

**'RING  
EXCLUSIVE!  
NEW OWNER SPEAKS**

**RACING BACK TO HEALTH**  
Meet the injured servicemen recovering on the racetrack



**TURBO v V8**

**BMW M FIGHT!**  
LATEST M235i TAKES ON M3  
*Used V8 screamer or new M junior?*

# evo

THE THRILL OF DRIVING

# Nissan GT-R

**HOW JAPAN'S SUPERCOUPE CHANGED THE WORLD**

**24-PAGE CELEBRATION + NEW N-ATTACK + MY14 GT-R v LEGENDS + 1st SKYLINE DRIVEN + GT-R PEOPLE**



**Plus**

- + NEW 155MPH AUDI S1 REVIEW
- + LATEST PORSCHE 911 TARGA DRIVEN
- + 12C IS DEAD. WE DRIVE THE NEW McLAREN
- + NEW MINI COOPER S OR FORD FIESTA ST?
- + LONG-DISTANCE ELECTRIC TESLA ADVENTURE

**AUDI R8 JOINS THE EVO FLEET**

Collecting 'our' new 198mph, 542bhp V10 from the factory





# FROM THE HEART TO THE ROAD.

## THE NEW BMW 4 SERIES CONVERTIBLE.

This is more than than just a hard top convertible. It's a convertible with innovative technologies for extra comfort and ease. With more practicality than you expect, even with the top down. And with superior driving dynamics that give you control. So for once, both your heart and mind will be satisfied.

To find out more visit [www.bmw.co.uk/4seriesconvertible](http://www.bmw.co.uk/4seriesconvertible) or contact your local BMW Dealer.

Official fuel economy figures for the BMW 4 Series Convertible: Urban 24.1 – 49.6 mpg (11.1 – 5.7 l/100 km). Extra Urban 44.1 – 65.7 mpg



The new BMW  
4 Series Convertible

[bmw.co.uk](http://bmw.co.uk)  
0800 013 2191



The Ultimate  
Driving Machine



Thom Richard is one of the few pilots in the world to possess the talent, experience and courage required to compete in the final of the famous Reno Air Races – the world's fastest motorsport. Less than ten champions are capable of vying with each other at speeds of almost 800 km/h, flying wing to wing at the risk of their lives, just a few feet off the ground. It is for these elite aviators that Breitling develops its chronographs: sturdy, functional and ultra high-performance instruments all equipped with movements chronometer-certified by the COSC – the highest official benchmark in terms of reliability and precision. Welcome to the Breitling world.

# WELCOME TO OUR WORLD



CHRONOMAT 44  
FLYING FISH



INSTRUMENTS FOR PROFESSIONALS™



Innovation  
that excites



## Nissan Juke n-tec. Turn every drive into a ride with Google™ Send-to-Car technology.

Get connected with Google™ Send-to-Car and Google™ Places – two thrilling features that enable you to plan a journey on Google™ Maps, send it to your Nissan Juke remotely and once you arrive, search for the coolest places to go using NissanConnect. Combine that with a Torque Vectoring system\* on selected models for enhanced stability when cornering, and the Nissan Juke n-tec comes fully equipped to turn every drive into a ride. Available from £13,200 to £22,705. Search 'Nissan Juke' for more information.

NissanConnect | DIG-T engine | Torque Vectoring System



\*Only available on models equipped with 4WD 1.6 DIG-T. Model shown is a Juke n-tec 1.6 petrol priced at £16,400 On The Road with optional metallic paint at £500. Models subject to availability. Google™ Send-to-car and Google™ Places require subscription, compatible phone or device (not included with vehicle), and Wi-Fi or 3G connection, and rely on services provided by third parties outside Nissan's control. Cellular networks not available in all areas. Voice minutes, roaming charges and/or data usage may apply. Nissan is not responsible for any equipment replacement or upgrades, or associated costs that may be required for continued operation due to service changes. Google™ wordmark and logos are registered trademarks owned by Google Inc. Information correct at the time of going to print. Nissan Motor (GB) Limited, The Rivers Office Park, Denham Way, Maple Cross, Rickmansworth, Hertfordshire WD3 9YS.

Fuel consumption figures for Juke range are: URBAN 28.8-61.4mpg (9.8-4.6L/100km), EXTRA URBAN 47.1-76.3mpg (6.0-3.7L/100km), COMBINED 38.2-70.6mpg (7.4-4.0L/100km), CO<sub>2</sub> emissions 169-104g/km.

## Subscriptions

Telephone 0844 844 0039  
Email [evo@servicehelpline.co.uk](mailto:evo@servicehelpline.co.uk)  
Online subscriber service [www.subsinfo.co.uk](http://www.subsinfo.co.uk)  
Back issues 0844 844 0039

## Editorial

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

**Editor** Nick Trott  
**Motoring editor** Mike Duff  
**Art director** Rob Gould  
**Features editor** Henry Catchpole  
**Road tester** Dan Prosser  
**Production editor** Ian Eveleigh  
**Staff photographer** Dean Smith  
**Film-maker** Sam Riley  
**Staff writer** Stephen Dobie  
**Sub editor** Dan McCalla  
**Designer** Will Beaumont  
**Staff writer (website)** Matthew Hayward  
**Contributing editor** Jethro Bowingdon  
**Contributing editor** Richard Meaden  
**Contributing editor** Tiff Needell  
**Road test contributor** David Vivian  
**Columnist** Richard Porter  
**Columnist** Dario Franchitti  
**Office administrator** Jane Townsend-Emms

### Contributors (words)

Kim Adams, Simon de Burton, Peter Tomalin, David Yu

### Contributors (pictures)

Simon Clay, Stuart Collins, Gus Gregory, Andy Morgan

### It wouldn't have been possible without

Sam Bisby, Harry Blower, Jake Groves, Jan Kamenistiak,  
Andrew Mulholland, Barry Parsons, Richard Usher and Blyton Park,  
and everyone at the Bedford Autodrome

## Advertising & Promotions

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

**MD of advertising** Julian Lloyd-Evans  
**Advertising director** Sarah Perks  
**Advertising manager** Tim Deeks  
**Business development manager** Shaza Agabani  
**Account manager** Neale Salt  
**Sales executive** Alexander Rumble  
**Inserts executive** Abdul Ahad  
**Lifestyle director** Sophie Kochan  
**Content partnerships manager** Andy Edwards  
**Group advertising manager digital** Elaine de la Cruz  
**Production executive** Michael Hills  
**Marketing & events co-ordinator** Traci McLean  
**Newstrade director** David Barker  
**Direct marketing manager** Liezl Hollander

## Creative solutions

**Commercial director** Jonathan Kitchen  
**Designer** Rob Callaghan  
**Senior project manager** Avril Donnelly  
**Projects co-ordinator** Ludovica D'Angelo

## Licensing & syndication

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

## evo Cars for Sale

Telephone 0207 907 6660 email [chris\\_wood@dennis.co.uk](mailto:chris_wood@dennis.co.uk)  
Commercial director Chris Wood

## Publishing

**Publishing director** Geoff Love

## Dennis Publishing Ltd

**Group managing director** Ian Westwood  
**Chief financial officer** Brett Reynolds  
**Group finance director** Ian Leggett  
**CEO** James Tye  
**Chairman** Felix Dennis

evo

ISSUE 196  
JUNE 2014

# Ed Speak



**THERE REMAINS A PREJUDICE TOWARDS THE GT-R;** my theory is that it's generational. The old guard hate it because it evokes feelings of displacement in the modern world, whereas the younger generation love it for being a beguiling mashup of the digital and the punk and thus a tool of revolution – a weapon to smash quaint old supercars with their multi-cylinder engines and prehistoric manual gearboxes, if you like.

GT-R comments on forums and YouTube make fascinating reading. The dialogue tends to consist of attack and counter-attack; GT-R fans v GT-R haters in a non-violent conflict of bad spelling and emoticons. 'Mehs', 'don't cares', or 'whatevers' simply don't exist in relation to the GT-R. If you like cars, you have an opinion on the GT-R.

The winner in this is Nissan, and it's no fluke victory. It has remained true to the GT-R's core characteristic (driver-empowering technology), proved the car in motorsport again and again, and embraced the world of modern gaming via *Gran Turismo*, thus capturing the attention of the next generation of performance car fans. This three-pronged brand-building assault has ensured that the GT-R has transformed itself from a mythological domestic-market monster into a global phenomenon. Nissan has also been punchy with the GT-R, needling rivals and never shirking a challenge.

Nissan's nurturing of the *Gran Turismo* generation is particularly important. Last year, I visited the incredible Nissan 'DNA Garage' in Kanagawa with a group of younger motoring journalists, including a pre-*evo* Dan Prosser. At 39 I felt ancient, but not so old that I couldn't trade stories with the others of racing GT-Rs in *Gran Turismo 2*. There is little doubt that our formative experiences of the car in the digital world shaped our understanding of the GT-R today. When we came face-to-face with the real Pennzoil GT-R (see page 74), I half-expected everyone to kneel. In fact, I'm pretty sure Prosser did.

So Nissan has promoted the GT-R's attributes brilliantly, but marketing is nothing without the product to back it up. Today, 25 years after Nissan rebooted the GT-R, it remains irrefutably a drivers' car. It prevails in matching technology and emotion (where others still struggle), its performance/price/practicality ratio is unmatched and its ability to detangle even the most twisted road in any weather is simply extraordinary.

Is it better than a multi-cylinder supercar with a manual 'box'? Well, on this I have to defer to one of the wisest YouTube commenters I've ever come across, who stated on our GT-R v 911 Track Battle page: 'People arguing which is better makes me laugh LOL buy the one u personally like and the one that makes u happy!' Not Shakespeare, granted, but I couldn't agree more. The only thing I'd add is that if you've never driven a GT-R, please book a test drive soon. Any thoughts of it being 'too digital' or that it 'drives itself' will disappear almost immediately in a lurid dose of oversteer and diff chunter.

Finally, it's farewell to Mike Duff this month, who leaves *evo* after two and a half years. A talented writer and real car enthusiast, we wish him well on his next journey.

**Nick Trott** Editor (@evoNickTrott)



The *evo* app has received a big update this month, with improved stability, a better search function, and the ability to manage downloaded content for offline reading.



## evo TRACK EVENINGS

Watch brand TW Steel is partnering *evo's* track evenings this year. Join the *evo* team on May 30, June 27 and August 29. For more details, visit [evo.co.uk/shop](http://evo.co.uk/shop)

## evo Worldwide EDITORS-IN-CHIEF

Argentina Pablo Perez Compagnon Australia Jesse Taylor Bulgaria Georgi Ivanov China Cheng Zhiming Croatia Nikola Curic  
Czech Republic Petr Ehrlich Egypt Omar Khalifa France Stéphane Schlesinger India Sirish Chandran Italy Maurizio Mozzi  
Malaysia Albakry Salehuddin Middle East Bassam Kronfli Singapore Sheldon Trollope Slovenia Matjaz Korošak  
Thailand Chettha Songthaveepol Turkey Burak Ertam Ukraine Igor Kravtsov

**evo** is available for international licensing and syndication. Email [Carlotta\\_Serantoni@dennis.co.uk](mailto:Carlotta_Serantoni@dennis.co.uk)

# evo

ISSUE 196 JUNE 2014

## CONTENTS



### Driven



020

PORSCHE 911 TARGA 4S

026

AUDI S1

028

ABARTH 595 COMPETIZIONE

031

AC SCHNITZER ACS1 SPORT

032

MORGAN 3 WHEELER

034

MINI COOPER S V  
FORD FIESTA ST



### Features



054

054

#### NISSAN GT-R: PERFORMANCE LEGEND

We celebrate one of the very best sports cars on sale, one which manages to mix genre-leading technology with real driver involvement, continent-crushing pace with four-seat practicality, and supercar-shaming acceleration with a relatively bargain price tag. Here are the key reasons why the Nissan GT-R has changed the performance car world, kicking off with a comparison of every 4WD version, right back to the R32 Skyline

078

#### McLAREN 650S

The McLaren 12C is dead, having evolved into the harder, faster, stronger 650S. But is it better? We find out on road and track

086



086

#### MISSION MOTORSPORT

The difference between 'everyday legs' and 'racing legs', and more: it's the story behind the former military servicemen of Mission Motorsport



© Copyright Evo Publications Ltd which is a subsidiary of Dennis Publishing Limited. Evo is a trademark of Evo Publications Ltd.



Photographic repro by Evo Magazine. Printed in the UK by BGP Bicester, Oxfordshire OX26 4OZ Printed in China by C&C Offset Printing Distributed by Seymour, 2nd Floor, 2 East Poultry Avenue, London EC1A 9PT. Tel: 020 7429 4000. Fax: 020 7429 3625. Web: seymour.co.uk  
ISSN 1464-2786 USPS 024-183



When you have finished with this magazine please recycle it.



*'By and large the car is simply stunningly fast and completely composed without an ounce of slip'*

078 McLAREN 650S

**092**  
**BMW M235i**  
**v M3**

Based on the spiffing M135i, BMW's new titchy two-door could be an affordable performance hero. But its older, more muscular uncle could seriously undermine it...

**098**  
**NURBURGRING**  
**SAVED!**

After several years of speculation and ill-advised rollercoasters, there's finally some positive news for the world's most talked-about racetrack. We meet the men promising a Ring renaissance



092



104

**104**  
**TESLA IN**  
**NORWAY**

Travelling 300 miles through sub-zero climes in a 416bhp, two-ton saloon... with no fuel costs. The Tesla Model S really is a whole new thing

**Regulars**

**010**  
**NEWS**

The latest on Mercedes' M3 rival plus news of a new British supercar to tackle the McLaren 650S and Ferrari 458

**045**  
**COLUMNS**

What do Joss Stone, Andrew Marr and Eric Clapton all have in common? And what's it got to do with cars? Porter reveals all

**051**  
**LETTERS**

Your reaction to last month's gathering of the greatest hot hatches and what we missed out, with plenty of love for the Peugeot 106, Lotus Sunbeam and, er, the MG Maestro

**114**  
**LONG-TERM TESTS**

Dickie Meaden's got a new long-term in quite probably a unique spec. And he's been on an adventure to celebrate

**129**  
**EVO KNOWLEDGE**

How to buy an über-powerful Mercedes CLK63 AMG, and where in its motherland to go and find out how fast it will travel without breaking the law

**162**  
**ART OF SPEED**

Celebrating what used to be the hallmark of great sports car design and the star of every childish supercar doodle – the pop-up headlight

evo (USPS 024-183) is published monthly by Dennis Publishing Ltd, 30 Cleveland Street, London, W1T 4JD, United Kingdom. For subscriptions in the USA and Canada, visit [www.imsnews.com](http://www.imsnews.com), phone 1-888-428-6676, fax 1-757-428-6253, or email [cs@imsnews.com](mailto:cs@imsnews.com). U.S. Agent Pitney Bowes International Mailing Services, 158 Mt Olivet Avenue, Newark NJ 07114-2114. Periodicals postage is paid at Paterson NJ and additional mailing offices. US POSTMASTER: Please send address changes to Pitney Bowes International Mailing Services, 158 Mt Olivet Avenue, Newark NJ 07114-2114. Subscription records are maintained by Dennis Publishing Ltd, 30 Cleveland Street, London, W1T 4JD, United Kingdom. Subscription prices: UK £47.99, Europe £58.20, Rest of World £88.40, USA \$115. All for 12 issues.



Remember, if your local newsagent doesn't stock evo, just ask them to order it for you

The Editors and Publishers of this magazine give no warranties, guarantees or assurances and make no representations regarding any goods or services advertised in this edition.



# AMG KEEPS THE V8 FAITH WITH LATEST M3 RIVAL

Mercedes' performance arm joins the downsizing revolution with new C63 – but sticks by V8 power with twin-turbo 4-litre unit **Words:** Mike Duff **Rendering:** Jan Kamenistiak



**p14 DAVID BROWN ROLLS BACK THE YEARS**  
British marque creates Jag-based Aston Martin DB5 throwback



**p17 ARASHI'S BACK WITH AF8**  
The maker of the Farbio GTS has created a new V8-engined supercar with an estimated 565bhp



**p18 TWO NEW GTS PORSCHES**  
Boxster and Cayman GTS models are the quickest of their kind ever made



**S**O FAR, AMG versions of the Mercedes C-class have struggled to beat the mighty BMW M3. But with the new C63 set to debut later this year with two extra cylinders and a solid power advantage over its most bitter rival, don't be surprised if Mercedes emerges victorious from the next scrap.

We're still several months ahead of official images, so what you can see here is a rendered image based closely on spy shots of the next AMG C-class testing. Visually, it's going to be pretty much as you'd expect – chunkier and more muscular than the standard car, with a lower stance and bigger wheels. It will launch as a saloon, and coupe and estate versions will follow.

But it's under the surface that the new C63 gets what could turn out to be its killer advantage. BMW has opted to switch the new M3 and M4 to a turbocharged 3-litre straight-six, but AMG is sticking with V8 power. The C63 will give the division's new 'M177' twin-turbo 4-litre engine its debut. It's down on capacity versus

the old 'M156' 6.2-litre naturally aspirated V8, as seen in the outgoing C63 and the soon-to-retire SLS, and although power levels won't rise substantially, you can be assured the new car will enjoy a healthy margin over the M3 and M4, which will have 425bhp.

We're expecting the Mercedes to produce between 470 and 500bhp, meaning it will maintain (or even increase) the advantage the previous car enjoyed over the V8 M3. We can also be certain that torque will rise from the 442lb ft of the outgoing C63, and will peak far lower down the rev range.

Yet what's really interesting when we chat to Tobias Moers, AMG's boss and former engineering supremo, is that no serious consideration was given to switching the new C63 from eight cylinders. 'AMG is a V8 company and will always be a V8 company,' he says. 'We have to switch to turbocharging because we're looking for the compromise between fuel efficiency and power output. But it has to be a V8, never a six-cylinder.'

One of the main appeals of AMG's eight-cylinder products has always been their sound. It's something Moers says was at the heart of the development of the new engine: 'The noise is what you feel every day

when you start the engine, when you hit the throttle. We all hear it – it's where the emotion comes from. The new engine sounds good. It sounds different because every engine always sounds different. But it's still a V8 because AMG stands for that sound – our customers expect that, it's one of the main reasons they choose an AMG.'

Would AMG ever consider butchering up the soundtrack with an 'active' system,

like Volkswagen and BMW? A look of disgust crosses Moers' face and he waves the question away: 'Never!'

Although not officially confirmed, we're certain the new car will continue with the familiar seven-speed MCT Speedshift gearbox, which combines a planetary-gear automatic with a wet clutch. Moers also says that, despite the availability of four-wheel-drive versions of the new C-class, the AMG version will only be rear-wheel drive.

high-tech features will be present, such as location-based gearchange programmes, potentially used in conjunction with circuit mapping.

Although the new V8 will make its debut in the C-class, it's set to spread throughout the AMG range. Next year we'll see it in the new AMG GT – the replacement for the SLS – and Mercedes insiders have confirmed the new motor will have a range of power outputs. As the C-class's position in

## 'No serious consideration was given to switching the C63 from eight cylinders'



**Above:** AMG chief Tobias Moers says V8 noise is important to customers.

**Above right:** old C63 carried huge 6.2-litre V8, as does the SLS (right)



This is despite the fact that AMG is now selling far more 4matic versions of its E- and S-classes in markets where buyers are offered a choice. Apparently there isn't sufficient demand for an all-wheel-drive C-class to justify the cost and complexity.

And although the standard versions of the new C-class can't muster much *evo*-type excitement, there's no doubting that the new car's extremely stiff and light structure gives AMG's engineers a great basis to work from. We can also safely anticipate that some of the new car's

the hierarchy means it will get a less powerful tune, it's safe to conclude there will also be brawnier versions, the engine ultimately replacing the twin-turbo 5.5-litre V8 that powers the more senior end of the line-up.

Finally, the name. There's no confirmation that Merc will stick with the '63' branding, especially as the new engine's capacity loses any link to the number, but we'd be very surprised if it didn't. A Mercedes insider tells us that it 'has become almost as much of a brand as AMG has these days – it's shorthand for the V8 engine'. ❧



# Meeting the new Mr Morgan

Steve Morris, Morgan Motor Company's managing director, explains how the company will fight on after Charles Morgan's acrimonious exit

Words: Mike Duff

**Y**OU WON'T NEED reminding that things got very heated at Morgan last October, with the ousting of Charles Morgan, the company's strategy director and former MD.

The move seemed as incongruous as Enzo Ferrari getting marched out of Maranello in the late 1960s. Not only is Charles Morgan the grandson of the company's founder (and the son of a previous managing director), he's also a major shareholder and had been a charismatic ambassador for the brand. From the outside, there was no obvious reason for the sacking – the company was profitable, sales were strong and the newly launched 3 Wheeler was a runaway success.

Morgan responded furiously to his sacking, even telling us that he was considering setting up a rival company

(evo 191), a claim that's since been retracted. But six months on, we've come back to Morgan Motor Company's Malvern Link home to meet up with managing director Steve Morris and to give him a chance to tell us about his vision for the future of the brand.

He might not share his surname with the company, but Morris is Morgan through-and-through, a one-time apprentice who worked his way up to become managing director when Charles Morgan moved to his strategy role. He speaks with a Worcestershire accent, in contrast to his predecessor's clipped vowels, but his knowledge of the company is near-total and his petrolhead credentials are confirmed by the C63 AMG daily driver that sits outside. We start with the obvious question – what's changed since Charles Morgan's departure?

'I've been in my current position



since January last year, so there wasn't a big change when Charles left,' says Morris. 'I'm very focused on running the business. We're still completely family-owned, there's no change in that structure or anything. From my point of view the focus is on moving forwards not looking backwards.'

There's no doubting Morris's ability to run the company day-to-day, but who, if anyone, is going to step into the ambassadorial role that even Charles Morgan's critics admit he did so well? 'I think that comes from within the management team we've put in place,' Morris explains. 'We haven't parachuted people in, we've promoted from within the organisation. From that ambassadorial point of view I like to think that I can comfortably talk about Morgan, that we all can. I'm not pretending to be anyone else, I'm doing my job and I like to think that I can step up to that.'

We know that Charles Morgan fell out with the board over his plans for the future of the company and the launch of several new models, one of which was the EvaGT, a four-seat coupe that was set to have a BMW straight-six engine and magnesium alloy bodywork. Morris confirms the project has been iced indefinitely. How much effort (and money) was expended on it?

'From a body perspective, not massive,' he says. 'Engineering-wise we did some work on the chassis, but we got to the point where we had to draw a line in the sand from an investment perspective. Any new platform is just extremely costly... I think the recognition here is that we must do things to the very best of our ability. There's a chance of spreading yourself too thin in a small team. We recognised that we want to focus on the Plus 4, the 3 Wheeler and the aluminium-platform vehicles we do. At the moment our focus is on being rock-solid in those areas.'

Morris is proud of the efficiency with which the factory is run, and the company's habit – which he is probably the best proof of – of promoting from within. A new training academy is being set up to help create the next generation of employees, and most of the senior management have been promoted from within.

But although he's adamant that R&D spending levels haven't been cut, Morris acknowledges that much of the

investment is now going on keeping the current model range legal for sale in the company's key markets. The traditional models – the Plus 4 and its derivatives – remain popular in Europe and Asia. 'When we launched in China we were intending to sell the aluminium-platform vehicles, because of all the press about Aston and Rolls-Royce and Bentley. But we found that the classic car is far stronger – it's the bedrock of what we do there.'

Although the 3 Wheeler can be sold in America (where it comes under motorbike homologation rules), none of the company's four-wheel products now make it to the States, despite the sizeable spending on getting the Aero family of cars through rear-impact testing a few years ago. 'We never got what we needed from a sales perspective in the States,' Morris admits. 'We'd love to go back there

## 'Morris acknowledges that much of the investment is now going on keeping the current model range legal for sale in the company's key markets'

properly, but it's a chicken-and-egg situation – if we could guarantee sales then we'd speculate to accumulate.'

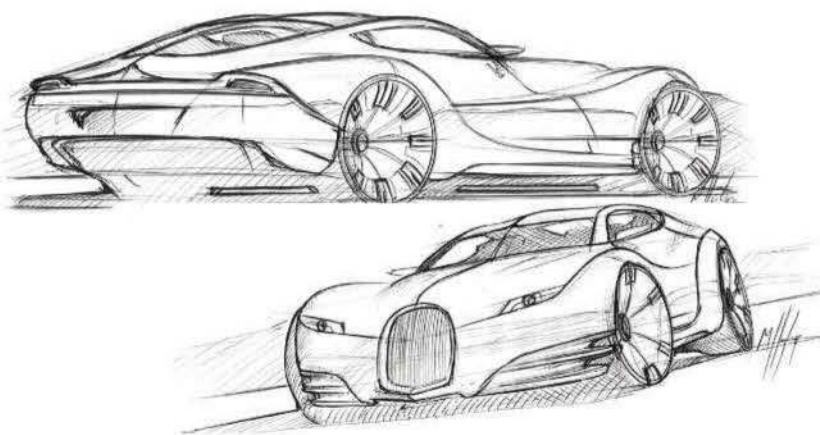
Although Morris reports that the Aero platform is more than strong enough for any current US impact standard, any cars going to the US would need smart airbags and more rollover protection, as well as a switch to a newer version of the BMW V8 that powers the Aero and Plus 8.

Morgan under Morris is a company determined to stick to what it knows. It's clear that big investment projects are going to be approached very carefully in future and that growth will mostly come from new markets and new variants of existing models. It's an approach that's seen the company survive for more than a hundred years, of course, but it does raise the question of whether a step-change project like the Aero 8 or 3 Wheeler would receive backing.

'We're Morgan and we stand for what we stand for,' Morris says. 'Don't try to be something that you're not, basically. We'll always be a niche product. There's room for us to be different.' ❏



**Far left:** Morgan MD Steve Morris. **This page:** Roadster (above), Plus 8 (left), 3 Wheeler and Aero Supersport (bottom) will remain in Morgan's model line-up. **Below:** EvaGT plan has been canned





**Above:** picnic bench folds out from boot.  
**Below:** many parts have been prepared by hand, outside and in



# David Brown gets retro with Speedback

New British marque creates luxury grand tourer, based on a Jaguar XKR but styled to resemble an Aston Martin DB5 **Words:** Stephen Dobie



**M** MEET THE DAVID Brown Speedback GT. It's another entrant in the modernised-classic genre – see also Eagle's E-types and Singer's 911s – but rather than fine-tuning old technology, there's a modern car lurking underneath the retro skin.

While its styling imitates cars of the 1960s, the Aston Martin DB5 in particular, its drivetrain comes courtesy of the Jaguar XKR. David Brown Automotive takes the XKR's powertrain and rolling chassis and attaches its own hand-crafted aluminium panels to the structural hard points.

Various parts of the GT's design have been created with 3D scanning and printing, while a more traditional hand-applied primer, paint and lacquer process accounts for the 120 hours that go into perfecting the car's exterior finish. No weight figure has been announced, but with the quoted 4.6sec

0-60mph time identical to the XKR's, something close to the Jag's 1678kg is likely. Top speed is limited to 155mph.

David Brown Automotive is funded by and named after a British businessman who is not related to the former Aston boss of the same name. So what inspired him to create the GT?

'I'd always dreamed of making a small-volume car, a thoroughly engineered thing rather than just coachbuilt,' he told *evo*. 'With modern technologies such as plastic printing and CNC machining, it's become possible.' Are Eagle and Singer his inspiration? 'Yes and no – they're slightly different. I love what they do but I think our car will be more useable.'

The story that led to the 2+2 Speedback is an ill-fated classic car rally, when a hired Peugeot 106 proved more pleasant than a friend's recalcitrant Ferrari Daytona. 'I've been on classic car events and you can get a ton of fun out of them, but not many people

have a wife or girlfriend along and most people don't spend their evenings in nice restaurants – they're underneath their car,' said Brown. He reckons the combination of a classic shape without a constant need to fix things will appeal to far eastern markets in particular.

The XKR's combination of a 503bhp supercharged 5-litre V8 engine and a six-speed automatic gearbox is described by Brown as one of his 'all-time favourites', and while the numerous versions of the XK – from the naturally aspirated base model to the wild XKR-S GT – offer the chance for Brown's customers to choose something different, he is keen that his vision for the car isn't too heavily altered: 'I wanted a lazy drive and lots of torque and grunt – discretionary performance. I do like to think of this as a gentleman's grand tourer – it's not a trackday car.' A picnic bench that neatly retracts from the boot – originally an intern's idea – rams this point home.

**'RATHER THAN FINE-TUNING OLD TECHNOLOGY, THERE'S A MODERN CAR UNDERNEATH'**

The Speedback takes its public bow at the Top Marques show in Monaco this April, with public reaction set to shape where the firm goes next. Brown can see other models joining the GT: 'The ethos of what we're creating has a lot of future. The Britishness of the product is something I'd want to keep. There are other platforms out there I'd want to use. If we can have a little innovation mixed with traditional craftsmanship, I'm happy.'

No price had been announced as we went to press, but a number well into six figures is expected. **✉**

## News in brief



### BMW M4 Convertible

There are few shocks or surprises in the soft-top M4: it takes the hardware of the Coupe (headlined by a 423bhp twin-turbo straight-six engine) and squeezes it under a more aggressive version of the 4-series Convertible's body. And while it's 60kg lighter than the old M3 cabrio, it's still a portly 1750kg. Prices for a six-speed manual version start at £60,430; DCT adds £2645.



### Mercedes S63 Coupe

The new S-class Coupe gains the powertrain of the S63 AMG saloon, meaning a 577bhp 5.5-litre twin-turbo V8 driving the rear wheels via a seven-speed auto 'box. For right-hand-drive markets it's rear-drive only; LHD customers get the option of 4matic AWD, which cuts the 0-62mph time from 4.3sec to 3.9. UK prices will start at around £110,000.



### Peugeot Exalt concept

At the Beijing motor show, Peugeot displayed another sexy concept car that will likely never see production. Powered by the RCZ R's 1.6-litre THP engine and with a 50kW electric motor at the rear, the 335bhp Exalt drives all four wheels. It has hand-beaten bare steel panels, plus 'shark skin' fabric – said to improve aerodynamic efficiency – at the rear.

# McLaren ceases production of 12C

Deluge of 650S orders means temporary build hiatus has been made permanent **Words:** Stephen Dobie



**I**N NEWS THAT dropped no car industry jaws, McLaren has confirmed the end of 12C production. The British supercar firm was curiously keen to talk up the 12C's future upon revealing the 650S at March's Geneva motor show, but the new model's popularity has swiftly quashed that.

'Following the temporary suspension of 12C and 12C Spider production, McLaren Automotive confirms that a

six-month order bank of the McLaren 650S has already been built and, as a result, the McLaren Production Centre will now focus completely on producing the McLaren 650S moving forward,' the company revealed.

The new 650S (driven on page 78) has more power and technology than the 12C it has been spun off, so the decision was expected. McLaren also announced that a number of the 650S's developments will be offered as a free retro-fit 'Technology Upgrade'

to the 12C. These include new software to make the Airbrake rear spoiler reactive in more situations, and the latest version of the Android-based infotainment system. This move should help keep recent (and potentially quite peeved) 12C buyers sweet.

McLaren has sold 3500 12Cs in its three years on sale, and the open-top Spider has accounted for 80 per cent of sales since its 2012 introduction. The 650S starts at £195,250, nearly £20,000 more than the 12C's kick-off point. ❧

## Bentley's hybrid future

Mulsanne concept points to eco-friendlier direction **Words:** Matthew Hayward



**B**ENTLEY INTRODUCED this Mulsanne-based Hybrid Concept (below) at the recent Beijing motor show, and announced that it has been busy developing petrol-electric drivetrains for its entire range.

Going hybrid is a big part of Bentley's future plans, and chairman Wolfgang Schreiber has confirmed that 90 per cent of the firm's model range will be available with a hybrid option by 2020.

Although the concept looks production-ready, Bentley says that the plug-in hybrid drivetrain – which incorporates the Mulsanne's usual 6.75-litre twin-turbo V8 – is still in development and won't be on sale until 2017.

This coincides



with the launch of the company's new SUV, which has also been previewed by a new teaser shot (above).

With ever-increasing sanctions based on CO2 output, hybrid tech seems to be the logical future for luxury cars, with benefits in refinement and performance to be had. This concept can run in zero-emissions electric mode for up to 31 miles. Visual changes are subtle, although the show car was emblazoned with copper decoration on the brake calipers, headlights and badges.

Bentley reckons its plug-in system can deliver a 25 per cent increase in power – which would mean around 625bhp in total for the Mulsanne – along with a 70 per cent cut in carbon emissions, all while staying true to Bentley's 'outstanding luxury and effortless performance' mantra. ❧

*DEFY CONVENTION*



*EVEN EASIER  
TO HANDLE.*



***0% APR\*** REPRESENTATIVE  
ZERO DEPOSIT  
UP TO £2,250 DEPOSIT CONTRIBUTION*

[MAZDA.CO.UK](http://MAZDA.CO.UK)

The official fuel consumption figures in mpg (l/100km) for the Mazda MX-5 range: Urban 25.4 (11.1) - 28.8 (9.8), Extra Urban 45.6 (6.2) - 50.4 (5.6), Combined 35.3 (8.0) - 39.8 (7.1). CO<sub>2</sub> emissions (g/km) 188 - 167.

The mpg figures quoted are sourced from official EU-regulated test results obtained through laboratory testing. These are provided for comparability purposes only and may not reflect your actual driving results. Retail sales only, subject to vehicle availability for vehicles registered between 01.04.14 and 30.06.14 at participating dealers. T&Cs apply. \*0% finance available on all Mazda MX-5 models. At the end of the agreement there are 3 options: (i) Renew: Part exchange the vehicle, where equity is available, (ii) Retain: Pay the Optional Final Payment to own the vehicle or (iii) Return the vehicle. Further charges may be made subject to the condition of the vehicle. Finance subject to status, 18s or over. Guarantee/Indemnity may be required. Mazda Financial Services RHI 1SR. Model shown: Mazda MX-5 1.8i SE Air Con, OTR from £18,495. Model shown with optional Crystal White Pearlescent Paint (£520). OTR price includes VAT, number plates, delivery, 12 months' road fund licence, first registration fee, 3-year or 60,000-mile warranty and 3 years' European roadside assistance. Test drives subject to applicant status and availability. Details correct at time of going to print. Not available in conjunction with any other offer unless specified.





# Farboud returns with 458 rival

Creator of Farbio GTS reveals first prototype of low-volume AF8 supercar. Claimed 565bhp from 7-litre V8; £165k price tag

Words: Dan Prosser

AFTER SEVERAL YEARS away from low-volume sports cars, Arash Farboud is returning with a new company, Arash Cars, and a clean-sheet mid-engined supercar. And Farboud, responsible for the Farbio GTS (now under Ginetta's control) and the stillborn 1200bhp AF10, says that this is his most commercially viable venture yet.

His new Arash AF8 is based around a lightweight tubular steel and carbonfibre hybrid spaceframe, with a six-speed manual gearbox and a GM-sourced LS7 V8 engine producing a claimed 565bhp. It'll be made at a purpose-built facility in Newmarket and is due to make its public debut at the Goodwood Festival of Speed in June.

The AF8 weighs a slim 1250kg at the kerb, thanks in part to its carbonfibre bodywork. It'll cost £165,000, which undercuts the Ferrari 458 and McLaren 650S by around 10 and 20 per cent respectively, and possesses a claimed power-to-weight ratio that eclipses the Ferrari. Suspension is by double wishbones all round, while the brakes are supplied by AP Caparo.

The first prototype of the aggressively styled AF8 (pictured) is said to be 90 per cent representative of the production model and is currently in the final stages of chassis tuning ahead of the build of a second prototype. Farboud expects to sell up to 36 units each year once production at Newmarket is up to full capacity.

**evo** asked Arash Farboud some key questions on his latest project...

## What's different this time around?

Firstly, the factory: it's our own space to be comfortable in. Secondly, we're in full control of everything, as it's no longer a series of sub-contractors and we make 90 per cent of the car in-house in composite. Thirdly, our control of the intellectual property rights is another step further forward. The basis is a lot stronger than it was ten years ago. I've also accepted that I can't be a massive volume car company, so I'm embracing the fact that we are lower-volume.

## Why didn't the Farbio GTS work out?

It was the right idea, but probably

not the right surroundings and I didn't have experience to carry it through. I didn't have the confidence then, but I have now. I've served a 15-year apprenticeship, learning about composites, aerodynamics, powertrains, suspension and customers.

## Who do you take inspiration from?

All the usual suspects, but particularly McLaren. They've shown you can turn around a brand in four years. I've always said a brand can be turned around in three years – introduction, sustenance and re-evolution.

## Can you emulate those brands?

It would be arrogant for me to even think that way: they're super-brands. Maybe in 50 years. In the short-term we can only be seen as a boutique sports car company.

## What comes next?

I'm always thinking about the next car. We're looking at forced induction, active aerodynamics, electric motors and more. I'm trying to run before I

can walk all the time. It's my natural inquisitiveness. When Enzo was asked which Ferrari was his favourite, he'd say: 'The next one.' That's a great attitude. I'm thinking 'spaceship' all the time. **✕**

## evo comment

On the face of it, Farboud will have a tough time persuading buyers away from Ferrari or McLaren and into his new and unproven AF8. With modest sales ambitions, though, he might just find a handful of buyers each year who have room in their collections for an esoteric supercar or who feel they've 'been there, done that' with the established brands. Understanding the demands of these rare buyers will be absolutely crucial. Farboud expects the majority of AF8s to find homes in the Middle East, where anecdotal evidence suggests buyers are beginning to recognise the significance of power-to-weight ratio over peak power. Power-to-weight is where the AF8 scores highly against its rivals. **DP**



# New GTs pair raise the bar

Most powerful Boxster and Cayman models to date, complete with generous standard kit **Words:** Stephen Dobie

**P**ORSCHE HAS officially unveiled GT versions of the Boxster and Cayman, marking the badge's debut on the mid-engined pair.

Both cars get a 15bhp rise over the S models they sit above, and while they use essentially the same 3.4-litre flat-six engine, their power outputs differ: the Boxster GT4 boasts 326bhp, the Cayman GT4 a slightly healthier 336bhp.

Combined with small rises in torque (the Boxster has 273lb ft, the Cayman 280lb ft), performance has improved enough to make these the quickest of their breed yet, surpassing even the old Boxster Spyder and Cayman R. The Boxster GT4 can complete the 0-62mph dash in as little as 4.7sec on its way to a 174mph top speed, while the Cayman is 0.1sec quicker to 62mph and hits a 177mph maximum.

## 'PERFORMANCE HAS IMPROVED TO MAKE THESE THE QUICKEST OF THEIR BREED YET'

Some of Porsche's more popular options are fitted to both cars as standard, including PASM adjustable dampers and Sport Chrono, which includes dynamic engine mounts and, if you've picked the optional PDK transmission over the standard six-speed manual, launch control. Also standard are 'Dynamic Lighting System' headlights (with swivelling main beams and speed-sensitive range control) and black 20in 'Carrera S' alloy wheels, while the interior gets plenty of Alcantara and a red rev-counter. Among the key options are PTV torque vectoring and 20mm-lower sports suspension.

The Boxster and Cayman GT4,

priced at £52,879 and £55,379 respectively in the UK, command around £6500 more than their S-badged relatives.

Cayman sales are currently split around 50/50 between the base 2.7-litre and the 3.4 S, while Boxster numbers are a little more biased to its base model. Although there are no sales projections for the GT4s, their desirable extra equipment and renewed dynamic focus could make them the picks of their ranges.

Intriguingly, a Porsche spokesman has confirmed that the Cayman GT4 'doesn't aim to replace the R', so it seems fair to assume a new R will follow, but probably not this year.

What's more, **evo** has learned that future generations of Boxster and Cayman will get turbocharged flat-four engines. The V4 that forms the petrol part of the drivetrain in the 919 Hybrid racer will aid Porsche's downsizing development. **x**



**Left:** Alcantara dominates GT4 interior. **Above:** Cayman GT4 is claimed to hit 62mph in as little as 4.6sec

## News in brief



### Hennessey Venom special

America's Hennessey Venom GT is claiming to be the world's fastest production car, with a Vbox-verified 270.49mph, and there's a special edition to celebrate. The 'World's Fastest Edition' features a patriotic white, red and blue colour scheme. Priced at \$1.25m (c.£750k), all three examples are already sold.



### Mitsubishi Evo X FQ-440

A limited edition of just 40 cars, specifically for the UK, the FQ-440 pumps out 440bhp and 412lb ft from its turbo 2-litre engine. Its suspension is lower than standard (by 35mm front, 30mm rear) and features uprated Eibach springs, while the only transmission offered is Mitsubishi's SST twin-clutcher. The FQ-440 costs £50,000.



### Chris Hoy races GT-R

Six-time Olympic cycling gold medallist Sir Chris Hoy has joined the Nissan Driver Development Programme with the aim of racing at Le Mans in 2016. After getting a taste for racing during his time in the Radical SRI Cup last year, Hoy is now set to compete in this year's British GT Championship driving the latest GT-R Nismo GT3 car.

# NEW PEUGEOT STILL AFFORDABLE



**3** YEARS  
INSURANCE\*  
WARRANTY  
SERVICING  
CAR TAX\*  
ROADSIDE ASSISTANCE

ALL FROM  
**£165-£305**  
A MONTH\*



**PEUGEOT RECOMMENDS TOTAL** Official Fuel Consumption in MPG (l/100km) and CO<sub>2</sub> emissions (g/km) for the 208 Range are: Urban 32.8-78.5 (8.6-3.6), Extra Urban 54.3-88.3 (5.2-3.2), Combined 44.1-83.1 (6.4-3.4) and CO<sub>2</sub> 149-87 (g/km).

MPG figures are achieved under official EU test conditions, intended as a guide for comparative purposes only and may not reflect actual on-the-road driving conditions. Terms and conditions apply, participating dealers only or visit [www.peugeot.co.uk](http://www.peugeot.co.uk) \*The first year Road Fund Licence (RFL) is included in the on the road price. The Dealer will provide customers with a cheque equivalent to twice the current RFL cost. The customer must apply for years 2 and 3 RFL. Just Add Fuel (JAF) is subject to status. \*Minimum age 21, 25 or 30 on selected models, maximum age 75. Policyholder must have a minimum of 2 years NCD to use on the vehicle. All drivers must meet eligibility criteria including minimum 2 years' full UK licence, driving convictions/claims limits. Excesses apply. 3 years motor insurance is provided and underwritten by U K Insurance Limited, which is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. A guarantee may be required. Written quotations available from Peugeot Financial Services, Quadrant House, Princess Way, Redhill, RH1 1QA. JAF is incorporated into a Personal Lease contract. \*From price 208 Access 1.0 VTi 3 Door Inc Metallic Paint, £2,541 initial rental, £4,347 final rental. To price 208 XY 1.6 VTi 3 Door £2,040 initial rental, £6,884 final rental and model featured 208 Allure 1.6 e-Hdi Stop&Start 3 Door Metallic Paint and 17" Oxygen Alloy Wheels, £285 monthly rental, £2,287 initial rental, £6,630 final rental. 35 monthly rentals. If you choose to pay off the optional final rental, you can pay an annual rental equivalent to one of your monthly rentals but will not own the car. Ownership is possible with JAF Passport, ask your Dealer for details. Rentals quoted for a typical customer and will vary according to age, postcode, initial rental and annual mileage. Excess mileage charges may apply. Routine servicing included only. Excludes wear parts. This offer is not available in Northern Ireland. Offer available on cars ordered by 30th June 2014. Information correct at time of going to press.

## PEUGEOT 208

MOTION & EMOTION



PEUGEOT

Every new evo car that matters, rated

## This month

### PORSCHE 911 TARGA 4S

991 with folding roof panel combines style with 394bhp

p20



### AUDI S1

Hot A1 comes with 228bhp and 4WD. We try it on ice

p26



### ABARTH 595 COMPETIZIONE

Upgraded Fiat 500 enters hot hatch ring with £19k price tag

p28



### AC SCHNITZER ACSI SPORT

BMW tuner gives M135i 355bhp and reworked suspension

p31



### MORGAN 3 WHEELER

One-wheel-drive sports car is tweaked and upgraded

p32



### MINI COOPER S v FORD FIESTA ST

Third-gen Mini takes on current small hot hatch benchmark

p34



### HONDA CIVIC TOURER BTCC

The first estate-based touring car racer for 20 years

p38



## The test team

This month, we asked our road testers to name the first Porsche they ever drove (or can remember driving...):



### NICK TROTT

Editor

'I was a rookie journo driving a 996 GT3 RS in biblical rain in Wales. Fear, joy, fear, joy, fear, joy – for three hours.'



### MIKE DUFF

Motoring editor

'996 Carrera 2, just after it launched in the UK. I had to drive it across central London and didn't get above 40mph...'



### HENRY CATCHPOLE

Features editor

'Issue 087, evo's 993 Carrera 2. John Lyon taught me its wiles at Millbrook and MIRA. It oversteered. I smiled.'



### DAN PROSSER

Road tester

'A Boxster S. It was the first time I'd ever felt such direct, communicative steering. How much is an early model these days?'



### JETHRO BOVINGDON

Contributing editor

'996 Carrera in silver, on 17in wheels. Instantly understood what all the fuss was about.'



