they can all hold a weekend trip's worth of luggage and have sensible ride heights; no front ends were scuffed on the dirt trails or carpark ramps we encountered, not even the track-biased Exige 410 Sport's, which, happily, I manage to snag for what turns out to be the best roads of the trip.

There's a larger than life drama to the Exige, even sitting still. The purposefulness of its looks imbues it with a presence that belies its diminutive size; with its carbon front splitter, GT wing, and black forged wheels, it looks exactly like a race car that's been shorn of its stickers.

If the sharp cold-start bark of the Exige's V6 (same as the Evora GT410's) can jolt you from your slumber like the world's rudest alarm clock, then the sensory assault of the Exige's driving experience is like injecting pure caffeine into your bloodstream.

Far Left: Fresh new speed limit signs being put up so soon? It could only be Australia... **Left:** Bells line of road is one of the top Driving roads near sydney; we weren't the only ones enjoying it. **Right:** Definitely not a car for old pansies



The performance of the supercharged V6 was eye-wideningly rapid in the Evora, but in the 300kg lighter Exige, it's downright swear-out-loud ballistic. Give it the beans and it'll launch itself to 100kmh in just 3.4 seconds - level pegging with a McLaren F1.

More illuminatingly, you feel every minutiae of physics that's involved with moving a car down the road: the friction between tyres and asphalt; the resistance of springs and hydraulics against undulations; the explosions that convert liquid fuel to forward motion. And yet while the sensations are brutal, they're rarely punishing.

The Exige does make you work for your pleasures though. The steering is hefty due to the sticky Michelin Pilot Sport Cup 2 rubber and is millimetrically precise, but it means that any deflections encountered by the front wheels are transmitted to your hands; the lateral forces the car can generate also mean a conscious effort is required to hold your body upright in long corners. Basically, preventing the *car* from controlling *you* demands concentration. Persevere, and you're rewarded with dynamics that are inimitable by any other new car. The steering constantly moves about, yet has little undesirable effect on the car's trajectory, the tyres offer seemingly insurmountable grip, and the stiffness of the whole package ensures the wheels feel like they're constantly being squashed into the road. All of which gives you the confidence to search for the limits of the Exige's handling envelope - a futile endeavour in something that can cling harder to the road than if Spiderman had his hands and legs coated in super glue.

I'm discovering all of this as we head back along Bells Line of Road, through the same apocalyptic landscape I had previously traversed in the Elise. With familiarity eliminating the shock of the scenery and with the road devoid of traffic, everyone's chasing each other along the 3rd and 4th gear open sweepers, with the V6s belting

Lotus Evora GT410 Sport (auto)

Engine V6, 3456cc, supercharged
Power 410hp @ 7000rpm
Torque 410Nm @ 3500rpm
Transmission 6-sp auto, rwd
Weight 1361kg **0-100kmh** 4.1sec
Top speed 280kmh **VES banding** n/a
Basic price n/a

evo rating ★★★★☆

Lotus Evora GT410 Sport

Engine V6, 3456cc, supercharged
Power 410hp @ 7000rpm
Torque 410Nm @ 3500rpm
Transmission 6-sp manual, rwd
Weight 1361kg **0-100kmh** 4.2sec
Top speed 300kmh **VES banding** n/a
Basic price n/a

evo rating ★★★★☆

out the angriest symphony in the world.

The cat and mouse game continues along the rolling hills west of the mountains, on nearby Jenolan Caves Road, and then Duckmaloi Road - the former a particular favourite of Sydneysiders. Both narrower and more technical than Bells, the driving experience gets even more intense, surfing in and out of the cambered corners, dodging roadkill, kissing apexes, and chasing the perfect heel-and-toe. In this moment - at this place, in these cars - I'm in B-roading nirvana.

TOO SOON THE FUN ENDS AS WE reach the town of Oberon, and thereafter it's straight roads back to Bathurst. As the cars tick and cool while we lunch at a cafe owned by a volunteer firefighter (it's chilling listening to some of his experiences over the recent months), my mind wanders to the drive we've just had.

There's a pure beauty in things with an uncompromising focus, in things that are devoted to perfection in a single facet. Our Lotuses are by no means jack-of-all-trades cars, but for the sort of drivers for whom the roads themselves are the destination, the heady sensations a Lotus delivers are as addictive as any Class A drug.

A concept as esoteric as "the thrill of driving" obviously means different things to different people, but if the thrills come from being able to communicate and feel connected with a car; from receiving and deciphering and reacting to the myriad of messages transmitted straight to your subconscious like some telepathic link; from feeling like you're in control of something with life that transcends the sum of its mechanical parts; then a Lotus has no equal. Life's too short and routine to settle for the dreary anonymity and soullessness that modern motoring has become; go experience the magic of a Lotus while you still can. ■

Lotus Evora (2010)

Engine V6, 3456cc
Power 280hp @ 6400rpm
Torque 350Nm @ 4600rpm
Transmission 6-sp manual, rwd
Weight 1383kg **0-100kmh** 5.1sec
Top speed 261kmh **VES banding** n/a
Basic price n/a

evo rating ★★★★½

Lotus Elise Sport 220

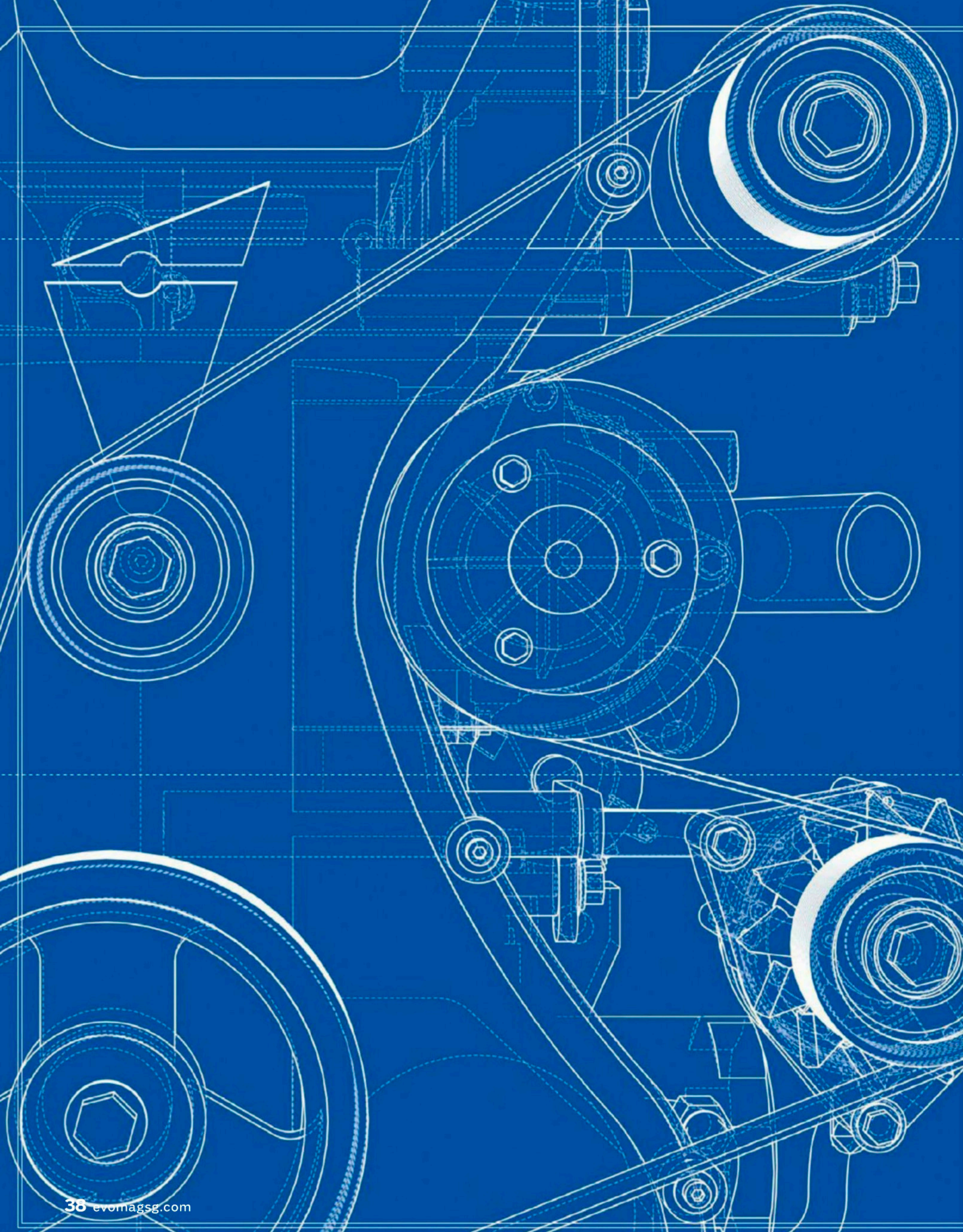
Engine In-line 4-cyl, 1798cc, supercharged
Power 220hp @ 6800rpm
Torque 250Nm @ 4600rpm
Transmission 6-sp manual, rwd
Weight 924kg **0-100kmh** 4.6sec
Top speed 233kmh **VES banding** C2
Basic price $210,000 (w/o COE)

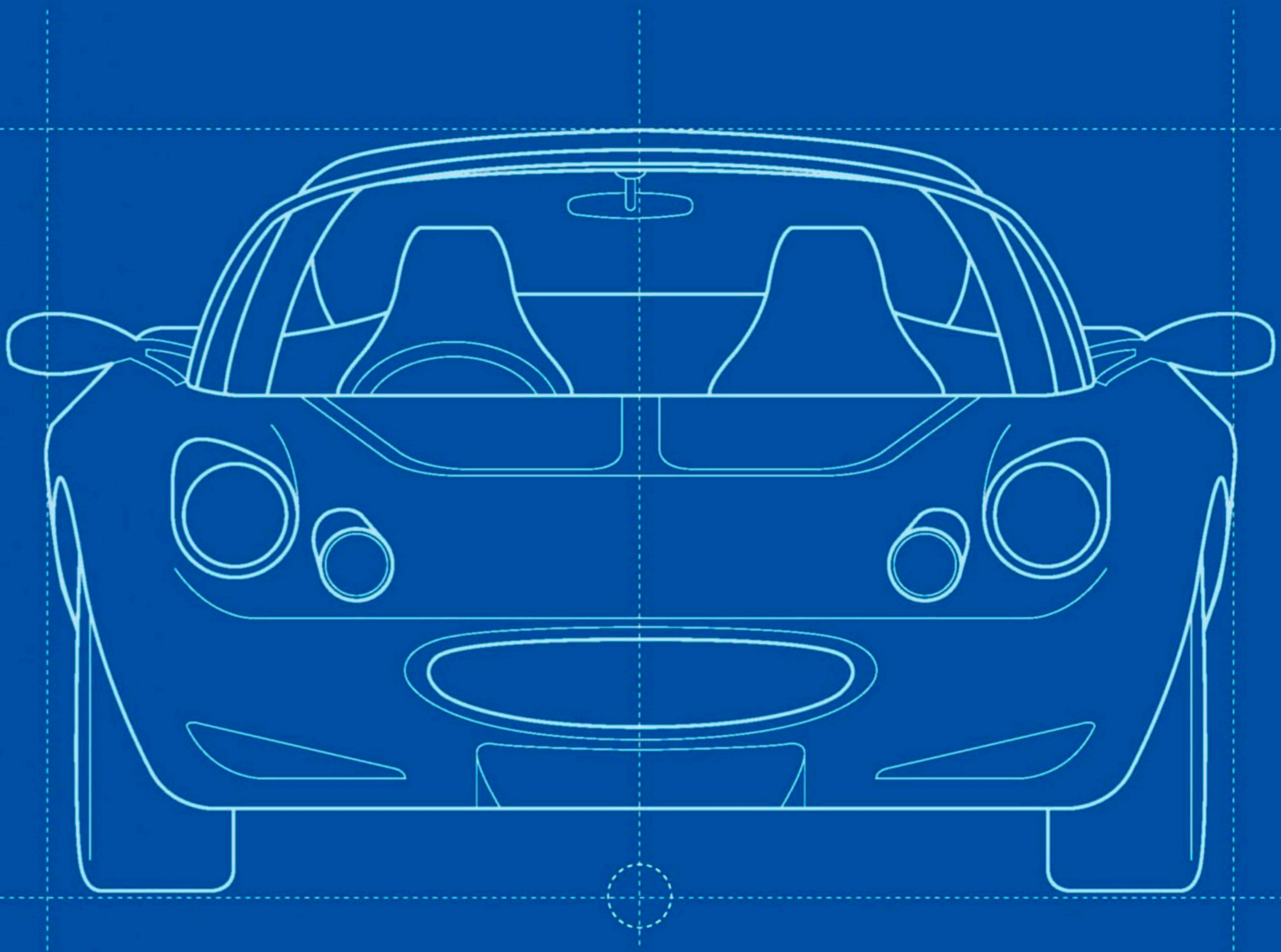
evo rating ★★★★★

Lotus Exige Sport 410

Engine V6, 3456cc, supercharged
Power 410hp @ 7000rpm
Torque 420Nm @ 3500rpm
Transmission 6-sp manual, rwd
Weight 1110kg **0-100kmh** 3.4sec
Top speed 280kmh **VES banding** n/a
Basic price n/a

evo rating ★★★★★





THE EVO BLUEPRINT

New performance cars are too big, too heavy and too powerful. What we actually need for a great drive is much less

by JOHN BARKER GRAPHICS *by* ALAMY

THE PASSION FOR driving we all share, it's sort of blissful, hard-wired, but we know what ecstasy is. We've all experienced moments of pure joy at the wheel, revelatory, unforgettable seconds of perfection where it all comes together – the car, the road and you. And as it ricks for, leaves you wanting more.

We still crave those moments even if we've driven many cars on many roads. It can be the sound of a car revving off round walls, the feeling of a wonderful engine working hard, a perfectly executed downshift, or just seeing the car's reflection in shop windows... but what really does it for us here at evo – and probably most of you too – is what happens in the corners.

It doesn't get any better than the feeling of the car perfectly poised beneath you, its attitude fine-tuned to what is still dictated by your brake, steering and throttle inputs, those inputs guided by feedback through the wheel and seat that tell you the car has got this, was born to do this, was bossed by engineers who love driving. That's what releases the endorphins. That's the thrill of driving.

Question is: what's the car?

We imagined driving a loop of our favourite A- and B-roads and asked ourselves what would we choose? What would deliver that poise, that feel and feedback, memory after memory? What would engage and reward at all speeds? What do we need rather than want? We brainstormed the options, eliminating cars that raise the mark to varying degrees, while homing in on those that would hit the bullseye just right.

Our shortlist of the most desirable cars quickly revealed some common traits and a pattern. For starters, it contained mostly relatively modest cars. In no particular order:

'THERE'S ROOM FOR MORE SUCCESSORS TO THE RENAULT SPORT CLIO TROPHY AND MÉGANE R26.R'

original Lotus Elise and Exige, Lotus Elise Club Racer, BMW E30 M3, Honda Integra Type R, Porsche 968 and 911 Club Sport, Porsche Cayman R, Alpine A110, Caterham Sevens (assorted), Ford Puma, Renault Clio Williams, Clio Trophy and Mégane R26.R, Subaru Impreza RB5 and P1, Peugeot 106 and 306 Rallye, Lotus Elan ('60s original)...

Spot the trend? There's only one new car, the Alpine A110 (the Caterhams are only new in drivetrain). And the common traits? One is that they all ride exceptionally well, but there are more obvious similarities such as they are all reasonably small and light and not especially powerful.

This is at odds with the new car market. In the last ten years, building SUVs has boomed, while building lightweight cars has waned. Even in driver's cars it seems that every new model year brings increased power, increased grip and cars that are physically bigger. It feels like we as enthusiasts should be cheering this evolution, applauding ever-greater performance and grip and faster Nürburgring lap times. But more power and grip just means you have to be driving harder and faster to get to that point where the car is dancing beneath you. Similarly, the physical upscaling of cars (and their proportionate increase in weight) makes them less exploitable; our roads are no wider than they used to be, our speed limits no higher.

This got us thinking: is there an optimum specification for a driver's car; a sweet spot that is just the right size and weight and the right power and grip? And are there essential features and characteristics it needs to deliver the ultimate driving experience? In short, can we create the blueprint for the ideal driver's car?

We started with that list of our favourite cars. They obviously get quite a lot right so we averaged their vital statistics, which produced some promising figures: a car of around 1100kg with 180hp per ton wearing a 205-section tyre, wrapped up in a body that casts a shadow no bigger than a Peugeot 306. Configuration? It

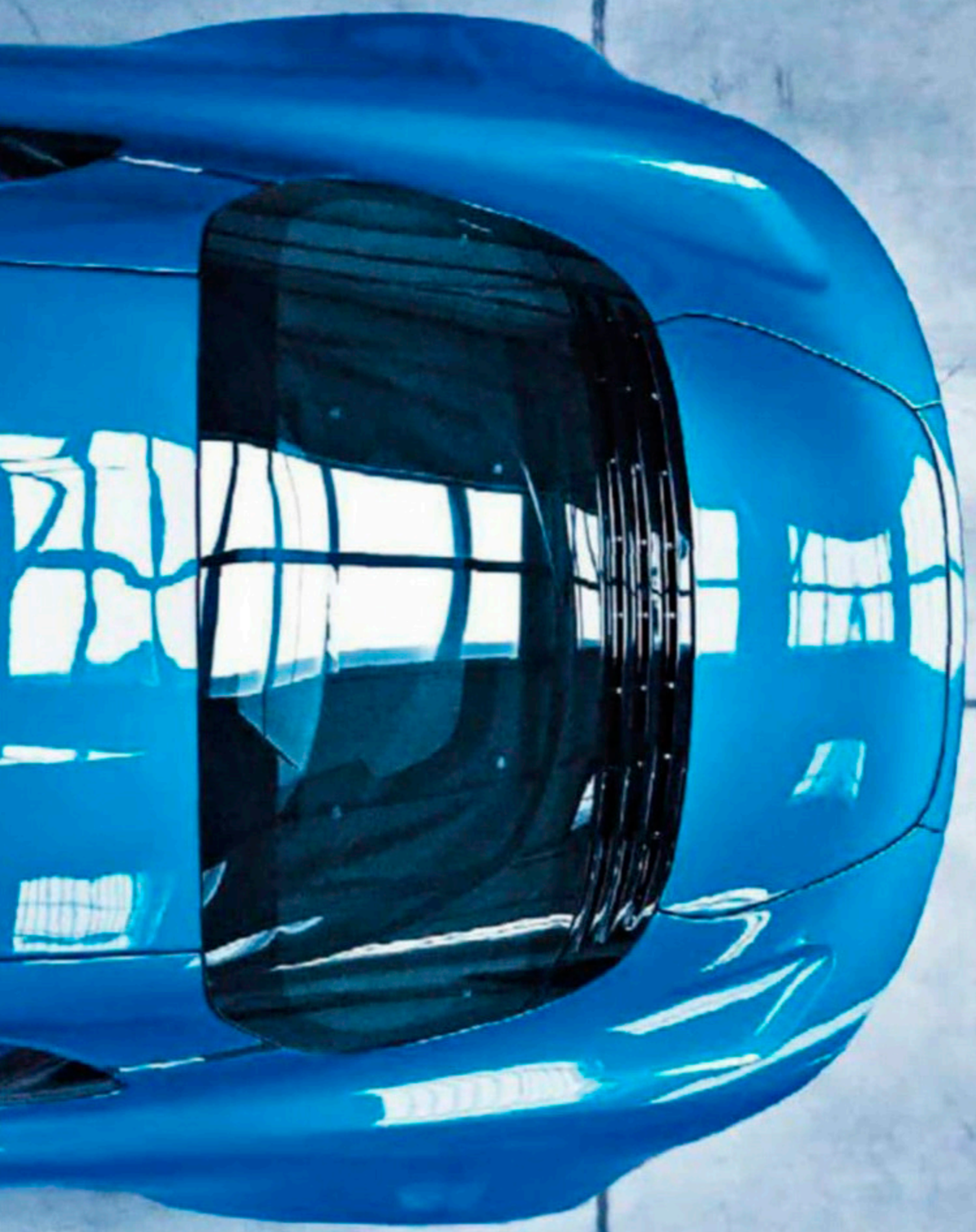
clearly matters less than these basics because our list includes almost all layouts: front-wheel drive, front-engine/rear-drive, mid-engined, rear-engined, four-wheel drive...