### RICHARD MEADEN

Contributing editor

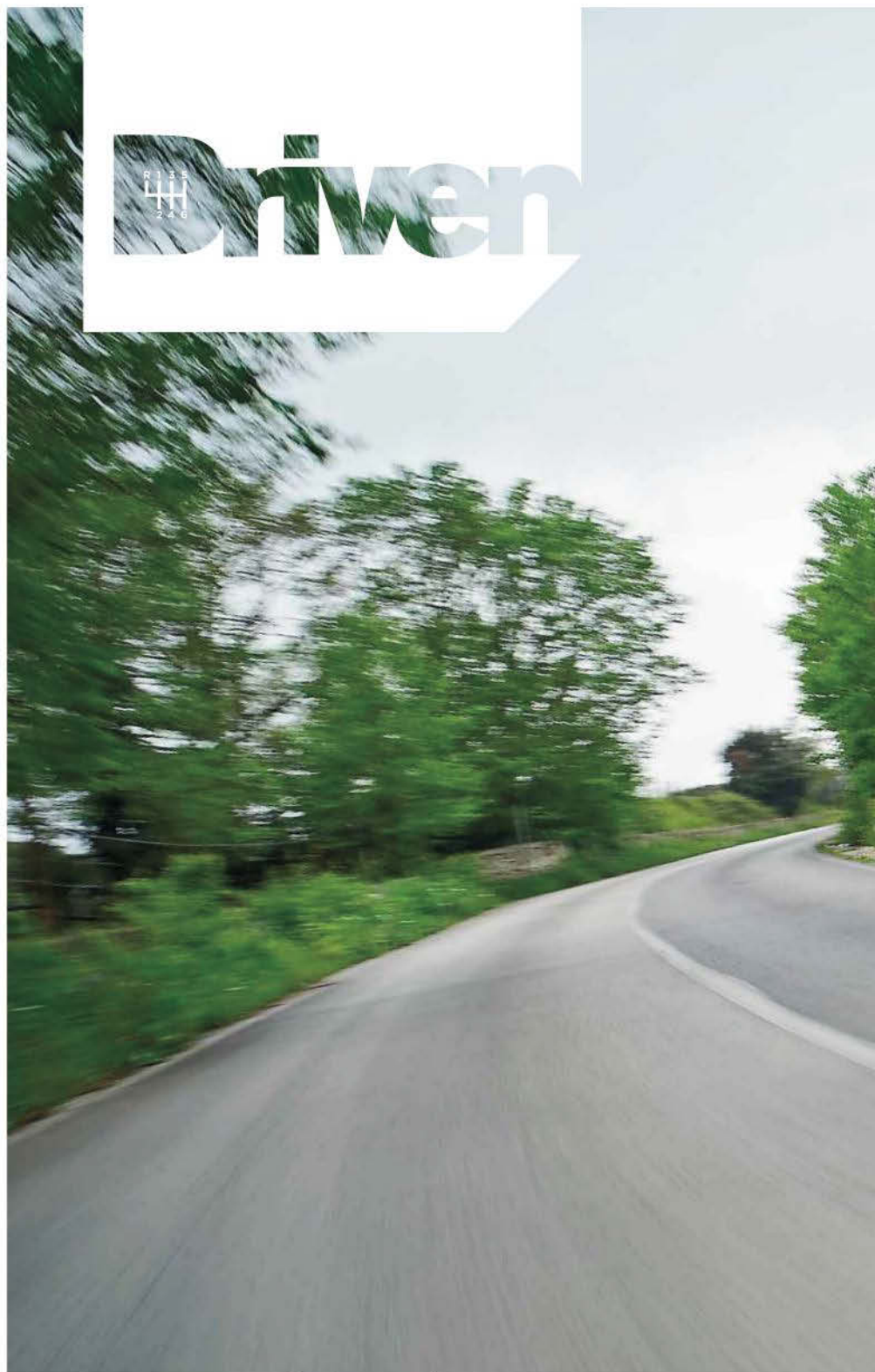
'Porsche GB's Pistachio Green 964 3.6 Turbo press car, trying – and failing – to stay with David Vivian in an 850 CSI.'



### DAVID VIVIAN

Contributing road tester

'It must have been a 944 of some description, but I do remember thinking, this is pretty cool.'



# Driven

📍 Test location: Cisternino, Italy GPS: 40.76478, 17.43531

## Porsche 911 Targa 4S

The Targa returns, with four-wheel drive as standard and 394bhp in 'S' form. But is the performance harmed by extra weight and a softer set-up?

Photography: Gus Gregory



**D**URING DEVELOPMENT of the 1996MY 911 Targa – based on the 993, the last of the air-cooled 911s – Porsche decided that it couldn't reasonably expect owners to lift and remove weighty roof panels by hand each time they wished to indulge in a spot of topless motoring. Its engineers, therefore, designed a motor-driven roof mechanism, incorporating a large

glass panel that slid backwards over the rear screen. The hassle in removing the panels was lost, but so too was the distinctive roll-hoop that had, over the years, become an icon of Porsche design.

Later generations of Targa adhered to the 993's sliding glass panel approach, but they never looked quite right; they never had the same fluid roof line of the coupe, nor did they match the retro charm of those early Targas. For

the new 991-based iteration, however, Porsche has created a best-of-both-worlds solution. The retractable roof is still powered, but the roll-hoop returns, now in silver to contrast against the paintwork and to add jewellery to a familiar shape.

For kerbside drama, a 991 Targa doing its thing takes some beating. At the touch of a button, either within the cabin or on the remote key fob, the rather beautiful glass canopy and



‘The engine pulls with muscularity from the mid-range and then rips around to its red line with urgency’

a section of rear bodywork lift up as one and rotate to a position behind the rear bumper. The fabric roof then rises and folds into itself, tucking down into a stowage compartment behind the small rear seats, whereupon the canopy returns to its normal position. The 19-second process is theatrical and elegant, but to watch it happen is to get some impression of the weight penalty that inevitably comes with such a complex mechanism. The Targa also can't shed its roof on the move because the tail lights are briefly obscured by the large panel.

Four-wheel-drive only, the Targa is based upon the Cabriolet platform, with minor changes made to the body-in-white around the B-pillar to accept the roll-hoop, which does add some torsional rigidity. Compared with the equivalent coupe, the Targa carries 110kg in additional mass, mostly comprised of extra structural bracing, and its suspension has, according to the engineers, been tuned with half an eye on improving ride comfort.

So the Targa is heavier, floppier and softer

than the coupe. Clearly the fixed-head model will remain the driving enthusiasts' 911 of choice, but the Targa might just be less of a compromise than a Cabriolet for those who insist on some form of retractable roof.

Two versions will be available. The Targa 4 costs £86,377 and is powered by a 345bhp, 3.4-litre flat-six, while the Targa 4S, driven here, costs £96,413 with a 394bhp 3.8-litre engine out back. A seven-speed manual gearbox comes as standard, but given the Targa's role as a cruiser rather than a bruiser, most buyers will opt for the seven-speed PDK twin-clutch transmission, as fitted to our test car. This also cuts the 0-62mph time by 0.2sec to 4.6sec.

The drivetrain is familiar to the rest of the 911 line-up and is therefore very difficult to fault. PDK works superbly as an automatic and shift speeds in manual mode are crack-of-the-whip quick; each new gear bangs in even before you've fully released the steering wheel-mounted paddle. The engine, too, is a joy, for it pulls with a certain muscularity from



the mid-range and then rips around to its red line with real urgency. The flat-six howl and rasp is pleasant enough, but a car of this nature surely deserves the more vocal and characterful optional sports exhaust (£1773).

The 4WD system adds a layer of security and infallibility that the non-enthusiast driver will certainly appreciate. Only a very clumsy throttle application in a low gear and on a wet surface will trouble the traction control. Comfort and security are the watchwords here, rather than involvement and edginess. There is still a certain sharpness to the ride quality over small lumps and bumps, but it does soak up surface imperfections with more pliancy than the coupe. As we've come to expect of modern 911s, the damping quality is superb; compressions and larger intrusions are dealt with swiftly, with composure and without deflection.

The natural chassis balance is neutral, pushing into slight safety understeer towards the edge of grip, and in the 991 there is now precious little sensation of there being a large

**Above:** steering is composed to the point of lifelessness; PDK dual-clutch transmission is a £2388 option. **Top right:** roll-hoop returns to the Targa after two-decade absence. **Right:** brake discs are 340mm at the front and 330mm at the rear, but bigger PCCB carbon-ceramics are available as an option





**Above:** rear panel blocking tail lights means Targa roof can't be operated on the move. **Below:** well-refined interior is carried over from rest of 911 range

pendulum slung out over the back axle. In the firmer chassis modes there is such abundant body control that the car feels intimately tied into the road surface, but it still isolates the occupants from it.

The dynamic make-up has thus far been more than impressive, but the picture begins to change when you start to work the Targa a little harder. The steering, as we've come to expect of the 991, is aloof and slightly remote when it really matters. It does now tug and weave a little in your hands as it did in the previous-generation 911, but it's only an illusion of true feel; when you want to know just where the limit of front-axle grip is without stepping over it, the steering won't give you too many clues.

Both Targa models get a Sport button to add weight to the steering and sharpen the throttle response, but only the Targa 4S gets Porsche Active Suspension Management, which can adapt to suit the road surface, as standard. Similarly Porsche Torque Vectoring, which uses



the inside-rear brake to pivot the car into turns to good effect, is standard only on the Targa 4S and is an £890 option on the Targa 4. One option that is exclusive to the higher-powered model, Porsche Dynamic Chassis Control, uses variable anti-roll bars to cut body roll during hard cornering. It's a clever system, but since roll is how the driver feels the loading of the chassis in corners, it is best avoided.

There is something a little strange in the way the new Targa approaches its limits when the driver begins to push. Experience of similar cars tells you that the Targa surely can't carry much more speed through a sequence of turns, and that it must be on the edge of adhesion, but there's actually very little evidence from the car itself to confirm this. The truth is that it is on or around the limits of its capabilities, but it just remains so composed, unflustered and, in a sense, lifeless that you begin to believe you're barely scratching the surface. The Targa just doesn't engage and reward in the manner

**'It's so composed and unflustered that you begin to believe you're barely scratching the surface'**

that the two-wheel-drive coupe can; it doesn't encourage a committed driving style.

The Targa's weight penalty compared to its fixed-head stablemate and the tuning for greater comfort are clearly manifest in its driving characteristics. It isn't a match for the coupe as a sports car, but for the aesthetic qualities of that roll-hoop and glass canopy, it is a more alluring drop-top than the Cabriolet. ❌

**Dan Prosser** (@TheDanProsser)

<b>Engine</b>	Flat-six, 3800cc
<b>CO2</b>	237g/km
<b>Power</b>	394bhp @ 7400rpm
<b>Torque</b>	324lb ft @ 5600rpm
<b>Performance</b>	4.8sec (claimed 0-62mph), 182mph (claimed)
<b>Weight</b>	1555kg (259bhp/ton)
<b>Basic price</b>	£96,413

**evo rating:** ★★★★★

- ➕ Cooler than a Cabriolet
- ➖ Not as rewarding as a coupe





8  
APRIL  
DONINGTON PARK

04-06  
MAY  
ROCKINGHAM

24-26  
MAY  
SILVERSTONE

21-22  
JUNE  
SNETTERTON

24-26  
JULY  
SPA

16-17  
AUGUST  
THRUXTON

30-31  
AUGUST  
BRANDS HATCH

13-14  
SEPTEMBER  
DONINGTON PARK

# DRIVEN BY SUCCESS.

**Jordan KING**  
BRITISH F3 SERIES  
WINNER 2013



[www.formula3.co](http://www.formula3.co)



COOPER TIRES IS PROUD TO BE THE OFFICIAL TYRE SUPPLIER AND TITLE SPONSOR OF THE 2014 BRITISH FORMULA 3 INTERNATIONAL SERIES.

This prestigious and fiercely competitive series is widely acknowledged as the toughest domestic single-seater championship in the world and is a genuine stepping stone for great drivers on their way to F1. Motorsport at this level therefore requires the very best components in every area, including tyres. When you need tyres that perform on your car or 4x4 Cooper tyres are the fitting choice.



[www.coopertire.co.uk/f3](http://www.coopertire.co.uk/f3)



**COOPERTIRES**  
100 Years



📍 **Test location:** Åre, Sweden **GPS:** 63.46299, 13.06965

## Audi S1

Four-wheel-drive hot hatch comes with 228bhp and stacks of styling options. 0-62mph in 5.8sec

**S** SLIDING THE CAR THIS way then that down a narrow white corridor, leaning on the snow banks on the exit of the odd corner... This is exactly how I dreamed of driving an S1. Of course, in my slumbering wonderland the S1 in question has a warbling five-cylinder soundtrack, while the small yellow car underneath me today has a more raspy four-pot. One day I might get to drive a full-blown Stig-spec Group B Sport Quattro S1 rally car, but for now this new A1-based S1 will have to do.

The pint-sized Audi S1 is a cracking-looking car. It's available in both three-door and five-door (Sportback) body styles, but I think our three-door is the better looking of the two

options. Admittedly our test car has had some sartorial help in the form of an optional quattro styling pack, which adds the roof spoiler and front splitter, plus the quattro logo on the side and some neat red detailing in the lights. The overall effect is one whereby the car's size says cute but its stance and spoilers say aggressive. Like a hamster with a hand grenade.

Things get even better inside, where there's another optional styling pack, with body-colour accents lifting the already high-quality fixtures and fittings. The best additions are undoubtedly the 'S' Sports seats with their backs in high-gloss yellow, which are rather reminiscent of the seats in a 968 Club Sport. In fact the yellow looks suspiciously like the Speed Yellow paint Porsche used to daub on its cars, while the Viper

Green option is an uncanny match for the green that was available on the gen-1 997 GT3 RS...

The underpinnings of the S1 are essentially very similar to those of the limited-edition (£41k) A1 quattro. This means the standard A1 torsion beam rear end has been replaced by a four-link design, while the quattro 4WD system uses a fifth-generation Haldex clutch mounted at the rear axle. Power and torque come in at 228bhp and 273lb ft, which is respectively slightly less and slightly more than the A1 quattro (which had an older version of the 2-litre TFSI engine). Perhaps the best news of all is that the S1 has a six-speed manual gearbox – there isn't even the option of two pedals.

Because our first taste of the S1 is in northern Sweden, the car is on winter tyres and this



**Left:** among various styling options, flat-bottomed steering wheel is a £250 extra. **Below:** six-speed manual is only transmission available. **Bottom:** five-door body is offered, as well as a three-door (far left)



inevitably muddies the water a bit when it comes to assessing the dynamics. However, the most striking initial impression on the evening drive from the airport on relatively straight but dry roads is the ride quality. Suspension on Audi 'S' models used to have the severity of a North Korean haircut, but despite being lowered by some 25mm the S1 has a lovely supple feel in the softer of its two damper settings. Switching to the firmer mode certainly brings more jolts and bumps up into the cabin, but it also adds noticeably more body control in the corners.

The following morning we wake to discover that it's snowed overnight and all the roads are significantly slipperier. We go searching for the Swedish equivalent of a B-road and round the back of a lake we find something akin to a deserted rally stage. Which is fun. Slithering along fairly slowly (there's hard ice under the snow) proves that the S1 will drift around in quite a balletic fashion, the quattro sending just enough power rearwards to provoke a slide before shuffling it back to the front wheels again to drag the car straight. For such a short wheelbase it doesn't feel snappy either.

After a bit of mucking about we head to the airfield that Audi has kindly cleared of snow, and here, on drier tarmac, the S1 proves to be both immensely quick and incredibly grippy. The claimed 5.8sec 0-62 time seems conservative and despite a lot of encouraging space and some seriously ambitious entry speeds, the little car simply clings on for dear life round the various corners. The natural balance when limits are finally reached is neutral to a smidgen of understeer, but just as on the snow, it's easy to feel the power being sent to the rear wheels, so if you judge the corner speed just right, you



can then use the throttle to tighten your line. The gearshift is quite light and surprisingly long in its action but in no way sloppy, while the reworked steering is pleasingly direct and accurate, although it doesn't yield much feel (it might be better with summer tyres).

Ultimately this is all just a taster, but the signs (particularly the ride) are promising for when the S1 arrives in the UK. With prices starting at £24,900 (and rising considerably with those optional styling packs) it will be a very expensive little car. However, it is definitely a premium package and as the huge number of heavily optioned Minis on the road proves, some people buy a small car because it's small and not because they want something cheap. ✘ **Henry Catchpole** (@HenryCatchpole)

## Specification

<b>Engine</b>	In-line 4-cyl, 1984cc, turbo
<b>CO2</b>	162g/km
<b>Power</b>	228bhp @ 6000rpm
<b>Torque</b>	273lb ft @ 1600-3000rpm
<b>Performance</b>	5.8sec (claimed 0-62mph), 155mph (limited)
<b>Weight</b>	1315kg (176bhp/ton)
<b>Basic price</b>	£24,900
<b>Finance</b>	£5110 deposit, 35 monthly payments of £265, £13,898 final payment. 10,000 miles per year. Audi Finance

**evo rating:** ★★★★★

✚ Quick, looks great

✘ Expensive, no five-cylinder soundtrack



Test location: Winwick, Cambridgeshire, UK GPS: 52.41418, -0.37680

## Abarth 595 Competizione

Sporty tweaks to 595 Turismo for £1k premium. Same 158bhp and 7.4sec 0-62mph time

Photography: Dean Smith

# A

**AFTER A SPATE OF EYE-wateringly expensive Abarth 500s, including the Edizione Maserati (£32,000) and the 50th Anniversary (£29,850),**

you'd be forgiven for thinking that you need five jobs to afford a hot version of Fiat's 500. Not so. The UK Abarth range starts at £14,260 for the 133bhp 500, moving to £17,960 for the 158bhp 595 Turismo and £18,960 for the Competizione tested here, which also has 158bhp.

Standard Competizione kit includes aluminium pedals, footrest and kick-plates, machined aluminium fuel and oil filler caps, tinted rear windows, 17in wheels, xenon headlights, red calipers and titanium grey grilles. But the 595 shows its age with a lack of integrated satnav or DAB on the options list.

Of more interest are the cross-drilled front and rear brake discs, while further upgrades include a 'Monza' exhaust with four outlets (a car should never have a 1:1 ratio of cylinders per tailpipe, in my opinion), Abarth Corse seats by Sabelt and the upgraded Koni FSD (Frequency Selective Damping) dampers. Our test car is also specced with Circuit Grey/Officina Red two-tone paint (£950), ten-spoke diamond finish alloy wheels (£170), an upgraded hi-fi with a 100W subwoofer (£265), and leather seat trim (£1000). Total cost? £21,345.

You approach the Competizione hoping the driving experience will match its styling: fun, unique and playful. Mostly, it does. You slide into the fantastic seats, grab the fat steering wheel and the cold metal gearknob and feel thoroughly buoyed up for a slice of hot hatch wrestling. And that's what you get, once you've



fumbled for a seat height adjuster that isn't there (the Sabelts are brilliant but mounted way too high) and prodded the all-important Sport and TTC (Torque Transfer Control) buttons.

The car feels tame at first. The throttle response is neither sharp nor effective, the steering is vacuous and the responses are nothing like as hyperactive as you expect. However, seek out Sport and TTC, as you will after about a mile, and the 595 releases a little more spirit. Sport mode increases steering weight from the all-electric rack and introduces more torque, but steering feel doesn't increase with the extra weight. The added torque is however noticeable. TTC, meanwhile, allows the 595 to dig into apexes and spread the torque across the front axle by braking the inside wheel. It's relatively common tech, but it works well in the Abarth, especially in the dry. In the wet it creates noticeable wheelspin if you're clumsy with the throttle.

The 1.4-litre engine is punchy and is simple to 'read'. You know instinctively when to upshift and the power is consistent through the revs (although a few more of the latter wouldn't got amiss), while the gearshift action is short and

sweet. The pedals are in a decent layout for heel-and-toeing and the brakes offer fantastic feel and power.

The Koni dampers work well on smooth surfaces but on broken, undulating or cambered roads (i.e. every British road) the Competizione loses its composure and hops, skips and fidgets non-stop. Worse still, one action tends to cause another and before long the car ties itself up in knots. In short, despite it willing you to do so, the 595 is not a car to drive to the max and it embarrasses itself the closer it gets to the limit.

The Abarth 500 is six years old, and while there's genuine appeal in the powertrain and styling, the chassis is in desperate need of some of the Mini's sophistication and a lot of the Ford Fiesta's agility and sheer energy. We sincerely hope that drivers' demands are considered equal to the fashionistas' when Fiat replaces the current car. Until then, you buy an Abarth for its personalisation options and styling rather than the drive. ❌

**Nick Trott** (@evoNickTrott)

<b>Engine</b>	In-line 4-cyl, 1368cc, turbo
<b>CO2</b>	155g/km
<b>Power</b>	158bhp @ 5500rpm
<b>Torque</b>	170lb ft @ 3000rpm (in Sport mode)
<b>Performance</b>	7.4sec (claimed 0-62mph), 130mph (claimed)
<b>Weight</b>	1035kg (155bhp/ton)
<b>Basic price</b>	£18,960
<b>Finance</b>	£2595 deposit, 48 monthly payments of £259, £7417 final payment, 10,000 miles per year. Abarth Financial Services

**evo rating:** ★★★★★

⊕ Spirited engine, great brakes

⊖ Sharper rivals



# Defectors willkommen

The Volvo V40 R-Design



For years we've been indoctrinated to believe that German cars are the only choice; the only option. But an alternative is out there, and it's closer than you think. Just look north to Sweden, and come see what's on the other side:

- Adaptive Digital Display
- R-Design Sports Upholstery with perforated leather
- 5 spoke diamond cut 17" Ixion alloy wheels
- Up to 83.1 MPG (Combined figure)

## SEARCH VOLVO V40

Official fuel consumption for the Volvo V40 D2 R-Design (manual) in MPG (l/100km): Urban 74.3 (3.8), Extra Urban 91.1 (3.1), Combined 83.1 (3.4). CO<sub>2</sub> Emissions 88g/km. MPG figures are obtained from laboratory testing intended for comparisons between vehicles and may not reflect real driving results. Finance subject to status. 5.9% finance available on all V40 models registered by 31st July 2014. \*At participating dealers. Example based on mileage of 8000 per annum, excess mileage charge 14.9p per mile. At the end of the Personal Contract Purchase there are three options: (i) pay the Final Payment/GFV (Guaranteed Future Value) to own the vehicle; (ii) part exchange the vehicle, where equity is available; or (iii) return the vehicle. Further charges may be made subject to the condition of the vehicle. Terms and conditions apply. 18s or over. Guarantee/Indemnity may be required. Volvo Car Credit RH1 ISR.

### PERSONAL CONTRACT PURCHASE REPRESENTATIVE EXAMPLE: V40 D2 R-DESIGN

36 monthly payments	£249
Customer deposit	£1,999
On the road price*	£21,080
Total amount of credit	£18,581
Interest charges	£2,752
Total amount payable	£23,832
Final Payment	£12,369
Finance Deposit Contribution	£500
Duration of agreement (months)	37
Fixed Rate of interest p.a	3.04%
Representative APR	5.9% APR



A WORLD OF PERFORMANCE  
SINCE 1949

LATEST OFFERS



# I'LL SEND YOUR HEART RACING



**595** *competizione*  
160HP T-JET 1.4 TURBO

**0% APR REPRESENTATIVE OVER TWO YEARS**

(Deposit required\*)



Turn heads with the stunning Abarth 500 and 595 range of cars. Abarth offers you an amazing set of possibilities; Outstanding performance with a choice of 135 or 160 bhp • Select either Manual or responsive MTA Paddle Shift gear change • Open Top Convertible or Sports Hatchback body styles. What more do you need to be seduced? **Discover the Abarth range now.**

FOLLOW US ON:  
UK.ABARTH.WORLD.COM



DRIVE ABARTH RESPONSIBLY

ABARTH.CARS.CO.UK

Fuel cons mpg (l/100km): urban 33.2 (8.5) / extra-urban 52.3 (5.4) / combined 43.5 (6.5), CO<sub>2</sub> emissions: 155g/km. New Abarth 500 range starting from £14,260 OTR. Models shown: Abarth 595 Competizione (at £19,360 On The Road) including optional Record Grey Paint (£400), Abarth 595 Turismo (at £18,910 On The Road) including optional Bi-Colour paint (£950) and Abarth 500C (at £16,823 On The Road) including optional Side Stripe & Door Mirrors (£163), optional 17" Alloy wheels (£300) and optional Gara White Paint (£300).

Promotion available on new Abarth models registered before 30th June 2014. With Advance Payment Plan you have the option to return the vehicle and not pay the final payment, subject to the vehicle not having exceeded an agreed annual mileage (a charge of 6p per mile for exceeding 10,000 miles per annum in this example) and being in good condition. \*Deposit amount is typically between 50% to 60% depending on term, model, and mileage. Finance subject to status. Guarantees may be required. Abarth Financial Services, PO BOX 4465, Slough SL1 0RW. Fuel consumption and CO<sub>2</sub> figures based on standard EU tests for comparative purposes and may not reflect real driving results.

ABARTH WITH





📍 **Test location:** Harrold, Bedfordshire, UK **GPS:** 52.21681, -0.61871

## AC Schnitzer ACS1 Sport

BMW tuning expert boosts M135i to 355bhp as part of £11k upgrade package

Photography: Dean Smith

**A** **AS A BMW M135i OWNER,** it is surely only a matter of time before a 116d M Sport driver, thrusting his way towards a career in middle management, delights in noting that his gutless diesel hatch is 'exactly the same' as your 316bhp, 4.5-star *evo* car. Some might take a degree of satisfaction from the quiet knowledge that he is, in fact, absolutely wrong, but for those who want their M135i to stand out from the sea of diesel motorway hacks, modifying is the way to go.

Based in the German town of Aachen, AC Schnitzer has been tuning and modifying BMWs for several decades. The company has recently turned its attention to BMW's impressive mega-hatch, with upgrades to the engine, suspension and styling. These are distributed in the UK by Norfolk-based Rossiters.

The standard M135i's badges, silver mirror caps and twin exhausts are easily missed by those not in the know, but the front bumper treatment, spoiler and rear valance that come as part of the AC Schnitzer aero kit (£1060 fitted) won't be. The 19in wheels (£2900 including tyres) fill the arches nicely and distinguish the car from the norm even further, but the styling revisions inevitably won't be to all tastes.

The power upgrade will likely meet with more universal approval – a removable ECU (£2250) lifts the peak output to 355bhp. This demonstrator runs on AC Schnitzer's RS coilover suspension (£2388), tuned in this instance for fast road and track use, one step back from the dedicated track setting. The coilovers are adjustable for ride height, bump and rebound, so most requirements can be met,



but they are passive, so the switchable modes that are optional on the M135i are lost. The exhaust (£2078) promises to release a little more aural drama from that turbocharged six-cylinder while the cabin trinkets (£630), including a pedal set, handbrake sleeve and mats, lift the interior a little.

The full kit can be bought for a discounted £10,995, inclusive of VAT and fitting. Although it'll work out more expensive in the long run, each upgrade can be fitted as and when funds allow. Only the engine and transmission aspects of the manufacturer warranty are affected, although AC Schnitzer will cover this for peace of mind; its warranty runs for two years as standard and can be extended for a third.

Take a look at the ride height, check out the 19in wheels and low-profile Michelin Pilot Super Sport rubber, consider the stiffer suspension, and it seems quite clear that the ACS1 would be disastrous on uneven UK roads. The way the suspension has been tuned is nothing short of genius, though, for the ACS1 remains comfortable at a cruise and there's plenty of pliancy even on the lumpiest back roads. Only the biggest compressions, hit at

speed, will lead to the suspension running out of travel; in all other instances the quality of the damping is beyond doubt. The non-runflat tyres certainly help, too.

One of the M135i's weaknesses at full pace is body control on a demanding road. The standard suspension system runs out of ideas when lateral and vertical movements come thick and fast, but the firmer AC Schnitzer set-up improves body control quite considerably. The electric power steering remains vague and uncommunicative, though. The remapped engine does pull harder both in the mid-range and at the top end, so the ACS1 feels appreciably quicker than the standard car. The exhaust adds a pleasing raspiness under full load and a suggestive burble at idle as well.

With its thoughtful and considered upgrades, AC Schnitzer has successfully tapped into the M135i's latent potential. The result isn't quite full M-car, but until BMW's in-house tuning division gets to work on its hatchback (if it ever does), the ACS1 is the best second-generation 1-series we've come across. ❌

**Dan Prosser** (@TheDanProsser)

<b>Engine</b>	In-line 6-cyl, 2979cc, turbo
<b>CO2</b>	188g/km
<b>Power</b>	355bhp @ 5800rpm
<b>Torque</b>	383lb ft @ 3700rpm
<b>Performance</b>	4.7sec (claimed 0-62mph), 155mph (limited)
<b>Weight</b>	1425kg (253bhp/ton)
<b>Price</b>	£10,995 (full conversion)

**evo rating:** ★★★★★

⊕ Engine and suspension upgrades improve M135i

⊖ High cost of full kit, steering still numb



Test location: Malvern, UK GPS: 52.10806, -2.34446

## Morgan 3 Wheeler

Retro tricycle receives a round of updates, but blink and you'll miss them

Photography: Dean Smith

**I**T'S NEARLY THREE years since we first drove a prototype version of the 3 Wheeler. Since then, the production version has become a smash hit by Morgan's standards. Over 1000 have already been built, and it now makes up around half the company's total production. And while recognising that Morgan's product cycles tend to get measured in decades rather than mere years, it does raise the question of how the 3 Wheeler should evolve.

The limited revisions to this 2014 version tell us two things. Firstly, that there is nothing obviously wrong with the existing model, which is still creating enough demand to fill a sizeable waiting list. But also that there's not really much you can do to change a lightweight car with no roof, barely any equipment and all the performance it realistically needs.

The most obvious revision is the arrival of a new cooling cowling on top of the V-twin engine, together with a small fan mounted behind to draw air through it. Although the two-cylinder engine is air cooled, it can struggle when asked to sit stationary in hotter climates, and with America already one of the 3 Wheeler's biggest markets, and sales about to begin in Australia, this 'hot weather' pack makes sense. It will be standard going forwards, and can also be retro-fitted to earlier cars.

It's the same with the new 'comfort steering', which uses a new link to connect the unassisted rack to the front uprights to reduce kickback. The only change that isn't backward compatible is a very slightly narrower transmission tunnel, to improve space in the cabin fractionally.



Very fractionally. Clambering into the 3 Wheeler's intimate embrace I'd be lying if I said I can notice any difference in the modest amount of legroom on offer – and there's still nowhere to put your clutch foot when you're not using it to change gear.

The driving experience is effectively unchanged. No bad thing: five minutes in the 3 Wheeler leaves you wearing a grin wide enough to catch flies. The big, lazy V-twin fires into a loud, offbeat idle, sound reverberating through the twin shotgun exhaust pipes. The throttle pedal is both light and sensitive, but the clutch is progressive enough and the Mazda MX-5 five-speed gearbox changes cleanly enough to keep power flowing smoothly.

The early cars would sometimes slip the drivebelt that connects the gearbox to the rear wheel under hard acceleration, but during several hours together, this one doesn't. The revised steering is tamer over bumps and still gives a good impression of how much of their relatively modest grip reserves the skinny front tyres have to call on.

But it's fair to say the Morgan remains a car that's best driven at something below maximum

attack. Under normal use the front runs out of grip first, the sensation exacerbated by the relatively low-geared steering. At lower speeds the 3 Wheeler can be persuaded into dinky powerslides, but ever since seeing one tip onto two wheels on track at eCoty 2012 I've never felt the urge to take one to the limit on road.

But at eight- or nine-tenths, it's brilliant fun. The thrummy engine delivers plenty of urge, the car steers accurately, and you get to watch the front wheel on your side as it turns or dances in and out of bumps and compressions. For making decent progress down a quiet, well-known road it's a superb companion.

It's genuinely hard to know what you could do to improve the 3 Wheeler in one area that wouldn't detract from another. It doesn't need to be quicker, it doesn't need to be lighter and it doesn't need to be grippier. Presuming Morgan can carry on finding buyers, there's no reason to suppose this won't be another of its decade-lasting successes. ❌

**Mike Duff**

<b>Engine</b>	V-twin, 1976cc
<b>CO2</b>	215g/km
<b>Power</b>	82bhp @ 5250rpm
<b>Torque</b>	103lb ft @ 3250rpm
<b>Performance</b>	6.0sec (claimed 0-62mph), 115mph
<b>Weight</b>	525kg (dry) (159bhp/ton, dry)
<b>Basic price</b>	£31,000
<b>Finance</b>	£11,000 deposit, 48 monthly payments of £299, £11,500 final payment. No mileage limit. Morgan Finance

**evo rating:** ★★★★★

- ⊕ Nothing else like it
- ⊖ No real changes from before



# Advanced Paint Renovation

As used and recommended by professionals



*Bodyshops have been trusting Farécla for over 60 years, and now our most advanced formulations are available in our G3 Professional range for you to use at home. As the number one recommended brand by the professional trade, using the products is easy: just prepare, restore, finish – and then stand back and admire.*

Available from **halfords** and all good automotive stores

For more information, visit our website at [G3Pro.com](http://G3Pro.com)

**PROFESSIONAL** Bodyshop results you can achieve at home.





📍 **Test location:** Winnats Pass, Derbyshire, UK **GPS:** 53.34158, -1.79238

## ***Driven twin test: Mini Cooper S v Ford Fiesta ST***

The third-generation Mini arrives on UK roads and faces the Blue Oval's benchmark hot hatch.  
Can the Mini's extra power help it overcome its weight and price shortfalls?

**Photography:** Dean Smith

**M**INI TREADS A VERY fine line with its new Cooper S. Arguably it always has, but in the latest iteration the bells, whistles and *son et lumière* seem to have been ratcheted up another notch, so the line is thinner than ever. Some of the designs and ideas, I confess, I looked at with childish glee. The ring of lights around the huge central display illuminates in various ways and colours depending on the function being performed: call someone via Bluetooth and some blue dashes chase each other round the circle; with the satnav engaged, a semicircle lights up and then diminishes as you near the next junction or turning; select the 'Green' driving mode and it glows purple (only joking with this last one).

The whole interior is fun, and with the new, more supportive seats (the seats were always a let-down in previous generations) and fantastic NVH levels, it feels like a lovely place on a long journey. But then it oversteps the mark. Turn the collar at the base of the gearlever (an excellent idea that saves you hunting for a button in the heat of battle) to select Sport and the screen in the circle displays the words 'Maximum go-kart feel'. That's like selling a cask-strength whisky with the slogan 'Particularly light-headed and giggly version'. To compound this crassness, the message is accompanied with thought-bubble pictures of a go-kart and a small rocket, both of which look like they have been drawn for a cheery pre-school book. It's patronising towards both the driver and the car.

It's a good job, then, that the Mini is largely best left in its Normal setting. The car that we drove on the launch (*evo* 194) was fitted with the standard passive dampers, but this UK car has the optional (£375) variable dampers, which would seem like an option worth spec'ing. Sometimes the differences between variable damper settings can be fairly minimal, but the Cooper S's demeanour changes markedly. In its standard setting the car feels much more supple, particularly in its secondary ride, and as a result copes far better with bumpy UK B-roads (and general everyday driving). On smoother terrain you get a little extra precision from the steering in Sport mode, but to me the car feels happier as a whole in its more relaxed setting because it breathes with the road rather than fighting it. The standard 16in wheels (our car is on 17s, a £450 option) might change things, so it would be interesting to try a car with a bit more sidewall, unfashionable though that might be.

Sport mode is more enjoyable for what it does to the engine, sharpening the throttle response and allowing some exuberant pops from the exhaust on a trailing throttle. The Mini also has a rev-matching system on the manual

gearbox (effectively heel-and-toeing for you when you downchange) and this seems to improve in Sport mode, although it is disabled if you turn off the DSC. Mini claims 189bhp and 206lb ft of torque, up 8bhp and 29lb ft on the previous generation car, but the new 2-litre turbo engine doesn't feel like it has quite the eagerness and enthusiasm of the old 1.6 turbo (which frequently felt much more potent than its official figures). However, the Cooper S remains a very quick little car and you still need to be careful how you ladle on the power out of tighter corners if you don't want to find the DSC cutting in as it tries to curb the wheelspin.

So, how does it compare to the Fiesta ST? Well, I've driven both cars in the Peak District, on lots of local roads that I know far better than the back of my hand (although really, who has an intimate knowledge of the back of their

hand?) and for several hours on the motorway. In everyday driving the Mini is a remarkable thing – so quiet and relaxing at multi-lane cruising speeds that you forget you're in a small car. It would put some executive barges to shame, so it's no surprise that it beats the Ford on that score. However, when the road turns interesting it is the Fiesta that has the edge.

The little Ford has beautifully controlled damping that feels somewhere between the two settings of the Mini but with slightly longer travel to the suspension. The steering is quick and accurate from the moment you turn the wheel and then it feeds back more and more information as it loads up the outside-front in a corner. In the Mini you now feel like you're sitting further down in the chassis compared to the old one, while in the Fiesta you feel like you're sitting comparatively high up, with the

**Right:** Cooper S centre console ring features an array of colours for different functions. **Bottom:** Mini can spin up a wheel when exiting a corner if you're heavy-footed. **Below:** oh dear





**Left:** Mini's new snout is not the prettiest. **Below:** Cooper S's 2-litre turbo has 10bhp more but 8lb ft less than the Fiesta's turbo 1.6 unit. **Bottom:** Fiesta is a joy to hustle along a challenging road



ST's centre of gravity a little higher too. This is then reflected in the way the cars corner, with the Mini's multi-link rear remaining relatively flat while the Ford, with its torsion beam rear axle, seems to naturally fall into that classic hot hatch pose, dangling a motionless inside-rear alloy in the air as you scoot round bends.

The 179bhp 1.6-litre engine in the Fiesta is a cracker. It revs with zeal and if it wasn't for the obvious swell of flexible low-down torque in the higher gears, you would be very hard-pushed to tell that it was turbocharged. Mated to a gearshift that can be thrown around the gate with as much speed as you can move your hand, it is a fantastically fun drivetrain. What's more, its 214lb ft feels enough but never too much for the front suspension, so you can get back on the throttle remarkably early in bends and the front tyres will take it despite the absence of any limited-slip diff. Add in brakes that have great power and feel and you have a car that responds to any input with an alacrity that makes it feel wonderfully light on its feet and an absolute joy to drive quickly. You can simply fling it down the road and the car stays with you every step of the way, encouraging you and feeding back more information just at the point where the Mini starts to feel a touch woolly.

The gap between these cars' base prices is not as wide as you might imagine, with the Fiesta starting just below £17k and the Cooper S at £18,650. However, while you can get a fully loaded 'ST3' for £19,250, the well-optioned Mini you see here would set you back over £23,500. Both are ultimately very good and great fun to drive, and some customers will undoubtedly be wooed by the Mini's razzmatazz (although I suspect the new face with those odd lower intakes might put a few off). But by the same margin that the Cooper S is arguably the nicer day-to-day car, the Fiesta remains the more fun drivers' car. It wins this twin test as a result. **✘**  
**Henry Catchpole (@HenryCatchpole)**

## 'You can simply fling the Fiesta down the road and the car stays with you every step of the way'



### MINI COOPER S

<b>Engine</b>	In-line 4-cyl, 1998cc, turbo
<b>CO2</b>	133g/km
<b>Power</b>	189bhp @ 4700-6000rpm
<b>Torque</b>	206lb ft @ 1250rpm
<b>Performance</b>	6.8sec (claimed 0-62mph), 146mph (claimed)
<b>Weight</b>	1160kg (166bhp/ton)
<b>Basic price</b>	£18,650
<b>Finance</b>	£5200 deposit, 24 monthly payments of £249, £11,728 final payment. 8000 miles per year. Mini Finance

**evo rating:** ★★★★★☆

- ✚ Easy to live with, sharp throttle response
- ✚ Expensive with options, naff dash displays

### FORD FIESTA ST

<b>Engine</b>	In-line 4-cyl, 1596cc, turbo
<b>CO2</b>	138g/km
<b>Power</b>	179bhp @ 5700rpm
<b>Torque</b>	214lb ft @ 1500-5000rpm
<b>Performance</b>	6.9sec (claimed 0-62mph), 137mph (claimed)
<b>Weight</b>	1088kg (167bhp/ton)
<b>Basic price</b>	£16,995
<b>Finance</b>	£4693 deposit, 24 monthly payments of £189, £9168 final payment. 9000 miles per year. Ford Credit

**evo rating:** ★★★★★★

- ✚ Great engine and excellent steering feel
- ✚ Not as comfortable on the motorways

# THIS FEELING,

## FROM £329 A MONTH.\*



### JAGUAR XF WITH 3 YEARS FREE SERVICING.\*\*

Even the price of XF has the power to raise your heartbeat. Now imagine how you'll feel experiencing these class-leading features as standard every single day...

- Leather seats with full electric adjustment
- 7" colour touchscreen navigation system and DVD player
- Xenon headlamps with daytime running lights
- 8-speed automatic transmission with SPORT mode and paddles

[JAGUAR.CO.UK/XFOFFERS](http://JAGUAR.CO.UK/XFOFFERS)

\*Plus Deposit and Final Payment.

#### REPRESENTATIVE EXAMPLE†

On the Road Price	£32,945
Finance Deposit Allowance	£3,124
Customer Deposit	£6,999
Total Amount of Credit	£22,822
Purchase Fee (Included in final payment)	£10
Credit Facility Fee (Included in final payment)	£285
36 Monthly Payments	£329
Final Payment	£13,714
Total Amount Payable	£35,681
Duration of Agreement (Months)	37
Representative APR %	4.9% APR
Interest Rate (Fixed) %	4.35%

HOW ALIVE ARE YOU?



†The model pictured is an XF R-Sport 200PS with optional extra of metallic paint and 20" alloy wheels at £37,800. Representative Example relates to an XF Luxury 163PS. Representative 4.9% APR available on new Jaguar XF Saloon and Sportbrake models only (excluding all 163PS models apart from Luxury), registered between 1st April 2014 and 30th June 2014 at participating dealers only. Finance is subject to status and only available to applicants aged 18 and over resident in Mainland UK and N.Ireland. Indemnities may be required. This finance offer is available from Black Horse Limited trading as Jaguar Financial Services, St William House, Tresillian Terrace, Cardiff CF10 5BH. \*\*New Jaguar XF Saloon and Sportbrake registered between 1st April 2014 and 30th June 2014 at participating Jaguar dealers only. Servicing at participating Jaguar Authorised Repairers only. Free servicing covers scheduled servicing, associated parts and labour for three years (or 48,000 miles diesel / 45,000 miles petrol, whichever is sooner) from the date of invoice up to a maximum of three services. Exclusions apply. The service package is not a warranty package. Visit [jaguar.co.uk/xfoffers](http://jaguar.co.uk/xfoffers) for full terms and conditions.

Official fuel economy figures for the XF Saloon in mpg (l/100km): Urban 16.7-48.7 (16.9-5.8); Extra Urban 32.8-64.2 (8.6-4.4); Combined 24.4-57.7 (11.6-4.9). CO<sub>2</sub> emissions 270-129 (g/km). Official EU Test Figures. For comparison purposes only. Real world figures may differ.



📍 Test location: Rockingham Motor Speedway, Corby, UK GPS: 52.51474, -0.66232

## Honda Civic Tourer BTCC

Title-winning team creates the British Touring Car Championship's first estate racer for 20 years

Photography: Dean Smith

# B

**BUILDING AN ESTATE** car to compete in the British Touring Car Championship is a sure-fire way of generating a heap of publicity. Witness

Volvo's brilliantly boxy 850 Estate from the Super Touring era of the 1990s. The problem with that car was that it never won a race. So you can imagine Honda Yuasa Racing's keenness that its striking Civic Tourer avoids the Volvo's fate and continues Honda's winning ways. Indeed, by the time you read this, there's a strong chance it will already have done so.

We join the team and one of its drivers, three-time BTCC champion Matt Neal, at a cold, wet Rockingham. The team is midway through some early pre-season testing and the car has been performing well. That's no big surprise as the Tourer is fundamentally a rebodied version of the all-conquering Civic hatchback used by Neal, his team-mate Gordon Shedden, and Andrew Jordan of rival team Pirtek Racing to take the last three drivers' titles for Honda.

Armed with this information, you might wonder why you'd mess with such a dominant machine, but with the BTCC enjoying a

renaissance and its grids bursting at the seams with a wide variety of cars, you need to find an advantage wherever you can. With a strong portfolio of sponsors to pay the bills and a hugely experienced team to iron out the wrinkles, the distinctive Civic Tourer is a brave but clever move.

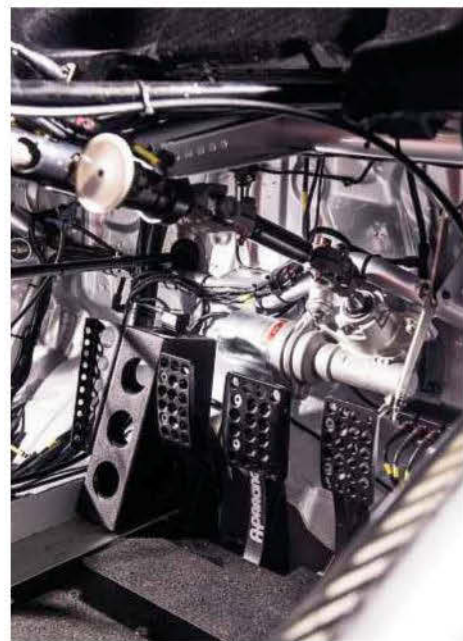
Like all the 2014 BTCC grid, the Tourer is built to TOCA's Next Generation Touring Car (NGTC) regulations. That means it employs many 'spec' parts that are common to all the cars, including the subframes, suspension, gearbox, limited-slip differential, engine electronics and an approved aero package. Beneath the bonnet is a turbocharged 1.6-litre four-cylinder, good for in excess of 300bhp. Like all forced-induction race engines, it's where this power (and torque) comes in the rev range, and the progression with which it arrives, that's as important as achieving big numbers.

There's something childishly amusing about an estate car wearing sponsors' war paint, slammed on the deck and sporting a set of deeply grooved wet-weather racing tyres. It's wrong and right at the same time. The shape itself is a good one for the BTCC, creating less

drag for a small but meaningful straight-line speed advantage. The downside is an increase in weight (around 35kg, but the team has been working hard to trim this back significantly) and a higher centre of gravity. Minimising the Tourer's compromises is not the work of a moment – Neal concedes they have a little way to go – but there's tremendous experience and talent within the team. So even if they're off the pace in the first few races, there's still a healthy chance that they'll claw back the deficit.

It's odd to open the door of an estate car and find most of the interior void criss-crossed with roll-cage tubing; stranger still to see just one seat. But once in you're far less aware of what you're driving. Sitting low and clamped tight, it's like any other racing car, and a serious one at that. The engine starts with a fanfare of revs before settling into a clattery idle, all kinds of zizzes and vibrations tingling through the car. Push down on the clutch, pull back on the sequential 'box's shifter, hold the revs steady, *f-e-e-d* in the clutch smoothly and you're away.

First impressions come thick and fast. With revs the engine becomes smooth and muscular with a surprising amount of low-rev response



**Far right:** racing pedal-box replaces standard set-up.  
**Below:** Neal prepares to hand over his Civic to our man Meaden.  
**Below right:** Dickie steps the back out at the Tarzan hairpin

‘Sitting low and clamped tight, it’s like any other racing car, and a serious one at that’



and a generous slab of mid-range torque. The damping is tightly controlled, yet brilliantly, supremely supple, creating a strange illusion that you’re floating on and yet totally keyed into the slippery surface below. The power-assisted steering is light and quick-witted. There’s some torque-steer, but traction is fabulous, even out of hairpins. You have to watch you don’t light up the front tyres with your initial throttle input, but once hooked up, the Tourer puts all its torque into the cold, wet tarmac.

Neal suggests balancing the car with left-foot braking through the faster, longer corners, so I give it a go, even though it doesn’t come naturally. I’m glad I do, for even my ham-footed efforts make the car feel less nervous and more stable as we slice round the long fourth-gear left-hander. When you work it hard the engine is super-impressive, with great response, masses of grunt and a hard, angry note punctuated by gunshots from the exhaust on every upshift and flames on the way down.

When standing the Tourer on its nose into Rockingham’s tighter turns, the brakes prove massively powerful, but with no ABS you have to carefully work your way to where you think

the limit of grip lies, at least in these conditions. I don’t have any lock-ups – a good thing when you’re only invited to get a taste of the car’s performance! – so it’s fair to say I could hit the middle pedal a bit harder and a bit later. I do, however, have one almighty oversteer moment when I trail the brakes into a second-gear hairpin. Neal warned me he likes his cars ‘pointy’, and you can feel the benefits of this through the faster corners, where it needs only the slightest nudge of lock to change direction, but I wasn’t expecting it to be quite so flighty at low speed. Thankfully my brain quickly manages to access the nook in which my front-wheel-drive racing experience is stored, and I get back on the power early enough to pull out of a potentially embarrassing half-spin.

I have to confess I’ve lost touch with the BTCC, largely because I didn’t think much of

the cars post-Super Touring. Now, having had time to evolve from S2000 to NGTC, the cars are quick, characterful and promote exceptionally close racing. And having driven one, I can also confirm they are genuinely exciting – and challenging – to drive. ☒

**Richard Meaden** (@DickieMeaden)

<b>Engine</b>	In-line 4-cyl, 1600cc, turbo
<b>CO2</b>	n/a
<b>Power</b>	300bhp+ @ 7000rpm
<b>Torque</b>	n/a
<b>Performance</b>	4.5sec (estimated 0-60mph), 160mph (est)
<b>Weight</b>	n/a
<b>Basic price</b>	£200,000 (est) (on sale late 2014)

**evo rating:** ★★★★★

- ➕ Unusual shape helps straight-line speed
- ☒ Extra weight and higher C-of-G brings dynamic compromises

# Watches

This month, a keenly priced chronograph, a piece for MG lovers and a Bentley-inspired limited edition **Words:** Simon de Burton

## 1 Citizen Primo Stingray

**Price:** £249 **From:** citizenwatch.com

Corvette fan? If so, you have good enough reason to buy one of Citizen's bargain drivers' watches, the Primo Stingray, which offers all the essential car watch features at a sensible price. That means you get a fifth-of-a-second chronograph, a 45 mm steel case, a perforated strap and crimson detailing aplenty. But perhaps its best feature is its Eco-Drive quartz movement, powered by a rechargeable lithium-ion cell that draws energy from natural or artificial light. Even when left in the dark, it will still run for up to seven years.

## 2 Meistersinger MG watch

**Price:** £1405 **From:** motoringclassics.co.uk

The original car watches were made in 1918 by Georges Scharen in the shape of Bugatti radiator shells. The idea has been revived by German MG enthusiast Ernst Graaf who, with the help of the MG Car Club and British Motor Heritage, has developed this watch based on the look of a TD grille. Made by well-regarded firm Meistersinger, the watches have robust ETA mechanical movements and are available in three subtly different designs: Abingdon (pictured), Kimber and Cream Cracker. Not for everyone – but then neither are MGs.

## 3 Breitling for Bentley 6.75 Midnight Carbon

**Price:** £8010 **From:** breitlingforbentley.com

The latest addition to the long-running range of Breitling for Bentley watches is this blacked-out version of the 6.75 chronograph. Named after the capacity of the mighty motor found beneath the bonnet of the Mulsanne, the 6.75 has a knurled bezel based on the pattern of a Bentley grille, an open-work dial revealing bits of the movement and a special 'large aperture' calendar display. Turn this 49mm monster over and you'll find a winding rotor in the shape of a five-spoke Bentley rim. Like all Breitling watches, the Midnight Carbon is chronometer certified. Just 1000 will be made.

### Now & Then



#### NOW

### Chopard Superfast

**Worn by:** Mark Webber

Chopard recently announced its new role as the official timing partner of Porsche Motorsport in advance of its return to the LMP1 class at this year's Le Mans 24 Hours, in which Mark Webber will drive the 919 Hybrid – and sport a Chopard Superfast chronograph.



#### THEN

### Rolex Datejust

**Worn by:** Dan Gurney

When Dan Gurney won Le Mans in 1967, he famously began a tradition that continues today by shaking up his victor's magnum of Moët champagne and spraying it into the crowd. Fortunately, his Rolex Datejust was equipped with the firm's legendary 'Oyster' waterproof case.



### Watch tech

#### Automatic winding

It is surprising how many people are baffled by the differences between 'hand-wound' and 'automatic' movements, even though the terms appear self-explanatory.

The former needs to be rewound by hand, while automatic movements wind themselves via a small weight built into the mechanism. The weight oscillates every time the wearer moves, replenishing the charge to the main spring through a ratchet mechanism. In high-end automatic movements, winding takes place regardless of which way the weight swings, whereas in less expensive designs it is uni-directional. In either case, a clutch arrangement prevents over-winding.

Englishman John Harwood was the first to make a feasible automatic winding wristwatch with his Autorist, in which the strap was attached to hinged lugs on the case. Wrist movements would cause the strap to pull on the lugs, which in turn were connected to a lever within the movement which kept the mainspring fully wound.

Too temperamental to be viable, Harwood ceased Autorist development after allegedly having a 'eureka' moment while observing two children playing on a seesaw – the human version of the oscillating weight familiar today.

A British patent was granted for the self-winding system in 1924, but Harwood went bust in 1929 – leaving Rolex to pick up the idea and perfect it in what became the famous 'Perpetual' self-winding mechanism.





See it in action!  
[www.armorall.eu](http://www.armorall.eu)

**EVEN BETTER THAN A WAX**

**NO SHIELD**

**SHIELD**

**DIRT AND GRIME WON'T STICK TO YOUR CAR**

Armor All® Shield is even better than a wax. Its revolutionary formula forms a protective shield against the elements so dirt and grime won't stick to your car. Once applied, each wash reactivates shine and protection for up to 10 washes guaranteed. Can your wax do this? Now available at Halfords, A1 Motor Stores and other good accessory shops.

**NEW ARMOR ALL® SHIELD WASH - NOW AVAILABLE!**

Now available at

**halfords**

**A1 MOTOR STORES**



**DIRT & GRIME WON'T STICK TO YOUR CAR**

- ▶ Each wash reactivates shine & protection
- ▶ No drying time - easy on, easy off
- ▶ Includes sponge applicator and microfibre cloth

**GENTLY LIFTS AWAY DIRT & GRIME**

# Simulations

The latest news, kit and reviews from the world of racing sims

Words: Matthew Hayward



## F1 2013

Formats: PC, PS3, Xbox 360

Price: from £20 From: [formul1-game.com](http://formul1-game.com)

LET'S FACE IT, as much as we all want to like the new turbocharged V6 F1 cars, there is something totally wrong about the sound. Or more accurately the lack of it. Thankfully *F1 2013* revolves around last year's 'good old' screaming V8s.

Like its predecessors from developer Codemasters, *F1 2013* isn't a game you can just jump into and play; it takes a reasonable amount of acclimatisation before you can drive the cars to their maximum. Although the game eases you in with a Young Driver Test tutorial, the best way to get to grips with the subtleties of the controls is to simply dive in and do a few laps of a circuit you know well.

The beauty of this game is that it's not a simulation of racing an F1 car, more an F1 career simulation. *F1 2013* allows you to progress up the ranks into a top-tier team, through all the testing and setting up and development of the cars throughout a season. Okay, the chats with your race engineer can seem

a little cheesy at times, but it is always good fun.

How hardcore you want to go is completely up to you. If you can commit enough time, the game allows you to progress through the season pretty much in real-time, completing each practice and qualifying session to the nth degree. There is also a wide degree of settings for various driver aids, and with all the dials twiddled to their hardest settings, the racing is particularly challenging. Of course, you can wind back the race distance and run through the game at a much increased pace if you're just after that quick hit after work.

And then there's the rain. Few games offer the stunning and changeable weather conditions that are a staple part of this simulation. A full-on downpour can completely change the outcome of a race, and driving in the wet requires a huge adjustment in driving style. Racing on full wets gives

confidence, but switching to inters or even slicks has big advantages if you can stick to a drying line, just like in real life.

If the whole modern F1 aspect doesn't appeal to you, Codemasters has created another selling point: some classic content. The standard game is packaged with a sprinkling of iconic F1 cars from the 1980s, but for an extra £10 you can buy the Classic Edition expansion pack.

Introduced by the unmistakable voice of commentating legend Murray Walker, the classic pack includes four circuits and 11 famous F1 cars from 1980 through to 1999. Driving the older cars is, as you would expect, a wholly different experience – and the sound from the Ferrari V12s makes even the 2013 V8s sound tame.

It's fair to say that *F1 2013* hasn't broken any new ground, but it is a solid evolution of the Codemasters F1 series. If you follow and enjoy F1, you should absolutely give *F1 2013* a go. ❏

## Peripherals



### NVIDIA SHIELD

Price: £250

From: [shield.nvidia.com](http://shield.nvidia.com)

The acceptable face of Android gaming, the Shield is Nvidia's first proper attempt at a gaming device. No more struggling along with fiddly touchscreen controls either – it features a dedicated control pad.



### AMAZON FIRE TV

Price: \$99 (c£60)

From: [amazon.co.uk](http://amazon.co.uk)

Amazon has moved firmly into your living room, offering streamed films and TV series via its new Fire TV device. Buy the optional game controller and you can play a number of games too. On sale in the UK later this year.



### RENOVATIO SRD-9C DISPLAY

Price: £107

From: [renovatio-dev.com](http://renovatio-dev.com)

Smart-looking USB-powered race display to add that final touch to any gaming rig. Includes gear indicator, rev counter, lap counter and more. Works with most PC sims (including *F1 2013*).



BY APPOINTMENT TO  
HER MAJESTY THE QUEEN  
SUPPLIER OF CAR CARE PRODUCTS  
AUTOGLYM, LETCHWORTH, ENGLAND



BY APPOINTMENT TO  
H.R.H. THE PRINCE OF WALES  
SUPPLIER OF CAR CARE PRODUCTS  
AUTOGLYM, LETCHWORTH, ENGLAND



OFTEN IMITATED, NEVER RIVALLED.

It's not until you've experienced an inferior product that you realise only the original will do. If you take car care seriously, like we do, you'll appreciate how important authenticity and quality is. After all, there will only ever be one king.

Find out more about why the finest marques insist on Autoglym Super Resin Polish, visit [autoglym.com](http://autoglym.com)

Join the conversation: [#superresinpolish](https://twitter.com/superresinpolish)



Made in Great Britain

PASSION *for* PERFECTION



# IMPROVE YOUR ST CRED.



**New Fiesta *ST***

Official fuel consumption figures in mpg (l/100km) for the Ford Fiesta ST 1.6 EcoBoost (182PS): urban 35.8 (7.9), extra urban 58.9 (4.8), combined 47.9 (5.9). Official CO<sub>2</sub> emissions 138g/km.

Vehicle shown is the Ford Fiesta ST2 in Molten Orange with ST Style Pack (colour and Pack available at additional cost). The mpg figures quoted are sourced from official EU-regulated test results (EU Directive and Regulation 692/2008), are provided for comparability purposes and may not reflect your actual driving experience.



**Go Further**

# Outside Line

by RICHARD MEADEN



Meaden worries that the quest for efficient, reliable vehicles is scaring carmakers away from creating unique curios

**A** **AT WHAT POINT DID CARS LOSE THEIR** national identities? Or rather, when did all cars have to be German? I only ask as I've just driven a new Maserati Ghibli, which appears to possess as much authentic Italian charm as a Pizza Hut cheeseburger-crust pizza. Worse, because it can't quite manage to be as good as its standard-setting German rivals, it's had a crisis of confidence and also attempted to channel its inner Infiniti, which as we all know is an unfathomable Japanese brand that's trying to be, er, Not Japanese. Confused? I'm totally bewildered.

The reason for this Gwyneth-style 'conscious uncoupling' of cultural identity is, of course, sales volumes. I mourn the days when Maserati effortlessly cornered the market in rucked leather, carriage clocks, laggy small-capacity bi-turbo V6s and hedge-seeking handling characteristics, but today's motor industry apparently has no room for such bold individualism or off-beam eccentricity. More's the pity.

Italian brands seem to have suffered more than most. There was a time not so long ago when you could rely on Alfa Romeo and Lancia to build convention-challenging cars that could only come from the land of short coffees and long lunch-breaks. Plush saloons like the boxy Alfa 90 (complete with a pull-out briefcase that formed an integral part of the dashboard!) were left-field oddities, the breadvan 145 Cloverleaf and charismatic 166 genuinely appealing precisely because they were so unmistakably Italian.

The French have suffered too, most notably Citroën. Cars like the low-slung CX fascinated me as a kid, and the XM that followed it continued to demonstrate the French knack for making avant-garde cars. The more recent C6 was less adventurous engineering-wise, but still exuded the kind of snooty panache that only a Gallic car can. Similarly, Renault never really recovered from our wholesale rejection of models like the futuristic Avantage. OK, so the strange mashup of coupe and MPV wasn't for everyone, but there's no doubt that it was a rather cool and appealing device.

To be fair to the car industry, courting people like us must be a nightmare, for we're an infuriatingly fickle bunch. We might love the idea of these more characterful, less conventional cars, but few of us commit to buying them. We even string the Germans along; a case in point being the M5 Touring. We all professed to love it, yet on the two occasions BMW built one it was a sales disaster. Then just to prove how contrary we are, on the rare occasion one comes up for sale we all go weak at the knees and implore BMW to build another. We're our own worst enemies.

At least the new breed of hybrid supercars appears to be the last bastion of national individualism, and although they feature a fair

few stereotypes, is that such a bad thing? Look at the Porsche 918 Spyder and you'll find a car that takes its pursuit of efficiency and engineering advancement to the nth degree in the finest German tradition. Compare this with the McLaren P1 and you see a car that chases ultimate performance in a forensic manner that's very different from Porsche's, yet entirely appropriate for a brand high on adrenalin and at the heart of Britain's Formula 1 industry. And Ferrari? Well, it still prefers to build a red V12 rocketship that – grudgingly – happens to feature hybrid tech. If only cars the rest of us can afford to buy were still shot through with the same confidence and singular identity.

Germanic quality, reliability and integrity – and the industry-wide aspiration to match it – has undoubtedly raised the bar, but in so doing our tolerance and appetite for cars that deviate from

**'Today's motor industry apparently has no room for bold individualism or off-beam eccentricity'**

that high-achieving norm appears to have worn depressingly thin. I'll be the first to put my hand up and say the motoring media doesn't help with its obsession about whether cars like the Ghibli can be a credible 5-series rival, or scolding Jaguar for not having a 3-series. It's like the European Union's fixation with ensuring all cucumbers are straight and of uniform length. Then, just to add further confusion, we celebrate cars like the striking Jaguar XJ in our initial coverage, then later berate it for not being a 7-series. No wonder we end up with class leaders – German, obviously – trailed by inferior, derivative tribute acts.

Faced with the stark choice of continuing to make flawed-but-fabulous cars that are appreciated by many but bought by a brave few, or building cars that chase increased sales by ditching charisma for conformity, Maserati has elected to capitulate and play the Germans at their own game. Possibly not because they wanted to, but because in the end we gave them no choice. The great tragedy in all this is not that the Ghibli is a weak BMW rival, but that in abandoning those unique qualities that German brands couldn't hope to replicate, the new Ghibli is also a weak Maserati. I'm not sure what the answer to this conundrum is, but one thing's clear: we should be careful what we wish for. ❧

@DickieMeaden

Richard is a contributing editor of *evo* and one of the magazine's founding team



# For a better engine performance.

Use Supreme Fuels for a deeper clean.



Energy Supreme has a double detergent treat rate, when compared to Esso energy Unleaded, to help clean petrol engine intake valves. Energy Supreme Diesel has a double detergent treat rate, when compared to Esso energy Diesel, to help clean diesel engine fuel injectors. Claims based on (1) internal or third party vehicle engine testing; and/or (2) government publications; and/or (3) industry or scientific literature. Engine type, driving behaviour and other factors may also determine fuel and vehicle performance. More at [fuelprogress.com](http://fuelprogress.com). Available at participating Esso service stations only.

# Petrolhead

by RICHARD PORTER



Porter praises an example of a 'retro' car done well, and castigates one done badly

**O**NE OF THE BEST IDEAS IN MODERN motoring is the Nissan Figaro. You know about the Figaro, I'm sure. It's that tiny, retro cabrio that you see every so often on British roads, even though it was never officially imported here. In fact, it was never technically available anywhere other than Japan yet I'd be staggered if there are any left in its mother country because, although it's a bit rare groove and over 20 years old, the UK seems to be crawling with the bloody things.

Clearly people look after their Figaros and that's because clearly people love them. If memory serves, there was even a company that sold only Figaros and scrupulously vetted all potential buyers. If they didn't like you, they refused to sell you a car. I don't know what sort of business model that is, but I'm pretty sure it would get you chucked out of the alpha-male knob-wagging warehouse that is *Dragons' Den*.

Why do Figaro owners – a merry band which once included Andrew Marr, Joss Stone and Eric Clapton – love this car so much? I'm certain it's not for the way it drives, because underneath is a K10 Micra, the 1980s vintage one that was driven only by the very young, who were being taught to drive in them, and the very old, who were too confused to realise it was shite. In the Figaro's favour, its 1-litre engine does have a turbo on it, which sounds racy. On the downside, the transmission is a three-speed automatic, which most definitely does not sound racy.

No, the reason why Figaro owners love their cars and why the Figaro is such a good idea is because of its appearance. It's a retro car that doesn't waste any effort trying to look exactly like something from the past. And this is exactly why it's such a bloody good idea. In fact, I'm amazed more carmakers haven't cottoned on to this and made their own new-old cars rather than tying themselves in the navel-gazing knots that form chips on the shoulders of the new Mini, Beetle and Fiat 500. You simply evoke the past, rather than slavishly trying to update it. And freed from the pressure of trying to recreate something specific from 50 years ago, you end up with a (relatively) modern, reliable car with the appearance and cool image of something old.

Which brings me on to something called the Speedback GT. You might have seen some of the fuss about this when it was announced a few weeks back. It's made by a chap called David Brown, no relation to the David Brown who gave his initials to all those Aston Martin DBs, and its stated aim is exactly this: to provide all the reliability and useability of a modern car with all the style and cool of a classic. It sounds like a ruddy marvellous idea, especially

since the Speedback GT is a Jaguar XKR underneath and, as such, should have everyday useability, an able chassis and lashings of lovely, supercharged grunt.

So far, so good. But it all falls apart when you see what David Brown (no relation) has put on top of that fine Jaguar undergubbins. It is not a cool, pretty, intriguing evocation of a more carefree time. What David Brown (no relation) has come up with is an artless, awful parody of an Aston Martin DB5. And it simply doesn't work. For one thing, the proportions are just slightly off and a car is never going to be truly beautiful if that's the case. Worse still, the detailing is so clunky and so self-conscious, from the ghastly grille and contrived, fake quarter-bumpers, to the graceless rear lights and hideous wire wheels, that you

**'I'm amazed more carmakers haven't made their own new-old cars rather than tying themselves in the navel-gazing knots that form chips on the shoulders of the new Mini, Beetle and Fiat 500'**

wouldn't be surprised to learn it was all sketched with pencils, by candlelight, under the watchful eye of a man smoking a pipe.

The Speedback GT had the chance to make a Nissan Figaro that **evo** readers would lust after. That is to say a car that reminded you of the past but wasn't bound by it nor worryingly obsessed by it. All they needed to do was give a hint of headier times whilst making sure the air con still worked. Instead what David Brown (no relation) has done is slavishly cribbed something glorious from a bygone age and in doing so he's exposed his efforts as a sham. It's profoundly annoying and a massive missed opportunity.

If I wanted something that looked like a DB5, I'd buy a DB5. If I wanted the power and poise of a Jaguar XKR, I'd save a lot of money by buying a standard XKR. By being so cloying and so obsessed with trying to recreate an old Aston, the Speedback GT has ended up being irrelevant. And frankly I'd rather be seen in a Nissan Figaro. ❌

 @sniffpetrol

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



Your partner for German car registration across Europe  
in four steps

1

GERMAN  
CAR  
REGISTRATION

2

COMPREHENSIVE  
INSURANCE  
COVERAGE

3

TAILOR-MADE  
FINANCIAL  
SOLUTIONS

4

ENJOY YOUR CAR  
ACROSS  
EUROPE

Shift into a new gear and drive away in discreet luxury

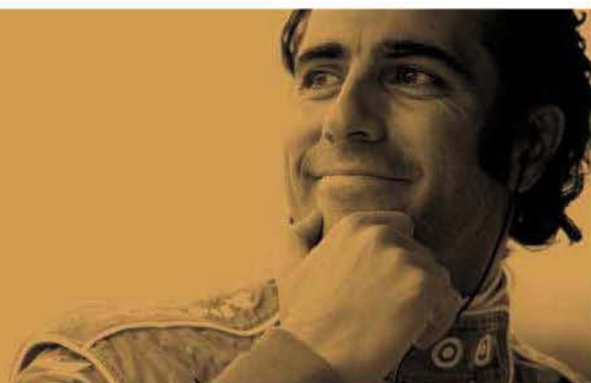


Bajuwarenring 17 • D-82041 Oberhaching south Munich • Germany  
Tel +49 89 416 154 62 - Fax +49 89 416 154 63  
info@uniar.de • www.uni-ar.de



# Champ

by DARIO FRANCHITTI



Dario has been wrestling with a Ferrari Boxer and testing the new Camaro Z/28 pace car he'll drive at the Indy 500 in May

# R

**RETIREMENT HAS NOT BEEN AS SLOW-** paced as I thought it would be. I've been all over recently, from east coast to west coast, but at least I've got my travel blanket to keep me company. Allan McNish's wife bought it for me

when I retired, then bought him one when he retired, so we have matching blankets. Not quite pipe and slippers, but close...

My foot is good, so I've managed to get back out on the road and drive some fun things. In fact I got to drive a Ferrari 512 Boxer on carbs recently, which was amazing. That was the first time I've driven one. I've got a couple of good pals in Nashville who are as mad on cars as I am and have all sorts of unusual stuff, and one of them had a Boxer that he didn't use much. So what did he do? He bought another Boxer.

We met for lunch and I took it for a spin. It's a really unusual thing. I had a Testarossa back in the late '90s and you could feel the family lineage. My expectations were pretty low, I have to say, but it was fun to drive in its own way. And the way it looks! So bloody good-looking. It's a stunning, stunning car.

My first impression was about, well, how ergonomically challenged it is. The steering wheel is too low and really close to the top of my legs, and if that wasn't bad enough, it is weirdly offset too. There's no real side support in the seat either. It was on the big Michelin XWX tyres – the vintage tyre with tall sidewalls – and there was a massive amount of movement in the rubber. I didn't drive it flat-out as it's definitely not the type of car you'd press on in, but I drove it quickly enough to feel the momentum at the back, not only from the tall tyres but also from that odd centre of gravity with the engine on top of the gearbox.

Saying that, when you get that slight fluff of the carbs at low revs, the noise from the induction just over your shoulder and that lovely rasp from the flat-12, you kind of forget about some of that negative stuff. Everything, good or bad, just adds to the driving experience. I love that the Ferrari 512 has racing history as well, and that Ferrari used a flat-12 in F1 when everyone else was using a V8. The Boxer race car, the LM, was a wonderful thing.

There's a guy out in the States called Preston Henn who won the Daytona 24 Hours in 1983 in a Porsche and he also owned a 512 LM for endurance racing. One time he went to Fuji for a race and it was raining so hard that nobody would go out. He said, 'Screw this,' put his helmet on, jumped in the LM, and went out. A lap later he came back in and said: 'Yeah, it is pretty wet out there.' The team replied: 'That's great, Preston, but the track goes the other way.' He'd done a whole lap of Fuji in the wrong direction.

The other car I've driven recently is the total opposite to the 512

– it's the new Chevrolet Camaro Z/28 and I've got to say it was bloody impressive. I've got a Camaro at home – one of the older pace cars with an LS1 engine – but that's more of a trophy than a car I really want to drive. I've also driven some Corvette pace cars, which have great engines, but that's about it...

Even walking around the Camaro Z/28 you feel like it's the real deal. It has proper Brembo carbon-ceramic brakes, Pirelli P Zero Trofeo R tyres and lighter glass. The tyres really interested me because they are the same size front and back: huge 305/30s. The engineers also told me that they chose a smaller 19in wheel not only to keep the weight down, but also to lower the car overall. It's always great when engineers make decisions like this; I bet the stylists were going mental.

You get in it and it has Recaros, which is immediately a good

## 'When you get that slight fluff from the carbs or the rasp from the flat-12 you forget about the negative stuff'

thing because a lot of muscle cars and Corvettes (and TVRs for that matter) have terrible seats that move around all over the place when you accelerate. It has a beautiful six-speed manual Tremec 'box as well: a good positive gearbox. The 428cu in, or 7-litre, engine has got around 505bhp, so it's not out-of-this-world powerful but it has got massive torque. I was pretty impressed overall. It pulls well, handles well and stops well, and I'd love to give it a proper blast.

The only question mark is with the steering. It's not the most feelsome but overall you could tell that it was a massive step forward for a muscle car. It would be a big leap of faith for someone to buy one in the UK; I mean, they're huge. In my garage at home my Camaro dwarfs the Ferrari F40 or even the 550 Maranello – it's a colossal thing.

Speaking of which, I'm jumping on a plane soon and coming back to the UK. The problem with a lot of planes now is that they've got Wi-Fi, so I've been surfing the net for more cars for the garage. You can read about those in the next columns. In the meantime, I've got a road trip to Le Mans in the Carrera GT to plan, and the Goodwood Festival of Speed and the British Grand Prix to look forward to. It's going to be a great summer! ☒

@dariofranchitti

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



## THE ULTIMATE IN PERFORMANCE UPGRADES.

AT DMS AUTOMOTIVE WE'VE BEEN UNLEASHING AUTOMOTIVE PERFORMANCE FOR OVER 18 YEARS.



**DMS 1M (EVO MARCH '12)**  
"THERE'S A REAL RIP TO THE WAY THE REVS PILE ON ABOVE 4000RPM"

**DMS SL65 BLACK SERIES (EVO OCTOBER '10)**  
"IT FEELS LIKE THE LOVE CHILD OF AN SL65 AND A PORSCHE GT2"

**DMS 135I (BMW CAR MAY '09)**  
"THE STANDARD CAR IS GREAT BUT DMS HAVE SOMEHOW MANAGED TO TAKE IT TO THE NEXT LEVEL"

**DMS 997 TURBO 3.6 (EVO SEPTEMBER '08)**  
"IT'S EPIC, HILARIOUS AND ADDICTIVE IN EVERY GEAR, YET DOCILE WHEN CRUISING"

**DMS 997 TURBO 3.8 PDK (EVO JUNE '11)**  
"DELIVERY IS ALMOST UNCOMFORTABLY FORCEFUL"



BELOW IS A SMALL SELECTION OF OUR MORE POPULAR MODELS TO UPGRADE. WE ARE ABLE TO UNLEASH PERFORMANCE FROM SMALL FOUR CYCLINDER DIESEL ENGINES UP TO V12 SUPERCARS:

### PORSCHE

997 TURBO/S 3.8 INC PDK » 611 BHP  
997 TURBO 3.6 » 625+ BHP  
997 GT2 RS » 670+ BHP  
996 TURBO/GT2 » 600+ BHP  
997 CARRERA S PDK » 400+ BHP  
997 CARRERA S » 376+ BHP  
997 CARRERA PDK » 368 BHP  
997 CARRERA GTS » 435 BHP  
997 GT3 UP » 436 BHP  
BOXSTER 3.4S » 336+ BHP  
CAYMAN S » 342 BHP  
CAYENNE GTS » 440 BHP  
CAYENNE TURBO 4.5 » 565+ BHP  
CAYENNE TURBO 4.8 » 578+ BHP  
CAYENNE TURBO S 4.8 » 600+ BHP  
CAYENNE 4.2 DIESEL » 450+ BHP  
CAYENNE DIESEL » 300+ BHP  
PANAMERA TURBO » 600+ BHP  
PANAMERA DIESEL » 305+ BHP

### MERCEDES-BENZ

'63' 5.5 Bi-TURBO ALL MODELS » 600+BHP  
'500' 4.7 Bi-TURBO ALL MODELS » 498+BHP  
SL65 BLACK » 720+ BHP (+DELIMIT)  
SL65 AMG » 690 BHP (+DE-LIMIT)  
'55' AMG KOMPRESSOR » 580+BHP  
C63 AMG » 530+BHP (+DE-LIMIT)  
SL63 AMG » 560+BHP (+DE-LIMIT, RE-MAP & LOWER ABC SUSPENSION)  
CL600 Bi-TURBO » 580+ BHP  
SLK55 AMG » 389 BHP (+DELIMIT)  
SLK 350 » 328 BHP  
220 CDI: ALL MODELS » 210+ BHP  
250 CDI: ALL MODELS » 259+ BHP  
320 CDI V6 » 274 BHP  
350 CDI V6 » 312 BHP  
420 /450 CDI V8 » 358 BHP

### BMW

M5/M6 F10 » 620+ BHP  
M5 V10 » 548+ BHP (205 MPH)  
X3M / X6M » 618 BHP  
1M » 411+ BHP  
M3 E90/92 » 445 BHP (+DE-LIMIT)  
M3 E46 » 370 BHP (+DE-LIMIT)  
F10 520D » 221 BHP  
F10 530D » 296 BHP  
F10 535D » 358 BHP  
335i/135i/X6 » 370+ BHP (+DE-LIMIT)  
123D » 252 BHP  
330D E90 » 296+ BHP  
320D E90 » 215 BHP  
730D » 290+ BHP  
X5 4.0D / 740D » 370 BHP  
X5 3.0D » 296 BHP  
X6 X50i 4.4 » 500+BHP  
535D / 335D / X5 SD » 355+ BHP  
M135i Please call

### EXOTIC / MISC

FERRARI CALIFORNIA » 487 BHP  
FERRARI 599 » 647 BHP  
FERRARI 430 » 525 BHP  
GALLARDO » 546 BHP  
LP560 » 600+BHP  
LP640 » 707 BHP  
MURCIELAGO LP640 » 707 BHP  
MASERATI GT/QPORT » 438 BHP  
MASERATI GT S / MC » 479+ BHP  
ALL 2014 MASERATI'S Please call  
AUDI RS6 4.0 T V8 Please call  
AUDI RS6 V10 » 680+BHP +DE-LIMIT  
AUDI R8 V1 » 592+BHP  
AUDI RS4/R8 B7 » 439 BHP + DE-LIMIT  
AUDI RS3 » 420+ BHP  
AUDI Q7/A8 4.2 TDi » 400+ BHP  
AUDI 3.0TDi (ALL MODELS) » 300+ BHP  
AUDI S3 / GOLF R » 317+ BHP  
ALL 2014 RANGE ROVERS AVAILABLE  
RANGE ROVER 4.4 TDV8 » 395 BHP  
R ROVER SPORT 3.0D » 305 BHP  
EVOQUE 2.2 DIESEL » 240 BHP  
BENTLEY 4.0 T V8 » 600+ BHP  
BENTLEY CGT / F-SPUR (INC 2013) » 660 BHP  
GT SPEED / SUPERSPORT » 680+ BHP



[WWW.DMSAUTOMOTIVE.COM](http://WWW.DMSAUTOMOTIVE.COM)

UK: 0845 850 1845 INT: +44 845 850 1845

E: [SALES@DMSAUTOMOTIVE.COM](mailto:SALES@DMSAUTOMOTIVE.COM)

[f /DMSAUTOMOTIVE](https://www.facebook.com/DMSAUTOMOTIVE) FOLLOW US FOR OUR LATEST NEWS!

FOR ALL OTHER MAKES AND MODELS, PLEASE CALL US.

# Inbox

What's rained sand on your paintwork this month?



Letter of the Month

## Live and let drive

Having read Richard Meaden's column about driving habits (Outside Line, *evo* 195), I agree totally with what he says.

I recently went for a country drive on a very quiet road I know. The limit was the national speed limit but a car I came across was going at 40mph. When I tried to overtake safely, he gradually moved over to the right, pushing me into the verge. I had no choice but to slam on the brakes and drop back. I saw no reason for this behaviour and, assuming the best, thought the guy just hadn't noticed me. On the second attempt to overtake he did the same, although this time I managed to pass, only to see him speed up and start flashing his lights at me.

My view is live and let live. If he wants to drive at 40mph in a 60, that's up to him, but why should I have to? Surely his actions are far more dangerous than my driving? I also know that I'm far more engaged when I'm pushing on a little, whether on the motorway or a back road.

**Tim Gates**

## Early learners

Last issue's Letter of the Month ended with the question: 'Wouldn't it be great if [young people] could be re-engaged with motoring by having some driving as part of the school curriculum?' This particularly interested me, as my school (along with a few others in south Wales) runs an after-school driving class. For two hours each week, local instructors teach pupils basic car control, including changing between gears 1 and 2 and doing a bit of reversing.

Sadly, although it has had a lot of interest from pupils, the school no longer gets the funding needed to continue it next term.

**Kieran Lucas**

## Welsh wonder

Being a devotee of the niche for the past 25 years, I have to commend you on a great hot hatch feature in *evo* 195. It took my mind back to a driving experience that I'll never forget, in a Peugeot 106 GTI.

Having overslept, my passenger and I were faced with a 4am hustle over unfamiliar roads from Builth Wells, over the Brecons to a dawn rendezvous with the 1997 Network Q RAC Rally. The little Pug had a wonderful balance of (just about enough) power, light weight, steering with great feel and feedback, and a fabulous chassis. As the driver, you received nuanced feedback via all your sensory channels, and it really did flatter your abilities.

We made it on time, just as daylight started to poke through the Forestry Commission branches. Parking up and getting our gear on for the trek into the stage as the 106 ticked away, I couldn't help but grin widely at the life-affirming experience.

**Kelvin Hawkes**



**Above:** a Peugeot 106 GTI gave Kelvin Hawkes a pre-dawn drive to remember

## Hurrah for the R-tronic

I feel that I must take issue with Jethro Bovingdon's throwaway comment about spec'ing an Audi R8 with the R-tronic gearbox being worthy of a 'custodial sentence' (*evo* 194).

As you might have guessed, I have an R8 R-tronic and, for the sake of objectivity, I must say that my initial impressions of it were not great. If you drive it like a regular automatic 'box, it is slow and clunky. However, once you realise that it is not an auto but is in fact an automated manual, things improve dramatically. Basically, the gearbox requires a degree of skill and finesse to get the best out of it, and surely, on a car of this sort, that's exactly what a real driver wants!

**Rob Price, Surrey**

## Tokyo shift

In his Petrolhead column in *evo* 194, Richard Porter captured something I have often felt but never been able to articulate: the secret handshake that passes between people who care about driving.

Recently in a Tokyo taxi I was piloted with wonderful skill by a middle-aged woman driving a lowly Toyota Camry. She was swift, smooth and considerate, with the powertrain always engaged and acting on the road surface. She was absolutely delighted when I noted her left-foot braking, and said that in 20 years of driving taxis I was only the second person to comment. The first was a test driver for BMW.

The rest of the journey passed in a babble of car talk, including our favourite places for going sideways in the mountains.

Right on, Richard.  
**Dan Underwood, Japan**



**Above:** the old R8's R-tronic automated gearbox isn't all bad, insists Rob Price



## The Letter of the Month wins an Elliot Brown watch

This month's star letter writer receives an Elliot Brown Canford 202-006 (pictured), worth £450. Individually tested to 200m water resistance, it also features a hardened and tempered domed mineral crystal with an internal anti-reflective coating.

ELLIOT BROWN®



[www.elliottbrownwatches.com](http://www.elliottbrownwatches.com)



1983-2013  
**30 YEARS**  
OF RALLYING EXCELLENCE






## MAKE EVERY JOURNEY EPIC

More than 30 years of continuous exhaust development and technical expertise are drawn upon to develop the ultimate Milltek Sport range of performance exhaust products. It's little wonder that Milltek Sport remains the 'must-have' brand for tuners around the World.

**MILLTEK**  
SPORT



Discover more at [millteksport.com](http://millteksport.com)

Find us online   



### Talking Point

## Greatest hot hatch

Which car from last month's hot hatch mega-test – or maybe one we didn't include – do you think is the greatest hatch of all?

The MG Maestro was conspicuous by its omission.

**Jobbo**

Certainly a wealth of cars to choose from. In my experience (Pug S1 106 Rallye, 205 GTI, Clio 172 Cup, Mini Cooper S, 106 XSi S1, 106 GTI, Suzuki Swift GTI, Golfs Mk3 & Mk4, Mazda 3 MPS, Ford Sportka), nothing flows down a road and gives you almost limitless options for neat or lairy like a **Peugeot 106 GTI or Rallye**.

**Ben B**

**Daihatsu Charade GTti**. Although they're probably difficult to get hold of now, I'd have thought.

**Delphi**

**Lotus Sunbeam** [pictured].

**Rich B**

**Saxo VTR/VTS**. Was surprised by its omission given the cult following of the car and its handling ability.

**scotta**

**MG Metro Turbo**. My dad had one as a company car and I thought it was the business at the time. Then he had a **Renault 5 GT Turbo** and I thought that was even better...

**Tim**

If I had to put my money where my mouth is, from the modern cars I'd buy the **Mégane R26.R** and from the classics it would be a **Renault 5 Turbo 2**. Although I do wonder if the **M135i** should get the award since half the *evo* forum own one.

**Philomena Cunk**

**Impreza Litchfield Type-20**.

**Mark BT52**

I think it's a toss up between 306 and 106, but as I've only driven the **106 GTI** out of those two I'll side with that. As Ben said earlier: infinitely adjustable, eager chassis, willing engine, able to carry staggering speed across country, and 'more than the sum of its parts' as the saying goes.

**Barry**

The thinking man's choice for me: **EK9 Civic Type-R**. The spec sheet is almost perfect and the reality is pretty awesome too. Closer to my heart:

**Polo G40**. Ridiculously fun car to drive. On paper it doesn't look great but the reality is very different. Supercharger whine gets added bonus points!

**markmctavish**

**Williams** and **106** for me. Although I preferred the fizziness and edginess of the 1.8 Clio over the Williams. The 306 was spoiled by the 'box, in my opinion. Great chassis and best engine in the *evo* list, though. If only they'd made a car with that chassis, engine and a five-speed 'box that really made the most of that great engine...

**Swervin\_Mervin**

Having owned none of these I'm fully qualified to state that the **Clio Williams** is the best. Because blue seatbelts.

**α7x88**

No **Daihatsu Cuore Avanzato TR-XX R4**? I am disappointed.

**16vcento**

### Next month

This issue we've put the new Tesla Model S to the test over 300 miles in Norway. Is electric power the future for the performance car, and would you be happy to live with an electric car?

Email your thoughts to [letters@evo.co.uk](mailto:letters@evo.co.uk), or join the discussion at [community.evo.co.uk](http://community.evo.co.uk)

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

## Thread of the Month

*habanero*

# Would you buy a convertible?

In my 20-odd years of car ownership I've never had anything 'roofless'. Now older, fatter and with little hair for the wind to blow through, I find myself drawn to a convertible. Mid-life crisis maybe? I have a real desire to drive to the French Riviera and into Italy in something open-topped. A Maserati GranCabrio [pictured] ticks the box for me, although a decent Merc SL55 can be picked up for peanuts. Are you a hardcore tin-top-only kind of bloke or would you consider a wibbly handling convertible?

I love our MX-5. It's great driving with the roof off so long as it's not raining. They all have good heaters so there is no excuse for not having the top down.

**McSwede**

Never had a convertible car, but I like the idea of a Triumph TR6 or a Stag.

**zedleg**

I'm not sure I'd bother with a compromise convertible again (Alpina B3) because for everyday use the extra weight isn't nearly offset by the limited fun you get. Sports cars like TVRs and Elises are a different matter. Top-down is the only way to drive them.

**Jobbo**

Nope. Don't like them at all. I don't even like sunroofs. I'd have an Elise, but would have a hard top permanently attached.

**integrale\_evo**

Nothing wrong with convertibles if they're designed with that in mind at the outset.

**Andy**

I've had two (Z4 and S2 Elise). Obviously one was more practical than the other and I wouldn't want an Elise without a garage, but I'd have another of either. Perceived image never bothered me.

**240PP**

Everyone should own a convertible at some point. Yes, you compromise on chassis stiffness etc, but in my experience this is far outweighed by the increased sounds and sensations. You can enjoy the sound of your engine, the smells of the countryside (or town) and the sight of clear sky (or stars) above you. If you want the thrill of driving, this is more fun than just driving fast.

**JonathanE**



Thread of the Month wins a Road Angel safety camera & blackspot alert device worth £159.99



The originator of the best **evo** forum thread wins a Road Angel Gem+. The Gem+ automatically updates its camera database as you drive and allows users to share the locations of 'live' camera vans.

**ROAD ANGEL**



# Car Insurance

Be Wiser...  
Save Money

- The best policy at the best price
- We search over 30 insurance companies
- FREE Breakdown Cover
- FREE legal protection
- Instant cover and instalments
- Good credit rating?  
Save up to 40%!

Freephone:

0800 298 9649



Online quotes at: [www.bewiser44.co.uk](http://www.bewiser44.co.uk)

# Be Wiser Insurance



For all your insurance needs -  
car, motorbike, van, multi-vehicle, home & travel

# 15

## REASONS WHY THE NISSAN GT-R CHANGED THE WORLD

*Over the past 25 years, Nissan's GT-R has pushed the boundaries of road-car technology, kept supercars honest, become a tuner's dream and been a force to be reckoned with on track. Join us as we examine why the GT-R is one of the most unique and exciting performance cars ever made*



WHY THE NISSAN GT-R CHANGED THE WORLD





01

BECAUSE IT'S BEEN AT  
THE TOP OF ITS GAME  
FOR FOUR GENERATIONS

by RICHARD MEADEN | PHOTOGRAPHY by DEAN SMITH



**S**UCH IS THE GT-R'S phenomenal global success that it's hard to believe it could ever have been one of Japan's best-kept secrets.

Yet step back to the early 1990s and the Skyline was all but a stranger to our shores; a mysterious, mythical beast whose sophistication enabled it to humiliate its opposition on the racetrack and – at least according to the few who had driven or ridden in one – attack any stretch of road with preternatural pace and extraordinary all-weather poise.

That car was the R32 Skyline GT-R, the first to use the now-legendary RB26 twin-turbo straight-six, and the first to employ Nissan's radical ATTESA all-wheel-drive system and HICAS four-wheel steering. It was as big a leap into the future as the current R35 was from the R34, the last of the RB26-powered cars. For many (myself included) the R32 remains the definitive Skyline GT-R, the car that propelled Nissan's tech-laden sports coupe from little-known curiosity to ultimate cult hero.

Parked alongside its descendants, the R32 looks sharp and distinctive, its simple, lithe lines highlighting the GT-R's pursuit of a more aggressive and muscle-bound physique with each subsequent generation. Like all the cars here today it is in standard specification, which given the Skyline's fabled suitability for tuning is something of a miracle. It's true to say that we were torn as to whether we should have assembled cars in a more typical state of tune. That's to say around 400bhp for the RB26-powered cars and 650bhp for the R35. In the end, driving these cars as they left the factory somehow seems like the correct way to get an accurate and authentic impression of their relative performance and dynamic capabilities at the moment they were launched.

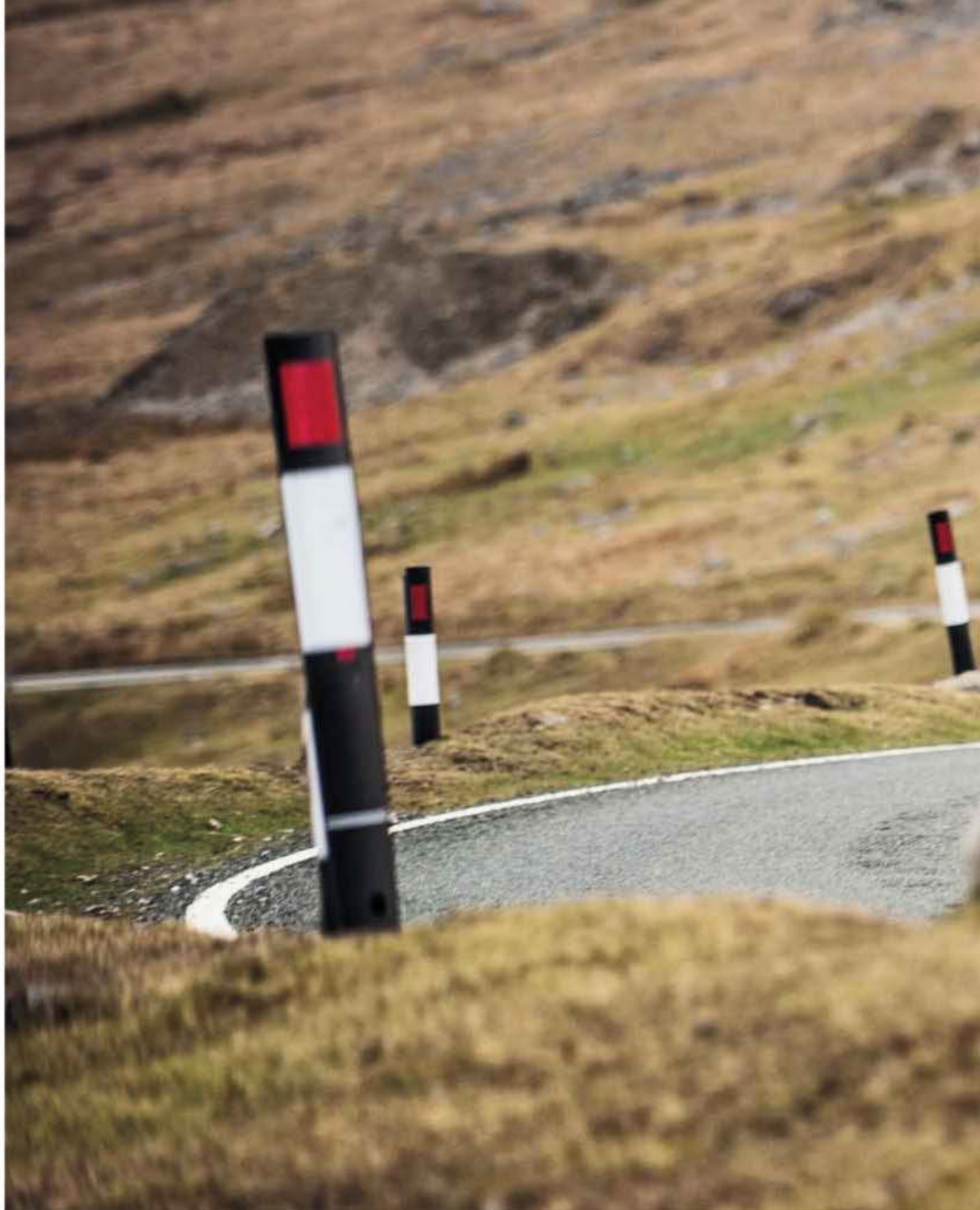
It's hard to imagine how a car with (officially) 276bhp could have created such an aura of invincibility, yet 25 years ago the R32 was in the same league as Porsche's 3.3-litre '930' 911 Turbo. In truth it was a far more sophisticated car, largely due to being conceived to compete in – and dominate – Group A racing. All-wheel drive with a variable torque-split gave it an innate traction advantage combined with a handling balance more suited to circuit racing, but this came at a price, the R32 weighing a heavy-for-its-time 1430kg.