These basics deliver because a smaller car has more road space to play with, and a lack of weight and thus inertia doubles up on this because any slip turns back to grip more quickly. The right amount of grip for the mass and torque should help deliver the desired dynamics: there should be grip enough that the car is responsive and able to exploit its weight distribution in a subtle way or an exaggerated way dependent on circumstances.

So what else do we need in our compact, lightweight car with its adjustable, responsive dynamics and good ride? You'll find our proposals over the page.

ALL CREDIT TO THE CAR MAKERS WHO are targeting these areas and whose development engineers can set the car up to fully exploit its potential. The Alpine A110 ticks almost all the boxes and absolutely nails the execution. It looks small beside a Cayman and lightness is a key factor in its superb dynamics and performance. The Lotus Elise – whose bonded aluminium chassis clearly inspired Alpine – continues to deliver, though the current models seem to be chasing grip at the expense of some dynamic delicacy. Credit, too, to Mazda. The original MX-5 weighed 971kg and 30 years later the current MX-5 is only slightly heavier despite perceived wisdom saying that modern cars are heavier as they meet stricter safety standards.

Based on past glories, you would hope to find some heroes in the hatchback sector, too, but only the Fiesta ST Performance Edition is on the right track. There's certainly room for more successors to the Renault Sport Clio Trophy and Mégane R26.R – small, light, affordable hatches that combine sublime damping with great agility and poise, rather than ever-more potent and/or expensive hatches such as the AMG A45 and Mégane Trophy-R.

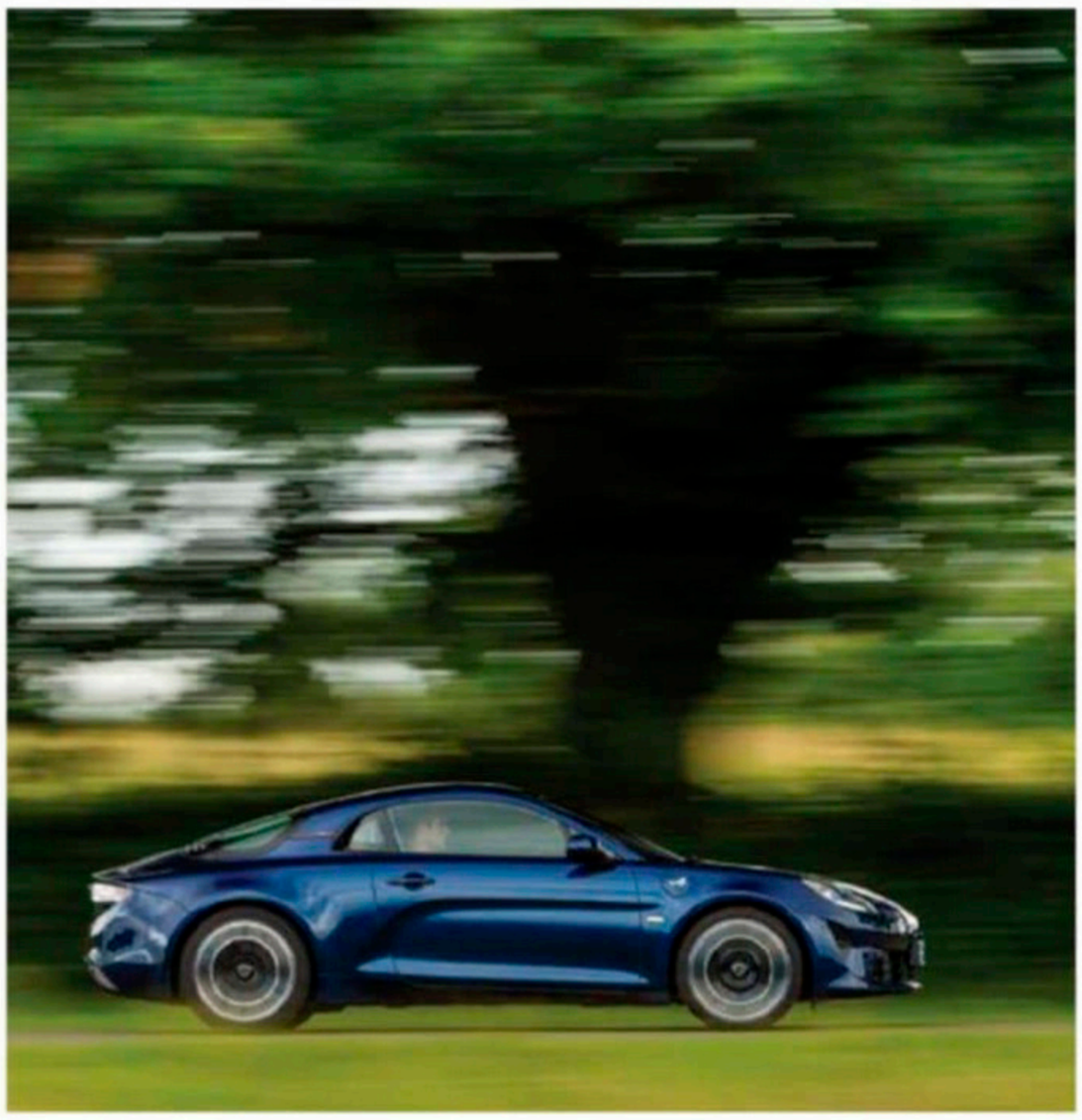


'THE ALPINE A110 TICKS ALMOST ALL THE BOXES AND ABSOLUTELY NAILS THE EXECUTION'

INGREDIENTS FOR A GREAT DRIVER'S CAR

RIDE QUALITY

Something of an underrated commodity, great damping is important because it's always working for you, smoothing out the bumps on the entry to a corner so you can home in on that apex, soaking up the pressure when maximum torque is unleashed and keeping the car calm and poised over humps and compressions at speed. Great damping keeps the mass of the car in check at all times and is essential in delivering a car's dynamic character.



STEERING FEEL AND FIDELITY

The steering is the driver's primary contact with the car. All we want is the ideal ratio, perfectly judged efforts and useful, accurate feedback at all speeds, so that we sense what the car is doing... and what it's about to do. Tuning great steering is as much an art as it ever was, despite the majority of cars now having electric power steering which offers even greater fine-tuning possibilities. Additionally, throttle, clutch, brake and gearshift should have similar weights and feel for a sense of consistency.

BRAKE FEEL For confidence and precision, the brake pedal needs to access strong braking potential with subtlety and progression. Top-of-the-pedal response needs to inspire confidence; there should be no obvious dead travel, but neither should there be a sharp reaction. The pedal should feel firm and allow easy modulation when using the brakes hard, to fine-tune braking effort and also allow smooth heel-and-toe downshifts.

ENGINE The engine provides more than just the force that gets the car from corner to corner. It should be responsive to the throttle so it can help finely adjust the car's attitude on and off the throttle, and for this it needs plenty of torque – 215Nm per ton is a good number. Turbocharged engines easily deliver the torque and the best now have good throttle response, but they still lack engine braking. So, a naturally aspirated engine is still optimum, one that delivers the torque. Bonuses would be light weight, low centre of gravity, smooth-spinning, high revs and a great natural sound.

GEARSHIFT Great manual shifters are a joy. They're increasingly rare with the advent of excellent DCTs, but you can still find superb examples that remind you how much more engaged and rewarded you are by a car with a manual shift. Mazda's MX-5 has always nailed it, and the current model is no exception: short throw, compact gate and a direct, connected feel. It helps that the Mazda's gearbox is right there beneath the lever, but remote linkages can be superb too, if the car maker invests the time and effort, as Ford did with the Puma and Porsche has often done with the 911.

SEATS A car seat should be so good it simply doesn't draw attention to itself. Yet surprisingly few manage to combine comfort with unobtrusive support that lets you feel what the car is doing, as well as offering a good range of adjustment so all drivers can find an ideal driving position. There is a lot of weight to be saved – a seat can weigh 20kg, a lightweight 'race' seat half that, but it shouldn't come at the expense of adjustment. A shout-out here for good visibility that helps place the car. There aren't many advantages of a high-built car but this is one.

SCHOOL OF LOCK

by C K LIM PHOTOGRAPHY *by* BMW AG

We learn to go sideways in the M4 Competition at the home of BMW Driving Experience.

BMW has been teaching drivers the correct way of handling vehicles in critical situations for the past 42 years. Since 1977, BMW Motorsport GmbH has been organising and managing BMW Training events, with the aim of 'raising the performance of the unity of man and machine to a new level', and of course, bringing sheer driving pleasure to drivers.

We recently had the opportunity to attend a half-day BMW M drift training at Maisach, Germany – the current home of the BMW Driving Academy since September 2012.

Located around 30 kilometres west of Munich, this former airfield is a 130-hectare site with a 1.8-kilometre circuit and several dynamic driving areas. The drift training takes place on one of the three irrigated circuits.

After registration upon arrival at Maisach, we were introduced to our instructor, Philip Goetz. We then sat through a 30-minute briefing where he showed us the optimal seating position and explained the driving dynamics behind drifting.

After that, we jumped into our designated "drift car", the BMW M4 Competition. Before heading out to the circuit, Philip got us to do a slow and tight slalom repeatedly in order for us to get comfortable with steering the car using the arm-over-arm technique. This involves keeping your hands at the three and nine o'clock positions regardless of how much steering input there is. Once we got that technique nailed down, we moved on to the irrigated circuit for our first drifting exercise.

Here, we had to learn not only how to initiate oversteer by abruptly getting on the power while going round the circle anti-clockwise (it's easier to drift in this direction for a left-hand-drive vehicle, and vice-versa for right-hand-drive), but also how to maintain the car's slide by applying opposite lock, and maintaining enough throttle to keep the rear wheels spinning – which if done successfully would be drifting.

Despite the M4 Competition making the job easier with well-endowed outputs of 450hp, 550Nm of torque, and near-50:50 weight distribution, it proved to be easier said than done. The combination of the 7 degrees Celsius ambient temperature and the wet surface made it rather difficult to gauge the appropriate amount of power to apply to initiate and maintain the slide. Applying the right amount of countersteer at the right time is another tough challenge to overcome for anyone learning to drift.

As yours truly - in addition to being a long-time contributor to evo Singapore - is a factory-certified high performance driving instructor, I could immediately drift the M4 Competition with ease in the circle. Philip noticed and requested that I try drifting in the opposite direction as well as getting the nose of the car as close to the line of traffic cones in the middle of the circuit as possible – both of which are manoeuvres more difficult than just drifting in a steady circle. I accomplished both without breaking a sweat.

After a short break, we were back at the irrigated circuit to learn transitions – where the car slides one way, then the other – by drifting in a rough figure of 8 around the circles. The training ultimately culminated in a simple course where we had to navigate round a circle, through a slalom, and around another circle.

Maintaining a drift through the entirety of this course proved to be much more difficult than it first seemed - even I found it quite challenging, particularly at the slalom, a section which Philip later revealed has a noticeably variable coefficient of friction.

Drifting has never been, and will never be easy skill to master, but with its ample performance and almost perfect weight distribution, the M4 Competition is probably one of the best learning tools for the job. ◘

HOW TO DRIFT

Initiate oversteer by getting abruptly on the throttle (power oversteer)

Once the car starts to slide, immediately ease off slightly on the throttle and apply opposite lock at the same time

The key point is to apply just the right amount of opposite lock at the right speed (the amount and speed of opposite lock matching the car's slip angle and rate of oversteer respectively)

Once the rear end of the car is no longer stepping out any further, increase throttle immediately, but smoothly, and then balance throttle with steering.

The key point here is to apply enough throttle to keep the rear end where it is – too much throttle, the rear end steps out, and more opposite lock will be required; too little throttle, the rear end reels in, and less opposite lock will be needed. Get either wrong and the car will spin or stop sliding respectively.

To come out of a drift, progressively ease off the throttle and reduce the opposite lock as the car stabilises.

The key point here is to ease off the throttle progressively, otherwise the car will transit into a drift in the opposite direction.

WILD WOOD

by ADAM TOWLER INTRO & PROFILES *by* HENRY CATCHPOLE

PHOTOGRAPHY *by* ASTON PARROTT

Six killer road cars – Integrale, GT-Four, RS Cosworth, Sunny GTI-R, Impreza Type RA and Evo 6.5 – from the Group A era of World Rallying and one killer location to drive them. Time to strap yourself in…

ON 2 MAY 1986 HENRI Toivonen and Sergio Cresto died on a mountainside in Corsica. Group B died with them. After Attilio Bettega's death on the same island a year earlier and the tragedy in Portugal the month before when three spectators lost their lives, the regulations were arguably already on borrowed time, but as the fire consumed the monstrous Lancia S4 the era of the WRC's most spectacular rally cars was definitely over.

Group S had been in the pipeline to succeed Group B, with several prototypes already produced, but although power would have been restricted to 300hp, it too was now considered too extreme. So in June FISA (then the sporting arm of the FIA) announced that from the start of 1987 the World Rally Championship would be run under Group A regulations.

For an in-depth examination of the regulations I heartily recommend reading the McKlein book *Group A: When Rallying Created Road Car Icons*, but in simple terms the new rules tied competition cars much more closely to the real world. Manufacturers had to produce 5000 (2500 from 1993) cars within 12 consecutive months in order for homologation to be granted, as opposed to just 200 under Group B regs or a scant ten for Group S. Evolution models were allowed as long as at least 500 (250 from 1993) were built.

Initially the cars, as intended, were slower than in the Group B generation, but this didn't last long as more sophisticated suspension and improvements in tyres made up for the reduction in power. And sometimes those power levels weren't as little as they should have been (300hp) thanks to innovative/illegal solutions from clever minds...

From an inglorious introduction, Group A grew to be one of the greatest eras of rallying. But although the action it produced on the special stages was sensational, its real legacy was the glut of fantastic, affordable homologation road cars it spawned. And it is those road cars that we are celebrating here.

LANCIA DELTA HF

NO GROUP A TEST WOULD BE WORTHY of the name if it didn't include a Delta. The car dominated the early years of the era, winning four drivers' titles (two for Juha Kankkunen, two for Miki Biasion) and six straight manufacturers' pots.

FISA's mid-season announcement in 1986 of the switch in regulations from B to A for the following year didn't leave much time for manufacturers to adjust. However, Lancia already had a car ideal for rallying: the Delta HF 4WD. It had been unveiled at the 1986 Turin motor show, ironically just a month before Henri Toivonen's demise.

The first High Fidelity (HF) version had been released in 1983, followed by the HF Turbo (although the first one was also turbocharged) two years later, but both were merely front-wheel drive. The 4WD version of '86 used a viscous coupling in the centre and a Torsen differential on the rear axle. Those first 4WD cars were front biased, but with every subsequent iteration the balance moved further rearwards.

Four-wheel-drive rivals in the early years of Group A included Mazda's 323 4WD, which won the second rally of 1987 (Sweden) but was generally unreliable and its challenge faded after the first couple of years. Audi won the fourth rally of 1987, the Safari, with its 200 Quattro, but it was too big and heavy to really be competitive. Then Prodrive – more of which later – proved 4WD wasn't always essential when a BMW E30 M3 won on the tarmac of Corsica. But it was a lone WRC victory, and after that initial variety Lancia really had it all its own way for the next three years.

For the first Integrale the transversely mounted four-cylinder received a bigger Garrett turbo, taking power to 185hp. There were also bigger wheels and the famous box arches first appeared. It was introduced to the WRC in Portugal in 1988. It won. A 16v version appeared at San Remo in 1989 in red Martini livery (a personal favourite) and also won.

The first Evoluzione or Evo version appeared late in 1991. It was to be developed into a rally car for the private Jolly Club to compete with in 1992 (the factory team retired, victorious, at the end of '91) and featured the ultimate expression of the bodywork, including larger arches (to accommodate wider tracks), deeper front and rear bumpers and an adjustable rear wing.

The final 1993 Evo II wasn't actually a homologation car, but a catalytic converter version of the first Evo, albeit with 5bhp more, taking the total to 215hp. Wheels also went up a size to 16 inches, while inside there was a leather three-spoke steering wheel and high-backed Recaros. Just three colours were available – white, red, and the dark blue of the car in this test.

TOYOTA CELICA

LET'S TALK ABOUT CHEATING. Group A was notorious for manufacturers trying to bend or simply flout the rules. There was controversy from the very first rally, when Lancia's Deltas turned up with bumpers moved forward for tyre clearance and extra holes for cooling, neither of which were features of the road car. But most of the creativity centred around engine power.

After the monstrous outputs of the Group B cars, the FIA wanted a 300hp limit. This was hard to police and the first thing the manufacturers did was downplay outputs of the road cars that the rally cars were homologated on. In 1990 the first airflow restrictor was introduced (40mm to start with, later 38mm and then 34mm) and this is where things really got interesting.