Of all the cars here, this is the one I lust after most. Even the plasticky interior can't dampen my enthusiasm for this prime example of a Japanese performance icon. The seats look a bit amorphous, but they're supportive and comfortable, and there's a delicious weight and substance to the controls and damping.

Dancing along the snaking, lumpen tarmac that coils its way across Black Mountain in Wales, the car feels brilliantly alert, agile and easily placed between the unforgiving rocks that line the margins of the road. The steering weight and response are perfectly judged, as are the size and feel of the steering wheel itself. This car is a pleasure to steer.

The engine has a palpable sense of robust, unburstable strength, but its appetite for revs is clearly limited by the amount of air it can get into and out of its lungs. The car's owner, Brian Parsons, has gone to great lengths to restore this early car to standard, even searching for nine months to find an OE exhaust system. Such dedication is admirable for it gives us a rare experience of an unmodified car, but it also highlights why so many cars have induction and exhaust system upgrades and a gentle tickle of additional boost, for previous experience of a lightly modified R32 suggests it totally transforms the driving experience without placing the motor under undue strain.

If there's one benefit to standard power, it's the fact that it allows us to focus on the R32's unique handling characteristics, for getting your head around them takes time and practice. There's plenty of grip and poise initially as you turn in, but when you push that bit harder and attack the remainder of the corner under power, you get a strange crabbing sensation as the R32 slides its tail enough to require corrective lock, yet also pulls from the front. It's totally unlike any other car, and something that makes you catch your breath the first few times it happens. You don't even need to be going that fast for it to do it. Keep your foot in and you can deal with the remainder of the corner as you would in a



02

**BECAUSE IT  
REDEFINES ALL-  
WEATHER SPEED**



When the R35 GT-R netted a 7:38 lap of the Ring in 2008, beating cars such as the Lamborghini Murciélago, it was heavily publicised. What we didn't learn until later was that GT-R chief test driver Tochio Suzuki was disappointed; the circuit was damp in places and plain wet in others (including the fearsomely quick Kesselchen section).

Traction, grip and stability are Nissan GT-R characteristics, but none matter without feedback. Fortunately it scores highly there too, making it possibly the fastest point-to-point car in the world.

rear driver by balancing throttle and steering, but still it requires familiarity and confidence to allow that initial unnerving yaw moment to develop sufficiently to exploit and control.

This is a car with which it would take time and effort to form an intimate, intuitive bond, but crucially it's also a car that rewards effort and empathy. If you revel in the challenge of mastering a car's dynamic traits and foibles, peeling back the layers before finally finding its true limits, the R32 is a car you could fall for in a big way. I know I have.

Though it looks very different, the R33 GT-R shares much with the R32. Launched in 1995, it featured an engine and five-speed transmission that remained essentially unchanged. It was a physically bigger car, with the wheelbase increased by 10.5cm, the overall length by 13cm and width by a scant 2.5cm. Weight also increased (to 1540kg) and in the V-spec models the ATTESA all-wheel drive gained an active limited-slip differential at the rear and lower,

**'The R32 is a car  
with which it  
would take time  
and effort to  
form an intimate,  
intuitive bond'**



stiffer suspension, although it's the standard car we have here. Far fewer R33s were built than R32s, total production not exceeding 16,500 units, compared to just under 44,000 of the earlier model in all its guises.

Strange, then, that of the four generations present, the R33 is perhaps the most undervalued, much like 996-generation 911s. I suppose that's inevitable given the fact it didn't make the same impact as its predecessor, lacks the last-of-the-line finality of the epoch-ending R34 and is totally outgunned by the R35. But this was the Skyline GT-R that made tentative steps into Europe, with a limited number of cars being imported by Nissan GB in 1997. By coincidence this was the same year the PlayStation game *Gran Turismo* was launched, further lifting the veil on Japan's vibrant and uniquely seductive car culture.

At launch I can recall thinking the R33 was a bit portly compared to the R32, but now I reckon it's a rather special shape, with a blend



**Top:** R32 started the GT-R's four-wheel-drive revolution when launched in 1989. **Above left:** its 16in wheels look tiny by modern standards. **Left:** RB26 2.6-litre straight-six debuted in the R32



03

### BECAUSE IT RATTLED PORSCHE'S CAGE



When Nissan announced the R35 GT-R's 7:29 lap at the Ring, Porsche bit. Hard. August Achleitner, the head of 911 development, suggested – no, stated – that the time was impossible for a standard car: 'We imagine with this, Nissan used other tyres.' He added that in Porsche's own tests, the GT-R did a 7:54. Nissan responded by cheekily offering Porsche tuition on the track to get a representative time. It was a petty row, but showed just how shaken Porsche was (and continues to be) by the GT-R.

of generous curves and toned muscle that sets it apart from the others. The interior is less of a departure, so while that means it's a functional and comfortable driving environment, it never quite managed to reflect the GT-R's growing status as a uniquely capable and desirable high-performance car.

Thanks to their shared powertrain there's an obvious similarity in feel and character between the R33 and its forebear. The five-speed manual gearbox has the same oiled, mechanical feel and measured, satisfying weight, while the engine delivers a solid slab of torque that shoves you down the road with endless enthusiasm. This car, owned by Harry Blower, has a big-bore exhaust, which helps the engine exhale a little more freely, but you're aware it has much more to give if only it could draw enough breath through the induction system. Still, there's enough performance to make impressive progress.

Despite the weight gain, it feels like a lighter

car than the R32. Indeed, far from reining in the R32's initial sense of dynamic instability, the R33 accentuates and exaggerates it, turning in with greater urgency and feeling even more keen to adopt that odd 'on castors' cornering attitude. It's harder to get your head around than the R32 because it doesn't feel or behave like a conventional four-wheel-drive car, but neither does it behave like a conventional rear-wheel-drive car. You don't need to provoke it into sliding, and on cold, wet roads you feel it moving beneath you, the four-wheel steering and four-wheel drive doing strange things to induce yaw in low-speed corners.

It's all harmless fun and effective too, but because the car feels so mobile at modest speeds you doubt it will find more stability in the higher-speed curves. Again the trick is to learn to trust it and show some commitment, and though it would be a lie to say I manage to do so consistently during our day in the mountains, it would also be a lie to say I don't



**Left:** 2014MY car's brutal acceleration stands out. **Below:** R34 was first GT-R to feature digital telemetry displays. **Opposite page:** R33 slides frequently and with ease

**'These GT-Rs are the products of utterly original thinking and gloriously obsessive engineering'**

have a great deal of fun. What you can rely upon immediately are the brakes, which have more power and a firmer bite. That's not to say the R32's brakes feel wanting, but I can see why owners often upgrade to the R33's Brembo set-up once they put more boost into the car.

It's perhaps unfashionable to mention such prosaic qualities as space and practicality, but the R33's greater size acts as a timely reminder that all these GT-Rs are useable in much the same style as successive generations of BMW M3, Impreza STI or Mitsubishi Evo. It's possibly stretching things to describe them as family cars, but four seats and a decent boot make any purchasing decision stand up to scrutiny from our better halves: 'No, sweetheart, it's nothing silly. Just a four-seater Nissan...'

**THOUGH IT ARRIVED IN THE LAST** year of the 20th century, the R34 definitely looks and feels like a 21st-century car. The structure feels more rigid than the R33's, and the engine – still with a claimed 276bhp, but now fitted with faster-spooling turbos – is more responsive. The manual transmission (now with six gears) has an even weightier shift action and the car itself is a little more compact than the R33, which was criticised back in the day for being too bulky.

Inside as out, the R34 makes quite a departure, a deeper, more upright dashboard featuring a multi-function LCD screen displaying the car's vital signs, plus a lap timer and G-meter. Graphics designed by the makers of *Gran Turismo* ensured life was now imitating art. It looks a bit quaint now, but in 1999 it cemented the GT-R's appeal and credibility amongst a younger, car-savvy audience and as a car that celebrated technology.

A V-spec version was officially imported to





the UK, again in small numbers (98 cars, to be precise), but this time with a significant package of hardware upgrades such as additional oil coolers for the engine and transmission, plus stiffer suspension, a remapped ECU and full Connolly leather to try and raise the interior's quality and ambience. This is one of those cars.

Despite the pimping and preening, there are still plenty of reassuring parallels between the R34 and the older cars. The seats still look like they were sculpted with an ice cream scoop, but although the leather looks and feels more upmarket than cloth, it's too slippery to hold you in position. The steering is very good, with near-perfect response and clean, transparent feedback. The ride is firm, and road noise is increased, but the trade-off is tremendous body control that yields just enough at speed. The R34 also feels light on its feet, which figures as it is barely heavier than the R33, yet benefits from the slicker damping.

It's less expressive than the older cars, but

**'The R34 feels like a more cerebral, less visceral machine to extend on a challenging road such as this'**

the handling balance is more consistent and less disconcerting as a result. That's not to say it feels conventional, but the front and rear definitely feel more connected and in sync, and less deliberately out of step with one another. It still has dazzling agility. In fact it feels like the sharpest, grippiest and most precise of all the RB26-powered cars, which is what you'd hope and expect given it's also the youngest, but if stepping from one GT-R to the next has taught us anything, it's to expect the unexpected.

This transparency means confidence builds more rapidly in the R34, your baseline levels of pace are significantly higher and your willingness to explore its limits are more genuine and less sweaty. You can still induce that trademark GT-R yaw, but it takes greater determination to do so, yet less skill to harness. Perhaps that's why the R34 feels like a more cerebral, less visceral machine to extend on a challenging road such as this. No less memorable, certainly, but definitely not so



**Left:** R34's shape shows substantial evolution from R32. **Above:** tech-heavy approach to R35 doesn't mean it can't get lairy. **Far right:** wheel sizes have increased with every new generation



idiosyncratic in its dynamic behaviour.

If I keep returning to the 911 analogy it's with good reason, for although the Porsche's rear-engined layout makes it the king of quirky handling and the ultimate exercise in effort versus reward, these GT-Rs are just as fascinating and addictive in their own ways. The products of utterly original thinking and gloriously obsessive engineering, it's hard to believe Nissan packed these three superb generations of GT-R into 13 years of production.

So the RB26-powered GT-Rs deserve our continued admiration and currently represent extraordinary value for money, but there's no polite way of putting this, so I won't sugar the pill. It's a whole different world stepping into the R35. Everything about it is so far removed from its predecessors that the only common thread is in its ability to dominate any road you put before it in a way quite unlike any of its contemporary rivals. It chomps its way into the road with a ravenous appetite and very

little fazes it, save deep standing water, which sees it shuffle and shimmy more than you might expect. In its defence it does present a lot more rubber to the road than the other GT-Rs, and it's going an awful lot quicker.

The most succinct way to compare the R35 against its ancestors is to say there's a great deal more of everything: there's much more power from its larger, twin-turbo V6 engine – roughly double when comparing outputs as each car left the factory – there's much greater response and urgency, and much more aggression. And this in a 2014MY car that feels significantly more compliant in Comfort and Normal suspension modes than earlier R35s, which always had a tendency to administer a bit of a pummelling. This newest iteration soaks up many more of the road's imperfections, which only serves to release an even greater level of performance. Working this R35 hard across these unforgiving, no-nonsense Black Mountain roads is a jaw-slackening experience.

## 04 BECAUSE IT HAS ITS OWN LANGUAGE

Complex car, complex terms. Here are a few: E-TS (Electronic Torque Split), ATTESA (Advanced Total Traction Engineering System for All-Terrain), Super HICAS (High Capacity Actively Controlled Steering), VR38DETT (the R35's 3.8-litre V6), RB26DETT (the '89-'02 engine), VDC-R (Vehicle Dynamic Control). Not forgetting Z-Tune, KPGC110, 400R, SpecV, Nür...

## 05 BECAUSE ITS TECH EMBELLISHES THE DRIVING EXPERIENCE

By improving both speed *and* enjoyment, the GT-R's technology achieves a rare double act. Exaggerating rather than insulating; improving rather than diminishing. And every single GT-R has done this since the R32 of 1989.

This is arguably the defining feature of the mighty Nissan supercoupe, but also curiously the one that non-believers struggle to comprehend.



**Above:** R33's global exposure helped make the current car the icon it is.  
**Above right:** R35 runs huge 390mm front discs – 66mm bigger than the R33 and R34's

**'The R35 is a ferociously fast digital car, but its gritty, organic character is undeniable'**



Unexpectedly, one of the lasting impressions is that you seem to be on the brakes a lot, but that's not because it can't carry speed through the corners, rather it illustrates just how much pace you're gaining between them. The explosive way it punches from corner to corner means you don't have to stroke it along and build speed like you do in the other GT-Rs.

Likewise the way it finds grip and traction is pretty remarkable, as is the way it uses electronics to augment the driving experience. Drive something like an R8, 458 or 12C and they feel like they're wearing running spikes. The GT-R is a match for these mid-engined supercars in terms of grip, and even trumps them for traction, but the way it digs and kicks and fights for every last shred of road-holding and forward momentum with such physicality suggests it's shod with rugby boots.

By modern standards the R35's steering is genuinely feelsome, more so now in the context of current rivals than it was in the days of the Porsche 997. It's consistent in its weight and response, too, so you can get dialled in quickly and then remain in the zone.

The R35 was the first GT-R with a suite of dynamic settings for damping, gearshift (now a twin-clutch 'box, of course) and stability controls. It's useful to be able to toggle through

the different modes to ramp things up or calm things down, but the truth is it can also be a bit of a distraction, for you're constantly wondering whether it would be better in another mode or setting. Of course, the reality is that it's devastatingly capable in whatever configuration you choose.

So the R35 is a ferociously fast digital car, but its gritty, organic character is undeniable. It flatters your driving, certainly, but it doesn't 'drive itself' as GT-R haters like to claim. You can hear and feel it working – the boost building and the transmission chuntering – and as you select the more aggressive dynamic modes you enter a world where you need to be absolutely on your mettle, not least because you're covering ground with the pace of a low-level fighter jet. No matter how many times you drive one you're always left incredulous at what it can do and the manner in which it does it.

At the time of its introduction it felt wrong for the R35 to drop the Skyline name, but the evolutionary step from R34 was so great and the R35 has since gone on to achieve so much that it now feels entirely correct that Nissan took the decision to set the GT-R free. Respectful of its past, disdainful of its rivals and fearless of the future, the R35 continues to blaze a trail as only a GT-R knows how. Long may that continue. ❏

**06**

**BECAUSE IT'S EXTRAORDINARILY GOOD VALUE**

Since its 2008 launch, the R35 Nissan GT-R has chewed up and spat out more six-figure performance cars than any European supercar manufacturer cares to remember. It has long been the cheapest way to hit 62mph from standing in less than three seconds (in air conditioned comfort, at least) and no car costing less than £100k can stay with it flat-out.

Only a Porsche 911 GT3 gets close to matching its mph-per-pound ratio. Both will stop pulling at 196mph, but the GT3 costs some £22,000 more than the GT-R.

Nissan quotes a 0-62mph time of 2.8sec for the latest 2014MY version. You'd have to fork out for a Porsche 918 Spyder – the small matter of eight and a bit times the price – to better that.

As we all know, however, manufacturers' quoted times can be a little misleading. Keep an eye on our forthcoming YouTube Drag Battle videos to see how a Nissan GT-R really compares to a Porsche 911 Turbo away from the lights...



### NISSAN GT-R (R35, 2014MY)

<b>Engine</b>	V6, 3799cc, twin-turbo
<b>CO2</b>	275g/km
<b>Power</b>	542bhp @ 6400rpm
<b>Torque</b>	466lb ft @ 3200-5800rpm
<b>Transmission</b>	Six-speed dual-clutch, four-wheel drive, rear limited-slip differential
<b>Front suspension</b>	Double wishbones, coil springs, adaptive dampers, anti-roll bar
<b>Rear suspension</b>	Multi-link, coil springs, adaptive dampers, anti-roll bar
<b>Brakes</b>	Ventilated cross-drilled discs, 390mm front, 380mm rear, ABS, EBD
<b>Wheels</b>	9.5 x 20in front, 10.5 x 20in rear
<b>Tyres</b>	255/40 ZR20 front, 285/35 ZR20 rear
<b>Weight</b>	1740kg
<b>Power-to-weight</b>	316bhp/ton
<b>0-60mph</b>	2.8sec (claimed, 0-62mph)
<b>Top speed</b>	196mph (claimed)
<b>Price new</b>	£78,020
<b>Value today</b>	On sale now
<b>evo rating</b>	★★★★★

### NISSAN SKYLINE GT-R (R34)

<b>Engine</b>	In-line 6-cyl, 2568cc, twin-turbo
<b>CO2</b>	n/a
<b>Power</b>	276bhp @ 7000rpm
<b>Torque</b>	289lb ft @ 4400rpm
<b>Transmission</b>	Six-speed manual, four-wheel drive (rear LSD on V-spec)
<b>Front suspension</b>	Multi-link, coil springs, dampers, anti-roll bar
<b>Rear suspension</b>	Multi-link, coil springs, dampers, anti-roll bar
<b>Brakes</b>	Ventilated discs, 324mm front, 300mm rear, ABS
<b>Wheels</b>	9 x 18in front and rear
<b>Tyres</b>	245/40 ZR18 front and rear
<b>Weight</b>	1560kg
<b>Power-to-weight</b>	180bhp/ton
<b>0-60mph</b>	4.7sec (tested)
<b>Top speed</b>	165mph (claimed)
<b>Price new</b>	£54,000 (1999)
<b>Value today</b>	£26,000-48,000
<b>evo rating</b>	★★★★★

### NISSAN SKYLINE GT-R (R33)

<b>Engine</b>	In-line 6-cyl, 2568cc, twin-turbo
<b>CO2</b>	n/a
<b>Power</b>	276bhp @ 6800rpm
<b>Torque</b>	271lb ft @ 4400rpm
<b>Transmission</b>	Five-speed manual, four-wheel drive
<b>Front suspension</b>	Multi-link, coil springs, dampers, anti-roll bar
<b>Rear suspension</b>	Multi-link, coil springs, dampers, anti-roll bar
<b>Brakes</b>	Ventilated discs, 324mm front, 300mm rear, ABS
<b>Wheels</b>	9 x 17in front and rear
<b>Tyres</b>	245/45 ZR17 front and rear
<b>Weight</b>	1540kg
<b>Power-to-weight</b>	182bhp/ton
<b>0-60mph</b>	5.4sec (tested)
<b>Top speed</b>	155mph (claimed)
<b>Price new</b>	£50,000 (1995)
<b>Value today</b>	£12,000-20,000
<b>evo rating</b>	★★★★★

### NISSAN SKYLINE GT-R (R32)

<b>Engine</b>	In-line 6-cyl, 2596cc, twin-turbo
<b>CO2</b>	n/a
<b>Power</b>	276bhp @ 6800rpm
<b>Torque</b>	260lb ft @ 4400rpm
<b>Transmission</b>	Five-speed manual, four-wheel drive
<b>Front suspension</b>	Multi-link, coil springs, dampers, anti-roll bar
<b>Rear suspension</b>	Multi-link, coil springs, dampers, anti-roll bar
<b>Brakes</b>	Ventilated discs, 296mm front, 297mm rear, ABS
<b>Wheels</b>	8 x 16in front and rear
<b>Tyres</b>	225/60 VR16 front and rear
<b>Weight</b>	1430kg
<b>Power-to-weight</b>	196bhp/ton
<b>0-60mph</b>	5.6sec (claimed)
<b>Top speed</b>	156mph (claimed)
<b>Price new</b>	c£42,500 (1991)
<b>Value today</b>	£8000-14,000
<b>evo rating</b>	★★★★★





07

## BECAUSE THE N-ATTACK IS COMING

by JETHRO BOVINGDON

T

**THE NISSAN GT-R Nismo N-Attack.** If you love the unique intensity of Japanese car culture, that name alone is enough to make this car impossibly

desirable. It is the car that goes beyond the GT-R Nismo, that pushes aero, chassis and drivetrain still further. It is the GT-R that did *that* lap. If you haven't seen it then you really should, because the very fact that a 591bhp GT-R can get within 10 seconds of an 875bhp Porsche 918 Spyder around the Nürburgring – and look more exciting whilst doing so – deserves 7:08.679 of any car enthusiast's time.

Let's deal with the braying, flame-spitting Godzilla in the room. How does Nissan respond to those who say that the infamous 'Time Attack' lap time is a fake; a time set on slicks or with a boosted 800bhp motor? 'Bullshit.' That's the response I'd hoped for and Andy Palmer, chief planning officer and executive VP of Nissan, spits it out almost without thinking. 'The brief was that everything on that car could be homologated and had to be offered to the customer,' he continues. 'Any cheating would go against my direct orders. Customers can choose from a range of options, from the aero to the lightweight fixed-back carbon seats... that car can be recreated exactly.'

The GT-R Nismo is a pretty thorough job

already (see *evo* 191). It features larger GT3-spec turbos, unique engine management, an eight per cent stiffer bonded body, a carbonfibre bootlid, wider front wings and wider front wheels. The N-Attack (that's 'N' for Nürburgring, of course) adds to this with significant upgrades to the aerodynamics and chassis and is lighter still. The engine remains rated at 591bhp and 481lb ft. This is low-volume, motorsport-quality stuff and hence the price penalty is high. A Nismo costs £125,000 in the UK and the N-Attack package will add at least a further ten per cent to that price.

Hiroshi Tamura, chief product specialist for the GT-R, explains why they wanted to go sub-7:10 at the Ring: 'To be honest another one or two seconds knocked off last year's lap time would not jump out. And even a change in wind direction can account for that difference. So we wanted to make a big progress. Having said that, people think we want to just hit a lap time with the N-Attack, but that's not true. Most important is the total balance management. Appropriate traction for the road and super downforce... for driver confidence. The human factor is very important.'

Tamura's enthusiasm bubbles over with every line and it's clear that the N-Attack was a very satisfying project. 'We did not change the turbo. We changed the management a small amount for pick-up. [For] grabbing the road we

**'The N-Attack is the car that goes beyond the GT-R Nismo, that pushes aero, chassis and drivetrain still further'**



added a front mechanical LSD. The suspension completely changed – we put on helper springs, for example – and aerodynamics, too.’

The aerodynamics were refined by Williams, who also helped with the set-up of the fully adjustable Öhlins dampers. ‘The standard Nismo is more for traditional tracks. I cannot say exactly but the spring rates are almost double that of the MY14 car. It is very hard. The Time Attack car is softer – let’s say in between the two. Nürburgring is not like a track – the bumps and undulations, the jumps... That’s why for traction it is more compliant.’

Weight is saved through carbon-shelled Recaro front seats that are 15kg lighter apiece, while the removal of the rear seats takes that total to 40kg. ‘We reduce nearly a further 50kg from base GT-R Nismo with carbonfibre fenders and bonnet,’ says Tamura.

Nissan’s approach of using four development drivers and then letting them compete for the fastest lap time is novel, but had a real benefit. ‘In the past I liked just one driver for Time Attack,’ explains Tamura, ‘but with more drivers you start to create a car that everybody can handle and extract the most from. You get a more fundamental understanding of what makes a great drivers’ car. Most important is that our philosophy pursues the ultimate driving pleasure. Driving pleasure chasing is very important for us.’ Wise words, indeed.

**Left and below:** N-Attack changes include a higher rear wing and carbonfibre for the bonnet and front wings. **Bottom left:** three disguised cars – described as ‘GT-R Nismos with track options’ (the N-Attack name had yet to be finalised) – were present for the Time Attack laps in November 2013; four drivers set times, with German Michael Krumm (right) being the fastest



## Riding in the N-Attack

The Sodegaura Forest Raceway, across the bay from Tokyo, is barely a mile in length. It comprises only four right-hand corners and a single left-hander, with not so much as a sliver of run-off even at the fastest turn. On a mild day in late autumn last year, a GT-R Nismo N-Attack, wearing camouflage wrap as war paint, monstered the little raceway without breaking sweat. Like a lion pacing its restrictive enclosure, the N-Attack had no room to find its natural stride.

The mute, helmeted driver was as

anonymous as the flat and featureless circuit. The car wore a rear spoiler that reached several inches further into the airstream than even the pumped-up wing of the road-going GT-R Nismo, and in the cabin those plush leather chairs made way for pared-back buckets and harnesses.

The N-Attack ripped down the straight with even more intensity than the Nismo, making mere kinks of the corners. Stifled by the track, it craved the open expanse of its natural habit in the Eifel mountains. **DP**

# 08

## BECAUSE IT DOESN'T DRIVE ITSELF – JUST ASK MICHAEL KRUMM

by JETHRO BOVINGDON



# R

### RECEIVED WISDOM SAYS THAT NISSAN

GT-Rs ‘drive themselves’. Take a look online at Michael Krumm’s astonishing 7:08.679 lap at the Nürburgring in the Nismo GT-R and you’ll know that’s completely untrue – he hustles every last tenth out of the car. As GT-R chief

product specialist Hiroshi Tamura said: ‘We calculated that the Nismo would do a 7:10. The rest is human... it’s all Michael.’ Now Krumm (pictured) reveals his secrets to unlocking the GT-R’s mind-bending potential on every corner. (NB: Talent, bravery and lack of imagination still required. Don’t sue us if you left-foot brake your way straight into some cold, hard Armco.)

“Easy to drive” is always relative,’ the 44-year-old German explains. ‘Nowadays every car is easier to drive, with paddleshifting and stability aids... so all stability systems must be off in order to make this judgment in comparison to other cars. Then you are discovering how a car reacts when pushed over the limit. The GT-R lets the driver feel that you are exceeding its grip level so you can take action accordingly. Some cars don’t give you that response



time and before you know what's going on, it can put you right off the road. In that sense, yes, the GT-R is easy to drive if you have the ability to really feel a car at the limit. But make no mistake, to drive the car very fast around a circuit – faster than your buddies – is everything but easy.

I have done lots of laps in the GT-R road car around tracks for many years and tried out various driving styles and systems in order to extract the maximum. The fact is that [with the Nismo] you have 600bhp available, but you are still on road tyres. So the four-wheel-drive advantage is key. The main focus must be in making maximum use of traction and acceleration.

It is driven at its fastest like this. You brake as late as you can and trail-brake deep into a corner. It's best to use left-foot braking, but not a must. In the middle of the corner you need to rotate the car quickly and point it to the exit direction. Don't worry about slowing the car down too much. Most people don't slow the car enough and cannot rotate, and they will naturally understeer straight on and then complain that the GT-R has too much understeer. While I rotate, I open the throttle a little to get the boost up and ready. Then when rotation is completed, you can go full-throttle and make maximum use of its four-wheel drive and 600bhp. This is where the lap time comes from: late braking and early power on. Forget about mid-corner minimum speed – this is not a single-seater.

Nissan's approach of taking four drivers and giving us one Time Attack lap [each] was unusual. For us this meant a huge amount of mental stress, but it was a direct comparison between drivers under very similar conditions in the same car. That's when you have to execute the technique I've described. I was confident, but I knew it would be a huge battle between us. Needless to say, all of us were nervous.

I lost around two seconds in small mistakes, so I believe a 7:06 was in the car, but having said that, I am not sure if my concentration would have allowed me to pull this off. Some high-speed corners I got absolutely perfect, but in some others I could have taken maybe a bit more risk. But it is a very long lap and unlike other circuits you don't really have a second attempt for each corner. The most difficult thing is not to overdrive the car or take too much risk. If I have to lift the throttle only once at an exit, the time will not be achievable, hence it is a very tough balancing act between risk and safety.

One thing is certain – the Ring is still the ultimate proving ground for road cars. When you enter the track in full attack mode, you know you must always hugely respect it. The moment you don't respect it, the Ring bites you back very hard.'

# 09

## BECAUSE OF ITS VERSATILITY FOR TUNING

by DAVID YU



# A

**AS YOU MAY** already have read, we managed to track down a perfect, 'factory-fresh' R32 Skyline GT-R to

participate in this issue's GT-Rs group test. What you may not realise is just how tricky the search for that car was and how lucky we were to find it.

The reason is that the vast majority of Skyline GT-Rs, from the R32 onwards, are tuned – some dramatically, some modestly. Completely standard ones are as rare as a Japanese petrolhead gamer who has not played *Gran Turismo*. So why do so many owners end up modifying and tuning their GT-Rs?

One obvious answer is that it is part of Japanese car culture to personalise and modify vehicles. Whereas a lot of fans and owners of cars from European marques consider any alterations from standard to be sacrilege and 'non-purist', the Japanese have always seen it as their right to stamp their individual identity onto their chariot of choice. This is why there is such a massive aftermarket tuning scene originating in Japan. Famous names like HKS, Trust, Top Secret and Mine's have built very successful businesses developing tuning

parts, and have become brands that inspire loyalty and fanaticism to rival or even surpass that for the manufacturer whose vehicles they are modifying.

However, the Japanese factor does not explain why the Skyline GT-R in particular was subject to near universal tuning, even in markets like the UK and Australia. One big reason was the capacity of the big, iron-block straight-six RB26DETT engine for tuning, especially as it was so understressed in standard 276bhp 'gentlemen's agreement' form. A simple ECU remap would liberate an effortless and much more entertaining 360/370bhp, but the standard ceramic turbines were prone to (engine-destroying) failure if pushed much beyond that, so steel-bladed replacements were common. And of course, if you were changing the turbos, it was no more labour to fit bigger ones, hence the slippery slope starting for countless thousands of owners.

Starting from that innocent 'reliability mod', tuning an RB26 could rapidly escalate, with many of the big-name tuners churning out 1000bhp+ monsters, particularly during the R33 era. Several of those early headline-grabbing 1000bhp cars were little more than drag racing showcases, with



**Above:** AMS Alpha Omega reaches 60mph in 1.7sec. **Above right (from top):** Veilside Evo III was famous modded R32; Top Secret Drag R extracted 1200bhp from R33; Nismo bought 19 used R34s to create Z-Tune special



frequent engine blow-ups and rebuilds being par for the course. However, as the dark art of ECU tuning progressed and higher-specification engine parts became available, the likes of Jun and Top Secret did manage to make genuinely reliable, albeit somewhat laggy, 1000bhp engines.

But the GT-R's ace in the hole was its ability to deploy that power in a useable way. Its ATTESA ET-S all-wheel-drive system fed the front axle with only the torque it needed to keep rear wheelspin under control. Combined with the Super-HICAS four-wheel-steering system, the Skyline GT-R could still handle properly with many times its factory power output being pushed out by its engine.

When the R34 GT-R ceased production, I wrote a piece for *evo* lamenting the passing of the RB26 and predicting there was no way the alloy-block V6 successor would have enough safety margin to allow 1000bhp. How wrong I was. Some US tuners (making up for lost time having been denied the Skyline GT-Rs) have already exceeded

1400bhp on R35s that can and are being used for daily driving duties, and the reliability of the 3.8-litre VR38DETT has been beyond anybody's expectation.

The mighty AMS Alpha Omega currently holds the world record quarter-mile for an R35 at 7.984sec and will do 0-100mph in 3.03sec and reach 200mph in 11.87sec. This in a completely street-legal car with a full interior.

Here in the UK, two firms in particular, Litchfield and Severn Valley Motorsport, are busy tuning dozens of R35 GT-Rs every week. My own Fast Fleet GT-R, Stealthzilla, is a Litchfield-fettled LM700 producing over 700bhp combined with Litchfield suspension and an upgraded braking system. The LM series, much like US firm Switzer's creations, are beautifully balanced cars suitable for road and circuit use rather than just being straight-line monsters. Litchfield has tuned a large percentage of the UK's GT-Rs and chief Iain Litchfield expects 'only 30-50 per cent are still standard'.

So rather than being the end, the R35 has continued the GT-R's reputation as a tuning icon. Can this continue if the rumours about the forthcoming R36 having a hybrid drivetrain are true? Only time will tell, but I suspect with heritage this strong, tuners will find a way.

## 10

### BECAUSE IT MADE THE NÜRBURGRING ITS OWN

The myth and legend of the GT-R is inextricably linked to the Nürburgring. Way back in 1989, Nissan used the place extensively to test the R32 Skyline GT-R. In 1996 the R33 GT-R dipped under the magic eight-minute barrier and rumours of super-sticky tyres and tickled boost abounded. That controversy has never entirely disappeared, and reached hysterical levels when the R35 GT-R arrived in 2008 complete with a 7:38.54 lap time, which was later reduced in better conditions to 7:29.03.

Since then the GT-R, with the heroic efforts of Toshio Suzuki and latterly Michael Krumm, has chipped away at that time and the standard 2014MY car was timed at a GT2 RS-humbling 7:18.60. Then the Nismo version came along and murdered anything short of a Porsche 918 Spyder – in fact when Nissan engineers talk about the Nismo they often cite it as a rival for the 918 and P1. Nissan stands by the claimed times absolutely and there's no doubt that when most of us think Nürburgring, a GT-R pops into our heads about a millisecond later.

## 11

### BECAUSE FOR THE NEXT GENERATION, NOTHING COMES CLOSE

The GT-R's notoriety grew back in the early days of the PlayStation game *Gran Turismo*, when everyone wanted a 1000bhp Skyline to kick sand into the face of those pesky exotic European models. A generation of GT-R fans was created. That use of global behaviour patterns continues now in the form of social media and video. YouTube seems to exist entirely for various GT-Rs to out-drag everything from 911 Turbos to Veyrons, and to set incredible lap times at circuits across the world. The kids can't get enough of it. And one day some of those kids will be earning enough money to choose a GT-R over an Aston, an R8 or whatever else might be on the scene.

Even the GT-R's works racing drivers acknowledge the role *Gran Turismo* played in its (and their) popularity. Speaking to *evo*, former F1 driver and GT-R pilot Erik Comas said: 'I kept my models of that year as Penzoil was great in merchandising, and *Gran Turismo* and PlayStation made my title even more popular.'

## 12

### BECAUSE IT'S NOW A GLOBAL PLAYER

Nissan has sold 25,076 R35 GT-Rs globally since the supercoupe's debut in 2007. Of those cars, 5775 have come to Europe.

The GT-R is not a massive seller – indeed in some markets the arguably more exotic Audi R8 finds more customers – but the fact that the GT-R has moved from domestic market oddity to global car has assured its future. The US and Japan buy the most GT-Rs, but inside Europe it's us in the UK who lead the sales charts, followed by Russia, Germany, France and Switzerland.

## 13

### BECAUSE IT'S A PART OF OF THE GT ACADEMY

The path to motorsport success invariably involves a silver spoon/mouth interface. Nissan disagrees. Its GT Academy is an international virtual-to-reality competition that aims to discover professional racers from *Gran Turismo* gamers.

Last year the GT Academy scored 41 podiums worldwide, including at the Le Mans, Spa and Dubai 24 hours, and won two championships with the GT-R Nismo.

There have been eight graduates since 2008, the stars being Lucas Ordóñez (Nürburgring 24h class winner, currently Nissan Super GT works driver) and Jann Mardenborough, who races in GP3 this year – an acknowledged feeder series for F1...



14

BECAUSE IT  
ALL STARTED  
WITH THIS

*The original GT-R is 45 years old and bears little resemblance to today's model, but the car known as 'Hakosuka' cast the die for a road and track hero*

---

by RICHARD MEADEN | PHOTOGRAPHY by DEAN SMITH

---

T

**THIS BOXY, UPRIGHT**

four-door saloon is an unlikely starting point for the GT-R legend, but this is where it all began, the Skyline 2000 GT-R making

its competition debut in February 1969. This particular example is a faithful Nismo-built recreation of the car that won the JAF Grand Prix at the Mount Fuji circuit in May that year; the first of a dozen race victories the new GT-R would score in its debut season.

Officially referred to as the PGC-10, fans of the 2000 GT-R affectionately nicknamed it 'Hakosuka', which literally translates to 'Box Skyline'. Despite its square-rigged styling, I think it really looks the part. It's a handsome machine (and rare too, with just 832 built) set off a treat by its black steel wheels and racing stripes. Lift the long bonnet and the twin-overhead-cam straight-six is a magnificent sight, its hungry array of triple 45DCOE Weber carbs and silver crackle-finish cam cover looking every bit as special as the best European hardware of the day. It was also one of the first production cars with electronic ignition.

This beautiful engine was a new version of the full-race GR-8 engine that sat in the back of Nissan's delightful R380 sports racer. Re-engineered for a production car that could be used for touring car racing, it replaced some of the GR-8's exotic magnesium components with ones made from aluminium in an effort to increase durability, but the 1989cc engine remained serious stuff for a four-door saloon. In road tune the GT-R had 158bhp, but in race tune it produced 230bhp, delivered at a screaming 8400rpm, and 149lb ft at 6800rpm. Many regard it as the ancestor of the RB26 motor found in the R32, R33 and R34 GT-Rs.

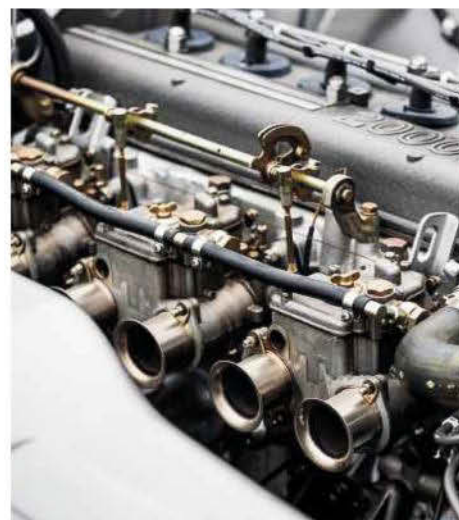
Inside, the Skyline is hilariously standard, the big steering wheel, flat vinyl seats and rudimentary safety equipment betraying just how close racing cars could be to standard in the late 1960s. There's a harness, a simple roll-cage and, er, that's about it. Even the front passenger seat and rear bench remain. Some wood veneer (it might even be plastic) around the instruments completes the impression that the original version of this car just had some numbers slapped on the side and went racing.

The layout is simple, with that gem of a six-pot up front sending drive through a five-speed manual transmission to the rear wheels. Skinny historic race rubber means grip levels will be modest, which is perhaps just as well given the semi-trailing arm rear suspension. Brakes are discs at the front and drums at the rear.

We're testing the GT-R at Grandrive, a test track located within the campus of one of Nissan's huge factories. It's a big facility with a decent test circuit, so we should have no



**Above:** inside-rear wheel is unloaded when 2000 GT-R is pushed through tighter bends. **Right:** straight-six is estimated to fire Hakosuka to 60mph in 7sec. **Below:** interior remains virtually standard



trouble stretching this fine old car's legs on the long straight and pushing it through the track's chicanes, switchbacks and fast sweeps.

This Hakosuka is supported by a team of Nismo technicians, who all treat the car with tremendous respect. Actually, it's more like reverence. This in turn makes me feel unusually nervous, but once the straight-six starts with a glorious carb-fed snort, even the stoniest-faced mechanic cracks a smile, which in turn releases the tension. This is going to be fun.

The throttle has a long travel and the clutch a soft and forgiving bite point, so it's easy to get rolling. The gearbox has a brilliantly sweet shift, the long lever snicking back and forth through the gate with a short, precise throw that's addictive and satisfying. The steering (unassisted, of course) is sharper than you might imagine, but its rate of response remains measured and calm. The car turns in well and its balance is nicely neutral, but through the tighter corners you can feel it begin to unload the inside-rear wheel. Later, in broken English, the mechanics tell me it has a limited-slip

differential, but judging by the way traction and power bleed away when the car is under most lateral load, it might be a little tired.

No matter, for this extremely rare and privileged opportunity isn't the time to attempt some kind of retro drift-fest. Besides, there's tremendous pleasure to be had simply from working the 2000 GT-R's engine through the rev range. It really howls once it's starting to work hard (we're politely requested to stay some way shy of the red line), but it's the way those three carburetors snort and snarl at low revs then build to a resonant bellow through the mid-range that's really memorable. It's part Big Healey, part E-type, but with a brittle, small-capacity zing that sets it apart.

Though clearly nothing like the modern-era Skyline GT-Rs we know today, this pioneering car forged Nissan's reputation in production-based racing and immediately established the GT-R as a force to be reckoned with, scoring 50 victories in all. It also gave Nissan an insatiable appetite for motorsport success. Nearly 50 years later, that hunger is as strong as ever. ❧



15

BECAUSE  
IT'S BEEN  
WINNING  
RACES  
FOR  
DECADES

*The Nissan GT-R isn't just a powerhouse on the road – in its native Japan it's legendary on the racetrack too. The drivers of three generations of winning GT-Rs explain its incredible success in Super GT*







by DAN PROSSER

PHOTOGRAPHY by DEAN SMITH

**S**

**SINCE IT WAS FIRST HELD** in 1993, the Japanese Super GT championship has been dominated by one car. In its various guises the Nissan GT-R has won nine of 21 drivers' championships and eight teams' titles.

During the series' history, it has prevailed in nearly 30 per cent of all races.

Along with Germany's DTM, Super GT is one of the fastest domestic touring car series in the world. With up to twice the aerodynamic downforce of a conventional GT car and more power, Super GT machines seem to adhere to the track and dissect corners like Le Mans prototypes.

Nissan's R32 Skyline GT-R won the first two drivers' titles, with the R33 collecting the crown at its first attempt in 1995. It took the mighty McLaren F1 GTR to finally depose the rapid Nissan from the top of the standings, but the GT-R soon got back to winning ways when the Pennzoil R33 (pictured) lifted the crown in 1998.

The latest R35-generation GT-R has cemented the model's dominance of the series. With some 23 race victories and five championship titles since its 2008 introduction, the R35 has been as peerless on track as its road-going counterpart has been in the real world.



## 1998 PENNZOIL SKYLINE GT-R R33

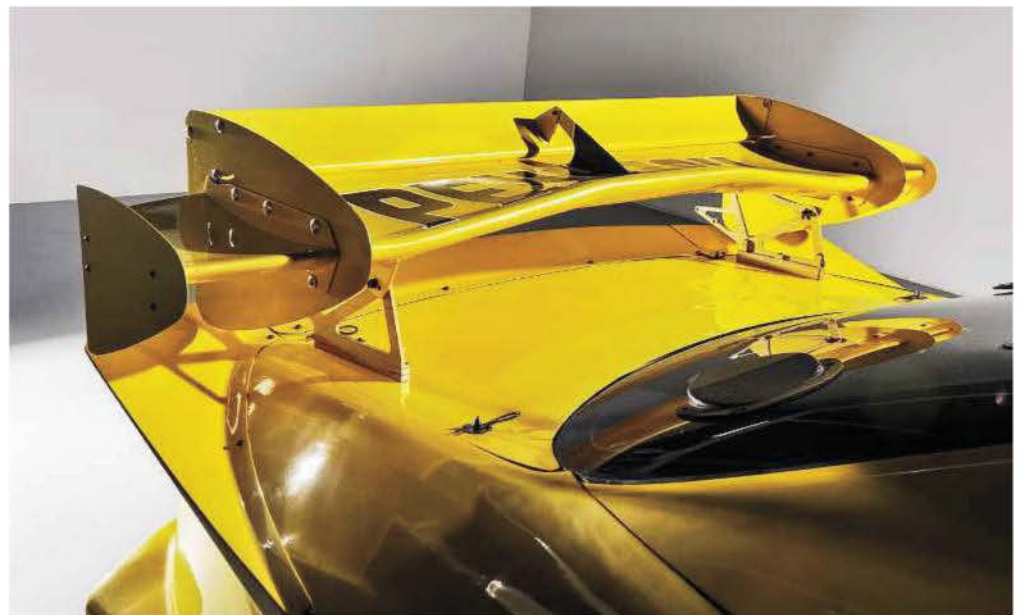
**Achievements:** two race victories,  
winner of 1998 drivers' and teams' titles  
**Drivers:** Erik Comas, Masami Kageyama

'When I heard from Nismo that we were to have Pennzoil as the main sponsor on the new R33 GT-R in 1998, this was a part of my American racing dream coming through,' says Erik Comas. 'At the time I was living in California and hoping to secure a drive in the Indy Racing League or NASCAR, but it never happened. So continuing my career in Japan with an American sponsor made me happy.'

'Together with the Renault 5 Turbo Maxi in which I won the 1987 French Supertourisme Championship, the Pennzoil GT-R was the most aggressive and challenging car I raced. It had big power and the ABS worked well, therefore I was able to brake very deep into the corners. I built a serious advantage on my competitors and even my team-mate.'

'The championship had a handicap system of 50kg for each race win, making it difficult to win many races in one year. We won two in 1998, so at one stage we ended up with a 100kg handicap and we were suffering.'

'The Pennzoil GT-R won me my first championship title since leaving Formula 1 and this was a kind of resurrection to win a title again after winning championships in go-karts, French Formula 3 and Formula 3000. I will always be thankful to Japan and Nissan for giving me a new chance of being happy in racing after May 1, 1994 [Ayrton Senna's fatal accident], had stopped my enthusiasm.'





### 2003 XANA VI SKYLINE GT-R R34

**Achievements:** four podiums, winner of 2003 drivers' and teams' titles

**Drivers:** Michael Krumm, Satoshi Motoyama

'I first drove the car early in 2003 when we were testing at Sendai Hi-Land, a track Nissan also uses for road-car development,' says Michael Krumm. 'My team-mate, Satoshi Motoyama, drove first and set incredible lap times. He said it was easy to drive, but it was hard to imagine how I could match those times.'

'The car was revolutionary as it was very low, the carbon tub was cut shorter than the original road car, so the centre of gravity was low. It took a few laps to grasp that you could turn in at such high speeds. I had a great first impression, something that is very important with new racing cars. The first impression is everything.'

'The car was easy to drive at the limit, which is what made it so successful. You could overdrive it and still manage to get it back under any circumstances. It was almost impossible to spin, yet it was versatile and direct. It was super-stable in high-speed corners as well. It was one of the first cars where we could go flat out through 130R at Suzuka in qualifying.'

'Winning the championship that year was great because things didn't go that smoothly all year long and it was a tight battle. We had to work very hard for it and that makes it ever so sweeter.'



## 2012 D'STATION GT-R R35

**Achievements:** podium at round five, Suzuka

**Drivers:** Björn Wirdheim, Hironobu Yasuda

'I first drove the R35 in pre-season testing at Sepang in Malaysia,' says Björn Wirdheim. 'At first I couldn't believe how different it was to the Lexus SC430 that I had driven for the previous five seasons, but I soon realised that most of it came down to the Yokohama tyres. It was a very strange feeling initially, almost floating around the track compared to the stiffer Bridgestone tyres I was used to.'

'During that time, qualifying tyres were necessary in Super GT and this was Yokohama's strong point. We could find up to two seconds just by swapping tyres, but with such a massive gain in grip it wasn't always easy to adapt and get all the performance out of the tyre. Also, tyre pickup was a major issue in the races and the only way around it was to keep running softer compounds to the point where we had blowouts three races in a row.'

'The GT-R had better downforce and it was much better under braking than the Lexus. The [V8] engine lacked torque, though, and this was a weak point, especially as we were getting loaded up with handicap weight. The GT-R needed a more refined driving style given the additional downforce, something I had moved away from in the Lexus, which responded better to a more aggressive style. As a result the GT-R was less forgiving – even a small mistake would result in a big time loss.'

'The podium at Suzuka with this car in 2012 was special. Our Yokohama tyre was not competitive until the second half of the season, when most cars were carrying 50kg-plus of handicap weight. After qualifying we'd almost written that weekend off, but halfway through the race, with the track surface getting grippier, the tyres came into their own. That podium is my best memory from my two years with Nismo and Kondo Racing.'



---

## WHAT WE WANT

**ACCORDING TO THE GT-R'S CHIEF ENGINEER, KAZUTOSHI Mizuno,** motoring journalists are obsessed with lightness in car design. He reckons we exist under the illusion that lightness is invariably a virtue in the pursuit of performance. It seems to be a fairly indisputable value, but Mizuno has gone on record as saying that the GT-R would suffer by shedding a few kilos. That may seem counter-intuitive, but he is absolutely right about motoring journalists: a quick straw poll of the *evo* office revealed we very evidently are obsessed with lightness.

When asked to offer suggestions for the next-generation GT-R, 'lighter' and 'smaller' were overwhelmingly the most frequently occurring wishes. Comments, delivered anonymously, included 'lose some weight', 'footprint no bigger than current car, ideally smaller' and the technically enlightened 'not as lardy as the R35'.

It's enough to send a Japanese car engineer loopy. Although Mizuno maintains the GT-R's relative corpulence is what gives the car its stability, we'd still like to see its replacement slim down to around 1600kg – perhaps through using lightweight materials and a reduction in external dimensions – to sharpen its responses and further boost the already bonkers straight-line performance.

The R35's sound and styling also came in for criticism, but there was not a single mention of hybrid technology. Not such a progressive bunch, us lot.

---

## WHAT YOU WANT

**'HOW SHOULD THE NEXT Nissan GT-R evolve?'** we asked on our forum ([community.evo.co.uk/forums](http://community.evo.co.uk/forums)) and via the *evo* Facebook page. Lighter, louder, faster, more powerful, better looking, more tech and much cheaper were the replies. You're a rather demanding bunch, aren't you?

Being serious for a moment, though, lightness is what the vast majority of you are calling for. The 2014MY GT-R tipped our office scales at 1783kg; that makes it portlier than a Range Rover Evoque.

'Forget all the extra power, just do one that isn't the size of a small house and that weighs less than an aircraft carrier,' reckons Mike RT4 on our forum. 'It would have the same effect on performance as adding all the power, but make it a better car. Making it more powerful is just going to add more weight, as the cooling and braking systems would need upgrading, so going down this route is chasing diminishing returns.' Users' suggestions for weight loss include carbon construction, the ditching of

---

## WHAT NISSAN TOLD US

**WE ASKED NISSAN'S CHIEF PLANNING OFFICER AND SPORTS car nut Andy Palmer** to give us a heads-up on the next-gen GT-R. Often senior execs (and few are more senior than Palmer) refuse to discuss future products. But Andy's not your average senior exec...

'Other guys have caught up in terms of power,' begins Palmer, 'but I'm not sure anybody has caught up in terms of price per power. That price tag is very important for me. Not everybody can afford it but there's a lot more people who can afford a GT-R than a Ferrari or a Porsche 918, for example.

Can we come with more? I do believe we can. We've registered the R-Hybrid trademark...

'I do think there's mileage in hybridisation, not from the perspective of economy but from that ability to fill in torque curves and performance where you need it, in particular more torque for corner-exit. We have the potential to make something startling.

'I can't tell you the solution but weight plays a part, as does aerodynamics. We are a world-leader in automotive materials, we have unique technologies in hybridisation thanks to vehicles like the Leaf and we have some of the GT-R's groundbreaking systems.

'Some things that allow you to put more power to the ground have a weight penalty, so there will have to be trade-offs with weight reduction in other areas. I'm not saying the next model will be lighter overall, but there will be weight savings in places.'



*Everyone has an opinion on the GT-R, as well as on the direction in which Nissan should take its famous machine in the future. Here's what we, you and Nissan think*

2+2 seating or four-wheel drive, plus numerous (and almost certainly fruitless) calls for a manual gearbox.

On the flipside, there's also a strong desire for new tech, inspired by the GT-R's multitudinous rivals. Four-wheel steering and carbon brakes are a popular choice, while the rumours of hybrid power are well received – so long as it is implemented in an appropriate way. 'The GT-R doesn't really need an electric-only mode, just enough storage to complement the petrol engine in hard driving,' Samoht tells our forum. 'A 600bhp petrol engine plus 100bhp electric motor would allow Nissan to claim a 700bhp headline "instantaneous" figure.'

Several forum users crave a simpler, more accessible GT-R variant, among them Paul1985: 'For previous Skyline versions there was a

---

'younger brother' model to the GT-R – the GTS-T. I would love to see an introduction of a model more in line with this version: less expensive, RWD, turbocharged, less power and less weight. Something that could potentially keep an M4 honest, but at a lower cost.' Others are less radical,

ShockDiamonds perhaps the most succinct with his feelings: 'If it *isn't* loaded with tech, a tad overweight but still shockingly capable, then it's not a GT-R. Those asking for lighter, less powerful replacements are missing the point. Nissan aren't making a Lotus.'

Over on Facebook, there's still the perception that the GT-R has cold, involvement-free dynamics that need an injection of fun. Many commenters reflected our forum users though, while our favourite suggestions came from Paranjay Dutt: 'Two things: 1. Continue with routine progress. Nissan do a brilliant job, and the next GT-R will reflect that. A little less weight, and probably increasing driver's control in some modes will make it even better. 2. Stop GT-R fanboys from voicing their opinion against every other car on Earth.' ❌

McLAREN 650S



by HENRY CATCHPOLE

PHOTOGRAPHY by DEAN SMITH

# driftability *noun*

[ DRIFT·A·BIL·IT·Y ]

*An aptitude for being oversteered on the throttle for an emotional, involving driving experience; implies an absence of clinical qualities. **Origin:** McLaren Automotive, on the new 641bhp 650S*

# T

## THE COACH LUMBERS

its way through the glorious corners of the Ronda road with all the enthusiasm of an elephant on Valium. Being swilled one way... then the

other in the slightly fuggy interior, its OAP occupants must surely be feeling a bit queasy by now. I would be. Behind, sitting barely higher than the coach's wheel nuts, I feel like a cheetah trying to look through the elephant's legs, waiting to find a way past (animal traffic jams are a real pain in the Masai Mara...).

I'm scanning the road ahead, eyes on stalks, looking for the smallest sliver of an opportunity between the corners. The wait seems endless, but then there it is. Round a long left-hander a clear stretch opens out and the McLaren, primed in second gear, needs no second invitation. With an extra 58lb ft over a 12C, the 650S is brutal under full acceleration and what looked like a slim chance of an overtaking opportunity turns out to be a gaping great one as I slot safely back in, barely a third of the way to the next corner.

Released into clear air, and with an empty road ahead thanks to the coach's ponderous progress, the 650S gets to work... and it's quite incredible. Imagine the feeling you get walking or running on one of those travelators in airports; your legs are moving like normal, but the walls with their adverts for perfumes and

banks are blurring past your peripheral vision about 25 per cent faster than your brain tells you they should be. Well, driving the McLaren 650S feels rather like the sinuous road beneath you has turned into one of those travelators.

With a monstrous 641bhp (25bhp up on the 12C) it has Group B levels of turbocharged propulsion, but because it deploys that power through specially developed Pirelli P Zero Corsas it just slices down the road, G-forces squeezing your chest under acceleration and tensing your neck muscles through the corners. It is performance of a staggering magnitude and a very physical nature. When you stop or slow down to give yourself a mental and corporal breather after a sustained run, you're momentarily left with a curious, almost disorientated feeling of coming back down to Earth. A bit like when you step off a travelator, in fact.

So, what is the 650S? Well, fundamentally it's a development of and a replacement for the 12C. The presentation at the original unveiling of this car talked a lot about 'driftability', the implication being that the 650S is more fun and more adjustable in the way it drives than the rather clinical 12C. The plot thickens, however, because out here in Spain the focus of McLaren's message seems to have shifted slightly to the car's performance. The short briefing we had styled the £195,250 650S as a car that has better performance than a 458 Speciale or 991

GT3 (neither was actually named, obviously) but without the rawness and compromises in habitability, useability and ride quality.

The claimed performance is certainly pretty mind-blowing: 0-60mph in 2.9sec is impressive, but it's the 0-100mph time which really sets out the McLaren's stall – just 5.7sec. Having recently felt the almost uncomfortable catapult effect of a 911 Turbo doing 6.9sec to 100mph while figuring it for a video, the idea of a 650S lopping over a second off that time boggles my mind. The Speciale can't match this pace, either. The Ferrari takes a claimed 9.1sec to reach 124mph. The 650S? 8.4sec.

Most of the extra straight-line performance over the 12C (which takes 6.1sec to 100mph on Corsa tyres) comes from the reworked engine, which has new pistons, cylinder heads and exhaust valves, and revised cam timing. But for some customers these uprated engine internals will simply be a nice bonus, because the entire reason they will want a 650S when they might not have considered a 12C is for the way it looks. That morning, wandering out into the sunshine and seeing a row of 650Ss (McLaren still hasn't got the hang of catchy names) basking side-by-side, they seem far more aggressive, with something lizard-like about the eyes. There are several new colours available, including an acid green and our car's searing Tarocco Orange, all of which look stunning, but despite the highlighter colour palette it's definitely the new

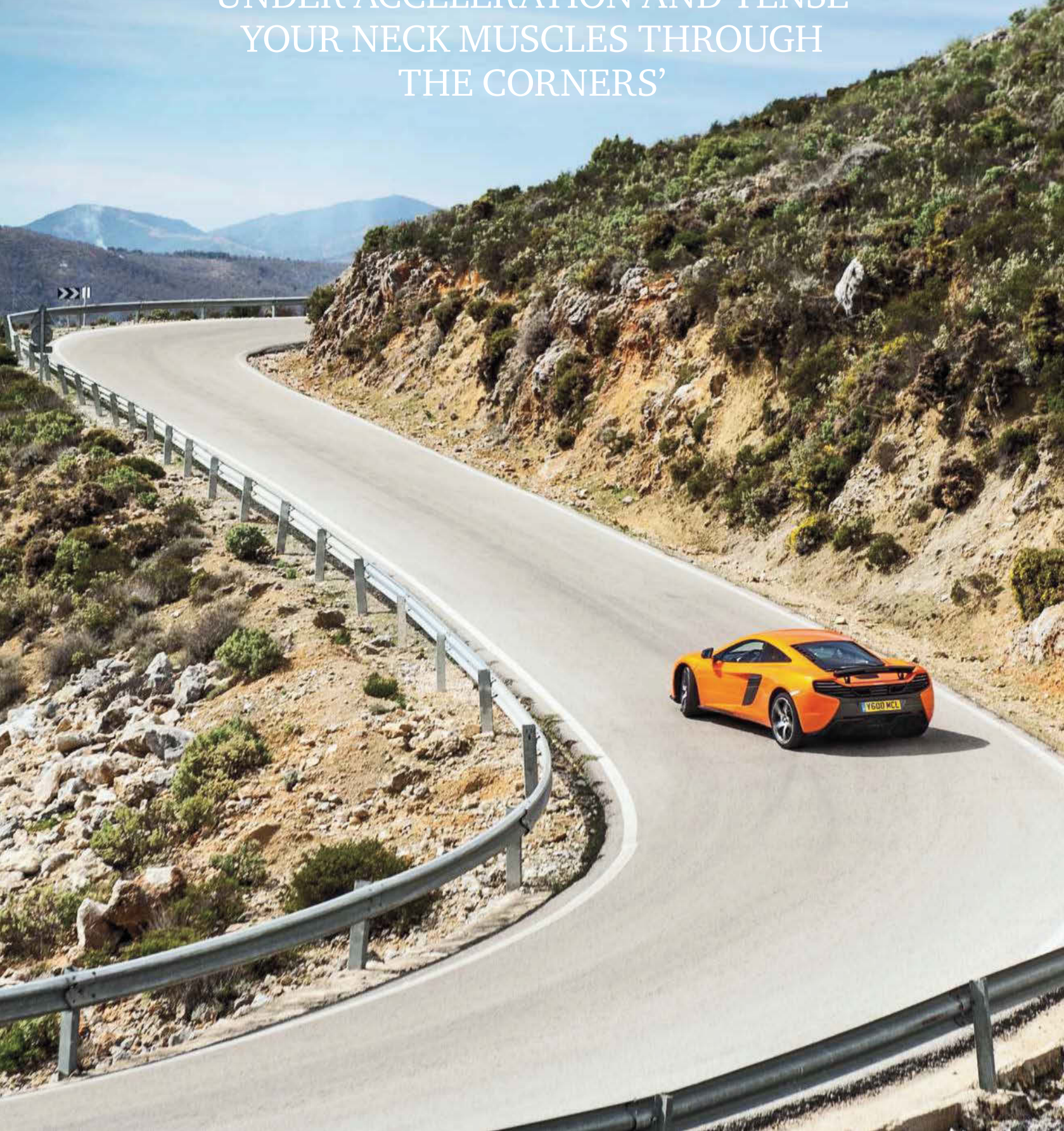


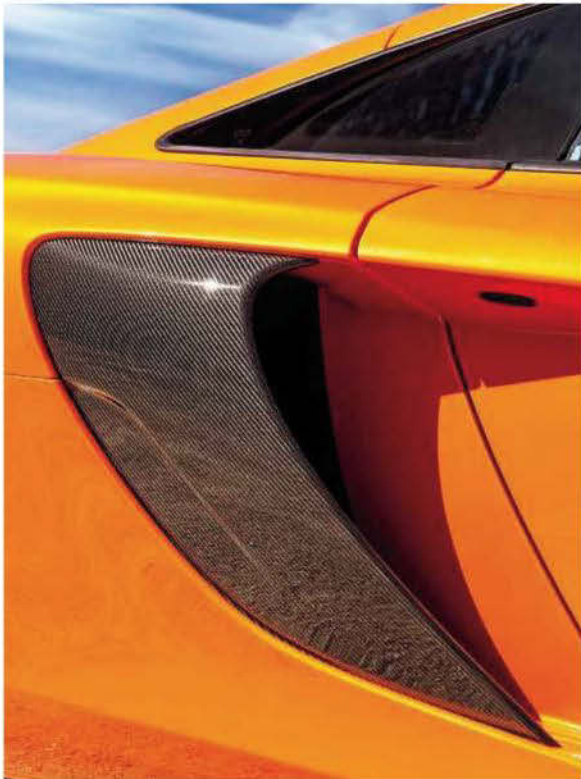
**Above:** Airbrake deploys to improve stability when lifting off or cresting a hill; this new functionality, along with a DRS mode, will be offered to existing 12C customers as a free 'Technology Upgrade'





‘G-FORCES SQUEEZE YOUR CHEST  
UNDER ACCELERATION AND TENSE  
YOUR NECK MUSCLES THROUGH  
THE CORNERS’





**This page:** test car features a host of optional carbonfibre parts, including the side intakes (£2280), 'racing' seats (£5120) and Airbrake (£3180); the diamond-cut wheel finish is £1550, Tarocco Orange paint £4090; in fact the options on this car total £70,740(!) – and that's on top of a £19k price rise over the 12C



nose that makes the real difference, giving the 650S a much more distinctive McLaren identity than the 12C and sprinkling the car with a bit of P1 kudos. Aerodynamically the new snout also increases downforce by 40 per cent, the car now generating 100kg at 150mph, but that almost seems like a bonus.

Inside, there is no real change to the architecture, but the interior is fully trimmed in Alcantara as standard, you get a reversing camera and you can now spec some rather lovely fixed-back carbon racing seats. Getting into them is a slightly ungainly process (at least it is for me) whereby you have to fall backwards into the car and then swing your legs in afterwards, but it's worth it, because once in you sit even lower than with the standard seats and your hips feel much more securely located.

Press the silver starter button and hear the twin-turbo V8 start quite discreetly, then reach up with your other hand and pull down firmly on the door to close it with a thunk, followed by the window whirring up. Heading through town and then onto the motorway with the adaptive powertrain and handling modes set to Normal, it's really very like a 12C. The spring rates are up by 22 per cent at the front and 37 per cent at the rear, which inevitably has some effect on the ride quality, but it's nothing like as severe as you'd imagine. Smaller bumps seem to be a bit more noticeable, but over bigger undulations there is still that slightly loose-limbed, waterbed sensation as it soaks everything up. Combined with the crystal-clear Meridian speakers playing some Katy



Perry (photographer Dean Smith's choice) and the air con supplying a cooling zephyr through the vents, there is certainly nothing about the experience you would call hardcore.

The calm only serves to make the storm all the more shocking of course. Pressing the Active button so that it glows orange and switching the dials to Sport or even Track (such is the general smoothness of the surface) stiffens the 650's sinews and slices its response times. The combination of the stiffer springs and the Corsa rubber means that you seem to get a better initial reaction as you turn into a corner and then more confidence to lean on the front end. Until the tyres have got some heat in them there is a bit of understeer to manage through the tighter corners, and you can get the 650 to oversteer if you're on the throttle with the boost building early enough, but by and large the car is simply stunningly fast and completely composed without an ounce of slip.

In the past this poise would occasionally have been disrupted by the braking, but not any more. The 650 comes as standard with carbon-ceramic discs, but where there used to be a horrible dead feeling at the top of the pedal travel followed by what felt like an

abrupt application of pad to disc, there is now superb, feelsome progression. It was actually something that was noticeable from the very first miles through town, because it's there, when you just want a light application of the brake to gently scrub a bit of speed, that they used to be at their most awkward. McLaren says there has been no hardware change in pad material, just a retuning of the booster. It's certainly worked. Now the brakes not only allow gentle applications, they also give better feel right up to the point of ABS kicking in. I'm not generally the last of the late brakers, but the 650S encourages me to wait longer and then brake deeper than I would normally, aided of course by the ease of a paddleshift.

The wraparound view out of the windscreen is still a joy too, allowing you to look through corners, plot your course and place the car with smooth steering inputs. On the spectacular road we're using for photography it's amazingly easy to fall into a rhythm, covering ground almost uncomfortably quickly, yet somehow incredibly efficiently. There is the odd moment when what sounds like the nose, but is actually some small plastic flaps just in front of the tyres, catches on the ground with an uncomfortable *schkkkk*, but

otherwise the car remains totally unflustered.

And that's the slight problem. Pure performance has its own thrill, of that there is no doubt, but there's some emotion still lacking in the 650S. I get to the end of several fast runs on the road feeling in awe of and slightly giddy with the speed, but not elated and grinning at the driving experience. I think a big part of the problem is the sound. The turbocharged engine simply doesn't make a noise that you crave. There's supposedly a new cylinder cut on upshifts in Sport mode, but sadly I can't really detect the added drama it's meant to add, and although overall it's not a bad sound that's being piped into the cabin, you won't lie awake at night longing for the next time you hear it. As a result you tend to treat the McLaren's engine as a means of propulsion that you use and enjoy the results of, but you never quite engage with it like you do a yowling naturally aspirated V8 or flat-six. The 911 Turbo has the same problem. The California T will be interesting.

To be honest, once we're finished doing the photos on the road, I'm not entirely sure how much more I'm going to learn from driving the 650S on track, but with the Ascari race resort at our disposal it seems stupid not to head up

‘THE WRAPAROUND VIEW IS A JOY,  
ALLOWING YOU TO PLACE THE CAR  
WITH SMOOTH STEERING INPUTS’



## Specification

### McLAREN 650S

**Engine** V8, 3799cc, twin-turbo  
**CO2** 275g/km  
**Power** 641bhp @ 7500rpm  
**Torque** 500lb ft @ 6000rpm  
**Transmission** Seven-speed dual clutch, rear-wheel drive, Brake Steer, ESC  
**Front suspension** Double wishbones, coil springs, adaptive dampers, roll control  
**Rear suspension** Double wishbones, coil springs, adaptive dampers, roll control  
**Brakes** Carbon-ceramic discs, 394mm front, 380mm rear, ABS, EBD  
**Wheels** 8.5 x 19in front, 11 x 20in rear  
**Tyres** 235/35 R19 front, 305/30 R20 rear  
**Weight (dry)** 1330kg  
**Power-to-weight (dry)** 490bhp/ton  
**0-62mph** 3.0sec (claimed)  
**Top speed** 207mph (claimed)  
**Basic price** £195,250  
**On sale** Now

**evo** rating: ★★★★★

# ‘THERE IS SO MUCH ABOUT THE 650S THAT IS AN IMPROVEMENT’

and do a few laps. I'm very glad I do. However fast you might feel you drive on the road, you never really hold on to the gears and lean on the tyres to the extent you do on a racetrack, and it's obvious within just a few corners how much better and much more fun the 650S is compared with the 12C round a circuit. The whole car simply feels better balanced and more intuitive in the way it reacts, allowing you to work both front and rear tyres more easily.

Despite the Airbrake, which you occasionally notice flipping up in the rear-view mirror, the car still feels quite mobile under heavy braking, which can be unnerving, but equally you can use this to your advantage. As for driftability, well, through the slower, second-gear corners the 650S is easy to slide gratuitously, lighting up the rear tyres with the torque and the ESP's clever 'fake diff' then managing things perfectly. Even more satisfying are the fast corners where you can balance the car on turn-in, feel the front slide slightly as you work it towards the apex, and then use the throttle to get the rear wheels just over-rotating after the apex so that they are still driving forwards but

also smearing and steering you subtly round without the need for any corrective lock. Even through the super-fast kink on the back straight the 650S has so much power that you can feel the tail just drifting the car wide and running you out to the exit kerb when you get back on the throttle. And all this is in a Spider, because McLaren is launching both versions of the 650S at the same time and is keen to demonstrate that there is no discernible dynamic difference between the two models. Remarkable really.

Back in the coupe a couple of hours later, Dean suggests that we 'pop up the road to get a sunset shot' (you can see the result in Contents, on page 8). I should have learnt by now, but this involves us getting lost. We do at least find some goats in trees (which make Dean happier than I've ever seen him) and as a result of being late and benighted we are able to try out the new LED headlights on our rather rapid drive back to the hotel, where McLaren are waiting. I'm pleased to report that the LEDs are a vast improvement on the 12C's candle-based efforts.

There is so much about the 650S that is an improvement. The feel of the carbon brakes,

the handling balance, the extra thump out of the corners, the lights, the seats, the looks (for some) – all of these make it more appealing than the 12C. A few owners will miss the 12C's smidgen of extra ride comfort and ability not to scuff its nose, but equally anyone who goes near a track will forgive the 650S these compromises in a heartbeat for the added enjoyment you now get from threading it between painted kerbs.

On the road it feels, perhaps more than ever, that the 650S is a car where you enjoy performance for performance's sake. It is mighty thrilling to go for a strop in the 650S because the Corsas (on warm, dry tarmac at least) take grip levels in all directions to new heights, but the downside is that the 'driftability' only comes in at a level that is largely out of reach on the road. Perhaps sacrificing just a *bit* of the civility for a *bit* more of the emotional rawness of a GT3 or Speciale would have been nice too.

As always, it will be interesting to try the car on the colder, more lumpen asphalt of Wales or Scotland. I suspect we'll find that there are few (if any) faster ways to get from A to B, but still some more enjoyable ones. ☒



# The Nissan GTR Specialist

Since importing the first Nissan GTR into Europe we have continued to provide the very best in servicing and upgrades. Investing in the latest motorsport technology has allowed us to create unique engineering solutions for all road and track applications.

Whether it is a daily driver that requires expert servicing or you are a world champion that desires a custom build, we cater for it all.

Contact us now or visit us online to see how we can improve the driving experience of your Nissan GTR.

Watch us test with WTCC Drivers



Servicing  
Warranty  
Engine  
Chassis  
Brakes

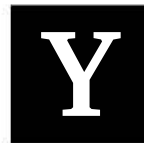
**LITCHFIELD**<sup>®</sup>  
litchfieldmotors.com  
+44 (0)1684 850999



# MISSION: POSSIBLE

by HENRY CATCHPOLE | PHOTOGRAPHY by DEAN SMITH

*The charity set up by Major James Cameron to give British servicemen opportunities in motorsport isn't just about quick lap times – it's also helping rebuild lives damaged by military operations. We profile just a few of Mission Motorsport's success stories*



**'YOU SHOULD FEEL HOW LIGHT** these legs are,' says Davie in his rolling Fife accent.

And without further ado, he leans against the wall of the pit garage at Donington Park (where a Mission Motorsport trackday is in full flow), swings a leg up in the air and instructs me to 'pull'. Obviously I do as I'm told and with a sharp tug, I'm left holding an impressively light piece of carbonfibre with a Sparco racing boot on one end and a sort of large goblet on the other.

'These are my racing legs,' he says. 'They're pretty trick, and if you compare them to my everyday legs over there you'll see how much lighter they are.' It turns out Davie (David Birrell, otherwise known as 'The Flying Scotsman' or 'Davie No Legs') designed the legs himself, using small, size-5 feet so that he could work the pedals more easily. Yes, work the pedals. All three of them.

Davie began his army career with the Black Watch and completed tours of Iraq and Northern Ireland. In 2007 he was also the light-welterweight army boxing champion. Then in 2010, while serving in Afghanistan with 1st Battalion, Royal Regiment of Scotland (1 SCOTS), his interpreter stood on an Improvised Explosive Device (IED). The interpreter was killed and Birrell woke up from a two-week coma to discover his left leg had been amputated below the knee. He admits to being in an extremely dark place mentally, something that wasn't improved when his right leg later had to be removed as well.

Davie is clearly made of stern stuff, however, and after a spell karting with hand controls, he was determined that he would be able to drive a car with a manual gearbox again and set about teaching himself in his old Evo on an airfield. His goal was to enter the Want2Race competition to win a drive in a Ginetta G40. There were 300 entrants for the competition and on merit Davie got through to the last eight. Ginetta were so impressed that, although he didn't win, they phoned him up a few days later and offered to put him through his ARDS test and gave him a race suit. Subsequently Davie has gone on to race a car without any adaptations and this year he's racing one of the Mission Motorsport MX-5s in the Max5 series.

This feature was originally going to be about Major James Cameron, who co-founded Mission Motorsport and was *evo's* Man of the Year in 2013 (he's got the pants to prove it and everything – ask him if you ever meet him). You'd like Jim. He's owned all sorts of cars, some of them very cool (a road-legal 1976 911 Carrera 3-litre race car), some of them more esoteric (a V6 Mk3 Cortina 'General Lee'), and has raced and rallied a variety of machinery too. But when we went to interview him over at the newly acquired Mission Motorsport workshop near Wantage, he was adamant that the story was really about chaps like Davie. He was right, of course.

It's been a meteoric rise for MM, which Cameron set

## 'LOOK BEYOND THE CVs AND YOU'VE GOT PEOPLE WHO ARE USED TO TURNING UP ON TIME, WORKING HARD, MUCKING IN AND GOING ABOVE AND BEYOND'

up after returning from Afghanistan in 2011. He cheerfully claims he spent most of his army career trying to make heavy armour go sideways (his Twitter handle is @tankslider), but as a Royal Tank Regiment officer, he latterly commanded the Warthog Group in Afghanistan. Sadly he saw colleagues and friends killed, and many more were injured during the tour, so upon arrival back in the UK he

was determined to do something for the wounded within his squadron.

One of the first proto-Mission Motorsport events was an entry at the Britcar 24 Hours race at Silverstone in 2011, with a team made up of serving soldiers doing the driving and a pit crew comprising the recently wounded. Mazda and Jota Sport supported them and Cameron organised various publicity stunts, such as racing a Challenger tank and then doing doughnuts under a hovering Apache attack helicopter. As you do.

But it was an episode during the race, in the wee small hours of the morning, that Cameron cites as the most memorable. It was about 4am, he'd just got out of the car and – unable to sleep, still buzzing from the adrenalin – he wandered back to the pits to talk to Sam Hignet, boss of Jota, only to find there was no sign of the boys. Keen to know where they were, he had a look around and eventually discovered them in a nearby garage, up to their

elbows in grease, helping another team to repair its Toyota MR2 and get it back out on track.

For Cameron, it's episodes like that which demonstrate exactly why ex-service personnel can make such brilliant employees. Look beyond the CVs and you've got people who are used to turning up on time, working hard, mucking in and going above and beyond. If they're not being shot at, then it's a bonus. Apparently this is actually a pretty easy idea to sell to companies, but it can be harder to make the soldiers themselves see how potentially valuable and employable they are, so a big part of what Mission Motorsport does is try to give people their self-esteem back and see that there is a potentially fulfilling life beyond the army.

A perfect example of Mission Motorsport's motto – 'Race, Recover, Retrain' – is Sergeant Gary Dunning, who cheerfully says that he has broken so many bones in his body over the years that he's lost count! But that wasn't the reason for him being medically discharged. One of Gary's tasks in Afghanistan was to go out and recover the bodies of servicemen or women that had been killed, get them back to camp and prepare them for repatriation. It's hardly surprising, therefore, that he suffered from Post-Traumatic Stress Disorder. Back in the UK he was, in his own words, 'a bit of a mess' and it affected not only him, but his whole family. Perhaps the best person to describe what happened next is Gary's wife, Joanne.

'We first became aware of MM through a publication I saw at work,' she says. 'Gary then attended the MM launch and was very impressed, but didn't have the confidence to talk to Jim [Cameron] or anybody else that day. Gary knew that I worked with Jim so asked me to mention that he had been to the launch, which I did. A short time later Jim asked if Gary was free that weekend, and that was the beginning of Gary's incredible summer with MM.'

'Whether it was racing or picking up and dropping off cars, he was absolutely loving every minute of it. I knew he hoped that this would be a new career but I was very sceptical indeed, and couldn't see how it could possibly lead to a new career. Who would want a broken, 40-plus racing driver?'

'However, when Gary was racing with MM in the Britcar 24 Hours at Silverstone we went to watch him race on the Sunday and I saw why he loved MM so much. It wasn't just the racing side – there was a real sense of family, belonging and camaraderie. I saw Gary get out of the car after his stint and just walk over to the press to be filmed and do interviews – it was amazing to see him so relaxed in front of the cameras.' Gary himself said that MM gave him the confidence not to be 'the grey person sitting in the corner' in interviews and he's subsequently gone on to do work for Aston Martin Racing, Prodrive and Darren Turner's simulator business Base Performance.

Then there is Lance Corporal David Colman, arguably MM's most high-profile success story. Colman was diagnosed with ulcerative colitis after becoming ill while serving out in the Forward Operating Base in Helmand province in 2007. After four operations and the removal of his bowel, he had been transformed from a super-fit squaddie to someone who frequently struggled to get up in the morning. In 2012 he was scheduled to be medically





**Top left:** tour bus turned raceday base. **Top right:** Jim Cameron at the wheel. **Above (from left):** David Birrell finished seventh and sixth in class in the Max5 season-opener at Donington; the emblem of the Royal Tank Regiment, for which MM was originally created; inspection ramp gets an appropriate embellishment. **Right:** MX-5 is maintained by servicemen, as well as driven by one





**Right:** new Mission Motorsport HQ in Oxfordshire is a hotch-potch of cars in various states of repair and raceworthiness.

**Below:** trackday at Donington Park in February for ex-service personnel ran at full capacity



discharged from the army, leaving him with a family to support and very few job prospects.

Colman himself takes up the story: 'I was in a really bad way emotionally, feeling hugely let down by the system and totally on the scrap heap. All my previous skills and qualifications were for jobs that I could simply no longer do. That's when my employment consultant put me in touch with Mission Motorsport. They got me involved in all kinds of activities, which allowed me to test my boundaries in a controlled environment and confirm what I can and can't cope with any more. Through this I was offered a work placement with Caterham F1, which ultimately led to permanent employment with them.'

What began as an almost personal quest for Cameron to help the wounded from his squadron has developed into a Defence-wide initiative that works closely with Help For Heroes and the army's Recovery Career Services. Given the numerous success stories, it's easy to forget just what a young and relatively small charity Mission Motorsport is. Cameron shows me around the new workshops before the trackday, and although he's rightly proud of the buildings,

## 'IF YOU THINK MM HQ MUST BE A MINIATURE McLAREN TECHNOLOGY CENTRE, THINK AGAIN'

if you think that jobs with Caterham F1, Prodrive, etc mean MM HQ must be some glossy miniature McLaren Technology Centre, think again.

Two freezing cold grey barns on an industrial estate are filled with an old hydraulic inspection ramp (donated by RJN Motorsport), a line-up of donated Mk1 MX-5 race cars in various states of repair, 'Sheila' the 550bhp Ford F6 Typhoon drift car (donated by Prodrive along with a separate cutaway F6 that can be used as a teaching tool) and the old MM battle bus (which originally did service for INXS while they were on tour).

Cameron cheerfully explains where he hopes a classroom will eventually be and points out a room at the back where MM currently does car wrapping. Despite the fact that it must feel like heaven compared to Helmand, there is, shall we say, a lot of 'potential' still left in the site. And you can't help thinking that if so much good has already come out of what is essentially very little, what could MM eventually achieve as the charity grows in the years to come?

Hopefully all this explains a little more clearly why Major James Cameron was *evo's* 2013 Man of the Year. What he has done really is remarkable. And whether it's thinking about employing an ex-serviceman, buying something small from the [missionmotorsport.org](http://missionmotorsport.org) website, or simply cheering on Davie No Legs and the other MM drivers at an event this year, we really hope that you feel you can give them your support too. ☑

*Swiss movement, English heart*



**C7 ITALIAN RACING RED CHRONOMETER – LIMITED EDITION**

*Made in Switzerland / Worldwide limited edition of only 500 pieces / ETA 251.233 COSC  
1/10ths second split-timing / 316L marine-grade stainless steel case / Anti-reflective sapphire  
crystal / Unique serial number / "Toro Bravo" leather deployment strap*

**EXCLUSIVELY AVAILABLE AT [christopherward.co.uk](http://christopherward.co.uk)**

**CHR. WARD**  
LONDON

---

by DAN PROSSER | PHOTOGRAPHY by DEAN SMITH

---

# M & M?

*It wears an 'M' badge, but is the M235i a match for a full-blooded M-car? With low-mileage used E92 M3s available for the same money as BMW's new coupe, we thought we'd better find out*



**W**

**WE'VE BEATEN THE SUNRISE TO THE** top of this peak in the Brecon Beacons, but the rain got here first. With the sun yet to breach the hills to the east and a stinking great cloud – almost black at its core, motionless in the stiff breeze – dumping its chilling contents upon us, there's nothing to do but take shelter in our cars. From the warmth of the M235i, I have a moment to contemplate the E92 M3 that slowly manoeuvres to my left around the gravel car park, to remind myself of its flared arches, the pronounced bonnet bulge and those four stubby exhaust tips. Just there, in silver bodywork, is a dedicated performance car, a real product of the M division. In its company the humble M235i lacks both visual and actual muscle; it has neither the breeding nor the hardware to compare. Even before the sun has tipped into view, I'm beginning to wonder if we haven't set the new car up for an ignominious fall.

Judged in isolation, the M235i Coupe is an intriguing car. It's the







**Above:** south Wales roads offer a mix of corners and conditions to test M235i (dark blue) and M3. **Far left:** M3's quartet of exhausts emit beautiful sound of 4-litre V8. **Left:** Prosser reckons you can easily make a case for choosing a DCT M3 over a manual

ninth model in BMW's M Performance line-up, billed as a halfway house between the marque's mainstream cars and its M-badged road racers. Having impressed us on the international launch in the Nevada desert earlier this year (evo 193), we know it's a capable machine, and at a little over £34,000, it might even be the real-world hero of 2014. Splendid isolation and favourable conditions cannot last, though, and in the vicinity of a bona fide M-car, and in this chilly Welsh setting, the M235i has to prove its worth all over again. The rain eases and several litres of icy water are swept away from the bodywork just in time for Dean Smith's camera to catch the sun bursting over the horizon.

There is, of course, reason to gather this pair beyond a simple benchmarking exercise. V8-powered M3s can now be bought for less than £17,000, while the same £34k that BMW asks for the M235i will afford a 2011 model with fewer than 20,000 miles, complete with a manufacturer warranty. How, then, does the M235i stack up against one of the great performance coupes of recent years, and is a three-year-old V8 M3 a better buy regardless?

The useful asphalt only totals five or six miles in this particular corner of the Beacons, but there's enough variety in surface type, topography and corner speed to get a full picture of the M235i's dynamic make-up. The

slower. Through third-gear bends the M235i settles into a neutral stance, leaning equally hard on each axle until the power is fed in and the rear end over-rotates just a little so that the car exits the bend in an almost imperceptible drift. Out of the few second-gear corners that cling to the side of the valley, the M235i will either waste most of that turbocharged muscle by spinning up the inside-rear wheel (a limited-slip differential is optional on this model and absent here) or, if the driver loads up the chassis and gradually feeds in the power to get both wheels driving before releasing the torque, it'll slide out suddenly but quite gracefully.

The most demanding length of road lies ahead. It's faster even than the section over the top, but with an undulating surface that demands tight body control. Attack it with commitment and the M235i begins to fall a little short. That pliancy that worked so effectively earlier on has now become an unhelpful imprecision and floatiness. Where the road crests and turns at once, the driver must be patient, allowing the car to settle from one vertical motion before winding in a steering input to provoke a new lateral motion. It's the M235i's most significant impediment to cross-country pace and it means that, along a yumping road like this one, the car's limits are well within those of the driver.

## 'In the vicinity of a bona fide M-car and in this chilly Welsh setting, the M235i has to prove its worth'

section that runs right over the top of the moors is smooth and flowing, mostly fourth-gear until it begins to drop down again into the valley. The M235i pours into these quick corners with strong and predictable grip across the front axle, its electrically assisted steering feeling direct and quite natural in its weighting.

Surface imperfections are few and far between over this particular stretch, but what lumps and bumps the M235i does encounter are dealt with cleanly and without deflection. The 321bhp turbocharged six-cylinder engine, meanwhile, pulls with immediacy and a brute force from low in the rev range (peak torque extends from 1300 to 4500rpm), then with a definite urgency towards the top end. The manual gearbox is slick and satisfying.

This first bit of road is undemanding and the M235i dully dismisses it without a fuss. Then we drop into the valley, clear of the blustering wind. The surface is still shiny from the downpour, the corners now tighter and

For the most part, though, initial impressions are very positive indeed. Until, that is, you approach the same roads in the M3. Immediately its hydraulically assisted steering has a gritty quality and the wheel wriggles and writhes in your hands where the M235i's helm is numb. There's a tautness to the ride quality, a little less comfort and isolation from the surface, but still a pliancy when needed. Only on the tighter sections can the M235i keep pace with the M3, for when the road opens up, the bigger car pulls out an advantage with each new gear, the 414bhp engine building to a frantic, howling crescendo over 8000rpm. The gears snap home with a pull of right-side paddle, the tug towards the horizon barely interrupted.

Paddleshift gearboxes aren't to all tastes, but when linked to an engine as exciting as this they can add to the experience rather than detract from it. Each upshift bangs in instantly and the engine lights up in a blare of revs with each downshift. This DCT twin-clutch option could

**Below:** M235i's 93bhp deficit to the M3 feels stark when its twin-turbo straight-six is revved to the top end; damp surfaces help the new car come alive on the throttle



reasonably be the preference of an enthusiast driver, particularly because the shift action of manual V8 M3s can be slightly notchy.

Over the tighter, slower road and the cresting, undulating stretch, the M3 makes known its genuine M-car credentials over and above the M235i. The M differential between the rear wheels and the linear power delivery make the M3 a more manageable and predictable car under power at corner exit. It feels as though there's a taut cable between your right foot and the rear contact patches, so sharp and faithful is the response to each application of the throttle, and that makes the M3 the quicker and more enjoyable of the pair away from the apex.

The tighter, firmer low-speed ride translates to a greater degree of body control along the most demanding stretch of road, so the M3 is better able to commit to one corner while settling from a sharp crest, or turn into another while hard on the brakes. In truth the M3 doesn't quite control its masses as brilliantly as memory served, but it's better tied down to the surface than the M235i and quicker cross-

country as a result. Its brakes, however, are under-equipped for purpose.

It's getting back into the M235i at this point that highlights just what the manifest differences are between a full M-car and one that simply wears the badge. On its own, the M235i's engine seemed to rev hard and keenly at the top end, but in contrast to the M3 it gives up all too soon, demanding a new gear just when that wonderful V8 would be starting to light up. Its steering, too, is remote and vague compared to the M3's, and its brake pedal is numb. Over the testing, demanding surfaces of typical British back-roads, the M3 is precise and agile where the M235i can at times feel wallowy and under-damped.

As the roads dry out, the M235i also becomes a more one-dimensional device, for it no longer has the sheer power to overcome traction and exit bends with the progressive, neutral-to-oversteer stance that makes the M3 so absorbing. Reduced grip flatters the M235i a little, because on a dry surface much of that involvement and throttle adjustability is lost.

One word perfectly encapsulates the differences between these cars: excitement. In the way that V8 engine rushes to its rev limiter, in the glorious sound it emits from those four exhausts, in the way the car looks and in the way it attacks a road rather than acquiescing to it, the M3 is a more engaging, more involving and more exciting performance car.

The M235i arrived at this duel fit and confident, broadly talented and with enough long-term appeal to have your pen hovering over the dotted line. Perspective afforded by a direct comparison with a more uncompromising sports coupe showed up its weaknesses, though, and it is perspective that will determine your own opinion of the M235i. Those trading up will think it a fun and rewarding performance car and those trading down from a genuine M-car will find it a little numb and unexciting. Ignominious fall? Not really. It remains a great car, we just now know what its limitations are. In its defence, it never did pretend to be a product of the M division.

For those considering each of these, just know that an approved used M3 does a better job of being a brand-new car than the M235i does of being an M-car. If a V8-powered M3 really is a viable alternative and you can live with the running expenses (servicing, tyres and insurance could each cost £1000 per year and it uses around 40 per cent more fuel), you wouldn't forgive yourself for denying your daily life that screaming V8, that playful chassis balance, those muscular good looks and that addictive sense of excitement. ❌

*With thanks to M3 owner Andrew Mulholland.*

## £34,000 alternatives

What else can be bought on the used market for the price of a new BMW M235i?



### Porsche 911 (997) Carrera

For its wonderful driving dynamics the 997 will long be remembered. Manufacturer-approved 997s start at around £34k for an example below 40,000 miles. Some early cars have had terminal engine failures, but with a two-year warranty, the approved used scheme offers comprehensive cover.



### Mercedes C63 AMG

For an authentic muscle car experience, look no further. Coupe versions are still around £38k, but there are plenty of saloons with manufacturer warranties for this or less. With 451bhp, the V8-engined C63 comfortably outguns both the M235i and E92 M3, but it's not quite as sharp as its Bavarian rivals.



### Aston Martin V8 Vantage

If beauty and prestige are priorities for you, it's hard to do much better than a V8 Vantage. Aston Martin-approved cars, which come with a one-year warranty, just about creep in at this budget, although you'll be looking at an early '05/'06 example and these aren't as well resolved as later models.



## Specifications

### BMW M235i

**Engine** In-line 6-cyl, 2979cc, turbo  
**CO2** 189g/km

**Power** 321bhp @ 5800-6000rpm

**Torque** 332lb ft @ 1300-4500rpm

**Transmission** Six-speed manual, rear-wheel drive, Active Differential Brake

**Front suspension** MacPherson struts, coil springs, adaptive dampers (optional), anti-roll bar

**Rear suspension** Multi-link, coil springs, adaptive dampers (optional), anti-roll bar

**Brakes** Ventilated discs, 370mm front, 324mm rear, ABS, Brake Assist

**Wheels** 7.5 x 18in front, 8 x 18in rear

**Tyres** 225/40 ZR18 front, 245/35 ZR18 rear

**Weight** 1455kg (claimed, 1541kg as tested)

**Power-to-weight** 224bhp/ton

**0-62mph** 5.0sec (claimed)

**Top speed** 155mph (limited)

**Basic price** £34,250

**On sale** Now

### BMW M3 (E92)

**Engine** V8, 3999cc

**CO2** 290g/km

**Power** 414bhp @ 8300rpm

**Torque** 295lb ft @ 3900rpm

**Transmission** Seven-speed DCT (optional), rear-wheel drive, M diff

**Front suspension** MacPherson struts, coil springs, adaptive dampers, anti-roll bar

**Rear suspension** MacPherson struts, coil springs, adaptive dampers, anti-roll bar

**Brakes** Ventilated discs, 360mm front, 350mm rear, ABS

**Wheels** 9 x 19in front, 10 x 19in rear

**Tyres** 245/35 ZR19 front, 265/35 ZR19 rear

**Weight** 1580kg (claimed, 1654kg as tested)

**Power-to-weight** 266bhp/ton

**0-62mph** 4.8sec (claimed)

**Top speed** 155mph (limited)

**Price new** £54,720 (2013)

**Value today** £16,500-49,000

**evo rating:** ★★★★★

**evo rating:** ★★★★★



---

by JETHRO BOVINGDON

---

PHOTOGRAPHY by GUS GREGORY

---

# NEW DAWN?

*The world's most celebrated racetrack has fallen on hard times in recent years. Now it's being taken over by a partnership of two local racing businesses, is the Nürburgring's future finally secure? To find out, we ask one of its new bosses*



I

## I LOVE THE LAST TEN MILES

or so on the way to the Nürburgring. The roads swoop fast and easy through the forest, other traffic is scarce and fast-moving and much of it is marked by the criss-cross of a roll-cage through the rear window. The villages around here are picture-postcard perfect, but amongst the clean white rendered houses and small hotels are dozens of little race shops. Doors flung open, you can usually see an old 911 hoisted in the air, the rolling shell of an M3 or a Golf waiting its turn on the grass outside. It seems every 100 yards or so you can rent a track-prepped Alfa, Suzuki, Renault or GT86. More frequent still are signs and stickers bearing the 'Save the Ring' lament.