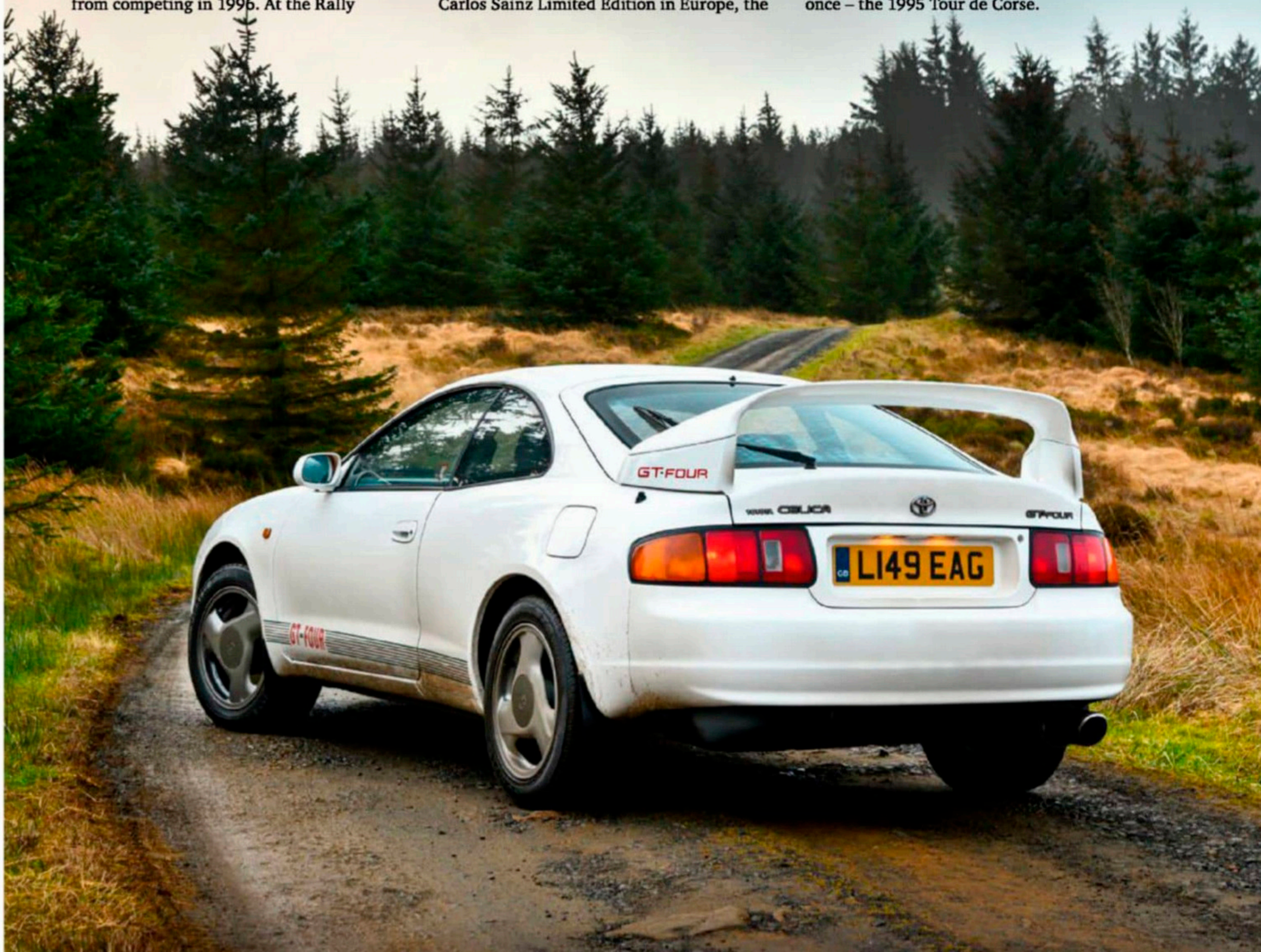
There was talk of nitrous hidden in fire extinguishers or spare tyres filled with additive and fluids running through roll-cages. But the biggest scandal was the one that saw Toyota Team Europe (TTE) excluded from the 1995 season and banned from competing in 1996. At the Rally Catalunya in 1995 officials were tipped-off to a clever spring-loaded mounting system for the Celica's air restrictor that allowed it to be bypassed without disturbing scrutineering tags. Max Mosley later called it 'the most sophisticated and ingenious device I have seen in 30 years of motorsport'.

Scandals aside, Toyota's part in the Group A era was arguably even greater than Lancia's, as it was there all the way through. It began with a hurriedly homologated Supra that was really too heavy, but Toyota got into its stride with the first Celica GT-Four (ST165) in May 1988. It wouldn't take its first win until a year later in Australia with Juha Kankkunen, but in 1990 Carlos Sainz won four rallies and the drivers' title.

Lancia was back on top in 1991, but 1992 saw the hugely successful Celica Turbo 4WD (ST185) launched into the WRC. Curiously the ST185 road cars had been around since 1989, but it wasn't until 1991 that a homologation version (called the Carlos Sainz Limited Edition in Europe, the GT-Four RC in Japan and Group A Rallye in Australia) with a water-to-air intercooler and new bonnet and bumpers was offered for sale. Anyway, the ST185 secured three straight drivers' titles (Sainz, Kankkunen and Auriol) and two manufacturers' championships.

The Celica GT-Four (ST205) here was released in 1994 (only 2500 needed to be produced by this stage). It offered a larger rear wing, better cooling and less weight thanks to an aluminium bonnet, a water spray for the intercooler and extensive changes to the suspension. There was also all the gubbins for the rally team to plumb-in both a water injection system and anti-lag. Power was 242hp in European spec and 255 in Japan. Only 300 came to Europe and at nearly £30k in the UK it was very expensive (over £3k more than an Escort Cosworth).

Auriol stuck to the old ST185 car to win his '94 title and with the rising challenge of Subaru and Mitsubishi the ST205 only won once – the 1995 Tour de Corse.



MITSUBISHI LANCER EVO

ASK SOMEONE WEARING A BOBBLE HAT and standing in a Welsh forest when the World Rally Championship's Group A period was and they will say 1987 to 1996. And they would be right. In 1997 the FIA introduced the new World Rally Car homologation rules that allowed much greater freedom for manufacturers. However, Group A Mitsubishi Lancer Evolutions won WRC drivers' titles four years on the trot, starting in 1996. As they say: you do the maths.

The Lancer Evo's WRC story began three years earlier in 1993. Run by Andrew Cowan's Ralliart Europe team it took over from the rather cool but also rather heavy Galant VR-4, a car which was actually relatively successful in that it won three WRC rounds. The Evo I, like the Impreza and Escort, took the fundamentals of this noble predecessor and put them into a smaller, lighter body. Its 4G63T turbocharged in-line four-cylinder engine, mounted transversely, put out 247hp in the production car and transmitted it to the road through a five-speed gearbox and an AWD transmission. There were Gran Sport Racing (GSR) and Rally Sport (RS) models, with the latter being the stripped-out equivalent of Subaru's Type RAs.

And that is pretty much how the formula stayed. The Evo IV was arguably the biggest change, moving to the seventh generation of Lancer platform and turning the engine through 180 degrees to improve weight distribution via relocation of the gearbox. The V's suspension updates were also quite extensive, but otherwise the cars really were just incremental developments with changes specifically geared around helping the rally car perform better. The end of the chain was the Evo VII, which arrived when the FIA forced Mitsubishi to switch to World Rally Car rather than Group A homologation rules for 2002, thus breaking the tight-knit road-car link.

Evos didn't officially make it to the UK until the sixth generation, and what we have in this test is the last of the Group A homologation cars, a 1999 Tommi Mäkinen Edition (also known as an Evo 6.5). Now this might just sound like a celebration special, honouring the team's star driver, but 2500 were built to satisfy homologation stipulations and you can clearly see that the slightly different front bumper was carried onto the rally cars for the 2001 season.

Mäkinen is of course as integral to the legend of the Mitsubishi Evo as McRae is to that of the Impreza. The Evo didn't win a rally until its third season of competition, when Mäkinen joined the team full-time, although it was early-years stalwart Kenneth Eriksson who took those initial victories in 1995. The introduction of the Evo III the following year was when the good times started to roll, with Mäkinen taking the drivers' title in 1996. He would repeat the feat in the following three years, with Mitsubishi also taking the manufacturers' title in 1998.

The reason that Mitsubishi stuck with Group A for so long seems to have been largely a desire to make the most of the marketing link between motorsport and its road cars. Sales were certainly strong and customers clearly loved being able to buy a true rally car for the road. In fact I think they still would, given the opportunity. Perhaps Group A should make a comeback...

FORD ESCORT RS COSWORTH

THE GROUP A ERA WAS A CURIOUS one for Ford and its Boreham motorsport centre. Both the Sierra RS and XR4x4 were used in the early years, but the Sierra was hampered by being rear-wheel drive and the 4x4 was hobbled by being underpowered. The Sierra did win once with Didier Auriol in Corsica in 1988, when it took a rare victory amid almost complete Lancia dominance. The new Sierra Cosworth 4x4 then appeared in 1990 (with a seven-speed manual gearbox that would be carried over to its successor), but it was still too big and heavy. What's more, it was really only a stopgap, because Boreham already knew what was coming...

In 1988 Stuart Turner, then head of Ford Motorsport, had convinced those around him that it would be a good idea to take the platform and running gear from a prototype Sierra Cosworth 4x4, chop a bit out of the middle and put the bodywork of an Escort RS Turbo around it. Instantly it was brilliant. Executives from Ford took it for a thrash up and down the A12 and loved it but, because the next generation of Escort was planned to be front-wheel drive with transverse engines, Turner et al were told to think of something more sensible. Thankfully, after much perseverance from Boreham, the Escort RS Cosworth eventually got the go-ahead. The project was designated ACE14 (A for Group A, and CE14 being the code for the new Mk5 Escort) and the prototype was known simply and affectionately as Ace.

The initial run of 2500 production cars – the reduced number required for homologation in 1993 – were all made with the large Garrett T34 turbocharger. Outputs from the YBT engine were 220hp and 290Nm of torque, split 34/66 front/rear. And all had the famous rear wing that designer Frank Stephenson had originally suggested should be an even wilder three-level affair.

These early cars also had (or at least should have had – some FIA spot checks found otherwise...) a length of tubing and a bladder under the rear seats, something not always known by the dealers or owners. Like the ST205 Celica, this rudimentary addition was to satisfy the authorities that a water injection system could be implemented. Another Group A homologation detail is the height of the rear wheelarch liners that were raised to help accommodate the travel needed for the rally car's suspension.

The car in this test is one of 200 1994 Monte Carlo editions, here in rare Jewel Violet, built to celebrate François Delecour's 1994 win at the season-opener. It was a particularly sweet win for the fantastically fast Frenchman as victory had been cruelly snatched from him a year earlier on the Escort's WRC debut. The 1993 Monte had seen Delecour demonstrate the new car's stunning pace on tarmac and he took a commanding lead into the final night's three stages. However, he would finish 15 seconds down to Auriol's suspiciously quick Toyota. Spectators reported a curious smell lingering after the Celica had passed and Toyota never fought the speculation about washer bottles plumbed into the engine...

A Cossie won five WRC rallies in 1993 but no championships, and 1994 was hampered by Delecour breaking both legs in an accident in a Ferrari F40 in April. Despite some victories in subsequent years, including Tommi Mäkinen's maiden WRC win in a one-off outing in Finland, the Escort RS Cosworth would never quite fulfil its promise on the world stage.

SUBARU IMPREZA WRX

THE SUBARU IMPREZA IS ARGUABLY slightly different to the other Group A homologation cars that we've covered so far. The Japanese company didn't build 2500 special editions purely so that Prodrive could have a competitive rally car. Rather it produced a car – the WRX, known later as the GT in Europe and the Turbo 2000 in the UK – which Prodrive was consulted about, but which was also designed to sell in large, commercially successful numbers.

Unlike the Escort and Celica of the same time there were no monster wings and no bags under the rear seats. Instead there were four doors and a price (less than £20k in the UK) that made it an absolute performance bargain. Yes, there was an aluminium bonnet with a scoop in it, but it was a very demure-looking car on the whole.

The more special WRX Type RAs, of which we have one in this test (a rare Version 1 STI Type RA from 1994), were homologation cars not for Group A, but for the lesser Group N. Under N regulations you couldn't change things such as gear ratios and differentials for competition, so the close-ratio 'box, short final drive and the driver-controlled centre differential (DCCD) had to be available in a road car. Most of the STI models and special editions such as the 200-run (too few for homologation purposes) Series McRae edition were a case of special road cars being inspired by successful rally cars rather than the other way round.

Anyway, the Impreza road cars that first appeared in 1992 were a replacement for the Leone, but on the WRC's special stages the Impreza was the successor to the Legacy. And here there are some similarities with Ford because, like the Sierra Cosworth 4x4, the Legacy was really too large and heavy. But like the Escort Cosworth, the new Impreza 555 (as it was officially known) leaned heavily on the development work done by its predecessor, using much of the running gear that the older car had developed. Subaru even built a shortened Legacy test bed, like Ford did with the Ace.

Initially there was a curious competitive transition period for the rally team between new and old cars on the stages. Colin McRae won in New Zealand in 1993 in a Legacy. At the next round, the 1000 Lakes in Finland, the Impreza arrived and Ari Vatanen took it to a fine 2nd place (Markku Alén had a slightly more ignominious start, rolling his Impreza out of the rally on the first stage). At the following round in Australia all the Subaru drivers were back in Legacies again…

The Impreza went on to take three victories in 1994 and then had its annus mirabilis in 1995, winning both the drivers' and manufacturers' titles before taking the manufacturers' title again in 1996 (whilst developing the all-new, non-Group A WRC car for the following year). It was, of course, McRae who secured that 1995 drivers' title, and his staggeringly skilful flamboyance arguably did the most to create the Impreza's legendary status. He certainly ensured that blue cars with gold wheels will forever be cool in certain people's eyes.

NISSAN SUNNY GTI-R

ONE OF THE WONDERFUL THINGS about Group A is that it created legends from some pretty unlikely starting points. The humble standard cars on which homologation heroes were based were often dull to the point of anonymity and it is somehow even better when those run-of-the-mill roots are still very clearly visible in the end product. There is perhaps no better exemplar of this marvellous melding of worlds than the Nissan Sunny GTI-R.

Nissan was one of the companies caught on the hop by the regulation change in 1987 and quickly realised that the 200SX that it had homologated wasn't going to be cutting any mustard with its naturally aspirated V6 and rear-wheel drive. So it was back to the drawing board, and a few years later, in the midst of Toyota's Group A heyday, the Sunny GTI-R was launched into the stages.

Based on the N14 generation of Sunny – or Pulsar as it was known in Japan – the GTI-R road car was quite the machine. It was launched as the Pulsar GTI-R first in 1990, and there were GTI-RA and RB models, the latter being more stripped-out. The Sunny version arrived in 1992 and its 2-litre turbocharged SR20DET engine had slightly less power (220hp rather than 227hp) owing to the European-spec ECU. Nonetheless, it was good for a very impressive 0-100kmh time of 5.4sec thanks to the ATTESA (Advanced Total Traction Engineering System for All-Terrain) four-wheel-drive system. This was a mechanical version of the system found on a GT-R of the same period, and with a kerb weight of a mere 1240kg the little Sunny made excellent use of it.

But the glorious thing about the Sunny GTI-R is that it looks like the equivalent of a teapot with tassels. Its little 14-inch wheels, standard arches and humdrum interior look so wonderfully incongruous juxtaposed with the huge rear wing and wildly bulging bonnet. Sadly the bonnet wasn't quite wild enough for the rally car. The slatted bulge was there to accommodate the needs of the huge intercooler that was on top of the engine. However, because of the heat rising from the engine (particularly on warmer rallies) the intercooler struggled and was nicknamed the 'interwarmer'. The solution for road-car owners was to move the intercooler to a vertical position in front of the engine, but Nissan couldn't do this on the rally car without producing another 5000 GTI-Rs to homologate such a major change...

The result was that the Sunny's only notable success from its two seasons in the WRC (when it was run by NME out of Milton Keynes) was a single podium place. That was in the hands of Stig Blomqvist at the 1992 Swedish Rally, but the event only counted towards the world championship for drivers, not manufacturers.

This in turn might partially explain why the Sunny GTI-R is such a rare car. Just 771 were produced (as against nearly 14k Pulsar GTI-Rs) and of those only 103 were right-hand drive. Nearly 30 years later the number left in completely standard trim, like the one we have for this test, must be astonishingly small.

‘THERE’S NO MISTAKING THE BIPLANE REAR WING OF AN RS COSWORTH’

A CRUEL, BITING WIND whips around the cold stonework of an imposing Northumbrian hall, towering heroically over us with time-served resilience amongst the harshly beautiful landscape. We’re just a few miles from the edge of the largest working forest in England. Kielder. ‘Killer Kielder’. Once the slayer of the world’s greatest rally cars and their crews, an almost impenetrable labyrinth of forest tracks, at night as black as a Goth’s wardrobe, a place where simply surviving to drive out the other end was tantamount to a victory.

Under the surreal incandescent glow of a floodlight two men are partly sheltered from the icy gusts by the flimsily light aluminium bonnet of an early Subaru Impreza. They move stiffly in restrictive but warm and waterproof gear as a third man suddenly appears out of the night clutching an alternator, and soon there’s the characteristic churning of that flat-four attempting to kick into life. Alongside, a gloriously muddy Toyota Celica GT-Four is closed up for the night, and over my shoulder there’s the agitated belt zing and gear whine of a Mitsubishi Evo being reversed into its parking spot. The Italian contingent have already dismissed their utterly filthy Integrale Evoluzione for the bar, and there’s no mistaking the biplane rear wing of an RS Cosworth casting its own shadow on the gravel. Wow. Just what was in that beer I drank upon arrival?

This is no time machine. It’s not a makeshift service area during the 1995 Network Q Rally, although the Impreza really has had a small, temporary hiccup. Yet this is maximum Group A all the same. Six cars – one from each of the key manufacturers that fought during one of rallying’s true golden periods – converging together just down the road from the start of Special Stage 10 back in ’95, all for **evo**’s ultimate Group A road-going rally homologation special group test.

THE NEXT MORNING DAWNS CHILLY, but it’s not the bracing wintry onslaught that one and all had feared. Humble Ford key in hand, I hurry across the car park as one by one our heroes are fired up and an overture of condensation rises in wisps from exhausts. The little key turns stiffly in the door lock of the Cosworth, and there’s the sound of motors turning locking mechanisms and the beep of an anachronistic alarm system.

Inside, the Cossie feels narrow, small, airy; it smells of the 1990s, somehow – an impression enhanced by the ghoulish glow of the backlit instrumentation and the separate DIN-slot CD player below the main hi-fi unit. The YB engine cranks into life with a growl and a tremor, the original ’80s lager-swilling bad boy motor as uncouth as ever, and I join our incredible convoy as we turn out of the hotel’s front gate and head for Kielder Forest. As I glance up into the mirror the view aft is perfectly bisected by the rear wing’s central strut, splitting the hungry mouth of the following Impreza’s bonnet scoop into two perfect halves of aggression.

As well as celebrating François Delecour’s victory on the Monte in 1994, the Monte Carlo edition Cosworth we’re driving here was intended to shift a few more of the necessary 2500 homologation-spec ‘big turbo’

cars before Ford switched to the smaller (T28) turbo under Ford's own engine management system. In a great many ways it highlights the beauty, reality and compromises of the formula – an ideal place to start, you might say.

Designed with brutal pragmatism, it's not an Escort at all, but a shortened Sapphire RS Cosworth 4x4 in disguise (hence the longitudinal position of the engine), and it's not especially concerned with the day-to-day, the humdrum. It may have a fancy digital clock, a sunroof, and reek of Ford's period interpretation of 'luxury', but the Motorsport department specified the Garrett T34 turbocharger based on its suitability to produce nearly 400hp (in the 38mm restrictor era), and not for accelerating off a roundabout in heavy traffic. As such, the engine is amusingly flat below 3500rpm, as in completely devoid of any enthusiasm whatsoever. I just can't imagine what buyers today would think of its contrary slothfulness, just as I adore its authenticity; it just doesn't give a proverbial what you or I think, reinforced by the belligerence of that rear wing and the mother and father of all daisy cutters below the front PU.

The seats are good, though. No-nonsense items that hold you firmly in place, albeit mounted high. The ugly airbag wheel feels small in the hands, and it's rapidly clear it needs little in the way of input to have a very big influence on where the front end is pointing, which in turn makes for a lively rear that's exaggerated by notable body roll. Already I can sense the Cossie is a live wire, and when the opportunity presents itself to keep the throttle wide open for long enough, its punch is keener than merely 220hp suggests.

Ripping myself away from the 'Scort at our first static photo location, my gaze falls on the inimitable outline of the Lancia, and a grin spreads across my face that Jack Nicholson would be proud of. In the final 'Evo 2' guise of this striking Lord Blue example it's optimised for road use with a more sophisticated ECU, and this car takes it a step further with a little electronic tickle from renowned specialist Walkers Garage, so should be good for around 240hp. It's also running a bit low on super juice, as is the Impreza, so I beckon **evo**'s fellow rally nutcase Henry Catchpole over for a fuel run, which out here requires an hour round trip. We might as well stock up on an industrial quantity of sandwiches and chocolate at the same time.

Man hath seen nothing swifter on legs than a Catchpole and a vacant Integrale driver's seat, and so it's the Impreza I'll take to Mr Shell. That's perfectly fine with me; I've been dreaming of the GC8 WRX STI Version Type RA (to give it its full name) for too long. Of all the cars here, the staggering sparseness of the STI is initially bewildering. The driver's door appears to weigh next to nothing, the frameless glass within it quivering nervously and a two-penny plastic winder the method of lowering it. It's small, almost naively simple inside, and when I turn the flat-four into life there's no offbeat rumble, because owner Dean Wilson has refitted its original 'pea shooter' twin-pipe back box for this gathering in the interests of originality. (He's also fitted some OZ Racing gravel-style wheels and a Subaru sump guard – he's clearly taking this very seriously.)

Above: 200 Monte Carlo edition Cosworths were built; special features included OZ Racing wheels and 'Motorsport' branded Recaro seats. **Below left:** 'Dried mud' should have been a factory paint option for all these cars


GT-FOUR
GT-FOUR
GB
L149 EAG

From the moment I let the clutch out with that mysteriously awkward sproing so redolent of Subaru’s all-wheel-drive system, the Impreza is straining to be driven absolutely on the limit. The motor’s job is made all the easier in this regard thanks to the shortest gearing I’ve experienced since an S1 106 Rallye 25 years ago: 3500rpm in top is good for around 96kmh. The result is that a brush of throttle in fourth or even fifth elicits an instantaneous and forceful punch in the back, and the EJ20 motor also offers the benefit of an elevated rev range, so while it takes a fair few revs to hit its stride, unlike, say, the Cosworth, the STI keeps spinning and howling with its TIE fighter-esque whine until nearly 8000rpm. For a car with ‘just’ 275hp it feels shatteringly quick, and the tight, slick gearshift mechanism is just as well given how frequently you’ll be swapping cogs in and out.

That feral response extends to the rest of the car, because the Type RA is a beguiling mix of manic enthusiasm and real delicacy. Give the Nardi wheel a deftly positive nudge and the Impreza wants to change complete lanes or dive for an apex like an industrial magnet on the inside of the curve has just been switched on, and suddenly the whole car feels even lighter than its kerb weight of 1200kg suggests. Whoa.

The run to Hexham leaves the forests behind and soon funnels us rapidly between dry-stone walls in fast sections, punctuated periodically with 90-degree lefts and rights. It’s clear the Impreza has a hilarious ability to turn every drive into a ‘maximum attack’ session, but I gain almost as much enjoyment from seeing the pugnacious snout of the Lancia bobbing around in my mirrors. By the time our gloriously mud-splattered duo pull up next to the pumps I want an early hardcore Impreza so, so badly.

The fabled Lancia is one of those cars on the list of things I’ve desperately wanted to drive for a very, very long time. And now here I am, perched on a sumptuously trimmed leather Recaro seat looking at one of the most recognisable dashboards ever made. Those dials… those yellow dials, like someone’s got carried away with a school protractor set and a gel pen. I think I’m in love with it already.

When I say ‘perched’, I really mean it, because the Integrale’s driving position is how you might imagine it to be: resolutely Italian and ergonomically haphazard. The wheel is laid noticeably flat, and I feel like I’m peering under the tops of the window frames to see out; this, and the angular dashboard architecture, betray a car that in its fundamental form went on sale at the end of the 1970s.

Which in some ways makes its ability, even more than its latent charm, the biggest surprise. After the crudity of the Cosworth and the hyperactive

‘THE COSSIE IS A WILD RIDE. HYPER-AGILE, LIKE AN UNSTABLE FIGHTER JET’

rawness of the Subaru, the Integrale feels a more rounded proposition, overlaid with a certain Italian flamboyance that the other cars here could never even begin to comprehend. I mean, the Lancia has deep tan carpeting, for starters, and its sculpted exterior panels are as suave as they are purposeful. There are cars here you'd feel a right wally in pulling up outside a luxurious villa beside Lake Como – the Sunny, perhaps? – and then there's the Lancia.

Henry is clearly a fan, and Aston Parrott's camera seems to be hypnotised by those swollen arches, but as the former says, the driving position is 'like playing a computer driving game with a steering wheel attached to a low coffee table'.

Still, it really gets up and goes, the Lancia. There's not that much lag, and the classic twin cam is smooth and distinctive in voice, if not overly loud; there's none of the deep, ripping gargle that characterised the Group A versions with Torino number plates. The most obvious dynamic difference is that the Integrale feels much more conventional, and that it needs a fraction longer to get turned in than some of the scalpel-sharp nutjobs from the Far East. That may have something to do with the rather unconvincing set of Falken tyres this car is wearing, but that gorgeous Momo Corse wheel needs more working on corner entry, and there's the perceptible sensation of the car settling initially and adopting a stance before the cornering can begin. At first I find it a little unnerving given the slippery, muddy asphalt underneath us, a small spike of adrenaline that car and driver are about to get familiar with the scenery head-on. But once you've learnt that it's simply how the Lancia goes about its work, and that traction is superb from there on in, the confidence begins to build, and using the brakes more on entry seems to help, too.

Reunited as a group, our spectacular convoy heads through the forest, over the border and immediately into a Scotland that for once isn't so pleased to see us. Thick, gloopy mist hangs in the air where bright sunshine existed just half a mile away, and worst of all, our chosen route – familiar from eCoty 2018 – is closed for repairs. So by the time we've made it round a frustratingly circuitous detour, refuelled cars and drivers, and given them all a begrudging clean (the cars, that is, for the cover shoot – although they look so good dirty!), it's dusk as I commandeer the GT-Four from Mark Robins, its enthusiastic owner.

I know this is a very special car, this original UK-sold Celica. It's not often you see an ST205 GT-Four that isn't a grey import, but not only that, Mark is only its second owner, having admired this very car as it drove around his local town when it was new. It was a pure fluke that he was able to acquire it recently, and it's wonderfully original down to the neatly folded plastic bag and associated plumbing for the water injection system in the boot. There's a strange aura that clings to this car. Formidable.

Top: this GT-Four, in ST205 guise, was one of 300 made for the European market and featured a larger rear wing, better cooling and lighter kerb weight

Above: dynamically the older Lancia feels like a more conventional car compared to the razor-sharp Subaru and Mitsubishi

Unsuccessful. The cheater's car, or arguably simply the one that got caught. It was very expensive when new, sold in small numbers, and sometimes received a slightly cool response from the media. It came from a dominating family but failed to continue the victorious bloodline. It will forever be the outsider. The black sheep.

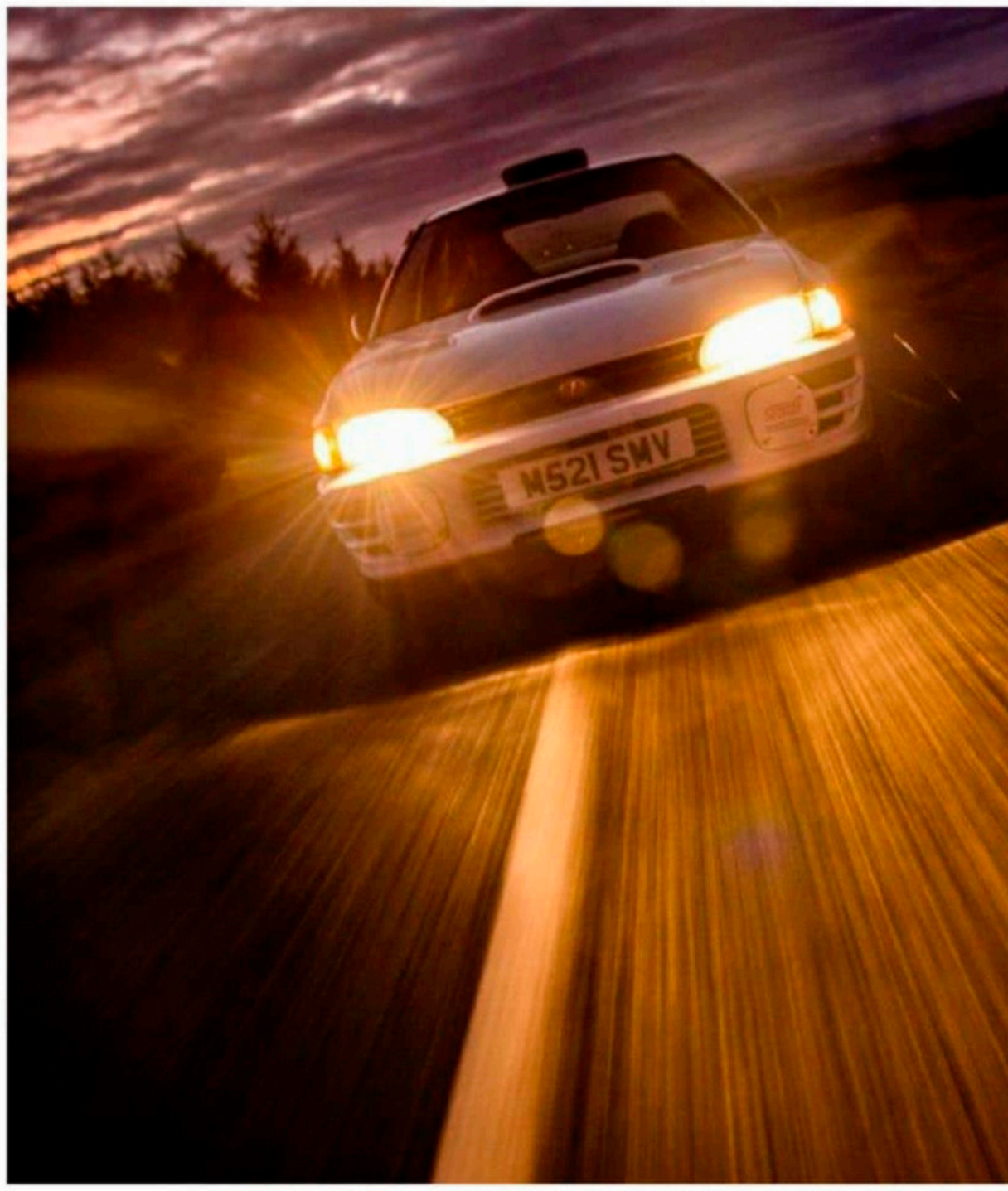
However, put into the context of today, both Catchpole and I find the Toyota beguiling. For a start, you sit obviously lower, even laid back, and the view out is more restrictive than in the others. I'm not ashamed to admit that the look, feel and smell of the interior, plus the whine when starting off in first gear, bring a lump to my throat; they're all identical to those of the similarly 3S-powered Mk2 MR2 Mrs Towler Snr drove when I was a teenager, and the triggered senses momentarily put me back in the passenger seat of that little red mid-engined sports car, with a badly folded tie and a sixth-form ring-binder smothered in cut-out pictures of Group A Imprezas and Cosworths under sticky-back plastic.

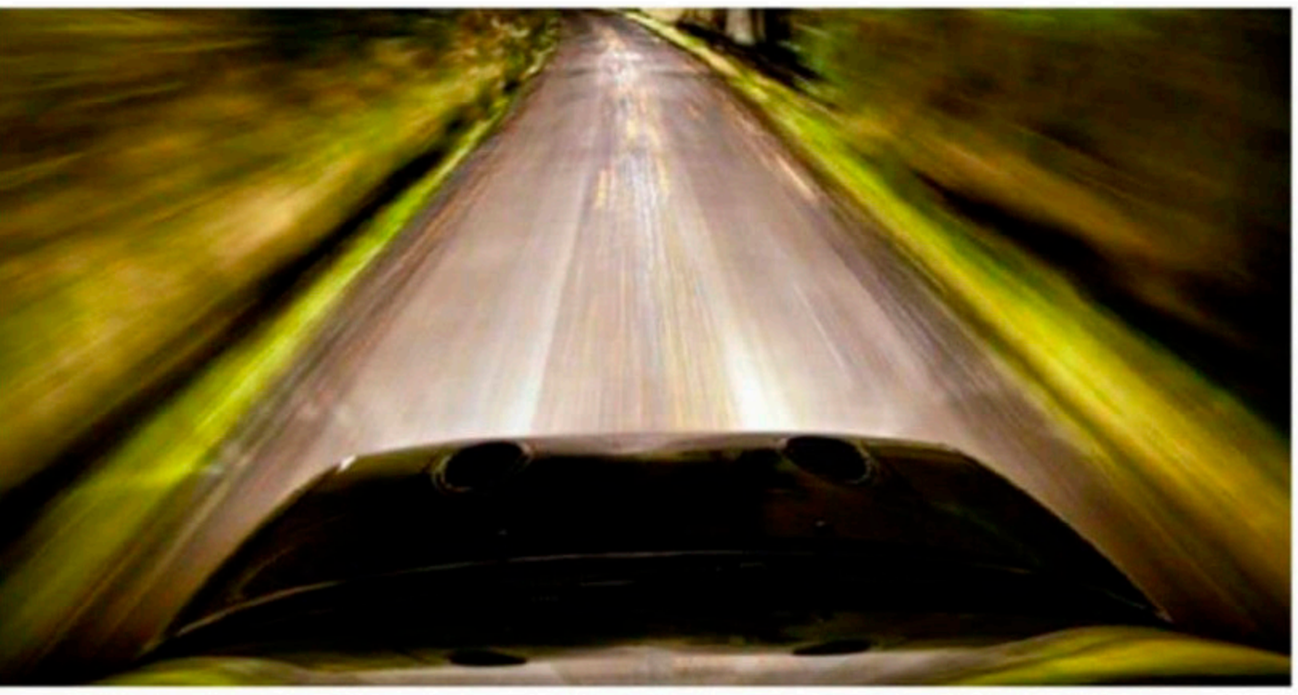
The 242hp 3S-GTE engine snaps me back to reality. It may not be the most powerful here, but its brawny, lag-free delivery and smoothness make it arguably the most sophisticated, and it really fires the Celica forward with conviction. There's something about the balanced, calmer, planted way the GT-Four drives that gives it a more modern feel, as does its solidity – Toyota's build quality in this era is rightly admired for its impregnability. It's a car that feels wider in track and longer in wheelbase than the others, and while that arguably makes it less of a thrill, and perhaps an acquired taste when new, its mix of feedback and ability in 2020 strike a particularly sweet note.

The cloud has split and the yellow light from a dying sun streams through, coating everything in the strangest deep glow. Hacking across the broad plains in the GT-Four with five pairs of headlights shimmering in the mirror, the Toyota's composure over the evolving crests is deeply confidence inspiring, its pace continuously impressive.

It's dark as we edge into Kielder Forest and its gravel tracks. Nicky Grist, Robert Reid, Risto Mannisenmäki et al would doubtless be bemused at our inability to even find the entrance for a while, but once inside, the scale and silence are breathtaking, and the clarity of the intergalactic display above our heads leaves us speechless, mouths agape. As the photography brief is worked through, cars are released back to the hotel in dribs and drabs until just a couple remain. The Cosworth awaits. Yes. Please.

You have to feel your toes squishing into the Ford's carpet fibres before you really get the best the Cosworth can give. That big old hybrid turbo has a maddening lethargy at times, but when you're really on it the chassis and engine make sense. The throw of the gearshift is long and slightly loose, and the damping is clearly very tired on this example, which is a shame, plus a creak from the front end and a slight pull





hardly fill a driver with confidence. But as much as common sense urges you to resist, out here in the middle of nowhere, struggling with early 1990s headlamps, the drive back turns into something electric.