What's so special about those last miles, the race shops and the motorsport-themed guesthouses is the sense that you're driving right into the centre of the car enthusiast's universe. Around here you can talk about camber and Cup tyres and brake pad materials safe in the knowledge that the very same issues are going through the minds of those around you. Around here super-unleaded is good, driving fast is to be celebrated and personal responsibility hasn't been strangled. It's like the best club in the world, and although thousands are in on



**Left:** Adam Osieka is joint-MD of the company that should gain control of the Nürburgring in 2015

the secret, it's still at once liberating and tight-knit.

Today the surroundings are more poignant than ever, because we've got an appointment with the new owners of the Ring. Better yet, we're not heading to a faceless office block but a race shop. A bigger, slicker race shop than you might find in one of the villages nearby, but a race shop nonetheless. The winning bid of around €100m (c£82m), including a pledge of €25m (c£20.5m) investment, came from a partnership between the Capricorn Group and GetSpeed, the latter a race team, race-prep and tuning outfit located on the Meuspath industrial estate, a stone's throw from the public entrance to the Nordschleife. Adam Osieka runs GetSpeed, races in the VLN series held on the circuit and has lived his life around the Nürburgring for over 20 years. He's also the joint-managing director of the newly formed Capricorn Nürburgring GmbH, which gains control of the circuit, and the hotels and leisure facility connected to it, on January 1, 2015.

Turning into the industrial estate, the thought that this place ever needed to be 'saved' seems laughable. Huge, pristine Aston Martin, Jaguar and Opel facilities sparkle in the sunshine, then there's Bilstein, KW, Continental, Manthey Racing, Hyundai... A camouflaged BMW M3 rumbles towards the circuit, closely tailed by a new X6M wearing the same zebra stripes. Later we'll watch everything from Mercedes GLs and S-class Coupes to M5s and snorting Camaros howl around the track as part of an intensive Industry Pool test session. The car industry has come to rely on this place for development and marketing and there was no way it would have let it slip into the abyss.

Nevertheless, the handling of this prize jewel has been criminally bad since a huge redevelopment project began in 2007. Vast hotel complexes sprung up around the circuit; a towering new indoor boulevard was built that was set to be bursting with shops, exhibits and car dealerships; the world's fastest rollercoaster was to hurl millions of happy tourists along the pit straight of the GP track while restaurants and museums emptied the wallets of their thousands of friends. It was a plan built on sand and wildly overstated visitor numbers, and in the end it was funded by the local Rhineland-Palatinate government to the tune of around €300m (c£246m). The people never came and the rollercoaster, which has never been operational, has become a ridiculous monument to an incredible folly.

The locals, understandably, were up in arms. Their taxes had effectively been used to create competition for their own businesses. When, in March 2010, the local government then leased control of the circuit for 30 years to Kai Richter and Jörg Lindner – two of the private investors behind the original failed initiative – things looked to be spinning further out of control.

To add further insult to injury, a loan of €254m (c£210m) was provided by local government in 2012 to help the Nürburgring service its debt. An EU Commission investigated and deemed that the project had received over €500m (c£412m) of 'illegal state aid'. Capricorn's bid is dependent on the EU Commission effectively wiping out the millstone of debt that has hung around the neck of the circuit, which should give this amazing place a fresh start.

#### **ADAM OSIEKA IS A RACER. YOU CAN TELL**

within seconds of meeting him. He darts around the workshop, directing the mechanics, fielding phone calls and obviously bursting with energy – despite the fact that he's barely slept for the past month. We sit down for a proper interview but Osieka is worried that his English might create the wrong impression on certain key points. We agree to conduct a formal interview via email. If he didn't seem so relaxed, I'd say he was paranoid about what I might write, but after years of negativity about the Ring's management, perhaps his caution is understandable.

What he is clear on is that the Ring is safe: 'We have the money with our partner Deutsche Bank and the track will continue to operate.' So the public 'Touristfahren' sessions will continue unchanged? 'Of course. It might be that a single lap costs more, but perhaps we can offset that for those who buy multiple-lap tickets.' The controversial Ringcard system will be scrapped. There are plans, however, to fit a camera system to the circuit that will increase safety and open up new possibilities. 'The technology is expensive – around €10m [c£8m] – but there is the chance to offer drivers footage of their car going around the track. Not a full lap, but some clips at certain corners.'

More surprising is Osieka's assertion that they will separate cars and motorcycles during these public sessions. From the outside looking in, this has always seemed like a no-brainer, but received wisdom is that the Ring's status as a one-way toll road necessitates it being open to all types of

**'A SENSE OF PUTTING THE  
CUSTOMER FIRST IS SOMETHING OSIEKA  
REPEATEDLY COMES BACK TO'**



vehicles, just like any other stretch of public tarmac. Osieka refutes that: 'We asked the EU and local government and there is no reason not to do it. Safety will benefit, there will be less track closures and I think it is better for everyone. Too often people come here on a Saturday and from 11 hours of track time they experience three or four. These are our customers and we must improve it for them.' Wisely, the rollercoaster will be broken up and shipped elsewhere.

This sense of putting the customer first is something Osieka repeatedly comes back to. He likens the current structure to a lazy old state – slow to react and arrogant. He mimes a walking stick and lurches forward, then raises his nose in the air to get his point across. However, he's not about to start discounting track time: 'Lots of people use this place but nobody pays the correct amount. We do not want to overcharge, but race organisers and the manufacturers need to pay a fair price to keep everything going.'

That last point is an interesting one, as the manufacturers are getting more and more nervous about the Industry Pool set-up. Effectively it runs as a co-op and the various manufacturers and suppliers share the cost and the risk. There are no marshals. A recent accident highlighted the risks involved in this, not least because any serious injuries or fatalities leave the whole group open to legal action. For

example, if an ESP engineer for an electronics company gets hurt, the family could in theory then go after BMW, Mercedes, Porsche, Bilstein, Kia... It's a huge can of worms. So they will undoubtedly be open to paying more for their time on the track, but in return they might want Capricorn Nürburgring GmbH to take the risk and to have some form of marshalling system – be that electronic via a massively expensive camera system, or with feet on the ground. This is all still to be negotiated and it's clear that the next six months or so will be intense for the new owners.

The Capricorn Group has bases in France, Italy, the USA, Basingstoke and here on the Meuspath industry park, right opposite GetSpeed. The basis of its business is building engine internals for motorsport, niche and prototype vehicles (cylinder liners for F1, forged pistons, gearbox internals, etc). However, at Meuspath it has an immaculate carbonfibre facility. After the smells of rubber and hot oil at GetSpeed, the quiet, surgically clean Capricorn operation is a marked contrast. It's building everything from Porsche 919 Hybrid tubs and bodywork to Audi RS5 rear spoilers here, and the quality of work is stunning. Seeing this Capricorn set-up – relatively small though it is – certainly adds a professionalism into the new owner's DNA, which already has plenty of passion and local knowledge from

the GetSpeed side. Capricorn's relationships with the big marques will also be crucial to the Ring's ongoing success.

So, can we conclude that the Ring has truly been saved? Well, there's energy about the new group and there's no question that it holds the tradition of this place as dearly as anyone. However, there remain unanswered questions. Can Capricorn attract F1 back to the GP circuit? Does the GP layout still conform to F1 standards? Does Capricorn have the money to address the Industry Pool concerns?

The winning bid outlines a schedule of three €5m (c£4.1m) payments over the final three quarters of 2014 (the first was on March 31) and a large payment of €45m (c£37m) on January 1, 2015, then a further €11m (c£9m) over the next four years and a €25m (c£20.5m) investment commitment on top. There is a loan facility of €70m (c£58m) in place from Deutsche Bank to cover much of this, which we assume will be dependent on the EU Commission wiping the existing debt, but the investment must come from Capricorn Nürburgring's own coffers. It's a massive undertaking and there will be bumps along the way, but let's hope the place has finally turned the corner. Flat in fifth, obviously. ❌

## DMS and GetSpeed team up

UK tuner DMS is joining forces with GetSpeed to open a development centre at the Nürburgring, initially within GetSpeed's workshop (the four-wheel-drive rolling road will be operational by May 1) but hopefully by the summer in a new building going up on the adjacent land.

Over the years we've tried lots of DMS-tuned machines and they've always been beautifully resolved and offered big performance gains – access to the Ring as a partner to GetSpeed will give unique durability and high-speed testing opportunities.

Rob Young of DMS is at GetSpeed finalising details when we visit. 'It's an incredible opportunity,' he explains. 'More and more cars are turbocharged due to emissions regulations, and now, with access to the Ring and Adam Osieka's driving expertise, we can verify our results from the 4WD load-controlled dyno on the toughest circuit there is.'

Of course, road-testing things like oil, intake and exhaust temperature at three-figure speeds is impossible. 'You can do part-throttle road testing, and refine the feel and delivery, but to ensure our cars perform right at the limit too is massively important,' he adds.

'Now we can hit 180mph along the straight here, or see how the engine performs over long high-load stints. This will give us such a complete product. We already have a base in Singapore, so we perform proper hot-weather testing across the border in Malaysia, and now here... It's an exciting time.'

Go to [dmsautomotive.com](http://dmsautomotive.com) for more info.

'THERE'S ENERGY ABOUT THE NEW GROUP  
AND IT CLEARLY HOLDS THE TRADITION OF THIS  
PLACE AS DEARLY AS ANYONE'



**Opposite page:** GetSpeed prepares cars to race the Nordschleife in VLN. **Left:** Capricorn's pristine factory makes various parts for race and road cars. **Above:** Capricorn's autoclave



Tesla Store, Trondheim

Tiller

Heimdal

Melhus

E6

Støren

E6

Berkåk



# COLD *charge*

by RICHARD MEADEN | PHOTOGRAPHY by DEAN SMITH



*Tesla's Model S impressed dynamically on our first drive last month, but there are still question marks over the electric supersaloon's practicality. How will it fare when we take one on a 300-mile, zero-emissions road trip through the wintry wonderland of Norway?*

T

### THE TESLA MODEL S IS A car defined by contradictions.

Who could have imagined the world's most advanced, ambitious and accomplished electric production car would be born and built in a country addicted to oil and renowned for producing distinctly average automobiles? Likewise, a car that accelerates with the ferocity of a supersaloon shouldn't be able to do so in near-silence, nor should something that looks so conventional on the outside conceal such an avant-garde interior. However, Tesla's neatest trick is building a car that burns not a drop of the hard stuff, yet intrigues and appeals to us petrolheads.

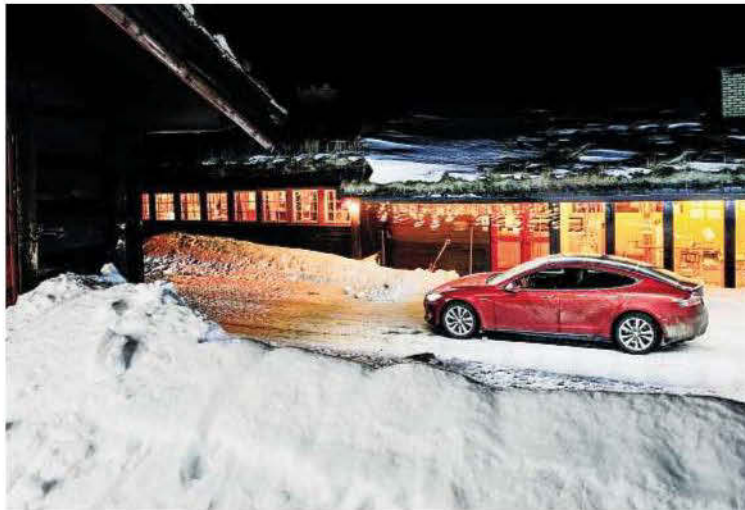
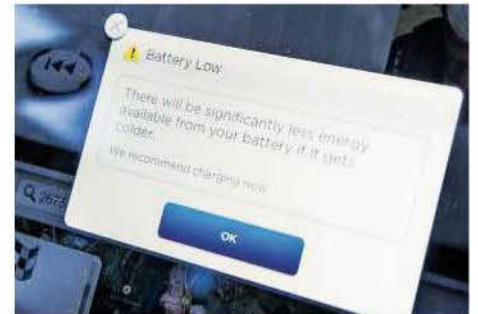
Norway is a country that has empathy for contradiction. Cold and craggy yet populated by warm-hearted, softly spoken people, the nation's vast mineral wealth (largely from oil and natural gas extraction) belies a deep-rooted respect for the natural world, and an unflinching commitment to powering the country via renewable energy alone. With electric vehicles exempt from the punitive import duty applied to all new cars, Norwegians find themselves in the enviable position of being able to buy what is to UK buyers a £70k Model S Performance for roughly the price of an up-spec VW Golf.

Combine the Norwegians' love of nature with the too-good-to-be-true satisfaction of buying twice the car for half the money, and you

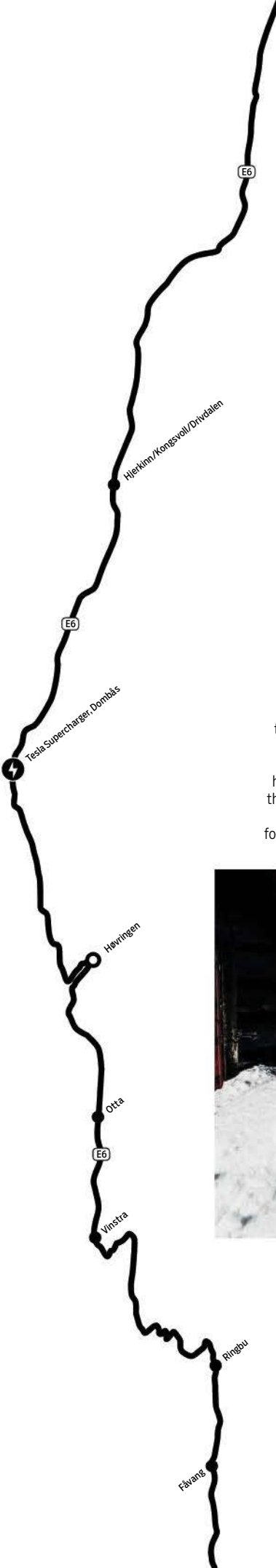
begin to understand why Norway, of all places, has become Tesla's fastest-growing market outside the United States. When you factor in the recently commissioned network of Tesla's own 'Supercharger' stations, at which Tesla owners can recharge their cars for free, for life, the decision seems like a no-brainer. With the imminent arrival of right-hand-drive Model Ss in the UK, and with it the first Superchargers along the UK's main routes, there's never been a more timely moment to experience Tesla motoring as CEO Elon Musk intended: a proper car, taken on a proper road trip and relying on a proper means of recharging en route.

All of which leads us to the Tesla Store in Trondheim, where we're due to collect a Model S (in evo-friendly Performance Plus spec, naturally) for a two-day journey of discovery to Oslo. As their name suggests, Tesla Stores are part car showroom, part Apple Store. There's a

**Right:** sub-zero temperatures reduce the Model S's range. **Below:** Brekkeseter hotel is a sanctuary in the wilderness. **Below right:** Meaden stops for an expensive coffee



'THERE'S NEVER BEEN A MORE TIMELY MOMENT TO EXPERIENCE TESLA MOTORING'





youthful, laid-back vibe, plenty of engineering cutaways to poke around, and friendly staff who are genuinely enthused about the brand and the product. Business is already so brisk in Trondheim that Tesla has secured new premises with more space and a central location. The approaching launch of the all-wheel-drive Model X SUV has seen a spike in interest; no surprise given it's greater suitability for extreme Norwegian winters than the rear-drive Model S. Still, with studded Nokian Hakkapeliitta tyres, we're assured our car will cope with anything the trip can throw at us.

When you've been around as long as I have, it isn't often you embark on a road trip of firsts. This is one such rare occasion, being the first time I've driven in Norway, the first time I've taken an electric car on a long journey and – should all go to plan – the first trip over 300 miles I've ever made that will cost nothing in fuel. It's also fair to say I'm excited and a little apprehensive about taking an electric car through some beautiful but remote and inhospitable terrain.

By contrast, the Model S really doesn't seem bothered by our impending adventure. Quietly proffering us its powered door handles in handshake as we approach, a press of the

key fob raises its tailgate in salutation. The rear luggage area swallows our assortment of camera equipment and overnight bags with plenty of room to spare, but should we have filled this cavernous space there's another large luggage area up front where you'd ordinarily find a big internal combustion engine.

Once inside, it's a bit strange to find everything primed and ready to go without the need to turn a key or press a button. The huge 17in tablet-style screen makes for a jaw-dropping centrepiece, while the instrument display behind the steering wheel is equally impressive and informative. It's all very futuristic, but also inviting and intuitive to use. Just as well, for all but the most rudimentary vehicle functions rely on you navigating a succession of displays and menus. Speed and dexterity come with repeated use, but if you feel more at home with buttons and rotary switches, the Model S will be a culture shock.

#### **YOUR FIRST FEW MILES IN A MODEL S**

are both wondrous and mildly disconcerting. Having depressed the footbrake and pulled down on the gear selector to engage D, the car makes a few distant clicks and whirrs. Then, when you release the brakes, it creeps like a

conventional auto. You can disable the creep function if you wish, but I'm not sure why you would. The throttle feels a little dead, so you might find you give it a bit too much gas – sorry – too many kilowatts when pulling away, but you soon learn to *squeeze* with your initial accelerator input rather than stomp on it.

Zippering through Trondheim's morning traffic is easy, not least because in Performance trim the Model S has 442lb ft of instant torque to punch you away from lights and into gaps. It's a big car (5m long), but this responsiveness shrinks it a little, so you're able to build confidence quickly. Like the switchable 'creep', you can also adjust the weight of the steering and the intensity of the regenerative braking. With regen on you rarely need to touch the brake pedal (this becomes more useful at speed, more of which later), but Tesla acknowledged feedback from owners who said they didn't like the braking effect and so offered the facility to switch it off via a software update. I suspect most will switch it back on again with time, as it's something you adapt to, and it also harvests free energy, which is always worth having.

As we slip out of Trondheim, we're soon swallowed by Norway's magnificent wilderness. Our route follows the main E6



**Above:** rural Norway offers stunning scenery and quiet roads. **Right:** satnav directs the S to Supercharger points. **Below:** range is shown in real-time as car is charged. **Below right:** Lillehammer's Olympic ski jump. **Bottom left:** plugged in at a Supercharger





## ‘AS WE BEGIN TO CLIMB, THE TYRES’ STUDS GO SILENT AS THEY BITE INTO SNOW AND ICE’

Euroroute (mostly two-lane, not motorway), which in turn follows the course of the Gaula and Sogna rivers that tumble through the rocky gorges and valleys. The road has an easy, seductive rhythm with enough swoops and sweeps to break the miles up a little, but not enough to interrupt our flow. Below us, the rivers’ icy waters are trapped in their seasonal stasis, draped over the scattering of boulders beneath like a soft, translucent sheet. At the sides of the road, cascades of icicles entomb the cliffs. It’s a truly magical sight.

Norway is fond of speed limits, which is a shame given the Model S’s abundant pace, but the upside is that even on this major route traffic is relatively sparse. Consequently, we can sit at a steady cruise while the spectacular scenery scrolls by. When we do encounter slower traffic, it’s dispatched with a solid, imperious slug of acceleration, and an increasingly urgent whine from the 416bhp electric motor. This is proper performance where it counts most.

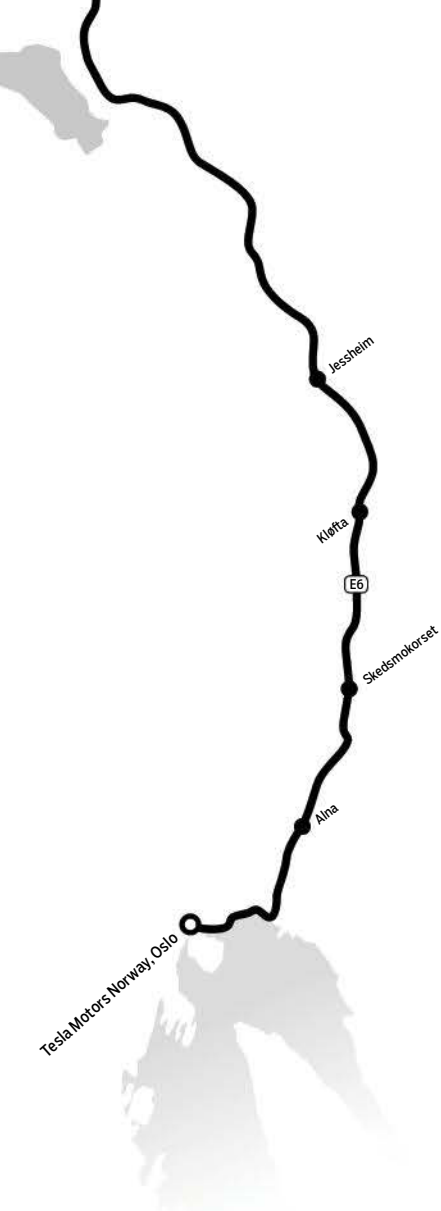
More often than not the approaching curves require only a lift of the throttle as the drag of the regen phase absorbs just enough momentum for you to turn in without touching the brake pedal, though when you do, the stoppers are smooth, progressive and powerful. The steering feels a bit numb in whichever mode you select. The only thing that changes noticeably is the effort required to turn the wheel, but it has a consistent rate of response so you can place the Tesla accurately at speed. Most cars in the Model S’s class have rather aloof steering, so it’s not a major issue, but a little more life and feedback wouldn’t go amiss.

On these smooth, flowing roads the damping – uprated with the upgrade to Performance Plus – feels controlled, with a flat, steadfast stance and stability that comes from a long wheelbase and a generous rubber footprint (albeit with studs!). It does an admirable job of containing the vertical movements of the Model S’s low-slung mass, but if there’s a flaw it’s that the

damping is a little muscle-bound and ultimately feels a bit short of wheel travel. A fraction more pliancy and depth would work wonders.

It’s not long before Dean Smith’s shutter finger begins to itch, so he uses the touchscreen to zoom in and scour the satellite image for suitably photogenic detours. He finds one that zigzags its way up one of the countless mountains that line the road. Thus far our route has been clear of snow, but as we begin to climb, the Nokian studs soon go silent as they bite into snow and ice. As the snow deepens and we leave the tree-line behind, our ears pop with the altitude. Still climbing, we round another hairpin to find ourselves on a plateau amongst parked quarry trucks and excavators. We stop long enough for Smith to jump out and capture the stunning view back along the valley.

The whole experience is made more surreal by still having enough 3G signal to be streaming music through the Model S’s sensational hi-fi. Some have criticised Tesla for making



a car that's reliant upon 3G to provide maps, navigation, music, etc, but if you engineered a 21st-century car for the UK's appalling 20th-century mobile internet coverage you'd still build it with map pockets and a cassette deck.

Our final destination is Oslo, but aside from our overnight halt in the wilds of Høvringen on the fringes of the Rondane National Park, we have two critical waypoints: the Dombås and Lillehammer Supercharger stations. With frugal driving and free from the distractions of a magazine photoshoot, we'd stand a good chance of completing the 310 miles without stopping, but photography places unique demands on any drive, the repeated 'ups and passes' requiring far more energy (of any kind) than a steady cruise. Besides, this isn't a hypermiling challenge and yielding to the temptation of dipping into the Model S's prodigious performance is all part of the test.

Thanks to our spirited mountain ascent, we've used roughly half our range by the time we reach the Dombås Supercharger station. With approximately 25 miles between it and our overnight stop at Høvringen, another 20 miles or so of photography driving once we get there, a night parked outside in sub-zero temperatures and a further 100 miles the following morning to reach Lillehammer, it's important we get a full charge. From prior experience of the *evo* office's regular 32-amp charger I know how long it can take to get a meaningful uplift in range (like all day), but the rate the Supercharger 'brims' the Model S (around 260 miles of range per hour according to the in-car display) is fantastic. By the time

Smith and I have wandered off in search of a hot drink, returned to the car and drunk it, the batteries are full. And for free.

The final ten miles to Høvringen are a real hairpinfest; snowy switchbacks snaking their way up onto an exposed plateau. The child in me wishes it was possible to completely disable the stability control, or at least relax it, for the Tesla could be a gifted drifter. As it stands, the stability system lacks the quick wits and fine control of those of the best European rear-drivers and you can't totally disable it.

Before my over-exuberance parks us in a snow bank, the soft glow of the Brekkeseter hotel's lights provide a welcome beacon in the darkness. As we park outside, the smell of wood fires and the promise of home-cooked food are the perfect incentive to swap the comfort of the Tesla's hi-tech cockpit for the timeless pleasures of a warm welcome and a cold beer. Proprietors Bjørn and Kari Setsaas are curious about the Tesla, not to say a little surprised that we negotiated the steep and slippery incline up the driveway. They currently own a pair of Audis, one being an A6 Allroad. Both express admiration for Tesla and a genuine desire to own a Model X because of its environmental credentials and because it's different.

**WE LEAVE EARLY THE NEXT MORNING,** driving between snow banks as deep as a man is tall, before slowly working our way back down to the main road and a decent run to our rendezvous with the Lillehammer Supercharger. Once again the Model S provides the perfect sanctuary, effortlessly



**Left:** most of the car's functions are operated via the 17in touchscreen. **Above:** journey's end is the Oslo headquarters of Tesla Motors Norway

devouring the miles in a manner that perfectly complements the tranquility of the scenery.

You soon get used to the fact that everything in Norway is fiercely expensive, but still it's slightly strange to sit inside a restaurant drinking cappuccinos that each cost more than a gallon of super-unleaded, while outside the Model S sits quietly charging for free. It goes without saying that the Tesla takes longer to recharge than a petrol or diesel car takes to refill. But there's a compelling argument which says you're effectively being paid £100 per hour, tax-free, whenever you're hooked up to a Supercharger. Such is the convention-challenging paradox of Tesla motoring.

Beyond Lillehammer, we're treated to more majestic lakeside views before the wilderness eventually cedes to increasing urbanisation as we approach Tesla Motors Norway's HQ in Oslo. It's been a memorable journey for all kinds of reasons. Norway is a fabulous place, but the Tesla has also played a central role. As a driving experience the Model S pretty much sells itself. Incredibly relaxing yet blessed with tremendous reserves of seductive performance in the meaningful sector of the speedo needle's arc, it combines the haymaker punch of a supersaloon with an ability to soothe and de-stress that surpasses all but the most luxurious Range Rover or Bentley. The styling sells the brand a little short (especially at the UK price point) and the seats and interior trim would also benefit from an uplift in look and feel, but you wouldn't bet against Tesla successfully stepping up to the European plate, not least because it sets the standard in so many other areas.

**'IT COMBINES A HAYMAKER PUNCH WITH AN ABILITY TO SOOTHE AND DE-STRESS'**

With the Model S's comfortable 250-mile real-world range, most of us could complete our daily return commute without the need to recharge or the fear of range anxiety. Still, there are undeniable compromises. Superchargers are brilliant for rapid top-ups, or full charges when you stop for a bite to eat on longer motorway journeys, but there aren't many of them, which leaves you at the mercy of sluggish municipal charge points on those occasions you head away from the main arterial routes. Once you've experienced the painless Supercharger experience you're loath to do that. This residual lack of ultimate go-anywhere, refuel-anywhere freedom provides naysayers with a few rounds of live ammunition with which to shoot at electric cars. Even ones as good as the Model S. If only the rest of the world operated with the logic, efficiency and joined-up thinking as those bits built by Elon Musk...

Sadly for the Model S, such is the lot of a pioneering product, but Tesla is clearly doing as much as it possibly can to address infrastructural shortcomings in its key markets until the rest of the world catches up. Our journey through Norway has proved how effortless electric motoring can be when there's a state-of-the-art charging network to rely upon, and the Model S has demonstrated it can match and in some ways exceed the driving experience of an internal combustion vehicle. Crucially, where electric cars were once too compromised to consider seriously, the Model S raises its game to a level that's impossible to ignore. Spend quality time with one and you might even find it impossible to resist. **x**

## Specification

### TESLA MODEL S PERFORMANCE PLUS

Engine	310kW electric motor
CO2	0g/km
Power	416bhp
Torque	442lb ft @ 0-5300rpm
Transmission	Single gear, rear-wheel drive
Front suspension	Double wishbones, coil springs, dampers, anti-roll bar
Rear suspension	Multi-link, coil springs, dampers, anti-roll bar
Brakes	Ventilated discs, 355mm front, 365mm rear, ABS
Wheels	8.5 x 21in front and rear
Tyres	245/35 ZR21 front, 265/35 ZR21 rear
Weight	2100kg
Power-to-weight	201bhp/ton
0-60mph	4.2sec (claimed)
Top speed	130mph (claimed)
Basic price	£83,480
On sale	Now

**evo rating:** ★★★★★



# EVO 5 ISSUES FOR £5 PLUS FREE GIFT

**YES!** Please start my subscription to **evo** with **5 issues for £5** and send me my **FREE T-shirt**. To continue receiving **evo**, no action is required – my subscription will automatically continue at the **LOW RATE** selected below.

**I am an existing subscriber.** Please renew my subscription with this offer.

**Please choose the T-shirt and size you require:**

**Design:**  Le Mans (Blue)  Karussell (Grey)

**Size:**  Medium (38"–40" chest)  Large (41"–43" chest)  Extra Large (45"–47" chest)

**YOUR DETAILS – (Please complete in BLOCK CAPITALS)**

Mr/Mrs/Ms	Forename
Surname	
Address	
Country	Postcode
Daytime phone	
Mobile No.	
Email	Date of Birth

## 3 EASY WAYS TO PAY OR RENEW (Gift available in UK Only)

### 1 DIRECT DEBIT PAYMENT – UK ONLY

**Print + Digital Edition:** 5 issues for £5 then £28.99 every 6 issues  
(Save 12% on the shop price and 74% on digital access)

**Print Edition Only:** 5 issues for £5 then £23.99 every 6 issues (Save 12% on the shop price)

For overseas prices please visit: [www.dennismags.co.uk/evo](http://www.dennismags.co.uk/evo)

<b>Dennis</b> Instruction to your Bank or Building Society to pay by Direct Debit		<b>DIRECT Debit</b>
Name and full postal address of your Bank or Building Society		
To the manager: Bank name	Originator's Identification Number	
Address	7 2 4 6 8 0	
Postcode	Instructions to your Bank or Building Society Please pay Dennis Publishing Ltd. Direct Debits from the account detailed in this instruction subject to the safeguards ensured by the Direct Debit Guarantee. I understand that this instruction may remain with Dennis Publishing Ltd and, if so, details will be passed electronically to my Bank/Building Society.	
Account in the name(s) of	Branch sort code	
	Signature(s)	
Bank/Building Society account number	Date	
	Banks and building societies may not accept Direct Debit instructions for some types of account	

### CHEQUE/CREDIT CARD – UK Only

**Print + iPad Edition:** 12 Issues for £53.99  
(Save 11% on the shop price and 79% on digital access)

**Print Edition Only:** 12 Issues for £47.99 (Save 11% on the shop price)

2  I enclose a cheque made payable to Dennis Publishing Ltd.

3  Please charge my:  
 Visa  MasterCard  AMEX  Debit/Maestro (Issue No. )

CARD NUMBER	START DATE	EXPIRY DATE
<input type="text"/>	<input type="text"/>	<input type="text"/>
SIGNED		TODAY'S DATE
<input type="text"/>		<input type="text"/>

**Return to: FREEPOST RLZS-ETGT-BCZR, EVO Subscriptions, 800 Guillat Avenue, Kent Science Park, Sittingbourne ME9 8GU**  
(No stamp required when posting within the UK)

For overseas prices please visit: [www.dennismags.co.uk/evo](http://www.dennismags.co.uk/evo)

Gifts limited to the first 80 subscribers. Please allow 28 days for delivery. Gift available to UK subscribers only. Alternative gift may be supplied. All subscriptions are for a 12 month period.

Dennis Publishing (UK) Ltd uses a layered Privacy Notice, giving you brief details about how we would like to use your personal information. For full details please visit our website [www.dennis.co.uk/privacy/](http://www.dennis.co.uk/privacy/) or call us on 0844 844 0053. If you have any questions please ask as submitting your details indicates your consent, until you choose otherwise, that we and our partners may contact you about products and services that will be of relevance to you via, direct mail, phone, email and SMS. You can opt-out at ANY time via [www.subsinfo.co.uk](http://www.subsinfo.co.uk) or [privacy@dennis.co.uk](mailto:privacy@dennis.co.uk) or 0844 844 0053.

Quote  for Print + iPad edition OR  
quote code  for Print Only edition

## GREAT REASONS TO SUBSCRIBE



### Great reasons to subscribe

- Your first 5 issues for just £5 then save a further 12% on the shop price
- FREE gift worth £25
- Get exclusive collectors' edition covers
- PLUS pay only 83p more per month if you add the **NEW DIGITAL** edition to your print subscription

## AVAILABLE IN...

### PRINT

Quote offer code **D1406P**  
when you call or order online

Order 5 issues for £5, then continue for just £23.99 every 6 issues by Direct Debit



### PRINT + DIGITAL

Quote offer code **D1406B**  
when you call or order online

Order 5 issues for £5, then continue your subscription for just £28.99 every 6 issues by Direct Debit





# Choose a **FREE** T-shirt

*when you get 5 issues of evo for £5*

Le Mans and Karussell are two iconic T-shirts from the distinctive men's T-shirt label, t-lab. Made for men of adventure, all t-lab shirts are designed and printed in the UK. Select the T-shirt design you wish to receive as your free gift when you subscribe to evo.

**t-lab** / experimental

See other T-shirts at [www.t-lab.eu](http://www.t-lab.eu)



**ORDERING IS EASY**

**Visit [subscribe.evo.co.uk/tshirt](http://subscribe.evo.co.uk/tshirt)**  
**OR CALL 0844 844 0039**

**USA** Call **1-866-622-5138** or visit [www.imsnews.com/evo](http://www.imsnews.com/evo)

**Rest of the World** Call **+44 1795 592 908** or visit [www.dennismags.co.uk/evo](http://www.dennismags.co.uk/evo)

You will be able to choose your size when ordering

Quoting **D1406P** for print only edition or quoting **D1406B** for Print+Digital edition

# Fast Fleet

*From F-type to R8, evo's Fast Fleet is the biggest and most comprehensive long-term section in the business. This month...*

**AUDI R8 V10 PLUS**  
by **Richard Meaden**  
Contributing editor NEW

Meaden expedites the running-in of his new long-termer with a tour of European racetracks on the drive back from the factory.



**MAZDA MX-5**  
by **Peter Tomalin**  
Contributor

Tomalin gets puzzled looks at his local garage as the MX-5 returns for another round of suspension work.



**VW GOLF GTI**  
by **Mike Duff**  
Motoring editor

With our GTI unwell, Duff takes the opportunity to try another, with less power and a different gearbox option.



**RENAULT CLIO TURBO**  
by **Dan Prosser**  
Road tester

The R8 is occupying Meaden's attention, so our new road tester has grabbed the keycard to the turbocharged RS.



**McLAREN 12C**  
by **SSO**  
Contributor NEW

Another new mid-engined long-termer gets collected in Germany, and heads straight off on a 600-mile road-trip.



**MERCEDES 190E 2.5-16**  
by **Mike Duff**  
Motoring editor

The recently fettled classic Merc returns to the scene of previous disappointment – the Bedford Autodrome.



**BMW M6 GC**  
by **Nick Trott**  
Editor

The Gran Coupe's penchant for oil continues apace, while its engine bay has acquired a new resident.



**PORSCHE 911 SC**  
by **Nick Trott**  
Editor

Trott's Porsche emerges from its winter hibernation and gets a shiny new look courtesy of the full Tipper treatment.



**JAGUAR F-TYPE V6 S**  
by **Jethro Bovingdon**  
Contributing editor

Turns out there are quite a few F-types out there – Jethro knows, because their owners have been in touch.



**FORD FOCUS ST**  
by **Dean Smith**  
Staff photographer

If you spot a man leaning into the back of a white Focus ST Estate, sweating and swearing, that'll be our Dean Smith.



**PEUGEOT 208 GTI**  
by **Sam Riley**  
Film-maker

Riley's been enjoying driving his 208 somewhere unlikely – Milton Keynes.



**TOYOTA GT86**  
by **Henry Catchpole**  
Features editor

Henry's been enjoying driving his GT86 somewhere unlikely – Milton Keynes.



**Also on the evo fleet:** Vauxhall VXR8 Clubsport Tourer, McLaren 12C Spider, Ferrari 430 Scuderia, Ferrari 458 Italia, Ferrari F40, Ferrari F50, Jaguar XJR-15, Aston Martin DBS, Lamborghini Murciélago, Toyota Celica GT-Four, Nissan GT-R, Ford Escort RS2000, Renault Clio Williams, Peugeot 106 Rallye

**Coming soon:** SEAT Leon Cupra 280, Vauxhall Corsa VXR Clubsport, BMW M235i



NEW ARRIVAL

# Audi R8 V10 Plus

Having waited nine long months for the big day to arrive, Meaden collects his new 542bhp, £130k long-termer



**I**T'S A WELL-KNOWN fact that long-term test cars are the juicy cherry on top of the motoring journalist's already rich and luxuriantly iced cake. It's also true to say **evo** gets more than its fair share of memorable metal on its Fast Fleet, but I'd venture to say few have ever been so special as this rather wonderful Audi R8 V10 Plus.

Ever since I drove the very first R8 on its international launch in Las Vegas in 2007, I've been a big fan of Audi's all-aluminium anomaly. With careful nurturing not only has the R8 got better (and better) with age, but thanks to its unique combination of quality, exclusivity and keen pricing, it somehow manages to transcend direct comparison with its apparent rivals. It also has unquestionable star quality, yet avoids the brashness of Italian supercars.

It took several glasses of red wine to summon the cheek to fire a speculative late-night email to Audi UK's PR maestro, Jon Zammett, requesting he put a £130k dent in his budget to facilitate my dream of vicarious R8 ownership. Perhaps he'd had a few glasses too, for his response was rapid and in the



**Above (from left):** 542bhp V10; it had to be a manual; flying visit to Zolder. **Below (from left):** R8 stopped at the Jim Clark memorial at Hockenheim, plus the Nürburgring and Spa



affirmative, and I'd be able to spec the car on the configurator. The downside to this was a nine-month wait from initial email to build slot, but the upside was ordering it in *precisely* the spec I wanted...

It's pretty simple to spec a V10 Plus, for much of the equipment is standard. That includes the lovely carbonfibre splitter, mirrors, side blades, diffuser and engine bay trim, plus the matching interior elements. I considered an Audi Exclusive paint colour, but didn't want to prolong the build process any longer than I had to. I then toyed with Phantom Black and graphite wheels, but in the end went for Daytona Grey with silver rims. That may sound dull, but I think it looks fabulous: impactful but nicely understated. The only options I went for were the Bang & Olufsen hi-fi upgrade, Audi Exclusive sports seats in black nappa leather,

Bluetooth connectivity and a reversing camera. One option I didn't go for was the excellent seven-speed S-tronic paddleshift 'box, preferring instead to stick to my principles and go with the standard six-speed manual. All of this resulted in an on-the-road price of £130,144. Like I said, a juicy cherry.

After a long winter's wait, the call finally came notifying me that the car would be built in February and ready for delivery in early March. It was at this stage I was glad I had requested a customer collection, for although it costs an extra £500 it means you get your hands on your car the moment it's ready. It also means a trip to Audi's vast Neckarsulm plant and a great drive home. Stretching a mile and a half from end to end, the Neckarsulm site is where many of Audi's more mainstream cars are built, but it's

also home to the more specialised A8 and R8 production areas and the top-secret development department where the powertrains for Audi's all-conquering LMP1 racers are designed and built.

Upon arrival, photographer Dean Smith and I are assigned a host to take us on our VIP tour of the R8 build area (a totally fascinating place that reveals the extraordinary level of hand-craftsmanship that goes into every car), after which we're ushered to a very tasty three-course lunch before completing a fine experience with the handover itself. Our man, André Lugert, is the consummate pro and a veteran of countless handover ceremonies, yet it's obvious the departure of every R8 is a special occasion. I'm half-expecting an awkward moment when I look into the cockpit to find the classic open-gate manual

gearlever absent, omitted in 'some terrible mistake' in the order process, but much to my relief, a knurled alloy lever is sprouting from the transmission tunnel. Good lads.

It's a happy geographical twist of fate that the route back from Neckarsulm to Calais can take you via Hockenheim, the Nürburgring, Spa and Zolder with minimal deviation from the quickest route. So in what feels like one of those 'If Carlsberg did...' adverts, Dean and I nose out into the late afternoon traffic and head for an appointment with several celebratory Bitburgers, a steak-on-a-stone supper at the Pistenklause and a good night's sleep in Nürburg's Hotel am Tiergarten. But not before stopping at Hockenheim, for no other reason than the fact that even dormant racetracks are cool places to hang out. We also stop and pay our



**Above:** 150mph on the Autobahn – not that Meaden was looking at the speedo...

**'A de-restricted Autobahn certainly makes running-in more fun than I remember'**

respects to Jim Clark at the location of his fatal crash on the fearsome old circuit in 1968. It's a tranquil spot and a poignant reminder of how cruel our sport can be.

Back on the move, I'm at pains to follow the strict running-in instructions to the letter, so with Lugert's words still ringing in my ears I do my best not to exceed 6000rpm. In sixth gear, I'm a bit busy looking out of the windscreen to jot down what this equates to in mph, but Dean got the money shot for me (see left). A de-restricted Autobahn certainly makes running-in more fun than I remember.

The next day dawns in classic Eifel fashion, but the wintry weather can't take the shine off another great day's driving. First we take on the roads that criss-cross the countryside surrounding the Ring, where I diligently check the ESP

button is fully functional. Then it's a cross-country dash to Spa for a lap of the jaw-dropping old GP circuit and a compulsory visit to the Masta Friterie for a portion of chips and a moment to reflect on how Porsche 917s used to come by here flat-out, having skittered through the Masta Kink without a lift.

It doesn't take long to get from Spa to Zolder. Tucked amongst pine trees on the edge of the motorway, Zolder is a challenging, old-school and slightly scruffy circuit. Like Hockenheim, the Ring and Spa, there's nothing to see on track. Unfortunately we can't find the memorial to Gilles Villeneuve either, but in the process of googling for any info on its whereabouts I find some classic shots of the French-Canadian holding his Ferrari F1 car at an absurd slip angle. These seem a far more appropriate way

of remembering him, so Smith and I leave Zolder and return to Blighty.

Some weeks later and with more than 2000 miles already under its wheels, the R8 is well run-in and so far exceeding my expectations. Sadly it's also now wearing British registration plates instead of the temporary German import items it's allowed to wear for a maximum of 14 days post-delivery. It's far too soon to be thinking about the day Audi will come to collect it, but I already know that when the moment arrives they'll have to prise the key from my cold, dead hand with a crowbar. ☒

**Richard Meaden**  
(@DickieMeaden)

<b>Date acquired</b>	March 2014
<b>Total mileage</b>	2115
<b>Mileage this month</b>	2044
<b>Costs this month</b>	£0
<b>mpg this month</b>	18.8



## Mazda MX-5 1.8i

Tomalin's suspension upgrades continue as Bilstein dampers join the recently fitted Eibach springs



**Left:** back in the workshop, this time to have Bilstein dampers (above) fitted. **Below:** Bilsteins work well with Eibach springs previously installed. **Bottom:** yellow Bilsteins just visible



**S** STEVE AND PETE at my local garage thought I was mad – and it was hard to disagree. A couple of months earlier they'd fitted a set of Eibach springs to the MX-5. Four hours' labour at £40 an hour plus VAT. And now here I was again with a set of Bilstein dampers. Not that they were complaining, but why on earth hadn't I had the springs and dampers fitted at the same time?

Good question. I'd reckoned it would be useful to gauge the effects of the shorter, stiffer Eibach Pro-Kit springs in isolation. And to a certain extent, it was. They'd lowered the comically tall ride height as I'd wanted, and although I now had to be slightly warier of speed bumps, the ride was pleasingly beefy without being crashingly stiff.

However, at speed over humps

**'Where the MX-5 was slightly loose and spongy before, it's now muscular and tightly controlled'**

and through compressions it had become noticeably jouncy. The problem, of course, was that the original dampers were some way past their best. In the meantime the excellent chaps at Bilstein had offered me a set of B8 dampers, but even then I hesitated. Would the B8s make the ride even firmer and make the MX-5 marginal for everyday road driving? After much dithering I bit the bullet, forked out another £170 in labour charges, and on went the B8s.

What I've effectively had fitted is the Bilstein B12 Pro-Kit, which comprises the fixed-rate B8s and matched Eibach Pro-Kit springs, and retails for around £640. You can add around £150-200 to that for fitting,

provided you do the whole job in one go and not in instalments...

The benefits of having springs and dampers that were designed and developed to work together are immediately – and unsurprisingly – apparent. Where the MX-5 was slightly loose and spongy before, it's now muscular and tightly controlled. Turn-in is sharper; humps and compressions no longer catch it out. Yes, it's firmer than standard, but not jarringly so, and if there's the occasional judder over potholes, that simply points to a need for extra bracing in the bodyshell and floorpan (something else for the to-do list). Meanwhile the enhanced feeling of connection through the seat

encourages you to revel in the MX-5's inherent balance and chuckability.

It's at speed where the Bilstein/Eibach set-up excels. The faster you go, the more impressive the control. Dickie Meaden took the MX-5 for a spin around the local lanes while I gripped the edges of the passenger seat, and after driving at speeds and angles that surprised car and owner, he declared it 'a really sweet little thing'. That's good enough for me. **✘**

**Peter Tomalin**

<b>Date acquired</b>	April 2012
<b>Total mileage</b>	116,573
<b>Mileage this month</b>	490
<b>Costs this month</b>	see text
<b>mpg this month</b>	31.9

## Volkswagen Golf GTI

With our Golf in for repair, Duff tries a different one with a DSG gearbox

**O**UR GTI CAME back from last month's hot hatch spectacular with its dashboard aglow with warning lights. It was still driveable, but it had apparently lost its adaptive cruise control, electric parking brake and variable dampers, so it was obvious something had gone seriously wrong. Strangely, nobody admitted to having been driving it when it lit up like a winning slot machine. Anyway, as a very early UK car it's gone back to Volkswagen to get plugged into the diagnostic mothership.