Hunched forward and high, elbows bent in a pure Monsieur Delecour fashion, and imagining Daniel Grataloup on the notes at a million miles per hour, the Cossie is a wild ride home, hyper-agile like an unstable fighter jet. Hard work, but so rewarding. Later, I'll have a dream that I even pulled on the bar at a deserted T-junction, but I'm sure that never happened. Oh no. Not at all. 'Just a dream,' as our Henry would say...

DAY TWO DAWNS AND I REALLY, REALLY NEED to drive the Sunny. And at our first fuel and jet wash stop, as drivers and cars shuffle their order, the little red Nissan awaits. Of all the cars here, it's the Sunny that illustrates what happened when a manufacturer ruthlessly exploited the Group A regulations, creating a bizarre concoction of humblest shopping hatch and rallying warrior with seemingly little to glue the two disparate halves together. And also how a lack of planning or understanding of those very same regulations could render an entire multi-million-yen project effectively useless before it had even got off the ground. You've probably read Henry's retelling of Nissan's 'interwarmer' fiasco at the start of this story, but the net result of it was that the company's campaign was sunk before the first stage.

'IT'S DARK AS WE EDGE INTO KIELDER FOREST AND ITS GRAVEL TRACKS'

Above: the rare Impreza WRX STI Type RA was homologated for Group N rallying, which allowed fewer changes than Group A regulations

It feels like eons since cars had interiors as basic and bland as the Sunny's. The flat cloth seats, scratchy plastic and simple dials are only augmented by a trio of secondary dials for boost, oil temperature and pressure. On its tiny 14-inch wheels it looks meek in one sense, but the bonnet bulge from the driver's seat is a pretty massive clue as to the qualities of the 'red top' SR20DET engine – perhaps best known in the UK under the bonnet of the Nissan 200SX. It's an absolute cracker: punchy, with little lag and an appetite to rev freely.

It may have been a miserable rally car, but the GTI-R is a formidable road car. It doesn't even feel overtly four-wheel drive; it's like some larger-than-life hot hatch that's time travelled through space to 2020. As it takes apart a particularly tough, twisting road, only the average response of the middle pedal and the sedate driving position betray that it's nearly 30 years old. You'd not fear even a

contemporary hot hatch in the Sunny, it's such a bizarre but deeply covetable little monster. Later, following the Sunny in the Lancia through a fast uphill left-hander for Aston's lens, the little Nissan puts the sweats on the Integrale. It's the first time the Lancia shows its age; its structure feels flexible, the glovebox pings open of its own accord, and I heed the message to back off a little. It just doesn't respond to being driven quite as hard as the other cars here.

I think I've made a subconscious effort to steer clear of the Mitsubishi. Perhaps that's because it's the car I know the best out of all of those here, or because I worry it'll overwhelm everything else with its abilities. For starters, it's the most powerful car of this bunch, its claimed 280hp putting it 5bhp ahead of the Impreza (although its advantage may be even greater than that if rumours are to be believed). It's certainly the youngest, too, and moreover, keen **evo** readers may well recognise this car as Mitsubishi's heritage fleet example, with just 8000 miles on the clock. It's perfect.

It's all about the rake with the Evo – the angle of pitch, fore to aft. That, and the lofty ride height. Spot that in the pictures and you've got a clue to what makes it so special. No, it's not the fabled 4G63 motor, although it's torque-rich slam dunk is so addictive. Nor the five-speed gearbox that offers the sort of precision that most manual sports cars, from any era, would die for. And it's not the car's unburstable traction, incredibly supportive seats, ruthlessly sharp, accurate steering, or the fact it looks so purposeful it's hard for the stomach not to do a little summersault when you see it.

It's about how there's seemingly not a road on the planet that

Lancia
Delta HF Integrale Evoluzione II
Engine In-line 4-cyl, 1995cc, turbo **Power** 215hp @ 5750rpm (c240bhp as tested) **Torque** 315Nm @ 2500rpm **Transmission** 5-sp manual, 4wd **Weight** 1340kg **Power-to-weight** 161bhp/ton (c182bhp/ton as tested) **0-100kmh** 5.7sec **Top speed** 220kmh **Price when new** c£30,000 **Value today** £20,000-77,000 ($35,500-137,000)

evo rating ★★★★★

Toyota
Celica GT-Four
Engine In-line 4-cyl, 1998cc, turbo **Power** 242hp @ 5600rpm **Torque** 304Nm @ 4000rpm **Transmission** 5-sp manual, 4wd **Weight** 1390kg **Power-to-weight** 175bhp/ton **0-100kmh** 6.3sec **Top speed** 245kmh **Price when new** c£30,000 **Value today** £7000-10,000 ($12,500-17,800)

evo rating ★★★★½

Ford
Escort RS Cosworth
Engine In-line 4-cyl, 1993cc, turbo **Power** 220hp @ 6250rpm **Torque** 290Nm @ 3500rpm **Transmission** 5-sp manual, 4wd **Weight** 1320kg **Power-to-weight** 167bhp/ton **0-100kmh** 6.1sec **Top speed** 219kmh **Price when new** £26,750 **Value today** £42,000-96,000 ($74,700-170,800)

evo rating ★★★★☆

Nissan
Sunny GTI-R
Engine In-line 4-cyl, 1998cc, turbo **Power** 220hp @ 6400rpm **Torque** 267Nm @ 4800rpm **Transmission** 5-sp manual, 4wd **Weight** 1240kg **Power-to-weight** 178bhp/ton **0-100kmh** 6.4sec **Top speed** 222kmh **Price when new** c£20,000 **Value today** £9000-30,000 ($16,000-53,400)

evo rating ★★★★☆

can faze it. No bump, camber or broken surface can deflect its purpose – namely getting from one end of a road to the other. It just floats magically over everything. And yet as Henry and I note wryly, unlike something such as the current Renault Sport Mégane Trophy-R, it also works at any speed. You don't have to be going flat out in the Mak to be engrossed, challenged and rewarded. In fact, it's a supremely demanding car to drive smoothly, slowly, insisting on absolute confidence and precision. If only cars were still made like this.

There simply couldn't be winners and losers amongst this gathering, if nothing else because we've compared cars from over the course of a decade. Instead, as the miles accumulate and the experiences are branded onto my brain, I come to see our Group A heroes as unique plots on a chart. The Toyota, over on one side, a multi-talented GT; the Sunny, an extreme lesson in Group A madness; the Lancia, achingly desirable; the Ford, the people's hero; the Lancer, the ultimate evolution – pun intended – of the breed. But the one I'd choose to drive home if push really did come to shove would be a machine that turns every B-road into a special stage, and whose most famous exponent grew up not too far from where we've been driving, a plumber's son from Lanarkshire who became Britain's first World Rally Champion.

Most importantly of all, though, these two days have reminded us that until road cars once again incorporate the laser focus of competition requirements that homologation-based rules demand, they're unlikely to offer such a capable, authentic and desirable blend of qualities: cars so special, two of them gave this very magazine its name.

Subaru
Impreza WRX STI Type RA
Engine Flat-four, 1994cc, turbo **Power** 275hp @ 6500rpm **Torque** 319Nm @ n/a **Transmission** 5-sp manual, 4wd **Weight** 1200kg **Power-to-weight** 229bhp/ton **0-100kmh** n/a **Top speed** n/a **Price when new** c£17,000 **Value today** >£10,000 (>$17,800)

evo rating ★★★★★

Mitsubishi
Lancer Evo VI Tommi Mäkinen Edition
Engine In-line 4-cyl, 1997cc, turbo **Power** 280hp @ 6500rpm **Torque** 373Nm @ 2750rpm **Transmission** 5-sp manual, 4wd **Weight** 1365kg **Power-to-weight** 205bhp/ton **0-100kmh** 4.6sec **Top speed** 241kmh **Price when new** £32,995 **Value today** £18,000-45,000 ($32,000-80,000)

evo rating ★★★★★

'THERE SIMPLY COULDN'T BE WINNERS AND LOSERS AMONGST THIS GATHERING'

NICKY GRIST AND HIS...

TOYOTA CELICA GT-FOUR GROUP A

Co-driver to World Rallying royalty, Nicky Grist spent a career in the passenger seat of many an iconic WRC car. Here he tells us about the painstaking process of restoring one for himself

by ADAM TOWLER PHOTOGRAPHY *by* ASTON PARROTT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Opposite: Group A ST185 GT-Four was powered by a turbocharged 2-litre four-cylinder engine; Grist’s example is set up like the car in which he and Juha Kankkunen won the Rallye de Portugal in 1994, only now Grist can enjoy the driver’s seat if he chooses – but old habits die hard (above)

‘IT BEGAN IN AFRICA,’ SAYS AN INSTANTLY familiar voice. I’m at Nicky Grist Motorsports, the eponymous equipment supply company belonging to possibly the most famous man to sit in the ‘other seat’ of a rally car. To hear him talk is to witness the passion for cars and rallying seeping out of him like mud oozing out of the tyre tracks on a Kielder Forest stage in November. Time listening to Grist is time to be relished.

Yet the man best known for sitting beside Colin McRae from 1997 until the Scot’s tragic demise has not bought a Banbury-crafted Impreza, as you might imagine. He’s bought a Toyota, and perhaps the most revered of all to come from the TTE (Toyota Team Europe, these days known as Toyota Motorsport Germany, or TMG) workshops in Cologne: the Celica ST185 GT-Four Group A.

‘After leaving Ford at the end of 1991,’ recounts Grist, ‘TTE put me with Mikael Ericsson, and we had three rallies lined up for the ’92 season. The first job was to do all the test and development work for the Safari Rally in Kenya. This wasn’t like the later events. This was a 5000km slog, and I had no idea what I’d be facing…

‘Early December and I’m on a plane to Kenya. I get in this car [an ST185 rally car], drop my gear in, and Mikael and I are soon blasting down the main Mombasa road. There were monkeys, baboons – I’d never been to Africa before – and there we were in this full Safari-spec rally car with lights on the wings. Screaming down these roads, people diving out of the way because they could see the lights coming. We went into the first section to make notes and it’s all “left at washaway” etcetera, and I thought, “Christ, what’s a washaway?”

‘We turned left at this junction, and then bing, bang, bosh, and I said, “Stop, stop, stop a minute!” We were on these big rounded boulders. “Mikael,” I said, “this must be wrong, this isn’t a road…” Of course, it was.

‘And the sweat was pouring out of me. The photocopied road book on my lap was just breaking up with the sweat, but we carried on. I basically fell in love with Africa, and this car.’

With testing and then recce work, plus the actual rally itself, Grist believes he did more than 25,000km in Africa that year.

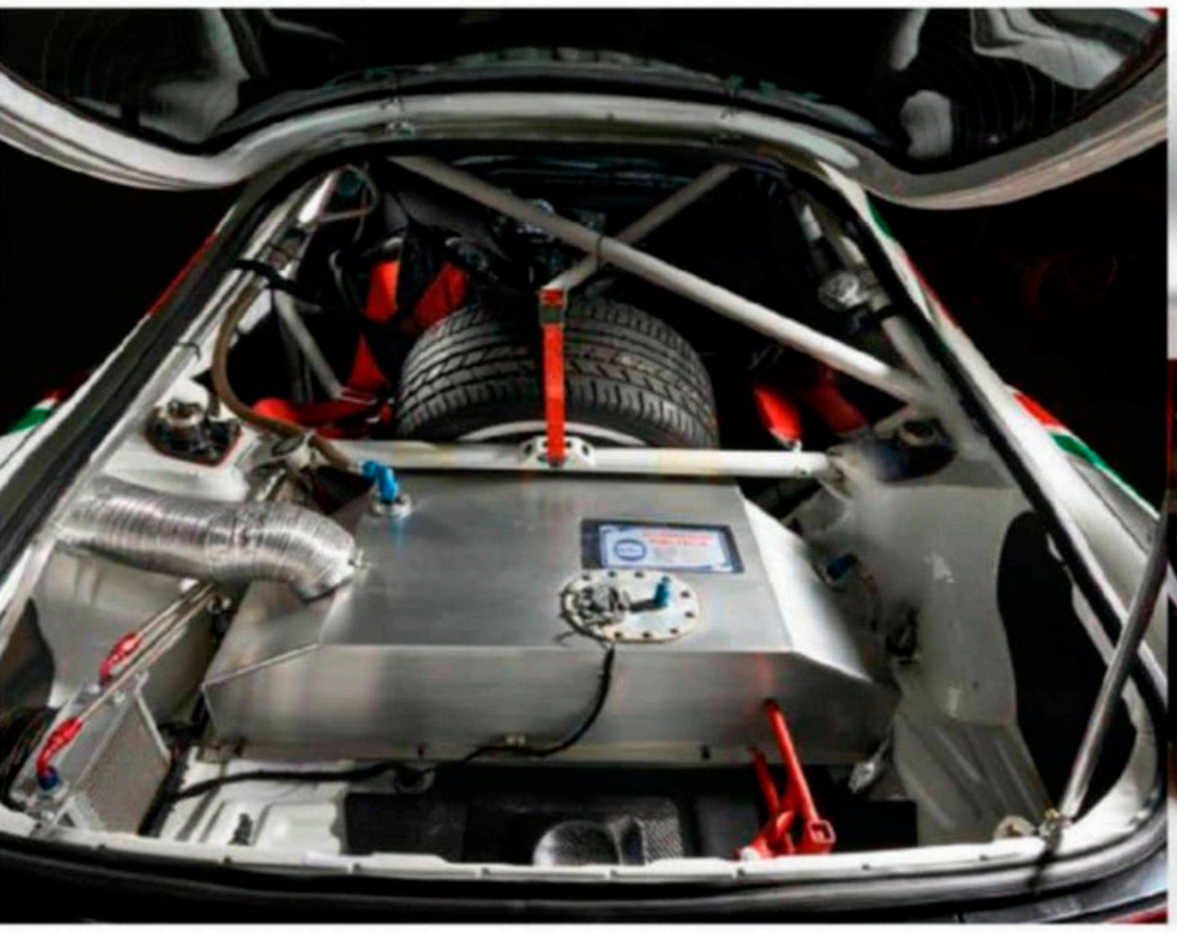
Grist’s relationship with Toyota got off to a faltering start, but came good in a spectacular way. With Ericsson’s forced departure from the team, Grist signed for Mitsubishi for 1993, partnering Armin Schwarz in the first Lancer Evo, but he received a call-up when Toyota’s Finnish superstar, Juha Kankkunen, suddenly lost his co-driver through ill health. Kankkunen and Grist won first time out, in an ST185, and twice more that year. But although the Finn was champion at the end of the season, Grist had to accept second place because he hadn’t done all the events with him.

‘Finding these cars is difficult,’ says Grist, ‘so many have been reshelled and buggered about with. This was an original shell. There was a lot of detail that’d been lost, but I thought, “Shit, for the money let’s go for it.” We thought at one point it was our Portugal car, which it wasn’t. It was built for Carlos Sainz for Australia 1992, then used on the Monte test by Juha in ’93, then the Swedish Rally by Didier Auriol. It was then sold to Toyota Team Sweden, who sold it to a guy in Denmark, and then it went over to Ireland and had a few owners.’

With painstaking attention to detail the Celica has been brought back to its TTE prime. ‘I’ve enjoyed the process, but finding the bits is a difficult thing,’ says Grist. ‘I was lucky that the majority of stuff was already on it, but it was the little things like the wrong ignition coils, and the fact the ECU was dying – we put a Motec into the old box.

‘John Day, TTE’s then workshop manager, went around the car and said, “You’ve done a good job. We never built them this good back in the day.” That meant a lot. I’ve got the spec sheet for the last rally we won together, Portugal, and the first day was always tarmac, so the chassis set-up, the graphics, are like that.’

What’s it like then, sitting behind the wheel for a change? ‘When I was co-driving I could see things from the passenger seat – because of the testing, you get a feeling – and I’d even suggest a different line. But when I jump behind the wheel everything’s gone. You don’t know if what you’re doing is right, you’re just doing it! I don’t think I’d ever want to push the car to the limit. I do it for the fun of it, and it would be nice to keep it in one piece!’ ■

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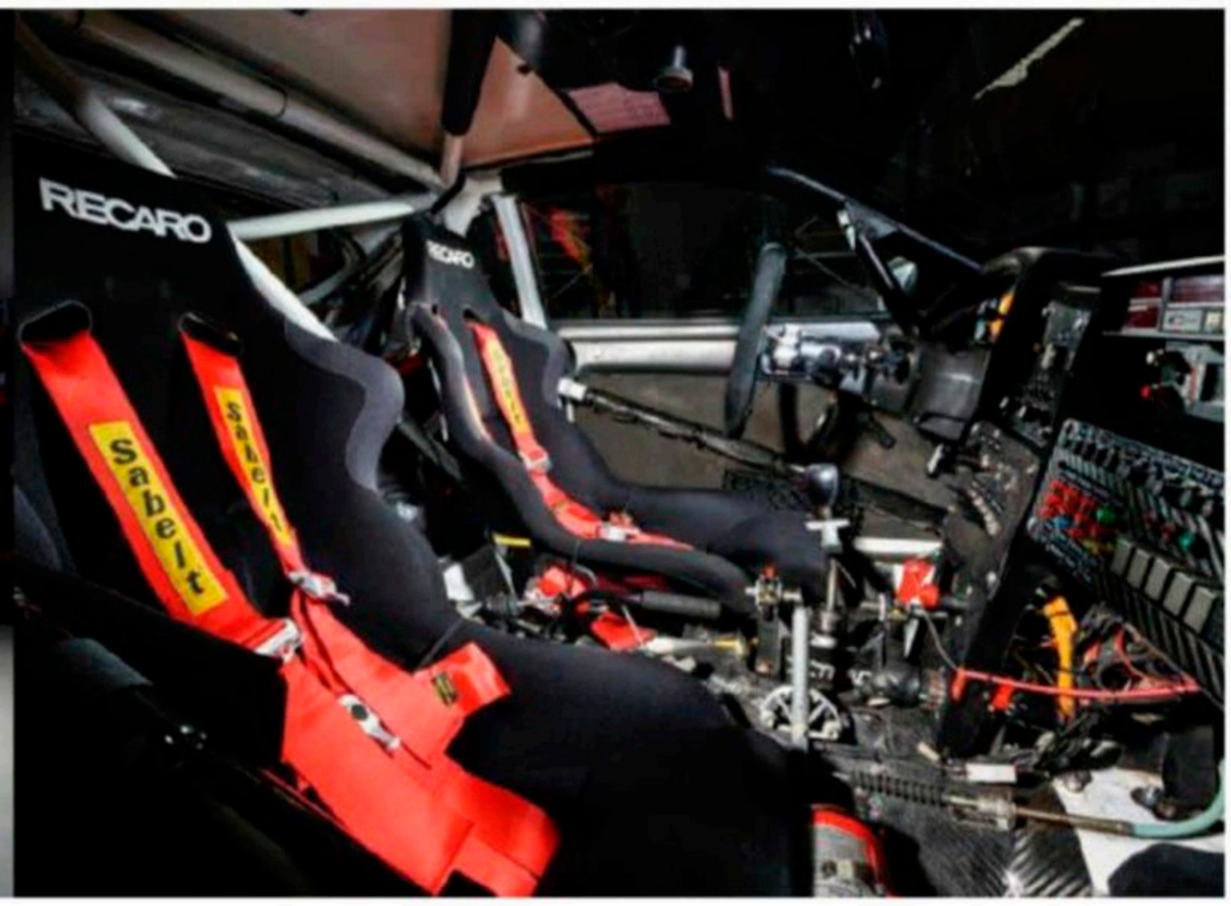
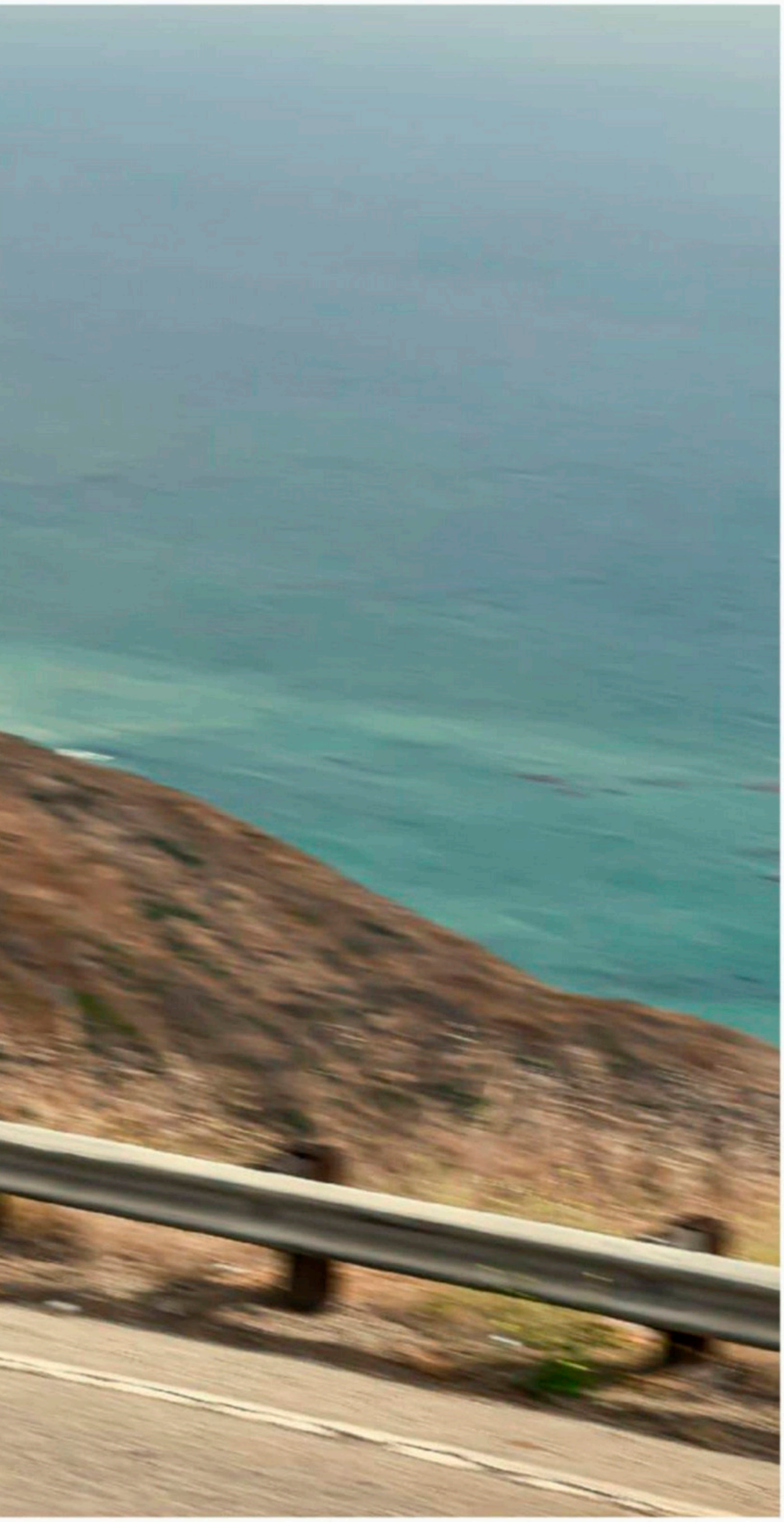

RECARO
Sabelt

911 HEAVEN

by JETHRO BOVINGDON

PHOTOGRAPHY *by* JAMES LIPMAN

Prefer your reborn coupes German? Then if your pockets are deep enough, LA-based Workshop 5001 could be the outfit to make your dreams come true. We drive its latest creation: a sublime restomodded 1972 911



T PAYS TO FORGET REALITY SOMETIMES, and today is one of those days. The surroundings make it easy enough. We're meeting at Trancas Country Market in western Malibu, the sun has a bleached-out movie-set quality and the aroma of the Pacific Ocean hangs in the air. Trancas is nothing more than a little shopping centre with barn-style buildings dotted around a central car park, but it became renowned for its Cars and Coffee events where you'd find 959s and F40s parked up next to Gullwings and Stratoses. Real life doesn't really apply around these parts, but fantasy car culture is everywhere.

Why Malibu? Well, if you're going to drive a hot-rodded, air-cooled 911 anywhere then the famous 'canyon roads' that climb the Santa Monica mountains are probably the location, conjuring up images of Hollywood icons howling around without a care in the world back in the '60s and '70s. Oh, and because the owner of this particular 911, based on a '72 and created by Los Angeles-based Workshop 5001, lives nearby. Of course.

Workshop 5001 is a small operation a world away from Singer, the behemoth of this obsessive, cultish and (is this OK to say?) slightly self-reverential air-cooled world. Workshop 5001's owner, Marlon Goldberg, is a fascinating character who tells it like it is, has impossibly high standards and believes that each car should be bespoke, its character defined and developed as a cooperation between owner and his team. So there's no such thing as a 'Workshop 5001 911' that can be easily recognised and understood. Bespoke builds have included a narrow-bodied '72, a 356 B Cabriolet, a barely disguised racer based on a '74 fitted with a seriously rude 3.8-litre engine, and there are two short-wheelbase cars in build alongside a 930 Turbo.

'We facilitate people's insanity,' he says with a smile. 'And to be honest, our own insanity.' You know I said about forgetting reality? Here's why: a Workshop 5001 bespoke project will likely cost you circa US$1million (S$1.39million). A mark of 5001's work is that it has one client already on his second build and who would love to do a few more. At least. 'I have to keep saying no,' explains Goldberg. 'I don't want to build cars just for one client. It's not a great business model and it's cool working with different people with different ideas, too.' Anyway, this is the fourth full build, an evolution of 'Number 1', which was a gorgeous Nardo Grey '72 with steel wheels, skinny tyres and a fiery 3.4-litre engine. 'I guess if Number 1 was a GT3, this is a GT3 RS,' says Goldberg with a grin. Sounds good to me.

The '72 edges out onto the Pacific Coast Highway ahead. I'm in a 992 Carrera S fitted with ceramic brakes, rear-wheel steering and all the other trick options you might like. It's painted Racing Yellow. Yet the sparkling new Porsche may as well be invisible. The Workshop 5001 cars don't do overt drama or huge rims, but there's something magnetic about the look and the sound, and

‘THE WAY YOU CAN TWEAK AND PLAY WITH THE CAR’S BALANCE AT WILL REMINDS ME OF A 997 GT3 RS 4.0’

the Fashion Grey paint might be subtle but somehow intensifies the innate charisma of this fierce little car. Goldberg brakes at a junction and the rear brake lights pulse like a modern car’s when ABS activates. I ponder whether it’s an electrical fault and then realise how stupid I’m being. ‘Oh, we did that deliberately,’ Goldberg later confirms. ‘We really don’t want anyone rear-ending this car.’

No wonder. Like all Workshop 5001 creations, it’s a labour of love, and Goldberg built the engine himself. ‘I’m always on the lookout for donor cars,’ he explains. ‘I tend to buy them up first and find a customer later… You can’t hang around when the right thing comes up.’ He’s not kidding. Goldberg bought this car in San Francisco on New Year’s Day 2017 having seen an ad on Bring a Trailer. It was a non-runner but everything was complete. The engine came out of an '86 Targa from Iowa and has been transformed from a sleepy 3.2-litre into a 3.4-litre twin-plug with titanium connecting rods, a straight-cut intermediate gear and a fuel-injection system co-developed with Michigan-based Kinsler. It produces 320hp and 380Nm of torque.

The bodywork is all as fitted to a ’73 RS and direct from Porsche Classic (it recently reissued the panels) but with the oil filler from a ’72 grafted in to keep that distinctive feature. Early RS prototypes didn’t have the ducktail spoiler, so the look is faithful to those progenitors, only finished to an altogether higher standard. The chassis is seam-welded and has been strengthened wherever possible. ‘OCD-spec’, as the team would have it.

Beneath all the glossy, shiny things is serious motorsport-spec hardware. Suspension is by three-way adjustable KW Motorsport coilovers, just like you’d find on a Cup car, and the car is controlled by two Motec ECUs. There’s so much more it’s impossible to list and, frankly, rather dull. What I love about the Workshop 5001 guys is that they are obsessed with the small details but don’t lose sight of the bigger picture. They know that all of this stuff means nothing if the driving experience isn’t as perfectly honed as the shell preparation.

So it’s precious and meticulously built. But dropping into the driver’s seat this tiny machine has the timeless simplicity and sense of assured purpose that makes all air-cooled 911s so immediately beguiling. I adore the immaculate pale green interior and the sheer perfection on display everywhere, but mostly I’m just excited to be in a compact, simple early 911. After the nagging sense that the 992’s retro-futuristic interior

Left: ’72 shell feels refreshingly compact on the road. **Right:** splitter is made from Jabroc, the composite wood used for the plank beneath F1 cars

has a whiff of cheesy pastiche about it, the snug, intimate surroundings are like breathing pure oxygen. My senses feel sharper before the car has turned a wheel.

We've left the multiple lanes of the PCH behind us when I finally get to feel what getting on for a million bucks' worth of hot-rodded 911 feels like. Yerba Buena Road is one of the many that climb and criss-cross the mountains and it's tight and technical, scorched to a yellowy hue by the sun and absolutely deserted. It really does feel like it was made for an early 911. But there are signs of the raging forest fires that devastated Malibu recently, the hills charred and apocalyptic and the road surface absolutely ravaged in places. It's definitely not a road a modern GT3 RS would enjoy, so I'm guessing this car – I'd like to call it Number 4 but the owner is of Asian heritage and so this 911 is maybe better described as 'The Car with No Number' – might be out of its comfort zone, too.

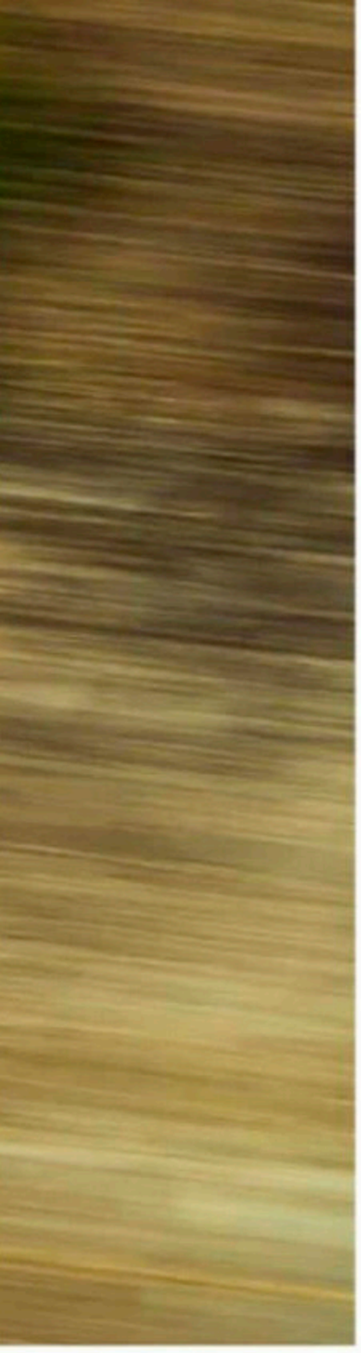
Even so, twisting the key and hearing the 3.4-litre flat-six boom into life is an exciting moment. It sets the whole car tingling and buzzing, and the deep, unreconstructed noise is utterly authentic and almost painfully evocative. The first few hundred metres are the usual slightly awkward handshake with an air-cooled 911. Muscle-memory recalling the technique for the floor-hinged pedals, grappling with high steering effort at low speeds and, in the case of this highly tuned engine, trying to be smooth and fast enough with the gearbox to make sense of the lack of flywheel effect and the way revs rise and die so quickly. Even so, there's immediately a sense of the toughness and integrity suggested to back up the hunkered-down stance and the work I know has been poured into this car.

The structure feels tangibly stiffer than those of other early 911s I've tried. Maybe not as immutable as on a modern GT3 RS, but it doesn't creak or judder and the precision of steering response and the wonderful polish to the damping speak volumes for the attention paid to the basic architecture. It's like a little billet of aggression and fast-twitch muscle. It's funny: despite the lavish attention to detail, this car's personality is rabid and angry and has the focus of a little race car.

It's an impression backed up by Goldberg's 3.4-litre masterpiece, which has the classic hard-edged flat-six howl of something like an RSR, dialled back just enough to prevent ear bleeding and underscored by a deranged whine from the straight-cut intermediate gear, and possessing an incredible ability to fling this little car along with almost shocking intensity. The engine is the car, infecting everything it does and seeping into every control, helping you to pick open the road and creating a sensation that you're able to dictate to the car and, soon enough, that it can almost pre-empt what you want to achieve. It's not just that a snorting 320hp rips 954kg to shreds, it's that the engine, chassis and controls come together in perfect harmony.

There are limits, though. Yerba Buena's surface only gets worse as we climb; the tarmac has literally boiled and reformed in painfully corrugated sections in places and flows like a petrified waterfall over into the scorched landscape in others. Here the uncompromising race-car-for-the-road set-up is simply too aggressive and the 911's light-footed accuracy dissolves into real harshness. It's not really a criticism because even a Phantom would struggle to deal with this stuff, but it is perhaps a clue that in the UK you'd need to back off those trick KWs to find the ideal set-up.

Fortunately, you're never far from the next pass in this part of the world and we head a little north to Deer Creek. It's slightly wider, quite a lot smoother (although still broken up in places from sun and fire) and much

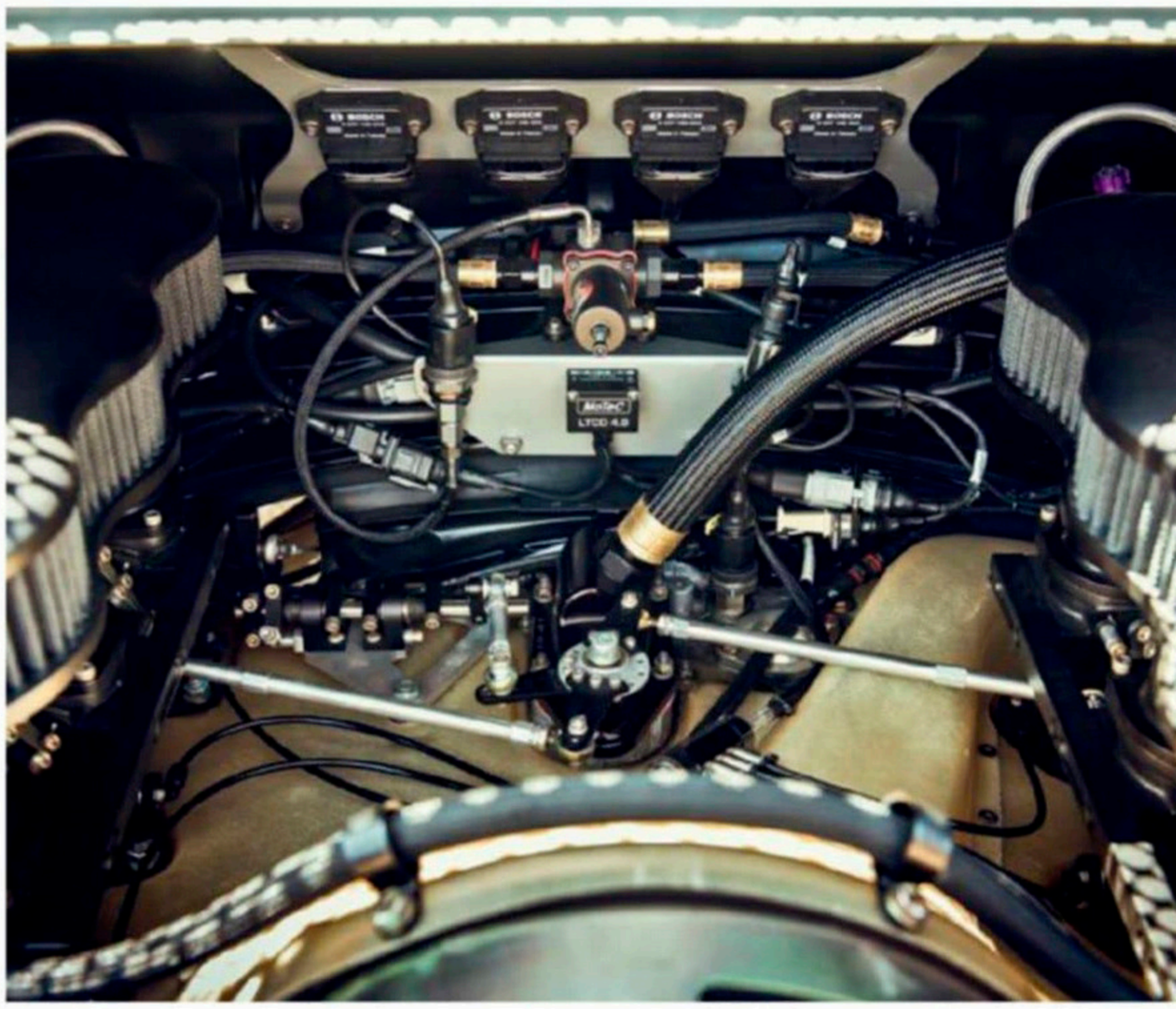


better sighted. The Car with No Number really comes alive. The steering is simply mind-blowing, the level of detail it provides painting a picture of the available grip in absolute clarity. Now factor in that every last trace of slack has been chased out of the chassis, plus the instant and abundant power from the engine, and you have the pure essence of 911 crystallised into something pretty darn extraordinary.