The silver lining has been the chance to try another GTI, one without the Performance Pack but with the optional £1415 DSG gearbox, and on first impressions it's a surprisingly different car. Mostly this is down to the DSG. I know how easy it is to find yourself ticking the two-pedal option when you think about all those hours you'll spend sitting in traffic, but the GTI really is



better with the snick-shifting manual 'box. The twin-clutch is smooth and swaps its gears pretty much seamlessly, but it definitely lacks the involvement and tactile pleasure you get from changing gears yourself.

Losing the Performance Pack's extra 10bhp doesn't have a noticeable effect on straight-line pace (the standard car shares the 258lb ft peak torque figure of the PP model). In fact the DSG's quicker responses mean it feels slightly quicker when called on for short-

notice overtaking, and it's fair to say the 217bhp GTI doesn't feel any slower in the real world than more powerful rivals like the Focus ST. Not having the PP's limited-slip diff does reduce front-end bite in longer corners, but you really have to press on to notice much of a difference.

The substitute car also lacks the adaptive dampers of our Fast Fleeter, and although the passive arrangement is considerably softer than the switchable system is in Sport mode, it's well suited to

dealing with the vagaries of rougher British tarmac. Indeed, at risk of sounding like a Luddite, I'm starting to prefer a well-judged compromise set-up rather than having to fiddle between modes to suit differing conditions. ❌

**Mike Duff**

<b>Date acquired</b>	January 2014
<b>Total mileage</b>	3998
<b>Mileage this month</b>	2200
<b>Costs this month</b>	£0
<b>mpg this month</b>	31.5

## Renaultsport Clio 200 Turbo

Our new road tester shares his thoughts on the paddleshift Clio

**A**S I AWAIT THE arrival of my own long-termer, I've been running the Clio that Dickie Meaden had been using until his R8 arrived. Much has already been said about the turbocharged 200, but one recent event seemed to sum up how we at *evo* feel about it. While we celebrated the best hot hatches ever over a week in north Wales last month – a test that included no fewer than three previous quick Clios – the new model

sat forlorn in the office car park.

In simple terms, the Clio 200 doesn't merit comparison with the very best hot hatches. For me, it isn't an issue of concept, but one of execution. Actually, the notion of a livewire front-driven hot hatch with a firecracker engine and a rapid-shifting twin-clutch gearbox is quite appealing in a full-commitment, Jean Ragnotti kind of way, but the 1.6-litre turbo engine isn't a firecracker and that twin-clutch gearbox isn't rapid-shifting.

So it doesn't feel much like a miniature tarmac rally car. The engine pulls quite hard, but it doesn't have an energetic top end that you feel any real urge to exploit. The paddleshift gearbox, meanwhile, has all the hardware to snap between gears like a junior GT-R, but the dramatic pause between



the right-hand paddle being flicked and torque eventually reconnecting simply drains all satisfaction away from the process. The gearbox does work better in Race mode, but you very quickly find yourself craving a proper manual.

The steering is another let-down for me, but look beyond that (and the frustrating drivetrain) and there's clearly a keen and agile chassis lurking beneath. It makes me think that the Clio could be vastly

improved with a little fine-tuning of the engine and gearbox.

Before the Clio leaves us we have a particularly stern test lined up for it – one last chance for it to redeem itself. More next month. ❌

**Dan Prosser** (@TheDanProsser)

<b>Date acquired</b>	August 2013
<b>Total mileage</b>	12,650
<b>Mileage this month</b>	1147
<b>Costs this month</b>	£0
<b>mpg this month</b>	30.2

**Renaultsport Clio 200 Turbo**

NEW ARRIVAL

# McLaren 12C Coupe

The Secret Supercar Owner gets his hard-top 12C and blasts it through Germany



**Below:** SSO chose LHD as this car will live on the Continent; optional carbon-ceramic brakes.

**Right:** mirror casings are lacquered carbon



**A**NTICIPATION IS A wonderful thing. It reminds all of us that we were once eight years old. And the anticipation of collecting a 616bhp supercar is hard to top if you're a hardcore petrolhead. So, on the morning I was to pick up my 12C Coupe from McLaren Stuttgart, I got up far too early, made a cup of coffee and opened the curtains. Looking up, the sky was perfectly blue: great. But looking down, the ground was white: crap. Despite a weather forecast that suggested temperatures well above freezing, frost was everywhere.

The team at McLaren Stuttgart were terrific. I had travelled to Germany the night before so I could get an early start on the day, as I had a drive of over 600 miles ahead of me. We had agreed to meet early on a Saturday morning in order to get the local bureaucracy out of the way so I could leave ahead of any traffic.

But until the roads thawed, I wasn't going anywhere.

Several hours later, the tarmac had turned black again and the grass had changed from white to green, so off I finally went. The outside temperature was still in the mid-single digits, though, so Winter mode was activated and the right-hand pedal was approached as if it was made of eggshells. The decision to opt for ceramic brakes with this 12C didn't seem like the wisest of choices, either!

The plan was to drive west towards Luxembourg, then up past the Nürburgring before heading north and east via Cologne and Hanover to my destination nearby. Of the total distance, around 200 miles would be on A- and B-roads, with the rest on Autobahns.

Most of the driving to the Ring was on back-roads, and these were soaked by heavy rain. But despite the cold, wet surfaces, the 12C never

put a foot wrong. With any new car, it takes me a while to bond and build up confidence, but with the Coupe that confidence built quickly. Smooth, measured inputs helped keep everything well under control and while progress was not rapid, it was consistent.

North of Cologne, my luck changed. The sun came out, the traffic lightened and the mercury moved upwards. From here to my final destination, it would be almost all Autobahn, and once the speed restrictions disappeared, it was over to the outside lane, traction control and gearbox mode in Track, rear wing activated, right foot down. Within seconds the first of the three digits on the metric speedometer was showing a '2', and with little traffic in front, I was able to hold this speed for about 15 minutes before running into a restricted zone again, where quickly having to drop down to 75mph demonstrated just how

**'The acceleration and braking are pretty much unmatched, and are the best of any car I have owned'**

good the big ceramic brakes are at rapidly slowing major progress. This pattern then repeated itself with each unrestricted section.

As I dug deeper into triple-digit territory, the fuel consumption went from a polite sipping to fraternity-style guzzling, although the upside to this was the Coupe getting several very positive comments and multiple requests for pictures during the frequent fuel stops.

By the end of the trip, I came to the following conclusions: The 12C Coupe's acceleration and braking are pretty much unmatched, and





are certainly the best of any car I have owned to date. High-speed stability is brilliant, and the rear wing makes a big difference in both keeping the car firmly planted and in slowing things down when you hit the brakes. And even when pushing hard on sometimes less-than-smooth surfaces, the 12C never loses its composure.

On our first day together we drove through four seasons, covered a huge distance and consumed a vast number of hydrocarbons, and yet I didn't feel tired or beaten up. It's a great car and I'm very much looking forward to more long-distance runs in it. ✕

**Secret Supercar Owner**  
(@SupercarOwner)

<b>Date acquired</b>	March 2014
<b>Total mileage</b>	4478
<b>Mileage this month</b>	901
<b>Costs this month</b>	£0
<b>mpg this month</b>	18.0



## Mercedes-Benz 190E 2.5-16

Fresh from its upgrades, Duff has given his old Merc another chance to shine on track

**S** SO AFTER LAST month's considerable investment, the 190E was supposedly fighting fit. But there was only one way to find out if it truly was – a trip to the Bedford Autodrome.

Previous visits to tracks with the 190E hadn't ended well. The first time it went to Bedford, its standard brakes disappeared after just three corners, while last year's trip to the Nürburgring blew up the self-levelling suspension. This principally led to the round of upgrades that have left the moths in my wallet blinking due to lack of cover.

My secret fear – which I can admit to now – was that the 2.5 would still feel out of its depth, despite the new tyres and suspension. It was one of the quickest saloons on the planet back in 1990, but these days there are mid-ranking diesels that can outrun it in a straight line. Is there any way something this old can ever feel on the pace?

My biggest concern had been with the new Eibach springs and Bilstein dampers. The ride height has dropped significantly, making me worry whether I'll ever be able to get a trolley jack under the car again. Despite that, the Merc remains impressively compliant on road, the new dampers keeping the body under tight control but still absorbing bumps well. But it felt like it would still be too soft for track use.

Not so. Bedford was sodden on the appointed day, limiting chassis loadings, but the 190E turned and changed direction with an intent it never possessed on its standard suspension, the whole car feeling sharper and more responsive. The new Dunlop Fast Response tyres coped well with the standing water, but conditions were still slippery enough to play with the car's handling balance. Despite the showboating clearly evident in the picture, the 190 isn't a natural

'It changed direction with an intent it never possessed on its standard suspension'

on-the-lockstops skid machine: the engine doesn't have the low-down torque to ride out high-speed drifting, and you have to be very quick with the low-g geared steering if attempting big angles.

That doesn't matter, though. What's brilliant is how benign it is when it reaches its limits, flags up its intentions and transitions into gentle, easily collected oversteer that shows the limits have been reached and breached.

It isn't the fastest car I've driven at Bedford – in fact it's probably embarrassingly close to being the slowest – but it is one of the most fun. If you've got an old car itch, then I'd urge you to scratch it. ✕

**Mike Duff**

<b>Date acquired</b>	May 2012
<b>Total mileage</b>	160,047
<b>Mileage this month</b>	156
<b>Costs this month</b>	£0
<b>mpg this month</b>	15.6

## Porsche 911 3.0 SC

A professional detailing transforms the SC's looks

**S**OME OFFICE WAGS have accused me of 'doing a Harry' this month. Why? I've had the SC detailed and they believe this will lead to a sale. There's no chance of that – not unless a tidy 996 GT3 RS (with blue stripes) comes along and I win the lottery.

Richard Tipper of Perfection Valet (@perfectionvalet) carried out the work, something he's been badgering me about for ages. I was sceptical about what the effect might be, despite another Tipper convert, Dickie Meaden, saying I'd 'be amazed by the results'. I was also a little nervous of a professional detailing because I bought the car for its mechanical strength and not its aesthetic perfection. That and the fear of Tipper finding 15 different 911s underneath. And possibly a VW Beetle

At 8.30am on a sunny spring day, Tipper began his Full Enhancement Detail, which cost £500 for the SC (although prices can vary depending on the work carried out and the treatments used). The SC went up on a jack to expose its arches and engine, and a degreaser was applied. I took the opportunity to take a deep breath and have a look underneath.

No Beetle under there. Phew.

Tipper used a gentle degreaser on the wheels, as original Fuchs items can be sensitive to some cleaners. He also noted that my wheels had never been repainted or restored, which is rare these days but did mean the original satin finish on the inner section would need careful cleaning so that the finish didn't buff out. A non-gloss enhancing polish was applied to the inners, and a gentle metal polish on the outers, and the wheels were done.

Next up was a clay bar treatment on the paint, which removes sap, carbon deposits and tar. It's very useful on 911s, where these 'fallouts' bake onto the paint, especially at the rear where the engine is. 'A clay bar is a safe way of removing anything protruding from the paint and making surfaces smooth,' explained Tipper. 'That then allows you to get maximum effect from polish.'

Nothing was spared in the valet. The leather of the seats has taken on a wonderful suppleness after Tipper used a cleaner to open the pores in the hide, then simply used a cloth to 'pull' the dirt out of the surface. The leather was then resealed and a cream applied to give a suppleness



**Above:** clay bar brightened paint. **Below:** wheels were gently degreased; sap-free rear



more akin to new seats. The glass, meanwhile, got a full polish and Tipper explained that I wouldn't need the wipers above 40mph. I didn't believe him. Then it rained on the way home. And he was right.

On that drive home, I'll admit to experiencing a deep sense of pride and satisfaction despite my early scepticism. My 911 has given me so much joy that it felt nice to 'give something back'. I appreciate that this introduces an anthropomorphic

element to the proceedings – and again my inner cynic is having a freak-out – but it feels that a little bit of TLC has revealed even more of the car's beguiling character.

Am I going to sell it? Am I heck. ✖  
**Nick Trott** (@evoNickTrott)

<b>Date acquired</b>	March 2013
<b>Total mileage</b>	89,004
<b>Mileage this month</b>	396
<b>Costs this month</b>	£500
<b>mpg this month</b>	n/a

## BMW M6 Gran Coupe

Trott remains concerned at the GC's thirst for oil

**I** I'VE POURED ANOTHER £18.99 litre of Castrol Edge oil into the M6 this month, making it four litres in six months and 7500 miles. BMW seems relaxed about this, but I'm nervous. There are no outward signs that the engine is poorly – its performance gets stronger every day – but that's £80 in oil now and it makes me wonder what's going on inside the V8.

Scouring M forums, I couldn't find a consistent pattern. Some have reported similar consumption to mine, while others reach 5000 miles on one top-up. If you've got an M5 or M6, I'm keen to hear from you. Email

me at nickt@evo.co.uk

In other news, it struck me the other day that I've never seen another M6 Gran Coupe on the road in the UK. Indeed, I've not seen another petrol GC on the roads: just a fistful of 640ds. That's brilliant if you desire exclusivity, but financially catastrophic if you've bought an M6 GC new. With one month left before my car goes back to BMW, I've been looking at used values, and those with a similar spec and new price are beginning to hover around £72,000. That's a massive £46k in depreciation in just one year and with no sign that prices are settling,



**Left:** the M6's engine bay has made an unlikely abode for a rodent

The latest M5 seems to be suffering the same fate, with the only recent M-car resisting the depreciation plunge being the wonderful 1M. Are dealers offering big discounts on new M5s and M6s, thus affecting residuals, or are customers just not interested in the new turbo M-cars? Again, email me with your thoughts.

Finally, a small rodent has apparently decided to make a home under the M6's bonnet. Discovered

during the oil top-up, I first spotted what looked like a nice collection of mixed nuts stored in the top of the suspension turret, then noticed a nibbled area of soundproofing material. On the plus side, the rodent's removal of weight from a key area has significantly improved the M6's turn-in and agility (although I am writing this on April 1st...). ✖

**Nick Trott** (@evoNickTrott)

<b>Date acquired</b>	September 2013
<b>Total mileage</b>	7566
<b>Mileage this month</b>	315
<b>Costs this month</b>	£18.99
<b>mpg this month</b>	20.1

# EXPERIENCE THE POWER

Akrapovič exhaust systems



## RS 4 Avant

**Audi** Hard facts: +7 HP, +12 Nm, -9 Kg

Enhance your car's performance with an Akrapovič exhaust system. More horsepower, more torque, reduced weight. And that unmistakable Akrapovič sound. Akrapovič exhaust systems are also available for performance models from the following brands - Abarth, Audi, BMW, Chevrolet, Ferrari, Ford, Lamborghini, Mercedes-Benz AMG, MINI, Mitsubishi, Nissan, Porsche, Renault and VW.

Akrapovič systems are available in titanium and stainless steel with exquisite carbon fibre or titanium tailpipes. On many models, you can add a Wireless Kit for adjustable sound.

**PERON**  
ENGINEERING PERFECTION

T: 0845 68 09 342 | [info@peron-automotive.co.uk](mailto:info@peron-automotive.co.uk) | [www.peron-automotive.co.uk](http://www.peron-automotive.co.uk)



**AKRAPOVIČ**

[www.akrapovic.com](http://www.akrapovic.com)



# BECOME A RACING DRIVER WITH GINETTA

From **£27,250<sup>+VAT</sup>**

Take the race out of the City, show your competitive edge by joining the Ginetta Racing Drivers Club.

Once a Ginetta Racing Drivers Club member, you will be supported through getting your race licence before you embark on an action packed year of track days, four race weekends and Ginetta lifestyle events, including a road trip to the famous 24 Hours of Le Mans.

Think you have what it takes? Test drive Ginetta's race car for the road at one of the UK's most prestigious circuits. Contact us on **0113 385 4171** or email **GRDC@ginetta.com** to book.

**GINETTA**

**CALL** 0113 385 4171 | **EMAIL** GRDC@ginetta.com | **WEB** ginetta.com/runwild

 [gnettacars](#)  [gnettacars](#) Photography by Chris Wallbank

In association with



# Jaguar F-type V6 S

It's glowing reports all round from F-type-owning *evo* readers, while Bovingdon needs some new rear tyres

**A** COUPLE OF months ago, I mentioned that the F-type is still a rare sight on UK roads. Since then I've only seen three more in the wild. But it seems they are being bought and enjoyed, and by *evo* readers, too. Paul Burton traded in his 997 for a V8 S, rather than an Aston V8 Vantage or a 991. The reason? 'It put a grin on my face like you wouldn't believe.'

A friend of his has since got out of a Vantage and into an F-type, too. Del R has the twin to my car – a Salsa Red V6 S on black alloys to go alongside his Mini Cooper S. Del says the V6 S 'puts a permanent smile on my face'. Are you spotting a trend?

It's fair to say that the F-type is a feel-good car. The crackly exhaust might seem a bit contrived but it's wickedly naughty and appeals to the teenager in all of us, while the air vents that rise from the dash are silly but sort of cool, too. Porsche would never do something like that, which I guess is the point. That the V6 S backs up the knowing frivolity of

some of its design touches with real substance helps, of course.

As the miles rack up, this car continues to impress more than frustrate. The ride is pretty jagged at low speeds and the ultimate body control just isn't in the same league as, say, a Boxster S's. It doesn't have the absolute precision and focus, nor is the 3-litre supercharged V6 as sweet-revving (masked to some extent by the howling exhaust) as the Porsche flat-six. But it keeps on putting a smile on my face, too – so much so that the rear tyres are on their wear markers after 7000 miles.

I think this could be a recurring theme. If you own an F-type, get in touch. Maybe we could organise a group discount on rear tyres... ✕

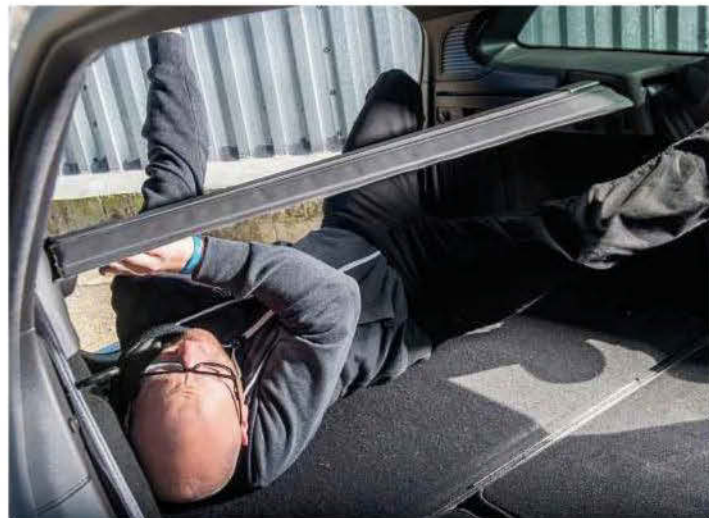
**Jethro Bovingdon**  
(@JethroBovingdon)

<b>Date acquired</b>	September 2013
<b>Total mileage</b>	12,054
<b>Mileage this month</b>	1419
<b>Costs this month</b>	£0
<b>mpg this month</b>	25.3



# Ford Focus ST Estate

Snapper Smith's patience is being sorely tested by the simple matter of removing a luggage cover



**O** N THE BACK of the drier weather we've had in the East Midlands of late, I'm pleased to report that the ST's keenness to spin its wheels at the faintest whiff of boost has been reduced tenfold.

In less positive news, I've noticed the offside mirror glass has a few rust spots, which I presume must be flecks of hot metal that landed on it whilst the car was in the body shop being repaired – not a disaster, but it will need sorting at some point.

Meanwhile, I'm going to need a trip to an anger management clinic soon due to repeatedly removing and refitting the ST's retractable luggage cover. Never have the workings of such a mundane item caused me so much pain and rage.

It seems simple at first – just push the sliders on the telescopic cassette towards each other and

then move one end up and out of the fixture. Sounds easy, doesn't it?

Well, it's bloody hard, as you have to be built like Schwarzenegger, with extendable arms like Inspector Gadget and a gymnast's flexibility. It's almost as if no one from Ford actually tried to remove the thing when designing and testing the car, so genuinely tricky is it to extract (or refit, which is even harder).

I had thought of leaving it at home, but it's handy to conceal anything I leave in the boot from prying eyes and so I have to remove and refit it almost daily. It's put me close to a nervous breakdown. ✕

**Dean Smith** (@evoDeanSmith)

<b>Date acquired</b>	August 2013
<b>Total mileage</b>	16,991
<b>Mileage this month</b>	1391
<b>Costs this month</b>	£0
<b>mpg this month</b>	26.9



## Peugeot 208 GTI

Riley finds his motoring nirvana in Milton Keynes...

**I** IT DIDN'T LOOK as if this month was going to give me much to report about my 208 GTI, but I'm happy to say that events ensured otherwise.

It was a month where several trips abroad to various video shoots meant lots of shuttling along the M1 and M25 to Heathrow and back. That's boring, monotonous and thrill-free no matter what car you're in, and when you're in a hot hatch with proper sporting credentials, you can add a relative lack of comfort compared to supersaloon cruisers to that list of grievances.

After a fair old while of doing nothing more than this dirge in the 208, I started to forget why the GTI badge on its tailgate was there and just what the car was capable of. Then, by sheer chance, an opportunity presented itself. I'd given a friend of mine a lift one night, and on my route home I had to cross from one side of Milton Keynes to the other. Doesn't sound great, right?

Wrong. With MK's 'grid' road system practically deserted, I was able to stretch the 208's legs and get myself into a rhythm. I fired myself between the many

roundabouts with a focused, almost mesmerised precision: build up speed, brake for roundabout, flick left-right-left around it, build up the speed again and repeat pretty much as many times as you like. And with all the roads subject to nothing less than the national speed limit, I was able to make good, safe, legal progress through the amply street-lit evening.

That all-round examination of what the 208 can do was a timely reminder of its abilities. Its 197bhp was the perfect amount of grunt for such short, sharp bursts, its brakes inspired confidence and its nimbleness and agility helped it negotiate each roundabout with gusto. When I returned to the office, I shared the experience with **evo** sub editor and MK native Dan McCalla, who fully agreed that the town's roads, when quiet, provide a superb legal motoring high.

Who'd have thought a night in Milton Keynes could be such fun? ❧

**Sam Riley** (@samgriley)

<b>Date acquired</b>	September 2013
<b>Total mileage</b>	17,287
<b>Mileage this month</b>	1393
<b>Costs this month</b>	£0
<b>mpg this month</b>	37.2

## Toyota GT86

..just as Catchpole discovers similar roundabout joys

**I** I STAYED WITH a lovely family in France while on a job a few weeks ago. On the Saturday they cooked a delicious meal and opened an equally wonderful bottle of red wine (which no doubt cost a fraction of what it would in the UK). Both the photographer (who was Spanish) and I commented on how jolly nice the wine was and a surprisingly in-depth conversation with the family then ensued about various grape varieties, regions and even specific vineyards. It was fascinating and I played no part in the discussion whatsoever, instead just listening in slight awe at the amount of knowledge they had on the subject.

Which brings me in a roundabout sort of way to the subject of roundabouts. You see, although I don't know much about wine, living near Milton Keynes and driving the GT86 has made me into something of a roundabout connoisseur (after this month in his 208 it sounds like Sam Riley will soon be one, too). In the same way that other people appreciate the exceptionality of a 2005 red Burgundy (I looked that up), I happen to enjoy the particularly fine seam of *rond-points* the A509 has to offer. As

a starter you're looking for good sightlines, a pleasant radius and a surface consistent in its grip (or lack thereof). Blend these together in varying quantities, throw in the odd undulation, camber or surface soaking and voila: myriad islands of handling joy to be explored.

In some ways, the GT86 actually needs the openness of an empty early morning roundabout for you to really enjoy the chassis. There simply isn't the power from the flat-four to adopt a 'slow-in, fast-out' method and just poke the car sideways with the throttle on the exit of a corner (which is the only safe option when your view through a corner is blocked by hedges or trees). Instead, you have to carry speed in; get the front end slipping a bit as you turn in and you can then balance the car on the throttle easily and enjoyably. A good, well-sighted roundabout allows you to do this, and at what frequently feels like just the right speed, too. ❧

**Henry Catchpole**  
(@HenryCatchpole)

<b>Date acquired</b>	May 2013
<b>Total mileage</b>	13,014
<b>Mileage this month</b>	1012
<b>Costs this month</b>	£0
<b>mpg this month</b>	30.4



# UNLEASH THE POTENTIAL



ALIVE TUNING

Engine tuning packages from only £295+vat. Worldwide service and dealer network. Find out more by visiting us online, or just give us a call. Feel the difference, Feel Alive!

[www.alivetuning.com](http://www.alivetuning.com)

+44 (0)1472 812900

@AliveTuning

[facebook.com/AliveTuning](https://facebook.com/AliveTuning)

# Chelsea Truck Co.

LONDON SW10

WWW.CHELSEATRUCKCOMPANY.COM



## NEW LAND ROVER DEFENDER CHELSEA WIDE TRACK

2.2 DEISEL XS90 2DR Manual - £39,875 | XS110 4DR Manual - £43,875

**Wide Track Specification:** 1948 Defend Alloy Wheels 8x18" in Satin Black, Front & Rear Wide Wings with Integrated Vents & Bolt Apertures, X-Lander Front Grille & Headlamp Surrounds, Bonnet & Side Vents with Mesh. Front Sports GTB Seats & Rear Folding Seats in Quilted & Perforated Leather, Centre Glove Box & Instrument Binnacle in Quilted & Perforated Leather, Vented Foot Pedals in Machined Aluminium, Door Entry Sill Plates in Stainless Steel, Steering Wheel - Billet & Leather, Rev Counter Facia in Red, Churchill Time Clock & KAHN Vehicle Branding. Image shown with optional: Mondial 9x20" Front Bumper Replacement inc. Bumper Lights & Sump Guard.



## NEW CHELSEA JEEP CJ300

2DR Automatic - £31,875 | 4DR Automatic - £33,875

**CJ300 Specification:** Jeep 1941 Alloy Wheels 7.5x17" in Satin Black, 4 Slot Chelsea Truck Company Grille, Front Grille Industrial Mesh, Side Wing Blades in Carbon Finish, Fuel Filler Cap in Satin Black, Chelsea Truck Company Spare Wheel Cover, Front & Rear Seats in Quilted & Perforated Leather with Matching Stitching, Coloured Dials, Door Entry Sill Plates in Stainless Steel, Floor Mats in Toughened Rubber, Brake Calipers in Liquid Red, Smoked Headlamps, Side Wing Blades in Carbon Finish & KAHN Vehicle Branding. Also Available in 3.6 Petrol Derivative at an extra cost. Image shown with optional: Diamond Bright LED Headlamps, Front Sports GTB Racing seats & All Terrain tyres.

All prices exclude Road Fund Licence and a First Registration Fee at the current rate. Government Charge. UK vehicles. LHD vehicles available at an extra cost.

HQ Kahn Laboratories: 240 Canal Road, Bradford, BD1 4SX. T: +44 (0) 1274 749 999  
A. Kahn Boutique: 385/389 Kings Road, Chelsea, London, SW10 0LR. T: +44 (0) 207 751 4555  
[www.chelseatruckcompany.com](http://www.chelseatruckcompany.com) | [www.kahndesign.com](http://www.kahndesign.com) | [kahn@kahndesign.com](mailto:kahn@kahndesign.com)





# Market Watch

Knowledge

Insights into the used-car market



## Market watch

# THE NEXT BIG THING?

Will the Ferrari 360 Modena follow the F355 with rising prices?

**T**HERE CAN'T BE an *evo* reader out there who, if they haven't already realised a dream of Ferrari ownership, isn't at least considering ways of making it come true. The genuine classic models (250 GTO, Daytona, original California Spider, Dino 246, etc) are now well and truly out of reach for all but the super-rich, and they're hardly the sort of cars you could live with on a daily basis in the modern world anyway. But that can't be said for the F355, which was probably the first two-seat Ferrari that could genuinely be considered a prospect as regular transport.

Around five years ago, there was a relative abundance of 355s in the low- to mid-£30,000s, but now the car has acquired 'modern classic' status, prices have edged up to the £50,000 mark and beyond. This should be taken as a lesson, because it's currently possible to buy its far better successor, the 360 Modena, for below £40,000.

The 360 (pictured) was lighter, quicker, better engineered and generally more reliable than the 355 and now looks like an absolute bargain. Prices start in the mid-30s for cash, but between £50,000 and £60,000 will get you an excellent coupe or a very good Spider. There's also a good spread of both F1 paddleshift cars and manuals in the market (I reckon the latter will become considerably more sought after). Trackday enthusiasts will appreciate the even-more-focused limited-edition Challenge Stradale, but these are now well into six figures and beyond.

My target, however, would be a 'cooking' 2002/2003 Modena for £50k or less, preferably in Tour de France Blue. Surely there can be few more enjoyable investments?

**Simon de Burton**



## Auction watch

A host of classics go under the hammer at Barons' April auction at Sandown Park

Barons auction house is holding a classic car sale on April 29. Based at its usual Sandown Park location, there will be a wide selection of mainly 1960, '70s and '80s cars, plus a sprinkling of more modern machinery.

One classic that really stands out is the 1973 Ford Escort Mexico. It's not a replica – the genuine AVO (Advanced Vehicle Operations) bodysell is certified – and having been recently restored to 'better than new' condition, it's in perfect running order. The original 1600 Crossflow engine has been fettled, now running a spikier camshaft and twin Weber carburettors, and there are some competition-style seats, harnesses and a roll-cage. MK1 Mexicos of this calibre are few and far between, and like all Escorts of this age it will be subject to high demand from historic rallying circles, hence the guide price of £17k-20k.

Next up is something a lot more technically advanced – a 2002 Mercedes CL500. Just as the S-class Coupe is now, the CL was once Mercedes' flagship coupe, boasting huge amounts of equipment as standard. The 5.5-litre V8 engine's 302bhp might sound a little tame by today's standards, but this CL will still comfortably cruise up to its 155mph limiter. This was also the car that debuted Mercedes' Active Body Control system, which eliminates body roll. This black CL500 shows 91,000 miles and has a full service history. If you're feeling brave, it could well be yours for the £3000-4000 estimate.

Finally, a real curio at the sale is a rather rare British sports car, the Jowett Jupiter. This unusual-looking 1950s roadster was the last production car you could buy that featured a naturally aspirated flat-four engine up front and a rear-wheel-drive chassis – until the GT86 came along, that is. It's expected to sell for £24,000-27,000.

**Matthew Hayward** (@evoMatthew)



**Top:** restored 1973 Escort Mexico will be in big demand.  
**Above:** tech-packed 2002 CL500 could be a bargain

# Market Watch

Knowledge

Insights into the used-car market

## Ask the expert



**Q** I read your recent 'Future Icons' article (evo 188) with great interest, particularly because it featured the BMW 1M Coupe. Like Richard Meaden, I also cannot 'get my head around the fact they're going for very close to the same money that they did new'.

Whilst 1M values are currently static, I'm concerned about the arrival of the M2 in 2015. I don't want to pay top dollar for a 1M and then two years later it drops considerably in value. I assume the M2 will not be a limited edition, which may help keep 1M prices high.

Other cars I'm considering are the E92 M3, A45 AMG and Golf GTI.

**Gordon Fryer**

**A** The A45 and the Golf are guaranteed to depreciate most because, while they're great cars in their own right,

they don't have such an abundance of the key ingredient that makes the 1M stand out – character. The low number released to the UK should also help residuals, while the volume-produced M2 should be different enough to help the 1M retain its 'special' status.

As for the E92 M3, the best way to protect your money in one of those is to start saving for a GTS. Refined Marques in Cannes has one with zero miles on the clock – for €220,000... **SdB**

**Email your question to experts@evo.co.uk**

## Trader chat



**Stuart Nicks, Racing Green TVR**  
racinggreentvr.com

'With the word on the street being that TVR could soon be back in business, interest in the marque seems to be gaining extra momentum. From what we see in the showroom, Griffiths are continuing to hold their value, while prices for the Sagaris [pictured] are going through the roof. People now recognise that this was the best engineered of all TVRs and is a pure drivers' car. Values are now north of £50,000 and we are keen to buy as many as we can find.

'Having said that, I would only recommend buying a TVR if it has an excellent maintenance history and evidence of good provenance. There are plenty of five- or six-owner cars out there, and that should not put anyone off – so long as they have been properly maintained.

'The Cerbera remains the entry-level model, and they really represent value. We have a 400 V8 on offer with around 60,000 miles on the clock, and it's up for £12,995. The only more affordable TVRs are the earlier, wedge-shaped cars. But we don't get involved with those because good ones are hard to find, values are relatively low and, since we offer every car with a 12-month warranty, they are not really financially viable.'

## Just looking

The pick of the classifieds this month



### Bristol Fighter

£159,950

Top 555, Rutland

www.top555.co.uk

01572 774830

Of the ten Bristol Fighters ever made, just six reside in the UK, apparently, and this was the last one built. A mere 1100 miles have passed under its unassuming alloys, while its engine has run for 62.8 hours, according to the amusing ceiling-mounted dial.

With a Dodge Viper-derived 525bhp 8-litre V10 driving the rear wheels through a six-speed manual gearbox, it seems a world away from the turbocharged, paddleshifted

GTs we're accustomed to now. Yet it's a properly cossetting car, its intergalactic gearing (70mph registers less than 2000rpm) and a full-size spare wheel both providing hints of real everyday useability – a great juxtaposition with completely off-the-wall styling and a 210mph top speed.

Despite hen's-tooth rarity, this one is £75,000 less than it was new in 2010, too. **Stephen Dobie (@evoStephenDobie)**

### Porsche 911 Super Sport Targa

£32,995

Gmund Cars, North Yorkshire

gmundcars.com

01423 797989



The new 911 Targa has just launched, and helping it shake off the naffness of its recent predecessors are retro B-pillars that ape those of this 1988 Targa, when the flip-lid 911 was perhaps at its very coolest.

Unlike the 991 Targa, which is four-wheel-drive only, this is a rear-drive 3.2 Carrera. The engine produces 231bhp, and as a later model it is mated to the desirable Getrag G50 five-speed manual gearbox.

This particular Targa is also a Super Sport, gaining the contemporary Turbo's body kit, whale-tale wing, brakes and suspension. The 14mm ride-height drop and a wider track are set off perfectly by those lovely Fuchs alloys.

With a smidge under 85,000 miles on the clock and a full service history, this Targa appears to have been kept well. And all this for £5000 less than a new Boxster... **SD**

## Fantasy garage: £100,000 challenge

Three shamelessly thirsty V8s for less than £100,000 (with a few grand left over for fuel) – all from the listings at [forsale.evo.co.uk](http://forsale.evo.co.uk)



**1**  
**Jensen SV8**  
£29,500

Jensen's last hurrah is a rarity, with just 20 completed cars leaving the Speke factory. Mustang engine is tough, looks are staid.



**2**  
**TVR Griffith**  
£15,995

With the Griff now established as a modern classic, this one could represent a bargain. 'Crystal Topaz' paint is an acquired taste, though.



**3**  
**Superformance AC Cobra**  
£49,995

Superformance is sanctioned by Shelby to produce 'continuation' Cobras – this one has done just 300 miles from new.

# Celebrating our 60<sup>th</sup> anniversary

60<sup>th</sup>

ANNIVERSARY

1954



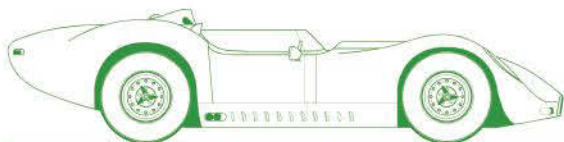
## We are privileged to announce the production of 10 Lister Jaguar Knobblys.

Built using the original chassis jig and body buck, at the original factory and overseen by the original engineers. Powered by the iconic Jaguar 3.8 Litre D Type Engine with Wide Angle Cylinder Head and fitted with the Jaguar D Type Gearbox, all of which have been manufactured from scratch, to full specification. Ready for road use or to be entered into any Motor Racing Legends event. Orders are now being taken direct from the Lister Motor Company.

Request a brochure direct from the Lister Motor Company today, please call: **0800 001 4998** or go online: [www.listercars.com](http://www.listercars.com)



RACE RETRO 2014  
 Quentin Willson & Sir Stirling Moss  
[www.youtube.com/listercars](http://www.youtube.com/listercars)



£249,000 + TAX



LISTER MOTOR COMPANY LTD

- Lister Jaguar Ltd
- Brian Lister (Light Engineering) Ltd
- Lister Storm Racing Ltd
- Lister Storm LMP Ltd
- Lister Heritage Ltd

George Lister Engineering Ltd  
 Queens Business Park  
 Wilbraham Road  
 Fulbourn  
 Cambridge  
 CB21 5GT



# Brand New VW T2 Campers from Danbury



FROM  
£33,849



Spacious 4 seat layout - full length kitchen, with a 3/4 width rack & roll bed!



Spacious 5 seat layout with a full width bed!

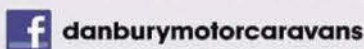
**Production ending this year!**

For more information visit our website, or call us today to arrange a visit to our Bristol showroom.

**DanburyMotorcaravans.com Tel: 01454 310000**



BUY WITH CONFIDENCE: WE ARE TRADING STANDARDS APPROVED



**Danbury  
MotorCaravans**

Showroom visits by appointment Mon to Fri 9am-5pm and Saturdays 9am-1pm. Danbury Motorcaravans, Armstrong Way, Yate, Bristol BS37 5NG. All factory visits by appointment only please.

## HIGH PERFORMANCE FINANCE PACKAGES

...for the purchase of Performance,  
Prestige and Classic Cars.

**SUPERCAR  
FINANCE**

0845 094 0911

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





**Lamborghini Diablo**  
Magnesium Wheels Jota Edition Unique Limited Edition 21,875 miles 1996 **£300,000**



**Lamborghini Murcielago**  
LHD Titanium Hercules Alloys Yellow Brake Calipers Lifting Gear 12,000 miles 2008 **£134,990**



**Lamborghini Diablo**  
VT Wheels, SE30 limited edition 24,000 miles 1996 **£129,990**



**Lamborghini Murcielago Roadster**  
Lifting Gear Egear 9,000 miles 2005 **£114,990**



**Lamborghini Murcielago V12 Coupe HIGH SPEC**  
Hercules Alloys Egear Lifting Gear 17,000 miles 2005 **£106,990**



**Lamborghini Gallardo**  
Lifting Gear Branding Pack 7,000 miles 2011 **£85,000+ VAT**



**Lamborghini Gallardo**  
Lifting Gear Reverse Camera Egear 21,000 miles 2008 **£79,990**



**Lamborghini stock wanted**  
Best prices paid  
Collection from anywhere in Europe



**Lamborghini Gallardo**  
Egear Lifting Gear Calisto Alloys 28,000 miles 2008 **£77,490**



**Lamborghini Gallardo**  
Branding Pack Matt Black Cassiopea Alloys Sportivo Interior 11,000 miles 2007 **£74,990**



**Lamborghini Gallardo**  
LHD Reverse Camera Calisto Alloys 8,000 miles 2009 **£71,990**



**Lamborghini Gallardo V10 Coupe LHD HIGH SPEC**  
Lifting Gear, Clear Engine Bay Cover, Yellow Brake Calipers, 14,000 miles, 2005, **£59,990**



**Lamborghini Gallardo LP570 Superleggera**  
Ceramic Brakes Carbon Fibre Driving Zone Carbon Racing Seats 12,000 miles 2010 **£124,990**



**Lamborghini Gallardo LP550**  
Calisto Alloys Reverse Camera Egear Lifting Gear 7,000 miles 2011 **£99,990**



**Lamborghini Gallardo**  
Lifting Gear Branding Pack Egear 22,000 miles 2008 **£78,490**

**BUYING OR SELLING LAMBORGHINI AUTOMOBILE'S**

TEL: +44 7782 220784

(Viewing by appointment only) Address: VVS UK Ltd Verralls Garage Cranbrook Common Kent TN17 2AF

www.lamborhিনিbuyer.com Websites: www.justlamborghini.com

# Buying Guide

Knowledge

Your indispensable resource when buying used

## Mercedes-Benz CLK63 AMG 2006-2009

### Overview



The Black Series is the version we all remember, but even the 'regular' CLK63 had a stonking 481bhp V8 **Words:** Peter Tomalin

**T**HE CLK63 AMG is notable for several things – a spell as the safety car in F1, the fact that Jeremy Clarkson bought a Black Series and then spent most of the time moaning about it – but mostly because it was the first car to be powered by a completely bespoke AMG engine.

In the early 2000s, AMG decided that rather than put another supercharged or turbocharged twist on an existing Mercedes engine, it would lure former employee Bernd Ramler back from Porsche (where he had created the Carrera GT's wondrous V10) and set him to work on a completely new power unit. The result was the M156 – a naturally aspirated 6208cc V8 producing a walloping 481bhp and 464lb ft.

When it made its debut in the previously underwhelming CLK Coupe in 2006, it transformed a prissy car into something rather wonderful. The fact the visual clues were so subtle – a slightly more aggressive front bumper/chin spoiler, 18in five-spoke alloys, four oval tailpipes, a sliver of bootlid spoiler – made the performance (0-62mph in 4.6sec) all the more pleasing. There was even a Cabriolet version, which must have furrowed the brows of a few traffic-light Alonsos over the years. Underneath there was beefed-up suspension, fade-free composite brake discs at the front (regular iron items at the rear) and a seven-speed multi-mode automatic transmission with the option of manual shifting via chunky paddles.

In June 2007, the CLK spawned something altogether more devilish. The CLK63 AMG Black Series was thoroughly reworked, from its tuned 500bhp V8 and its additional oil coolers to its stiffer shell, uprated suspension, flared arches and rear diffuser. It was AMG's answer to Porsche's 911 GT3, came with a near £100k price tag and just 31 of the 700 built were sold in the UK.

Rarity has kept Black prices buoyant – you'll be lucky to find one for less than £60k – but the regular CLK63, with prices from £20k, looks very decent value. Find one that's been fastidiously maintained and bask in the sound and fury of that very special engine.

### Checkpoints

#### Engine

The M156 V8 developed a reputation for snapping head bolts, with occasionally catastrophic results if coolant got into the combustion chamber. Oliver Stoner of Hants-based Mercedes specialist Prestige Car Service says most engines have had the problematic bolts replaced, but it's important to be aware of the issue – the early symptoms are similar to head gasket failure. Also, listen for a tappety noise – common when the engine's cold, but if it continues it means the hydraulic lifters are sticking and potentially causing premature wear to the cam lobes. Replacing the lifters will cost a couple of grand at a specialist and more at a Mercedes dealership, but ignoring the signs is potentially a lot costlier. Many engines had their head bolts and lifters replaced with later, improved items under warranty. Other than these issues, Oliver says the M156 is largely trouble-free provided it has the scheduled 10,000-mile oil changes with the recommended Mobil 1.

automatic gearbox is generally a robust and reliable unit provided it's properly maintained. In this case, that means a fluid change at the recommended 37,500 miles, and at 40,000-mile intervals thereafter. A specialist like Prestige Car Service will charge around £180-200.

#### Suspension, steering, brakes

Like any hefty high-performance car, the CLK63 is heavy on its brakes, suspension and tyres, particularly if the ample performance is enjoyed to the full. Control arm bushes are particularly prone to wear, so listen for any clonks and rattles on the test-drive. The brakes are superb – but also very expensive (budget around £2k for front discs and pads). Unsurprisingly, a 63 gets through rear tyres pretty smartly. Check all four boots are matching and a premium brand – if the owner has skimped here, he's probably skimped elsewhere too.

#### Transmission

Although the CLK63 is a rare beast, its engine and transmission are used in many other recent AMG products and – as with the engine – the seven-speed

#### Body, interior, electrics

Some of the trim inside is a bit plasticky and easily scratched, but the general build quality is high, the sports seats are superb and electronic glitches are rare.



**1:** carbon-ceramic front discs are expensive to replace. **2:** engine should be reliable if serviced regularly. **3:** scratched plastics should be the only problem inside

## What we said

June 2006



'Driven gently it's easy to wonder what's so special about the 63. The steering is encouragingly weighted, but you don't sense there's a huge amount of feel or detailed feedback, and the chassis suggests that it has had to trade involvement for containment, with the emphasis on muscle-bound damping and plenty of grip to keep the abundantly potent V8 in check.

'When you work some lateral load through the chassis, it summons more feel and delivers a more detailed report from the front and rear contact patches. Normally when you disengage ESP on an AMG model it is never truly off-duty, which makes for frustrating and often ill-timed intervention. Not so in the CLK63. Now when you thumb the switch, the system is truly off.

'That's not the end of the story, though. Peeling away ESP reveals the next layer of defence: electronic traction control. While it effectively snuffs out your wildest drift fantasies, it also means you can drive the CLK to the edge of adhesion, and sometimes beyond.

'Brilliantly controlled and robustly built, the CLK63 has plenty of engineering integrity and charisma.' (evo 092)



Above: with 481bhp from its 6.2-litre V8, the CLK63 is a very rapid machine on fast roads



Above: quad exhausts were amongst the subtle AMG styling cues on the non-Black 63

## 'I bought one' Ken Price

'I bought my CLK – a September 2007 model with only 21,000 miles on the clock and full supplying dealer history – from Hofmann's of Henley in August 2011. It has nearly all the options – heated and cooling seats, digital TV, Harman Kardon hi-fi, glass roof, etcetera.

'Although the Merc initially felt sterile compared to the Maserati GranSport it replaced, it's an extremely subtle tool with immense power, as happy driving

to the shops in Auto Comfort mode as blasting along fast roads in Manual.

'The car has now done 31,000 miles and has been totally reliable. The maintenance costs are very reasonable – around £300 a year, though I supply my own Mobil 1 as it saves half the price Mercedes charges! I've only changed the front pads once – good quality pads, which meet or exceed OEM, cost around £75 – though it's now on the second set

of rear tyres, which seem to last about 7000 miles. Tax is now approaching £500, which is expensive, and of course if driven hard the fuel consumption is high. That said, on a motorway run, mid-20s can easily be achieved.

'If you want a subtle but very powerful car, with German build quality, surprisingly low maintenance costs and one of the all-time great V8s, then a CLK63 is amazing value for money.'

## In the classifieds



**2008 CLK63**  
69,973 miles Obsidian Black/black leather Ash Black wood trim Harman Kardon, etc FMBSH hamiltongrays.com

£18,950



**2007 CLK63**  
33,600 miles Obsidian Black/black leather 18in black AMG alloys Comand DVD/nav FMBSH romansofstalbens.co.uk

£29,995



**2008 Black Series**  
17,000 miles Left-hand drive Obsidian Black/red leather FMBSH Two owners statusautomotive.co.uk

£59,990

## The rivals

### BMW 650i

BMW's 4.8-litre V8 made 362bhp and a matching torque figure. 0-60 in 5.5sec and lots of toys. £20k buys you a very presentable '06/'07 Sport.