The way you can tweak and play with the car's balance at will reminds me of a 997 GT3 RS 4.0. There's the same connection between throttle and every fibre of how the car responds but in a more compact, lighter old-school package. The limits, though still pretty high, are more accessible, too. That means you find yourself within that magical zone more frequently. Full immersion isn't a matter of removing your brain but engaging it – feeling for the limits of front tyre grip, trail-braking to loosen the tail, and acting precisely on the throttle to steer the car through any given corner right on the edge of oversteer but not slipping away. All the while that engine howling and shrieking behind you and the car seeming to exist in this state of permanent optimum slip angle. You know when you watch an old racer float around at the Goodwood Revival, front wheels jinking left and right to maintain the perfect line and rears elegantly scribing a slightly wider arc? That's this car on a canyon road. On the edge but so composed it feels like slow motion.

Of course, to expect anything less seems ludicrous. This is – and I repeat – a circa $1million car. It *should* be utterly intoxicating, it *should* exude a sense that it'll keep on performing in this way for years and years, it *should* purify and intensify all the things that make old 911s great. Otherwise... it's just a very beautifully wrought object. The fact that Workshop 5001 appreciates that the driving experience is so important and spends weeks dialling in the set-up really warms my heart. Even since I drove the Car with No Number, Workshop 5001 has been working on the set-up, the gearbox is being rebuilt with shorter ratios for even more fury and it's further refining the new fuel injection system. It's like it can't quite let it go... Perfection is an elusive goal.

Pulling back onto the Pacific Coast Highway after a day of howling up and down the Santa Monica mountains, ocean shimmering in the afternoon sun and huge pickups mingling with SUVs and the odd Porsche, Ferrari or Aston Martin, reality still seems a distant nightmare. The air is hot and the car doesn't have air conditioning, so I'm slowly wilting into the seats, but that seems a small price to pay for the memories of this fierce, hard-edged little 911 howling and dancing from one corner to the next, sometimes on three wheels, sometimes sideways, but always in sync both with the surface and whatever I was asking of it behind the steering wheel.



Above: exquisitely finished 3.4-litre engine produces 318bhp and 280lb ft of torque, and was built by Workshop 5001 owner Marlon Goldberg himself

However, a reality check is perhaps in order. Any older 911 in good mechanical shape captivates with detailed steering, the unique sensations of a flat-six hanging out beyond the rear axle and all the challenges and rewards that brings, plus the ever more enticing qualities of low mass and modest dimensions. Would a sweetly sorted early SC on skinny cookie-cutter alloys deliver the same thrills? Would a genuine 2.7 RS blow it into the weeds as a driving experience?

They'd certainly get you some of the way there. Maybe even closer than is strictly comfortable if you've just lavished many hundreds of thousands of dollars on a creation such as this. But cars such as this aren't really about logic. They're about passion and obsession, about the fever and madness that all of us as car enthusiasts possess to a certain extent. So the question of 'value' is almost null and void. I'm sure the owner realises it's not value in the traditional sense. But as an expression of love for the 911, of seeking out the purest Porsche driving experience, of simply refusing to compromise, it's a machine we can all admire. This might be the Car with No Number, but for the owner it's simply The One. I can understand that. I'm sure we all can. L

WORKSHOP 5001 911

Engine Flat-six, 3.4 litres
Power 320hp
Torque 380Nm
Transmission 5-sp manual, rvwd
Weight 954kg
Power-to-weight 339bhp/ton **0-100kmh** c4.0sec (est)
Top speed n/a
Price as tested c. US$1million
evo rating ★★★★★

by ANTONY INGRAM

PHOTOGRAPHY *by* ASTON PARROTT

UNSTOPPABLE FOURS

With the same power as our Group A cover stars had in competition spec, can a trio of today's 300bhp-plus, four-wheel-drive mainstream performance cars deliver the same thrills?

ONE OF THE GREAT PLEASURES OF OWNING A Subaru Impreza or Mitsubishi Evo must be opening the curtains on a winter's morning to a blanket of pristine white snow. While poor weather would be the excuse for most drivers to crawl back between the sheets and add another 30 minutes to their alarms, a select few cars revel in uncertain conditions. They tread confidently where the rest hesitate, and impart reassurance to their drivers where others send mixed messages.

We have three such cars with us today. The skies over the Peak District are heavy with misery, gusts of wind cut through to the bone, and 'road liable to flooding' signs litter the verges like oversized confetti. It's not snowing, and it isn't raining either (yet...), but we're promised a dousing after lunch, and in the meantime the greasy, winter-ravaged asphalt still makes our trio preferable to most front- or rear-drivers you'd care to mention.

Two hail from **evo**'s very own long-term fleet, in the shape of art editor Rich Browne's metallic Melbourne Red BMW M135i xDrive, and dep ed Adam Towler's SEAT Leon Cupra R ST Abt in a shade called Blackness Grey. The latter is set off both by copper-coloured details ('ginger', according to editor Stuart Gallagher) and subtle Abt badges.

The Abt tweaks lift power to a not-insignificant 345hp from the standard 300hp, which makes the Cupra the most powerful car here by some margin. The BMW, which also has a 2-litre four-cylinder engine, musters 306hp, while the third car of our gathering, a metallic Cosmos Black Mercedes-AMG A35, again with a 2-litre four, makes an identical 306hp.

As we'll discover, the way these cars deliver their outputs is far from identical, despite all sending their power to all four wheels through paddleshift transmissions. Our trio also demonstrates the diversity of body styles in this segment – the BMW a traditional five-door hatchback, the Leon a five-door estate, and the Mercedes a four-door saloon, albeit a bijou one. While we're not expecting the shapes to have much influence on the way they drive, it's at least a positive sign that crossovers haven't brought an end to such variety.

Styling does play a part for many though, so it'll be interesting to see how diehard BMW fans take to the £36,430 (S$239,888 w/COE in Singapore) M135i. It's... not great, is it? Previous 1-series weren't exactly pretty but at least had traditional front-engined, rear-drive proportions going for them, before you even got to rear-drive layouts or six-cylinder engines. But this latest car might just be the least cohesive shape BMW has penned this side of a 5-series GT.

The £37,975 (N/A in Singapore) Leon is vastly more appealing. Ginger detailing or not, its shape has aged exceptionally well, particularly in estate form, and the VW Group's fancy metal panel stamps, capable of ultra-sharp edges, have rarely been put to better use than for the creases in the Leon ST's flanks. It's particularly fetching from the rear three-quarters, and despite its extra length over the other two here it carries far less visual bulk. There are, of course, practical benefits to the Leon too, and with BMW's wagon alternatives being the X1 and X2 crossovers, and Mercedes' upcoming CLA Shooting Brake more of a style-led device, the SEAT should remain the car for those who actually wish to transport large or inconveniently shaped objects.

It'll take something special to overcome the £38,615 (S$214,888 w/COE) A35's showroom pizazz, though. Next to the BMW it's almost a Renaissance masterpiece, despite being probably the least appealing '35' body style. Compared to the sleeker CLA35 it's a little too tall and truncated, a little too close to those dubiously styled supermini-based saloons made for places such as China or India. But this example's black-on-black colour scheme gives it an air of class the other two lack, and I soon warm to its 'Hot Wheels E63 S' vibe.

Whichever shape you choose you're still privy to one of the best cabins in the class, with a pared-back dashboard, highly configurable screens, and when it's dark an ambient cabin glow that's simply more inviting than the token nocturnal illumination of the other two.

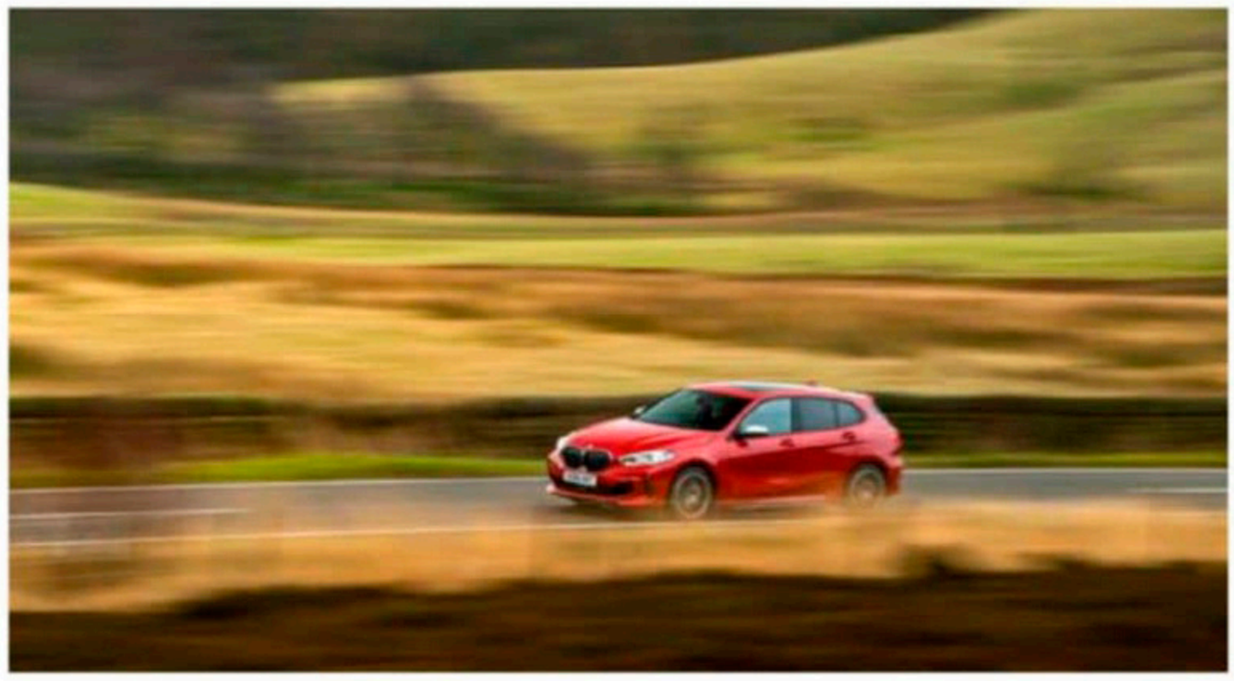
The Cupra offers a couple of configurable display options, of which the standard, round-dial look is most effective, while the Merc's options seem almost endless. The Sport view is probably best, with a pair of clear, analogue-style gauges, though Supersport might appeal if you want to feel like Luke Skywalker threading down a trench on the Death Star.

It's the BMW that lags, with difficult-to-read contra-rotating bar graphs pushed out to either side of the cluster. The rest of the cabin is a better effort, if rather generic – there's been an effort to cant the centre console towards the driver, as in BMWs of old, but as I type this I've had to bring up an image of the dashboard just to recall what it looks like. Given the exterior styling I suppose 'unmemorable' is the lesser of possible crimes, and to BMW's credit the 1 feels the most tightly constructed here.

Top right: BMW cabin is a tad pedestrian in its styling. **Bottom right:** Leon boasts 40hp more than its rivals courtesy of its dealer-fit ECU upgrade


‘THE WAY THESE CARS DELIVER THEIR OUTPUTS IS FAR FROM IDENTICAL’
KM19 PXA


‘THE A35’S COMPETENCE DOESN’T COME AT THE EXPENSE OF ENGAGEMENT’
KM69 DXC
YG69 HVT



The AMG's fancy shapes are let down by the occasional rattle and a curiously nasty take on Merc's traditional column-mounted transmission selector, and the Cupra now feels a bit flimsy, despite a welcome splash of Alcantara here and there. All three get their basic driving positions right, letting you draw the steering wheel into your chest and allowing you to sit a few notches off the floor if that's your thing, but the best visibility belongs to the slim-pillared SEAT with its minimal blind spots.

It's the bulkier Beemer I've driven up north in, impressed by its comfort, integrity and refinement, but mildly irritated by some of its other characteristics. The first is an automatic transmission that feels curiously unintuitive, shuffling up gears as quickly as they all do these days, but more reluctant to swap to a lower cog when you squeeze the left-hand pedal, making it feel lazy and disinterested.

Worse, there seems to be a complete absence of engine braking. I'm sure the ability to sail along for miles off-throttle is wonderful for fuel consumption, but if BMW is going to stick an M badge on the back of the car it's reasonable to expect a more natural and connected feel when you roll on and off the throttle. It's not just a symptom of a mushy Comfort mode either, as the situation's only marginally better in Sport or when changing gears yourself with the apologetic steering wheel-mounted paddles. As an illustration of just how little resistance you get, the 135i struggled to hold a consistent 20mph on a fairly gentle downhill gradient in first gear for our tracking photography. Expect to spend a lot on brake pads as an M135i owner.

Then there are those dials. BMW instrument clusters used to be a model of clarity, but not here, and while a head-up display mitigates this to some extent, it doesn't include a gear indicator to replace the minuscule number hidden away on the dial pack's lower edge. And amusing though it is to see a 'dangerous turn' warning appear in the display every time the road veers away from the straight-ahead, this too seems somewhat at odds for a performance-orientated car that an owner might like to, for instance, enjoy driving around corners in.

And in fact the BMW is not bad at the whole cornering thing. The last few miles of last night's drive were fun, and this morning's first run is proving entertaining too. Held in Sport mode and choosing gears yourself, the transmission is just about liveable, throttle response is good, and with a stiff structure and sensible damping the BMW dances over the broken surface without a shudder. With quick, Mini-like steering (the 1-series shares its platform with the Clubman) it doesn't take much effort to pitch the nose into a turn, and like the current Minis the 135i responds well to a slightly more gung-ho style of driving, making best use of the sharp turn-in and a throttle lift to get the rear axle involved. It's not snappy, but it's always up for a quick sequence of corners, and the car immediately settles

as you feed in more throttle. The pliant ride is paired with good body control too, so it feels unfazed by dips and crests and quick changes of trajectory.

This, though, seems to be where the 1-series' dynamic character begins and ends. While the steering is quick and less gloopy than some recent BMW racks, there's also not much in the way of feedback. And while undoubtedly agile, the car feels more like a competent front-driver than a dynamic all-wheel-drive car, and even further from its rear-drive predecessor. The engine seems mostly disinterested too – there's little to be gained from revving beyond its healthy mid-range, and while it's a smooth unit, neck hairs will go unprickled by BMW's token effort at piped-in sound.

SEAT has had a better go with the Leon, which growls at you on start-up and then offers a variation on that growl everywhere else. It has that familiar Volkswagen Group voice of a four-cylinder trying desperately to sound like it has one or two more, but the EA888 feels a bit old-school these days, with a gravelly tone and slightly busy feel at all speeds that make the others seem like models of refinement. That extends to the Cupra's structure, which is very obviously a generation behind the others now (indeed its replacement has just been revealed). Perhaps it's a factor of the longer estate body, but over certain stretches of road the SEAT creaks and fidgets, despite a ride quality – even in Cupra mode – that isn't far behind offering the BMW's level of pliancy.

The more you drive the Cupra, the more its talents become apparent. Turn-in isn't as quick as in the others and there's not the same level of weight to the steering, but response and feedback seem to meet you halfway as you build up the pace. Despite its extra length the SEAT is actually the most expressive car here, keenest to rotate into a turn, and feels the most rear-driven once you get back on the power, more alive at every stage of the process.

Sometimes things do get a bit scrappy, perhaps a symptom of the older platform, the weight hanging out behind you and the slight imprecision to initial steering inputs. On slippery surfaces it's not unusual for the Cupra's front end to push on turn-in, morphing quickly to oversteer as you lift the throttle to control it, and yanking straight again as you get back on the power. The SEAT is also the only one of the three to lean noticeably on its stability control through one particular corner, as the front wheels go through their slip-then-grip sequence at a rather higher speed.

And high speed is something the Leon does very easily indeed. With a sixth more power than the others it's no great shock that the Abt-fettled SEAT is quicker in a straight line, but that doesn't stop it plastering an enormous grin across your face the first time you sink your foot to the carpet and the entire Peak District turns to a greeny-grey blur.

What the Leon's lump lacks in low-end response, needing a little more stoking than the BMW or AMG units from low revs, it more than makes up for as the needle passes 3000rpm or so. In a world of flat torque curves the

'THE M135i IS A FACSIMILE OF ITS RIVALS – YET EVERY ONE OF THOSE DOES THE SAME JOB BETTER'

SEAT's seemingly exponential rate of acceleration is quite addictive, and with the old DSG 'box still lightning fast under full throttle, the thrust never really lets up. The way the Cupra lassoes between corners feels anything but routine, even in a class where 300-plus horsepower has become the norm.

It's enough to take the wind out of the AMG's sails, at any rate. In isolation the A35 feels punchy, but the SEAT's lunacy relegates it to second place in the straight-line stakes, in turn ahead of the laid-back BMW. But there's plenty to like about the AMG's engine even so. It's the most eager to respond to small throttle inputs, its dual-clutch 'box changing down intuitively when you ask for a bit more go, while also not being too eager to change up again through gnarlier sequences. It's better still in manual mode, the selection of which also prevents it changing up of its own accord when you stray close to the red line, something it'll do in auto even in the farts 'n' pops Sport+ mode. The Merc's cabin theatre also extends to its proper metal gearshift paddles, the clickety action of which is nearly as engaging as using a proper manual 'box, and the changes they command, while not as snappy or smooth as the SEAT's, are more responsive than the BMW's.

Like the SEAT, the A35's powertrain is rare for a turbo four in that it's even more keen at the top end than it is everywhere else. It's a motor that incentivises you into making the most of each gear rather than surfing the mid-range, and aurally it falls between the slightly raucous SEAT and subdued BMW, mixing aggression with free-spinning response.

In fact, the Mercedes treads the middle ground between its German and Spanish rivals virtually everywhere. Its steering falls midway in terms of weight and response, lighter than the BMW's but more accurate and garrulous than the Cupra's, and its chassis splits the pair too – it has the keen front end and mid-corner security of the BMW, yet feels neutral like the SEAT when you get back on the power.

Unlike the Cupra (or the A35's brawnier and more engaging A45 S sibling) you rarely feel the power making its way fore and aft based on the car's cornering attitude, but you can exploit the benefits at corner exit,

'THE AMG IS FUN WHEN YOU WANT IT TO BE, SECURE WHEN THE HEAVENS OPEN AND A JOY TO LIVE WITH'

simply planting your foot and feeling the AMG match your steering input precisely. No trace of understeer or sense of your line getting tighter, just efficient drive and considerable speed.