### Maserati GranSport

Not as everyday useable, but a special car with similar performance – 396bhp from its 4-litre V8 gives 0-60 in 4.8sec. £25k buys a low-miles '06/'07 example.

### Porsche 997 Carrera S

0-60 in 4.6sec and our 2004 eCoty winner. £20k buys an early ('04) model.

## Specification

### CLK63 AMG

(Black Series in brackets)

Engine V8, 6208cc

Max power 481bhp @ 6800rpm (500 @ 6800)

Max torque 464lb ft @ 5000rpm (464 @ 5250)

Transmission Seven-speed automatic, rear-wheel drive

Weight 1755kg (1760)

Power-to-weight 278bhp/ton (289)

0-62mph 4.6sec (claimed) (4.2)

Top speed 155mph (limited) (186)

Price new £65,215 (2006) (£99,517)

## Parts prices

(Prices supplied by Mercedes-Benz Cambridge, tyre prices from blackcircles.com. Prices include VAT but exclude fitting charges)

Tyres (each) £108.79 front, £184.38 rear (Michelin Pilot Sport 3)

Front pads (pair) £165.60

Front discs (pair) £1480.80

Front damper £169.20

Wheel £399.76

Exhaust £1905 (mid-section), £858 (rear)

Spark plugs (each) £10.32

## Servicing

(Prices supplied by prestigecarservice.co.uk, including VAT)

Every 10,000 miles, alternating minor and major services

Minor service (oil and filter, etc) £200

Major service (varies according to schedule) up to £600

## What to pay

Even the regular CLK63 is a rare sight in the classifieds, so you may have to be patient to find the right car. £20,000 is the realistic entry point, though we spotted one high-miler for £18,950. Top money for a low-mileage car with impeccable history is c£30k. The even scarcer Black Series still commands a massive premium – you'll be lucky to find one for less than £60k.

## Useful contacts

mbclub.co.uk

forums, advice, events

benzworld.org

forums, advice, classifieds

mbworld.org

US forums, advice

mercedes-amg.com

official AMG site

prestigecarservice.co.uk

servicing, tuning, parts

pistonheads.com

cars for sale, forums

forsale.evo.co.uk

cars for sale

# AlloyGator®

**Protect** your wheels from kerb damage

Tested at **MIRA**

**FITS WHEELS UP TO AND INCLUDING 21" ALLOYS**

**BEFORE** **AFTER**

**Auto EXPRESS PRODUCT OF THE YEAR 2013**

AVAILABLE IN VARIOUS COLOURS

**www.alloygator.com**

**'KERB THE GATOR NOT THE ALLOY!'**

© Alloy Gator Ltd. All rights reserved.

**specialised covers**

innovative tailored protection

## THE ULTIMATE IN CAR COVER PROTECTION.

INDOOR & OUTDOOR **CUSTOM MADE** CAR COVERS DESIGNED BY YOU.

prestige+  
STARTING FROM **£299**

**FULLY TAILORED. ANY MAKE. ANY MODEL.**

CALL OUR TEAM ON **01943 864 646**

VISIT OUR WEBSITE **specialisedcovers.com**

DISCOUNT CODE: **EVO-2014**

British Design & Manufacture

FOLLOW US

# C.QUARTZ®

Your car deserves the ultimate protection.

## Unsurpassed Perfection...

- No more waxing
- Super High-Gloss Finish
- Anti Scratch Effect
- High Durability
- 2 Year Warranty**

We bring you an unrivalled formula ceramic quartz nano-tech coating which when expertly applied by our network of top Detailer's, will bring you a level of perfection you won't want to resist showing off.

For **10% off** your Cquartz coating, visit [carpro.uk.com](http://carpro.uk.com) to find your nearest approved detailer.

CarPro reserve the right to end promotion without further notice.

# knight-racer.co.uk

Bodykits, Carbon, Customising & Performance Tuning Parts


We also offer performance packs and brake packages  
**LOADS MORE OFFERS LISTED ON OUR ONLINE SHOP**

**www.knightracer.com**  
**01908 379118**

Knight-Racer Ltd  
Bodykits, Carbon, Customising & Performance Tuning Parts  
Unit 6, 16 Watling Street, Milton Keynes, MK2 2BL



# Essentials

## Knowledge

The best books, models, clothing, games, garage kit and tuning gear



1 2

### Model

**Minichamps McLaren F1**  
£99.99 [www.diecastlegends.com](http://www.diecastlegends.com)

1 It's not the first time we've featured a McLaren F1 model in Essentials, and it probably won't be the last. Can you blame us? This Minichamps 1:18-scale version is typically well detailed, and its gold foil-lined engine bay looks almost as stunning as the real thing.

### Wheel

**HRE Performance Series P1**

From £1770.60 (each)  
[rpmtechnik.co.uk](http://rpmtechnik.co.uk)

2 Porsche specialist RPM has become the exclusive UK seller of wheels made by American premium brand HRE. The wide range, including this Series P1 version, is designed to fit any modern Porsche but can also be applied to other makes of car. The price may be steep, but each wheel is made to order.

### Book

**Car Design Review 1**  
£30 [cardesignnews.com](http://cardesignnews.com)

3 Intended to be the first of an annual series, this book looks at the designs of all of 2013's big new models and concepts in thorough detail. Those excited by a car's aesthetics will enjoy the detailed pictures and background stories to the latest innovations and features.

### Car care

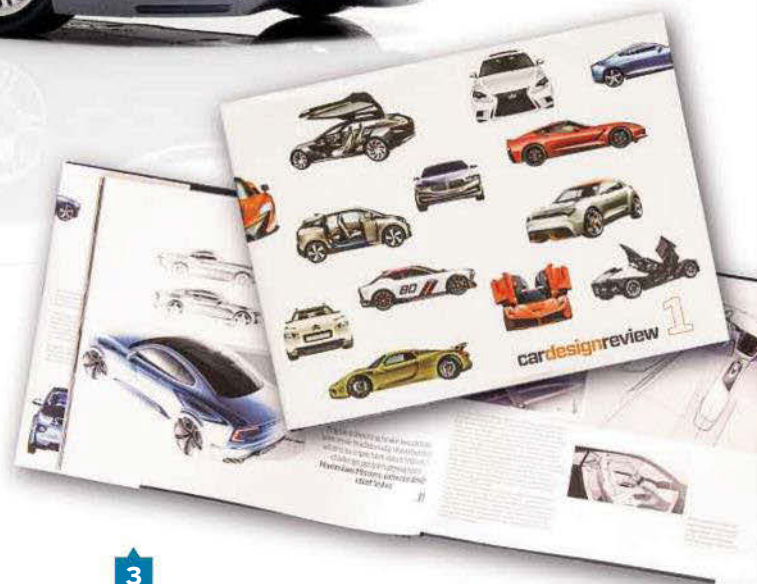
**Scholl Concepts Bubble 6-in-1 Soft Care Pudding**  
£16.60 (1kg) [schollconcepts.com](http://schollconcepts.com)

4 Looking more like handwash than shampoo, the citrus-smelling 'pudding' in this 1kg tub can be used as a car wash, plastic, vinyl or leather cleaner and even in the washing machine to revive microfibre cloths and sponge applicators. You use tiny amounts – two teaspoons for a bucket of car wash – so the tub should last ages.

### RC car

**Alfa Romeo 155 V6 TI**  
£199.99 [hobbyco.net](http://hobbyco.net)

5 The 155 V6 TI, with its beautiful Jägermeister livery, raced in the DTM in 1994, taking a podium in the Hockenheim season finale in the capable hands of Michael Bartels. Now you can drive it in 1:10-scale Tamiya RC kit form, with adjustable wheelbase, ride heights and gear ratios. The radio battery and charger are included in the price.



4  
5



Professional car cleaning by



**Valet PRO**  
PROFESSIONAL VALETING SUPPLIES

Find a stockist at [valetpro.co.uk](http://valetpro.co.uk)  
or call us on 01323 287980

PREPARE PROTECT MAINTAIN

**400+ APPLICATIONS**

**REARGUARDS**  
BUMPER TOP PAINT PROTECTORS

- Easy to fit • Hides old paint scratches
- Moulded in recyclable ABS in four colours: **Black, Silver, Carbon Look, Brushed Alloy Look**
- Looks like an original factory fitted accessory

"Every VW driver should have an RGM Rearguard to protect their painted bumper" Neil Birkitt, VW Driver

**NEW SILLGUARDS**  
DOOR SILL PROTECTORS

- Large range of tailored fit front and rear Door Sill Guards - the ideal protection product to complement Rearguards
- Made from ABS • Easy to fit with 3M tape

For all the latest applications and to order online visit: [www.rearguards.co.uk](http://www.rearguards.co.uk)  
Phone: 01525 853888 Email: [sales@rgmouldings.com](mailto:sales@rgmouldings.com)




**Repairs at your door**

- ☀ Total repair solution regardless of damage severity
- ☀ Convenient service built around your customers' lifestyles
- ☀ Reduced cycle times with up to 30% of repairs completed in less than 1 day
- ☀ Industry leading Net Promoter Score of over 70%
- ☀ Lower overall claims costs
- ☀ BSI Kitemark and a Lifetime Guarantee on everything we do
- ☀ The sustainability of dealing with a Belron® Company



[www.autorestore.co.uk](http://www.autorestore.co.uk) | email: [info@autorestore.co.uk](mailto:info@autorestore.co.uk) | 08000 329 073

# GIVE YOUR CAR THE BEST

## SUPERIOR AIRFLOW, SUPERIOR POWER

Designed to **Improve** Engine **Power**

Cotton – brought to you by Mother Nature and used for filtration by K&N, the leader in washable performance air filters. Cotton breathes easier than paper and that can help improve engine performance by reducing airflow restriction. Another natural feature of cotton is its durability. It can be washed again and again. That means a K&N stock replacement air filter can last for the life of your car reducing waste and saving money.

**Washable & Reusable**  
Up To 50 000 miles Between Cleanings  
Under Normal Motorway Driving Conditions

**Lifetime Product**

- ⌚ 5 minute install
- £ save money
- ♻ reusable
- ⚡ more power

100% REUSABLE

OVER 45 YEARS OF EXPERIENCE  
MILLION MILE LIMITED WARRANTY

[WWW.KNFILTERS.CO.UK](http://WWW.KNFILTERS.CO.UK) | TEL.: 01925 636 950




# Tried & Tested

Knowledge

The best motoring products, put through their paces by the *evo* team



## AutoRestore

From £275 [autorestore.co.uk](http://autorestore.co.uk)

We like to take care of our cars here at *evo*. Presumably this explains why, when the paint on the luggage restraint bar in our Mini GP long-termer got scratched, the person responsible was too embarrassed to own up.

To get the damage fixed, I called mobile bodywork repair specialist AutoRestore. The first mobile accident repairer to receive a BSI Kitemark for Vehicle Body Repair, AutoRestore isn't just another SMART (Small to Medium Area Repair Techniques) repairer, as its nationwide network of 150 mobile units can tackle much larger jobs – pretty much anything that isn't structural, in fact.

How this might be possible became apparent when Ernie, the technician assigned to our job, arrived in his Transit, from which a huge tent-like structure appeared, creating a fully enclosed working environment complete with an extraction system to keep it dust-free.

Although a whole car could fit inside, for this job it was easiest to remove the luggage bar from the Mini so it could be prepped and then suspended in the 'body shop' for painting. The correct shade of Chili Red paint was mixed in the van, and the painted bar was baked until dry before being refitted to the car.

The job took around half a working day and cost £318. It was certainly more convenient than visiting a body shop, but best of all was the quality of the work carried out – the finish was glassy smooth, and noticeably better than the original factory paint. You can't argue with that.

**Ian Eveleigh**



**Above:** AutoRestore's sizeable mobile body shop. **Far left:** numerous big scratches needed removing. **Left:** finished job was better than new

## Lego Technic 42000 Grand Prix Racer

£79.99 [lego.com](http://lego.com)

Full disclosure: I adore Lego. Always have. Number 42000 is only really a medium-sized set from the Lego Technic range, but the 14 bags of parts and three books of instructions make for quite a daunting prospect when you first open the box. Soon, however, you're immersed in the process of building and hours can pass as you carefully follow the wonderful diagrams. It's fascinating seeing a differential or some working suspension emerge almost miraculously from all the little parts.

You really do need to pay attention, too. Click something together incorrectly and you might not realise your mistake for

a couple of hours, at which point there's a nerve-wracking period of disassembly and reassembly as you try to retrace your steps (I speak from experience!). It's all part of the fun, though, and simply increases the warm glow of satisfaction when it's all finished. And once you've marvelled at the pistons pumping in the engine, you can take it all apart, download the instructions for a race truck from the Lego website and build that from the same kit: two builds for the price of one.

People always seem to assume that I'm joking when I ask for Lego for Christmas. I'm not.

**Henry Catchpole** (@HenryCatchpole)



## Ring Powerpack RPP165

£119.99 [ringautomotive.co.uk](http://ringautomotive.co.uk)

One of the problems with power pack jump-starters is ensuring they are ready to go when needed in a hurry. Each pack in this new range from Ring (bar the entry-level model) comes with a charging station, which keeps the battery topped up while being stored. We tried the RPP165, which also comes equipped with a compressor.

At the heart of the unit is the 17Ah (amp-hours) battery, which easily spun over our 1.3-litre test engine in repeated starting attempts. The 80cm leads are a little too short to work with the pack on the ground but the clamps are robust and we like the 'wrong connection' warning

beep. But while the compressor with its preferred screw-on connector worked well, adding 3 psi to an 18in tyre in 1min, the dual-scale gauge is hard to read.

Modern power packs are more than just jump-starters, though, and this one also has two 12V cigar-lighter sockets, both protected by rubber covers, while its USB connection charged both an iPad 2 and an (often electrically fussy) iPhone 4S. And if you break down at night its LED beam is powerful and can light several metres away. Add in the choice of 12V or mains charging and you have a great addition to either boot or workshop.

**Kim Adams** (@cargadgetguru)

# ARKVENDOR

UNIQUE CAR HIRE

Experience driving nirvana with a high-spec rental from Arkvendor Prestige Car Hire.

- Easy pick-up from the Scottish Borders or Edinburgh for an exhilarating drive to Glencoe and beyond.
- Back road blast in our Caterham 7 or Audi TT black edition
- Challenge the Scottish landscape in our Range Rover Evoque
- Road trip around the Highlands in our VW Camper Van

Arkvendor Prestige Car Hire offers:

- Low deposits
- NO mileage charges
- Luxury cottage rental, ideal as a base to explore the region's great driving



T: 01890 870619/ 07707 592939  
 e: info@arkvendo.co.uk  
 w: www.arkvendo.co.uk

# WIN YOUR DREAM CAR

GUARANTEED WINNER EVERY TWO WEEKS



MIR. VINCENZO VIGNOLA  
ONE OF 220 BOTB WINNERS

TICKETS FROM £3  
 FREE £5 FOR NEW PLAYERS  
 AS SEEN AT UK AIRPORTS SINCE 1999

ENTER NOW AT [BOTB.COM/EVO](http://BOTB.COM/EVO)



TEL: 020 7371 8866  
 EMAIL: info@botb.com



**Courtenay**  
**SPORT**

**30th Anniversary 2014**  
 Tel: 01692 404313 [www.courtenaysport.co.uk](http://www.courtenaysport.co.uk)  
 Courtenay Sport Ltd., Folgate Road, North Walsham NR28 0AJ

**Courtenay**  
**SPORT**  
*acing*

# Trips & Travel

Knowledge

The best destinations to visit in your car



## Great drives: derestricted Autobahns

The roads: various Autobahns across Germany Great for: Bugatti Veyron, Hennessey Venom

**C**ORNERS AND SCENERY are what define most of the Great Drives I've written about over the past couple of years. This month, however, I shall be extolling the virtues of neither. Germany's Autobahns, specifically the derestricted parts, always seem to be near the top of 'must drive' lists and it's easy to see why, as the lure of legally going as fast as you can on the public road is a strong one. What's more, the desire to do so only seems to increase as the years pass and the likelihood of a blanket speed limit grows (although with Angela Merkel's Christian Democrats having been re-elected last year, the derestricted Autobahns should be safe for a while yet).

Due to the vagaries of traffic, road works, etc, it's not always easy to predict where you'll be able to go fast. However, the following sections of Autobahn are a geographically widespread selection of stretches that **evo** has been to in one capacity or another over the years.

The most historically significant is the A5 between Frankfurt and Darmstadt (number 1 on the map here). This is where Rudolf Caracciola drove his 736bhp Mercedes at a public-road record 268mph on January 28, 1938, and where Bernd Rosemeyer lost his life later that day trying to top that in an Auto Union. The A5 between Karlsruhe and Mannheim (2) and the A9 from Ingolstadt to Nuremberg (3) are stretches used in **evo** 055, when a young Jethro Bovingdon drove a twin-engined Audi TT to 205mph, and what would become Harry Metcalfe's Zonda failed to creep above 199mph. The A8 south of Munich (4) is too busy by day, but at night I managed over 200mph in a Bentley Conti GT Speed (it was easier heading towards Munich). I also managed a healthy speed in a Corvette Z06 on the A7 just after crossing the border from Denmark (5). Finally, the A1 south of Cologne (6) is on a possible route to and from the Nürburgring and as it's a sort of road to nowhere (it doesn't end at a city), it frequently seems to be quiet.

Henry Catchpole  
Features editor



## The route



## Watch out for

There are a myriad of things to bear in mind if you want to go fast on an Autobahn, and this is not an exhaustive list (so use common sense).

Tyres are critical, so check pressures, speed ratings and condition before attempting any big speeds. How does your car behave when braking from big speeds? The balance might not be as you expect, so you need to be aware before hauling on the middle pedal as hard as you can from 160mph. Leave room between yourself and other traffic, and then leave more just to be sure. You should be looking and planning a very long way ahead and if you're at all unsure about another vehicle's movements, back off. Also remember to check your mirrors – you might not be the fastest thing out there.

The weather can play havoc with a car at speed: standing water is to be avoided, but high winds can also be unnerving, particularly if they hit you broadside. Night-time can mean that the Autobahns are quiet, but watching the red lights ahead can be deceiving and it's easy for a truck to conceal a car from view. And finally, don't chase numbers: try to hit 200mph if you want, but if you're doing 199mph and the truck up ahead starts indicating, don't be tempted to keep accelerating.

## Reader road trip Scottish road trip

After years of thinking about getting a sports car upon our retirement, my wife and I took the plunge and spent just under £2000 on a Mk1 MX-5. Its optional Bilstein dampers gave a harder ride than standard but that would just add to the enjoyment of all the sweeping Scottish roads we planned to visit.

We started by heading through the Yorkshire Dales to Croft Circuit, where the wife marshalled at the HSCC Nostalgia Weekend. Showers then slowed us en route to Dumfries, where we sampled the great, fast, sweeping curves of the Galloway roads around Kirkcudbright. The north of Scotland



now called, and a great run on deserted roads via Ayr, the Erskine Bridge and the Alexandria Motor Works took us towards Loch Lomond and our campsite at Arrochar.

Past Glencoe, a crash blocked the A82 towards Spean Bridge, so instead we explored the B8004, which runs parallel. The following day we took on the Road to the Isles, to Mallaig, and the day after that we drove the road that has to be travelled when in this part of Scotland: the high mountain pass known as Baelach na Bà. Next we travelled east, alongside Loch Ness, towards Inverness and then on to the Old Military Road and the Whisky Trail. After this we set up camp near Kinross in order to visit Knockhill, where the wife marshalled the BTCC meeting there.

By now the rains had arrived and to travel back to Lancashire we left the A7 south of Galashiels and headed over flooded roads to Dumfries before taking the A6 over Shap and back home. It was a truly memorable 2000-mile trip and the MX-5 behaved beautifully. Not bad for a sub-£2k car that's 19 years old!

John Cooke

Email your road trip story to  
henryc@evo.co.uk

## Events calendar

### MAY

#### May 4

Goodwood Breakfast Club Supercar Sunday  
goodwood.co.uk

#### May 15-18

Mille Miglia, Italy  
1000miglia.it

#### May 17-18

Blancpain Endurance Series, Brands Hatch GP  
www.brandshatch.co.uk





# The finest of British Country Outbuildings

From Passmores - Est 1909



The ideal home for your daily run around or classic car

**OAK FRONTED CARRIAGE HOUSES AND STAND ALONE TIMBER GARAGES**

View our picture gallery on line for ideas and inspiration. Excellent range and service.



**PASSMORES**

Est 1909

HIGH STREET, STROOD  
ROCHESTER, KENT ME2 4DR  
Tel: 01634 290033

For further information visit : [www.passmores.co.uk](http://www.passmores.co.uk)



## Service and performance upgrades on Toyota GT86 and Subaru BRZ

From the basics to forced induction upgrades

- / EcuTek re-mapping
- / Suspension and brakes
- / In-house Dynapack dyno
- / Sprintex SC authorised dealers



f /AbbeyMotorsportUK @AbbeyMotorsport

Call: 01883 732 331  
[www.abbeymotorsport.co.uk](http://www.abbeymotorsport.co.uk)



Call today: 01270 291 054

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

With a class leading suction performance of 400 air watts\* GarageVac has the power to remove even the most ground in dirt. Keeping your interior immaculate. Conveniently wall mounted so it's Always Ready To Go!



- 1 40' / 12m stretch hose retracts to 8' / 2.4m and stores around the unit.
- 2 7 specialist tools including and 24" / 610mm flexible crevice tool for hard to reach places.

\*Air Watts are equivalent to an engines' B.H.P. Household / workshop vacuums need a minimum of 200 air watts

# Composite ceramic coating system + fully trained detailers = *Perfection*<sup>2</sup>



**GTECHNIQ**  
SMART SURFACE SCIENCE

Gtechniq is the marriage of cutting edge nano engineered coatings and skilled craftsmen

TO FIND YOUR NEAREST GTECHNIQ ACCREDITED DETAILER, GO TO OR CALL:

[service.gtechniq.com](http://service.gtechniq.com) | 01327 811 015







# SECOND TIME ROUND

# (020) 7499 7442

Specializing in Rolex for 20 years!

Grays, 58 Davies St. London W1K 5LP



Daytona



GMT Master II



Datejust



Date

Audemars Piguet \* Bvlgari \* Cartier \* Franck Muller \* Hublot \* Jaeger LeCoultre \* Patek Philippe  
\* Piaget \* Rolex \* Vacheron et Constantin and all fine wristwatches...

[WWW.SECONDTIMEROUND.COM](http://WWW.SECONDTIMEROUND.COM)

**Bought, Sold & Exchanged**

## The ultimate *cartuning* and *styling* centre

[sales@ppcgb.com](mailto:sales@ppcgb.com) [www.ppcgb.com](http://www.ppcgb.com) [facebook.com/PPCGB](https://facebook.com/PPCGB)

- ALLOY WHEELS & TYRES
- SPORTS EXHAUST
- PERFORMANCE BRAKES
- TUNING & REMAPS
- BODY STYLING
- LED LIGHTS AND LAMPS
- INDUCTION KITS
- SUSPENSION UPGRADES

- SERVICING & DIAGNOSTICS
- M.O.T.



**50% off performance tuning when you buy any performance exhaust**

### Fitting Centres

Essex 0845 1630 130 • Crawley 0845 5644 576 • Scotland 0845 8694 982 • Newcastle 0845 4212 960  
Milton Keynes 0845 2876 678 • Southampton 0845 322 8769 • Eastbourne 0845 1633 722

NATIONAL FRANCHISE AVAILABLE

**PRESTIGE  
PERFORMANCE  
CENTRE  
GB.COM**



# DTUK<sup>®</sup>

DIESEL TUNING UK LTD



**CARS • VANS • TRACTORS • MOTORHOMES**

**EXCLUSIVE  
READERS OFFER**

**£50 OFF**

the rrp on all DTUK systems  
(use the code EV050)  
or give us a call

- Up to 40% more BHP and Torque
- Up to 20% improved fuel economy
- Adjustable Plug and Play systems
- 10 Minute average fitting time
- TuV approved Digital Technology
- 24/7 Aftersales support
- 14 Day money back guarantee
- Next day delivery (UK only)

for further information contact sales:

**Tel: 01207 299 538**

email: [sales@diesel-performance.co.uk](mailto:sales@diesel-performance.co.uk)

**[www.diesel-performance.co.uk](http://www.diesel-performance.co.uk)**

## Performance Gains and Improved Fuel Economy



DTUK CRD2+  
Multimap system

with a DTUK CRD2+ Multimap Power Digital Diesel Tuning System

.....

## Improve your Fuel Economy



DTUK Green ECO 3  
Maximum Economy

with a DTUK Green ECO 3  
Digital Diesel Tuning System\*



# KW clubsport

„For me KW suspension gives me the most success and confidence when driving the Nürburgring.“



**SABINE SCHMITZ**

Nordschleife expert &  
race taxi driver



A MUST-HAVE **FOR**  
**ANYONE DRIVING**  
THE RING

FOR THE DRIVE OF YOUR LIFE.

KW automotive UK Ltd  
Telephone: 0870 990 7536  
Telefax: 0845 021 2548  
eMail: [info@KWautomotive.co.uk](mailto:info@KWautomotive.co.uk)





**www.watches.co.uk**  
where time meets passion

SWISS WATCH  
COMPANY



We specialise in the acquisition and sale of high quality Swiss watches both modern and vintage, un-worn and pre-owned.

Free Watch Valuation On-line  
INSTANT CASH PAID

by appointment only:

**+44 (0)20 8994 4567**

474a Chiswick High Road, Chiswick, London, W4 5TT

Rolex ■ Panerai ■ Tag Heuer ■ Audemars Piguet ■ Omega ■ Breitling ■ Zenith ■ IWC ■ Jaeger Le Coultre

**Drive Your Car Here!**

Book with your favourite Track Day Organiser

**Blyton  
Park**

- Three Circuit Layouts
- New Eastern Circuit for 2014
- Proper Facilities



Blyton Park, Gainsborough DN21 3PE [www.blytonpark.co.uk](http://www.blytonpark.co.uk)

T: 01427 628 922 E: [richard@blytonpark.co.uk](mailto:richard@blytonpark.co.uk) or [russ@blytonpark.co.uk](mailto:russ@blytonpark.co.uk)





ROAD CAR

RACE CAR

ARMoured VEHICLES

HISTORIC

# CITY HEAT.

Experience ultimate control in the urban playground.



If you appreciate control, style and performance, our caliper, disc and brake kit upgrades are designed for you.

We draw on our race pedigree to reduce brake system weight, improve track day durability and provide precise control with no fade. Braking confidence guaranteed.

Upgrade to AP Racing brakes and clutches for ultimate control.

T: +44 (0) 24 7663 9595 E: [roadtech@apracing.co.uk](mailto:roadtech@apracing.co.uk)

**AP**  
**RACING**

The science of friction [www.apracing.com](http://www.apracing.com)



JUST LIKE THE CARS WE FINANCE...  
**WE WORK FAST.**

THE UK'S NO.1  
FUNDER FOR PRESTIGE CARS




WE WANT YOUR BUSINESS...  
AND WE'VE GOT THE RATES TO PROVE IT!

WE FUND ANY CAR, NEW OR USED FROM ANY UK DEALER OR PRIVATE SELLER

CALL US TODAY ON:

08450 944 997

WWW.ORACLEFINANCE.CO.UK

Proud to be a Patron of  
The Prince's Trust 

**ORACLE**<sup>®</sup>  
FINANCE

Please contact us for an individual finance quotation on any prestige or sports car and we will detail the full benefits of our finance plan and terms and conditions. Finance & terms are subject to status. UK residents only. Oracle Asset Finance Limited is authorised and regulated by the Financial Conduct Authority for the sale of consumer credit.



# Track Times

## Knowledge

**Key** + = new addition this month. Red denotes the car is the fastest in its class.

Car	Lap time	Peak mph	Issue no.	Conditions
<b>Radical SR8LM (fastest car)</b>	<b>1:13.6</b>	<b>127.8</b>	<b>138</b>	<b>Dry</b>
<b>Caparo T1 (fastest supercar)</b>	<b>1:14.8</b>	<b>130.9</b>	<b>131</b>	<b>Dry</b>
Ferrari 458 Italia	1:19.3	120.0	159	Dry
Gumpert Apollo S	1:19.4	120.4	119	Dry
McLaren MP4-12C (Corsa tyres)	1:19.6	121.2	159	Dry
Caterham Levante V8	1:19.6	118.6	131	Dry
Porsche 997 GT2 RS	1:19.9	122.3	158	Dry
Lotus 2-Eleven GT4	1:20.1	113.2	138	Dry
Caterham Superlight R500	1:20.2	115.7	119	Dry
McLaren MP4-12C	1:20.6	120.9	159	Dry
Noble M600	1:20.8	121.8	159	Dry
<b>Porsche 997 GT3 RS 4.0 (fastest coupe)</b>	<b>1:21.0</b>	<b>118.2</b>	<b>160</b>	<b>Dry</b>
Lamborghini Murciélago LP670-4 SV	1:21.3	121.1	134	Dry
Ariel Atom 3 Supercharged	1:21.5	113.6	119	Dry
KTM X-Bow (300bhp)	1:21.5	112.7	138	Dry
Ferrari 430 Scuderia	1:21.7	117.2	121	Dry
Porsche 997.2 GT3 RS (3.8)	1:21.9	116.8	150	Dry
Lamborghini Gallardo LP560-4	1:22.5	119.1	122	Dry
Brooke Double R	1:22.5	113.2	119	Dry
Lamborghini Murciélago LP640	1:22.9	116.7	143	Dry
Porsche Carrera GT	1:23.3	115.2	119	Dry
Porsche 997.2 GT3	1:23.3	114.5	138	Dry
Porsche 997 Turbo S	1:23.5	117.5	146	Dry
Porsche 997 GT2	1:23.5	115.1	119	Dry
Nissan GT-R (2008MY)	1:23.6	113.1	119	Dry
Porsche 991 Carrera	1:23.6	112.5	182	Dry
Porsche 991 Carrera Cabriolet	1:23.9	112.3	183	Dry
Porsche 997 Turbo	1:24.1	113.5	136	Damp
Lotus 340R (190bhp)	1:24.2	110.0	135	Dry
Porsche Boxster S (981)	1:24.2	109.3	183	Dry
Caterham Superlight R300	1:24.3	101.5	138	Dry
Maserati GranTurismo MC Stradale	1:24.5	115.1	160	Dry
Mercedes-Benz SLS AMG	1:24.6	115.7	146	Dry
Porsche Boxster Spyder (987)	1:24.7	107.7	167	Dry
Ferrari California	1:25.0	111.8	134	Dry
KTM X-Bow	1:25.0	105.0	123	Dry
BMW E92 M3 Coupe	1:25.1	109.1	162	Dry
Mercedes-Benz SL65 AMG Black	1:25.2	108.6	131	Dry
Jaguar F-type V8 S	1:25.2	111.2	183	Dry
Audi RS5	1:25.4	108.8	162	Dry
Audi R8 Spyder V8	1:25.5	107.0	167	Dry
Porsche Cayman R	1:25.5	106.8	158	Dry
Aston Martin V8 Vantage Roadster	1:25.6	109.1	183	Dry
<b>BMW M5 (F10) (fastest saloon)</b>	<b>1:25.7</b>	<b>112.0</b>	<b>165</b>	<b>Dry</b>
Aston Martin V12 Vantage	1:25.8	110.9	146	Dry
Mitsubishi Evo X FQ-400	1:25.9	107.5	138	Dry
BMW 1-series M Coupe	1:25.9	106.4	158	Dry
Mitsubishi Evo X RS 360	1:26.1	106.6	153	Dry
<b>Renaultsport Mégane 265 Trophy (fastest hot hatch)</b>	<b>1:26.1</b>	<b>105.3</b>	<b>166</b>	<b>Dry</b>
Audi TT RS	1:26.3	107.2	149	Dry
Aston Martin DBS	1:26.4	109.5	143	Dry
Porsche Panamera Turbo	1:26.5	109.2	137	Dry
Jaguar XJ220	1:26.7	111.7	131	Dry
Mercedes-Benz E63 AMG	1:26.8	104.9	165	Dry
<b>Porsche Cayenne Turbo (fastest 4x4)</b>	<b>1:26.9</b>	<b>107.4</b>	<b>158</b>	<b>Dry</b>
Lotus Evora	1:27.1	104.2	145	Dry
Nissan 370Z	1:27.1	104.0	158	Dry
Porsche Panamera S	1:27.3	102.4	165	Dry
Mercedes-Benz C63 AMG Coupe	1:27.7	111.0	162	Dry
Lotus Elise SC	1:27.7	104.6	131	Dry
Vauxhall VX8R Bathurst S	1:27.8	106.1	131	Dry
BMW E46 M3 CSL	1:27.8	105.4	153	Dry
Renaultsport Mégane R26.R	1:27.8	103.3		
<b>Audi RS6 Avant (C6) (fastest estate)</b>	<b>1:27.9</b>	<b>111.0</b>	<b>121</b>	<b>Dry</b>
Jaguar XFR	1:27.9	108.1	137	Dry
Lexus IS-F	1:28.1	106.4	151	Dry
Porsche Boxster S (987)	1:28.1	105.4	120	Dry
Subaru WRX STI	1:28.3	101.6	157	Dry
SEAT Leon Cupra R	1:28.7	102.4	162	Dry
Bentley Continental Supersports	1:29.2	105.8	149	Dry
Lotus Elise Club Racer	1:29.2	95.5	162	Dry
Renaultsport Mégane 250 Cup	1:29.9	101.4	156	Dry
Honda NSX	1:30.1	101.3	145	Dry
Nissan 370Z Roadster	1:30.3	100.1	173	Dry
VW Scirocco 2.0 TSI	1:30.4	98.9	155	Dry
Ford Focus RS (Mk2)	1:30.8	101.8	131	Dry
Vauxhall Astra VXR (Mk2)	1:31.4	100.9	174	Damp
Renaultsport Clio 200 Cup	1:31.9	97.2	144	Dry
VW Golf GTI (Mk6)	1:32.4	99.3		

### TRACK MAP



### West Circuit facts

- Location Bedford Autodrome
- Opened 1999
- Length 1.85 miles (2.98 kilometres)
- Direction Anti-clockwise
- Left turns 9
- Right turns 6

**CHIP EXPRESS™**  
tuning specialists

## Plug-in Diesel Upgrades

Enjoy up to 40% more POWER  
and 20% better ECONOMY!



Diesel Tuning for Cars, Commercials, Tractors & Boats  
Fit yourself in minutes - instantly improve drivability!



Easy to:  
- Fit  
- Remove  
- Transfer



The CHIP Express™ tuning system is without doubt the most advanced plug-in diesel upgrade available. It works in harmony with your engine, retaining all safety functions without needing to interfere with the vehicle's existing on-board computer. It can be self fitted in minutes, adjusted for more performance and easily removed. It will free your vehicle from its manufacturer's limits.

[www.chipexpress.com](http://www.chipexpress.com)

Visit our website, see your vehicle's true potential, order online.

e: [email@chipexpress.com](mailto:email@chipexpress.com) t: 01727 730 956



**TERGUS**  
CAR INTERIORS

Fully bespoke car interiors

*Tergus: latin for skin, hide, leather*

- Leather, Alcantara, Vinyl, Original cloths
- Custom embroidery and embossing
- Over 100 colour options including perforated and metallic options
- Carbon fibre effect leathers
- All work guaranteed for 3 years/60,000 miles
- Seats, headrests, door panels
- Parcel shelves, carpet sets
- Full dashboards, boot builds and installs trimmed in leather



For Further information please contact 0116 2696470

email: [sales@terguscarinteriors.com](mailto:sales@terguscarinteriors.com)

or visit our website at [www.terguscarinteriors.com](http://www.terguscarinteriors.com)



YOUR MISSION, SHOULD YOU CHOOSE TO ACCEPT IT



IS TO DRIVE 2,500 MILES ACROSS EUROPE IN 6 DAYS  
RISE TO THE CHALLENGE OF THE CANNONBALL RUN, HARD BUT NOT IMPOSSIBLE  
EXPERIENCE WINDING ROADS, LONG STRAIGHTS, WORLD CLASS TRACKS, 5 STAR DESTINATIONS  
PREPARE TO EXPECT THE UNEXPECTED AND BE DRIVEN BY ADVENTURE

SHOULD YOU CHOOSE TO ACCEPT THIS MISSION  
VISIT [CANNONBALLRUNEUROPE.COM](http://CANNONBALLRUNEUROPE.COM) AND REGISTER TODAY



THIS AD WILL NOT SELF-DESTRUCT IN FIVE SECONDS





evo  
**TRACK  
EVENINGS**



● ●  
**TW STEEL**  
BIG IN OVERSIZED WATCHES

Come and join the evo team on track at  
this year's evo track evenings at Bedford  
Autodrome. For more information, visit  
[www.evo.co.uk](http://www.evo.co.uk)

**DATES**  
Friday 30th May 2014  
Friday 27th June 2014  
Friday 29th August 2014

**PRICE**  
£125 per car, with up to 2 drivers\*

**WHERE**  
Bedford Autodrome  
Thurleigh Airfield Business Park  
Bedford  
MK44 2YP

**SIGN-ON TIME**  
3.30pm

To book call 0844 245 6971  
or visit [www.evo.co.uk/shop](http://www.evo.co.uk/shop)

\* additional drivers are  
charged at £30 each



# One discount, two discount, three discount, more...

Insure your cars with Admiral MultiCar, and each car receives a great discount. More cars equals more discounts!



**Admiral.com**

**0800 600 880**



## Specialist Car Insurance

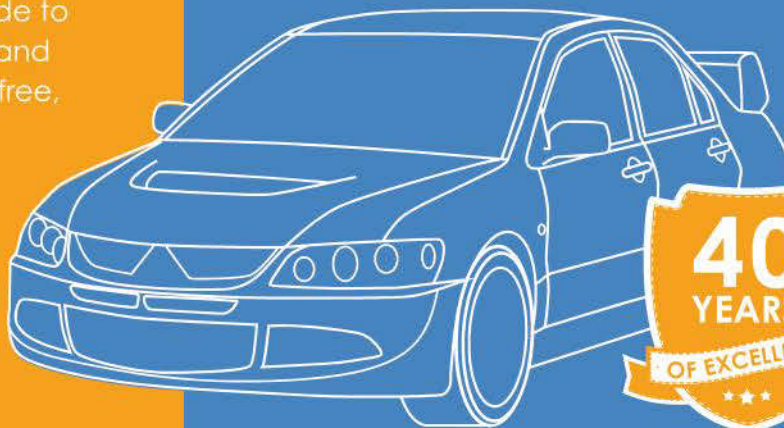
Adrian Flux know how much you love your car, that's why we are dedicated to finding you a policy, tailor-made to your own personal requirements and driving history. Call us today for a free, no obligation quote!



**0800 081 8989**  
**adrianflux.co.uk**

Authorised and regulated by the Financial Conduct Authority

## High Performance Insurance



Benefits available include:

- FREE Legal Cover
- Breakdown Cover
- EU Cover
- Imports Cover
- Limited Mileage Discounts
- Modifications Cover
- Club Members Discounts
- Track Day Cover

# Art of speed

Camera: Nikon D2Xs. Focal length: 35mm. Exposure: 1/125sec at f/16 (ISO 100)



## Lotus Esprit pop-up headlights

by DAVID VIVIAN | PHOTOGRAPHY by SIMON CLAY

**I** F THERE ISN'T ONE ALREADY, THERE SHOULD BE A museum dedicated to cars that don't appear to have headlights until the sun goes down. Think of the Lamborghini Countach, the best-looking Ferraris (Daytona, 308, 288 GTO, F40), the Chevrolet Corvette, numerous front-engined Porsches, the original Lotus Elan and its Japanese tribute act, the Mazda MX-5. Honda's NSX and the BMW M1 linger in the memory, too. The full list of potential museum exhibits would be phenomenally long and littered with as many aesthetic tragedies as triumphs. But for better or worse, the 68-year reign of the pop-up headlight – which ended in 2004 along with the Lotus Esprit and Corvette C5 – has to be regarded as one of the most powerful and pervasive design trends in automotive history.

It all started in 1936 with America's Cord Model 810. It was the 'coffin-nosed' car's unprecedented sleekness rather than its front-drive powertrain that fired the imagination of the crowds at the New York Auto Show. Cord chief stylist Gordon Buehrig and his team had created the world's first 'hidden' headlights – not pop-ups in the strictest sense as it was the flush-fitting covers that moved, not the bulky, modified Stinson landing lights themselves. But while

their concealed presence may have conferred sleekness, exposing them wasn't exactly a slick exercise, each rotating cover having to be hand-cranked with levers at each end of the dashboard. A couple of years later, Harley Earl's Buick Y-Job concept car for General Motors sidelined the elbow grease for powered operation. But it wasn't until 1942 that pop-ups featured, albeit briefly until the outbreak of war, on a mass-produced car. The Chrysler DeSoto's peepers, called 'Airfoils', were introduced with the slogan 'Out Of Sight Except At Night!'

The irony is that, at night, it's harder to tell that the popped-up lights have trashed the clean, uncluttered lines and whatever aerodynamic advantage the concept was meant to achieve. It hardly seemed to matter. Pop-up headlights were considered, at various peaks from the '60s to the '90s, the height of cool. Safety legislation and the emergence of visible headlight technology as design jewellery may have hurried their extinction, but it's hard to imagine trend-setters like the 1963 Corvette Sting Ray and the Oldsmobile Toronado without them.

And, as with the Countach, the wedge nose of the Lotus Esprit (pictured) depended on the flat surface they permitted when stowed. That Esprit drivers couldn't always rely on the light housings to pop up in unison is another story. ❧

NEXT MONTH IN  
**evo**

## Huracán LP610-4



New 602bhp 'baby' Lambo driven. Is it a worthy successor to the Gallardo?

On sale  
WEDNESDAY  
MAY 21

**Plus**

- ✚ Cayman GTS
- ✚ BMW i8
- ✚ Subaru WRX



# Warrantywise

The UK's Best Used Car Warranty



Don't risk wallet busting garage repair bills, protect your car today!

**Auto EXPRESS**

★★★★★  
Auto Express Tested



## Is Your Car over 3 years old?

If it is, chances are your car warranty has expired. Why not buy direct and protect your motor with my award-winning warranty from Warrantywise.

I've spent the last 6 years designing and refining this warranty to ensure it offers you the UK's highest level of car warranty cover - bar none!

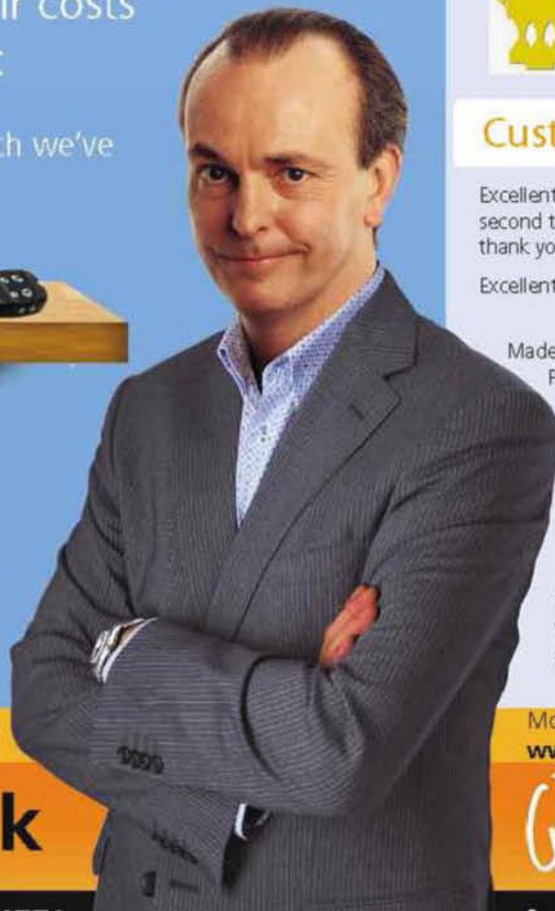
I'm so obsessed with the detail that if for any reason you are unhappy with our service you can even contact me directly.

**Quentin Willson**



Here are some of the recent repair costs we've covered for our customers:

Visit [warrantywise.co.uk/paid](http://warrantywise.co.uk/paid) to see how much we've paid out for your car!



### Our Warranty Plans Include:

- ✓ Cover for failure due to Wear & Tear
- ✓ No exclusions for betterment or consequential damage
- ✓ Unlimited mileage
- ✓ Roadside Assistance & Recovery administered by the Automobile Association
- ✓ Vehicle Hire with Enterprise

*Quentin Willson*  
QUENTIN WILLSON  
**PROMISE**

"I personally guarantee that you will not find a higher level of used car warranty protection at a lower price!"

**15** years ONLINE

over **250,000** warranties sold

multi **AWARD** WINNING

**92%** POSITIVE FEEDBACK

### Customer Testimonials

Excellent service, a truly great warranty, second to none. Will recommend to everyone, thank you.

**Mr Faith**

Excellent service - no complaints.

**Mrs Wild**

Made a claim, only 2 days left on the plan. Payout was made quickly. Fantastic.

**Mr Tucker**

Cheque received very quickly thank you. Excellent service as before.

**Mrs Williams**

Very good, even enquiries got through to someone almost straight away. Everyone was extremely helpful, very happy with the service you provide as a whole.

**Miss Irving**

More happy customers at:

[www.warrantywise.co.uk/happy](http://www.warrantywise.co.uk/happy)

*Quentin Willson*  
Designed by Quentin Willson

Follow us on Twitter: @warrantywise

Visit our website for a Car Warranty Quote in just 60 seconds at:

# warrantywise.co.uk

Call to speak to a member of our team on: 0800 121 4770



SEAT

# THE NEW SEAT LEON CUPRA 280

INTENSIFY THE EVERYDAY



ENJOYNEERING



CUPRA

## OUR MOST POWERFUL CUPRA EVER.

Official record holder for the fastest ever front wheel drive lap of the Nürburgring.

FOLLOW US ON:   **Search: Leon Cupra**

Official fuel consumption for the SEAT Leon Cupra in mpg (litres per 100km); urban 32.5 (8.7) – 34.4 (8.2); extra-urban 49.6 (5.7) – 52.3 (5.4); combined 42.8 (6.6) – 44.1 (6.4). CO<sub>2</sub> emissions 154 – 149g/km.

Standard EU test figures for comparative purposes and may not reflect real driving results. Acceleration 0–62mph in 5.7–5.9 seconds.