The one area where the Mercedes lags behind both of the others is in ride quality. We've observed in the past that the AMG A-classes actually ride better than their non-AMG counterparts, but the A35 can occasionally feel brittle where the BMW smothers and the SEAT feels fleet-footed. It's far from punishing, but it takes the edge off the Merc's integrity on rougher roads.

Just as when the A35 hatch faced the Golf R a few months back (**evo Singapore** 089), you could misinterpret the Merc's more tied-down nature as a lack of character, and like the VW in that test, the SEAT does feel lighter on its feet than the AMG. But importantly, the A35's competence doesn't come at the expense of engagement. Its combination of well-judged steering, keen throttle responses, an engaging power delivery and strong and progressive brakes (a quality shared among all three, incidentally) add up to a car that's fun when you want it to be and utterly secure when the heavens open, while the fantastic cabin makes it a joy to live with.

The SEAT's balance is further towards pure entertainment, but the platform and everything attached to it is no longer at the cutting edge of this class. Then again, it's also seven years old. Its slightly raw nature and rocketship pace can be very entertaining, and it's undoubtedly the best-looking of the three here, so perhaps it gets the moral victory – a reminder to car manufacturers that there's room for something more boisterous even when practicality or all-weather security are priorities.

It's a message BMW would do well to heed. The M135i xDrive feels like a car with no real USP. It's sure to sell well to those for whom easy straight-line performance and a BMW badge are all that matter, but where the old M140i could always be suggested as an alternative for those who wanted rear-wheel drive or a sonorous straight-six, the latest car is a facsimile of its rivals – yet every one of those rivals does the same job better. We suspect there's a good **evo** car within the new 1-series, it just needs BMW to discover it.

So it's the A35 Saloon that wins, a small margin ahead of the fun but less well-rounded SEAT, with the BMW trailing a distant third. All, though, demonstrate one thing: there's no such thing as bad weather – just the wrong kind of car.

BMW M135i xDrive

Engine In-line 4-cyl, 1998cc, turbocharged **Power** 306hp @ 5000-6250rpm **Torque** 450Nm @ 1750-4500rpm **Transmission** 8-sp auto, 4wd **Weight** 1525kg **Power-to-weight** 201bhp/ton **0-100kmh** 4.8sec **Top speed** 250kmh (limited) **Price** S$239,888 w/COE

evo rating ★★★☆☆

Mercedes-AMG A35 4Matic Saloon

Engine In-line 4-cyl, 1991cc, turbocharged **Power** 306hp @ 5800rpm **Torque** 400Nm @ 3000-4000rpm **Transmission** 7-sp double clutch automated , 4wd **Weight** 1495kg **Power-to-weight** 205bhp/ton **0-100kmh** 4.8sec **Top speed** 250kmh (limited) **Price** S$214,888 w/COE

evo rating ★★★★☆

SEAT Leon Cupra R ST Abt

Engine In-line 4-cyl, 1984cc, turbocharged **Power** 345hp @ 5300-6500rpm **Torque** 439Nm @ 2000-5200rpm **Transmission** 7-sp double clutch automated, 4wd **Weight** c1482kg **Power-to-weight** c237bhp/ton **0-100kmh** 4.7sec **Top speed** 262kmh **Price** n/a

evo rating ★★★★☆

by HENRY CATCHPOLE

Mac madness

Seeing red in the F1… and keeping Ron Dennis in the dark

I DON'T THINK THERE CAN BE ANY DOUBT about the greatest group test that **evo** has ever assembled. It was issue 186 – the summer of 2013 – and the magnificent seven that gathered in a car park in north Wales were F40, F50, Carrera GT, Noble M600, Murciélago LP670-4 SV, Zonda F and XP5. This was the Analogue Supercars test.

In case you are puzzling over that last one, it is arguably the most famous McLaren F1 in the world – Experimental Prototype No. 5, or the very car in which Andy Wallace (wearing civvies!) recorded 240.1mph at VW's test track in 1998. For our **evo** group test 15 years later we had to insure it for what now seems like a very reasonable £5million, but the excess on the policy was nonetheless large enough to close the magazine for good and put us all out of a job.

It was with this fact in a position a little further forward than the back of my mind that I found myself in the legendary central seat at the end of the first day of the test. For obvious reasons we had to park the F1 in a secure location overnight and we were driving across Snowdonia to get there. We had agreed to do the same with the F40, and Jethro Bovingdon was in front of me wrestling with its IHI turbos.

In front of both of us was videographer Sam Riley in his long-term Skoda Superb Outdoor. Sam knows little fear at the best of times and was putting the big white estate's four-wheel drive and decent suspension travel to surprisingly effective use. On wet, bumpy roads, with dry-stone walls creating an unfriendly corridor, it was no easy job to keep up in the two icons. I knew Jethro was in need of a little more suspension travel because I could sometimes see sparks as the Ferrari skimmed across the choppier bits of tarmac. Add to these the occasional flames from the triple exhausts with the glowing roundel lights above and it looked like the whole thing was a firework about to take flight.

This merry display was exacerbated by the fact that it was dusk, and this brought its own problems in the cockpit of the F1. Reading the road by the beams of twenty-year-old headlight technology isn't easy at the best of times, but it was made considerably more difficult by the two red LEDs shining directly back at me like small demonic eyes from either side of the rev counter. Hovering just on the periphery of my vision they were incredibly bright and incredibly distracting. They only appeared when the headlights were switched on and I wasn't about to turn those off, so I just had to squint a bit and follow the sound of the Ferrari (or what I could hear of it above the McLaren's V12). I would have backed off and tried to sort the issue, but to be honest I didn't know where I was going and I'm not even sure the insurance stipulations allowed us to have the car out after dark…

Still, no harm done. Other than later on – to a certain Ron Dennis' blood pressure. You see, I heard some years down the line that the first thing McLaren's boss knew of the loan of his precious XP5 to a bunch of journalists was when a copy of issue 186 landed on his desk a month later. I think he would only have been less pleased if we'd invited Max Mosley to guest edit the issue.

As far as I know, our test remains the last time that anyone outside McLaren was allowed to drive XP5 on the road.

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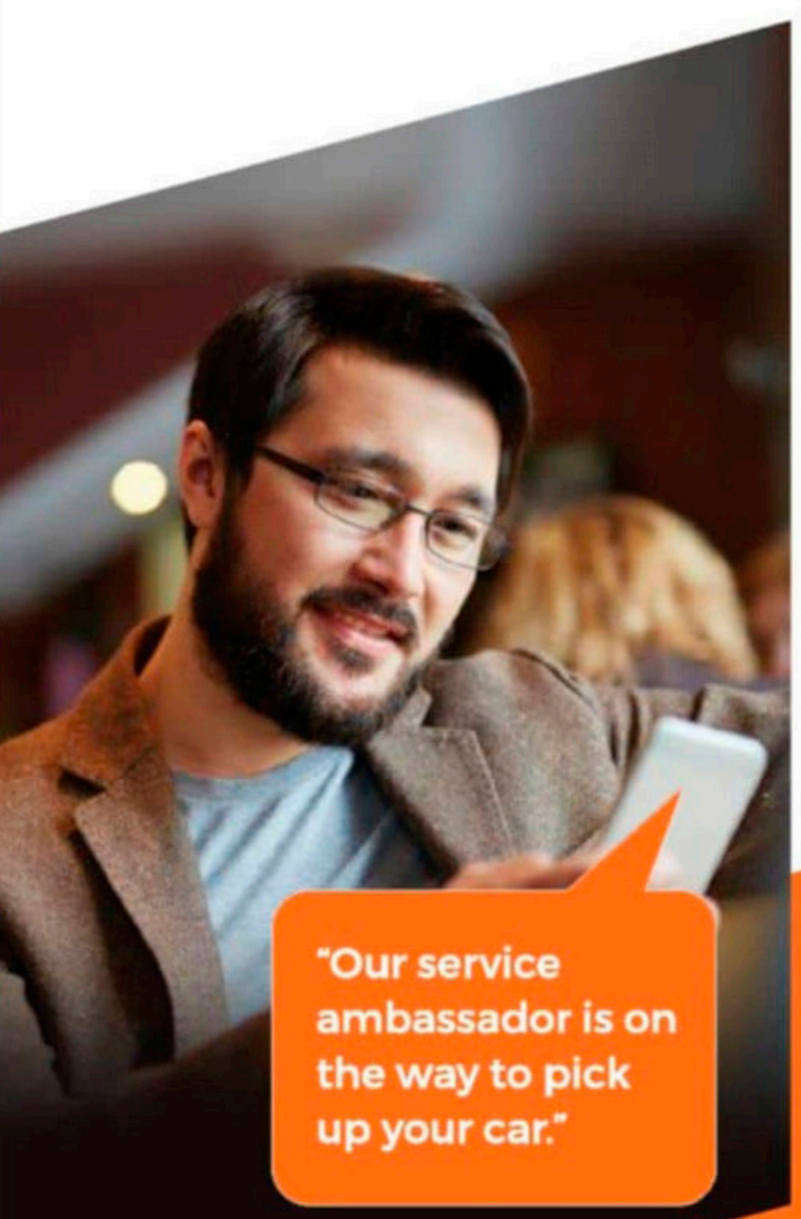

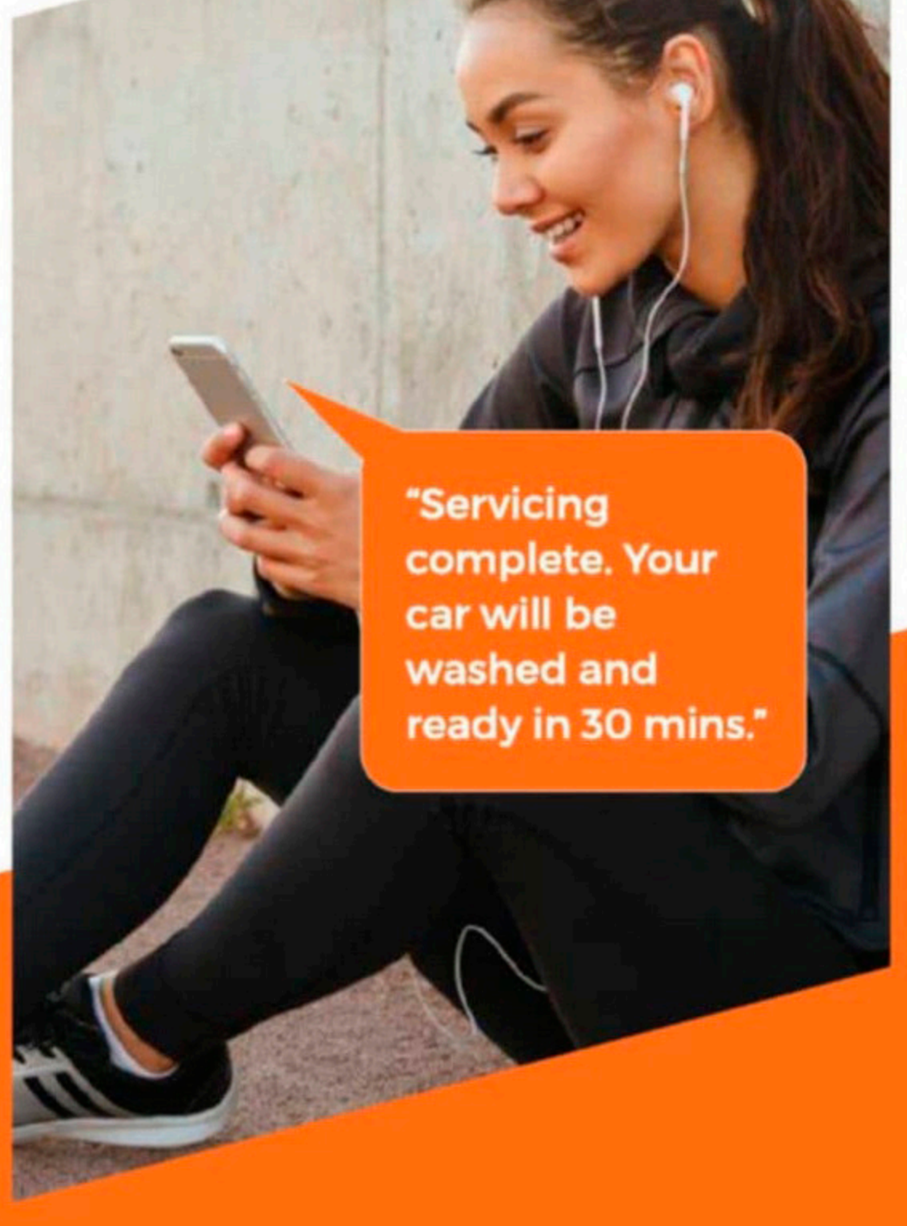

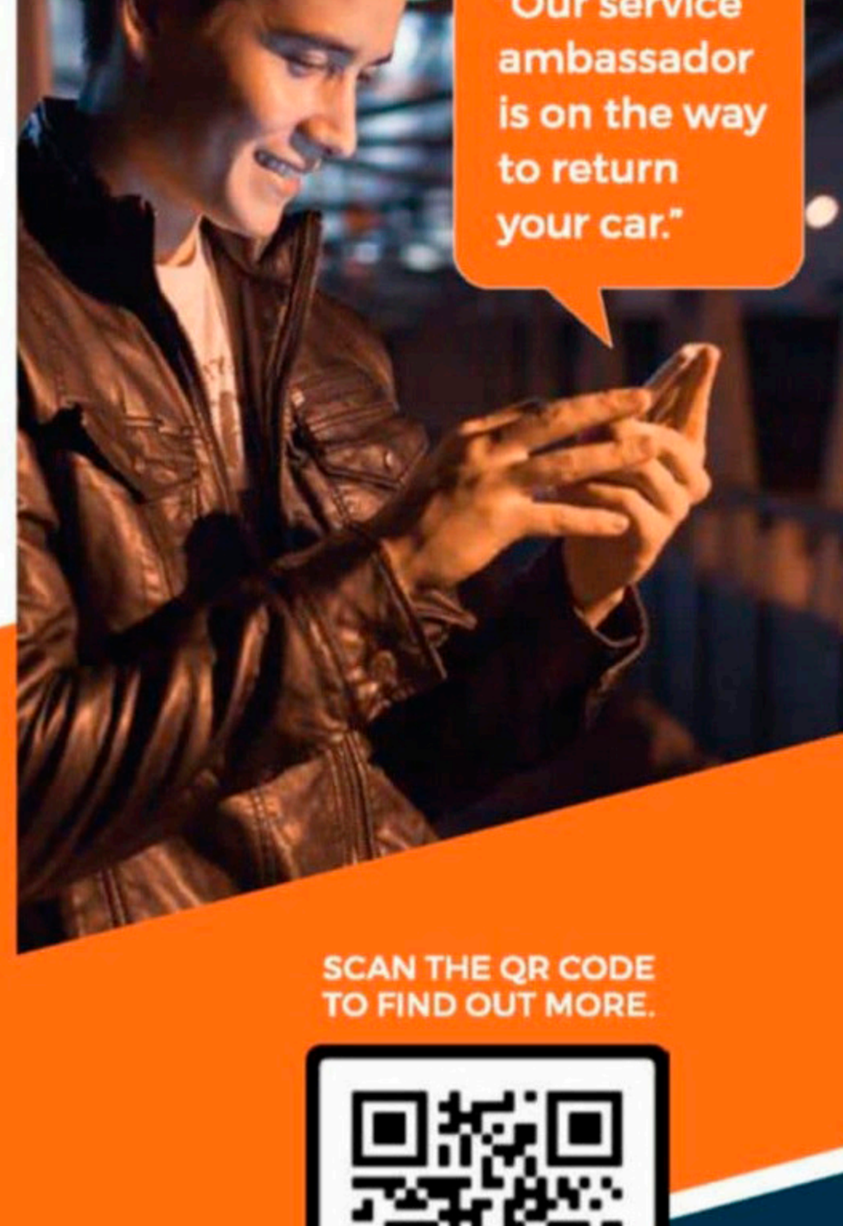

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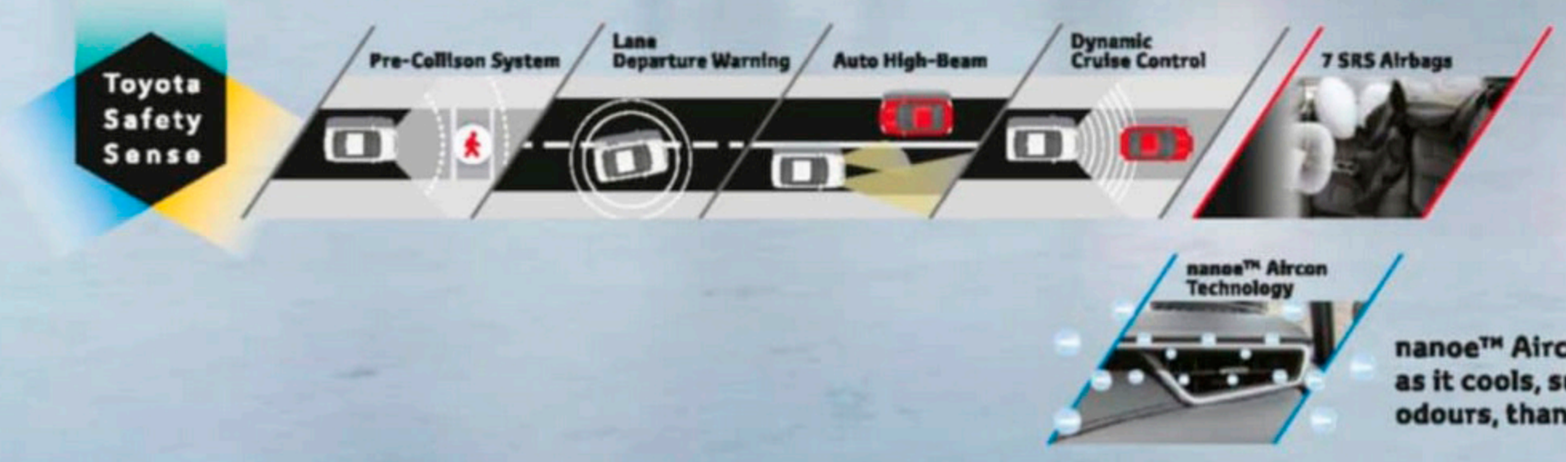

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