AUTOMOTIVE

SPRING 202

FUTURE OF MOTORING SPECIAL



PEUGEOT E-208 ROAD TEST

Incognito electric hatchback put through its paces



PLUS

HONDA E DRIVEN

Fashionable electric fun



MADE IN CHINA

£8k electric city car



HEAD TO HEAD

HOT HATCHES

Abarth 595 v Cooper S

SUPERMINIS

Kia Rio v Ford Fiesta



TIME SHARE SPORTS CAR



£600 MX5 RESTORED



EDITORS' LETTER

Is it possible to put together a magazine without seeing another member of your team in person for the entire creation process? Yes, it is – and this edition of Automotive illustrates that. The process certainly isn't quite as smooth and has been frustrating at times, but what we have created here is 38 pages of automotive content while entirely conforming to lockdown restrictions.

Even though it has been quite challenging, there are so many features in this edition that we really hope you will enjoy. The team have managed to arrange some fantastic road tests – some superb little EVs, some fun hot hatches, and even some cars exclusive to China. While it has made things harder, we like to think that those restrictions haven't slowed us down too much.

Creating the magazine has been a great experience for us all, and has given us the chance to practice road testing and automotive writing, among other important skills to becoming the best automotive journalists possible.

We hope that you enjoy this issue as much as we enjoyed creating it.

Thank you,

The 2021 Automotive Team



Ellis Hyde George Hill Jack Cooper Joe Pepper Ryan Fernandez Sarah Shorter Trystan Finocchiaro Zheran Chen

Thanks to Honda UK, Peugeot UK and Suzuki UK for loan of press cars. With special thanks to Andrew Noakes for all of his support and guidance throughout the project.

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WHAT IS AUTOMOTIVE?

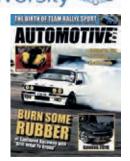
Each year, students on Coventry University's Masters degree course in Automotive Journalism course work together to create an automotive magazine. For more details regarding the course, tweet at @covautoj, or alternatively visit the university website: www.coventry.ac.uk/automotive-journalism-ma

See previous issues at www.magcloud.com/user/coventryjournalism

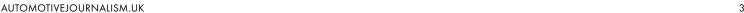














SAFETY BENEFIT TO TESLA YOKE, SUGGESTS THATCHAM

The yoke design was unveiled in the new 1,100bhp Tesla Model S Plaid



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Tesla's new yoke-style steering wheel could have "some safety benefit" according to Matthew Avery, the Director of Research at Thatcham, the UK's centre for automotive safety and security. "I see no reason why the vehicle wouldn't pass all tests, as long as it is equipped with a restraint system and an airbag. We've seen a lot of vehicle manufacturers throughout history that have used different steering wheel styles, so it's nothing too unusual from a design perspective," he said.

"I think that in some ways the yoke could provide some safety benefit, as steering wheels tend to do damage to drivers in the event of a severe crash. This is why it is important for steering wheels to have a large boss to protect the driver's head and chest, and the Tesla yoke appears to have this feature. In some ways the yoke could also be safer, as the upper rim that sticks into your head or chest in the event of a crash can also cause severe injury to the driver of the car."

Avery thinks the new wheel will be engineered to help with manoeuvring due to its smaller size. "Most of the time in regular driving you don't turn the wheel more than 45-60 degrees. But when you're manoeuvring you need a lot of movement, which means the steering wheel must be engineered to enable a three quarter turn and have the full lock. I am unsure from a user experience how good this will be", he said.

"Over-assisted steering could also potentially make the vehicle very twitchy and nervous. I am unsure as to whether the Tesla Model S Plaid will suffer from that, but we shall wait and see."

Avery did have other concerns with the design. "I think a lot of drivers like their cars to drive and look like cars. There is very little practical reason why you would put a yoke in a car, and it will certainly be less comfortable for the driver."

"Another concern is around Tesla continuing to push the concept of automated driving, as they have been using the marketing term 'Autopilot' with their Level 2 (semi-autonomous) assisted driving system. This lulls drivers into thinking that they have a Level 3 or Level 4 (fully autonomous) driving system, with drivers then not responding to

take back control of the vehicle when necessary."

"The analogy of aeroplanes with yokes is not helpful and can often mislead people, so I am not sure if this is the right way forward."

"Tesla is definitely a company that like to push the boundaries", he said. "We're in regular contact with Tesla and will test the new Model S as soon as we are able to."

The Tesla Model S Plaid is available to order now, with UK deliveries scheduled for 2022.



The Model S Plaid will start from £110,980





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Seat will launch an electric urban vehicle in 2025, priced between £17,000 and £21,000. The new vehicle, which Seat teased by releasing an outline sketch (above) will feature SUV-like proportions whilst keeping supermini dimensions – it will be around the same size as the current Arona.

The new vehicle "will be the first car for an entry platform for different brands of the VW Group" according to Seat boss Wayne Griffiths, referring to a modified version of the existing MEB platform used by the VW ID 3, adjusted for smaller vehicles. The same architecture will likely be shared by the future VW ID 1 and ID 2 models.

The preview comes as Seat aims to "put Spain on electric wheels" and allow the country to "jump on the electrification train" according to Griffiths in a statement made in March.

Seat will lead future electric vehicle development for the entire VW Group as part of a plan named "Future Fast Forward". The company hopes to transform its Martorell production plant near Barcelona to produce over 500,000 urban electric vehicles per year for the entire VW conglomerate.

Griffiths added: "We've drawn up the plan, we have the right partners on-board and we're generally ready to invest. This project is intended to become the driver for the transformation of the Spanish automotive industry."





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VW has unveiled plans for six new gigafactories in Europe, which will produce enough batteries to power five million entry level VW ID.3s per year.

The first opens in Skellefteå, Sweden by 2023, and the second in Salzgitter, Germany by 2035. Together they will produce enough batteries a year for half a million VW ID.4 electric SUVs.

Volkswagen also announced plans to introduce a new single battery cell format in 80% of its group's electric cars by 2023. Having a standardised battery cell in most of the VW Group's electric vehicles will radically reduce

costs and the complexity of manufacturing according to CEO Herbert Diess: "Lower prices for batteries means more affordable cars, making EVs even more attractive for customers."

Thomas Schmall, Volkswagen board member for technology, said: "We aim to reduce the cost and complexity of the battery and at the same time increase its range and performance. We will drive down the cost of battery systems to below €100 (£85) per kilowatt hour."

Beyond building cars, the VW group reaffirmed its investment in charging infrastructure and battery recycling. Aiming to have 18,000 fast chargers in Europe by 2025, five times the number that are available to use right now.

IN BRIEF



Audi will develop no more new internal combustion engines, according to CEO Markus Duesmann. Instead, existing engines will be adapted to comply with the stricter Euro 7 emission standards that are set to come into force in 2025.



Kia has unveiled its first dedicated electric car, the EV6. The car will be capable of charging from 10% to 80% capacity in 18 minutes, and has a potential range of 310 miles. Prices to be announced closer to the launch date of the car, later this year.



The Government's grant towards the purchase cost of new electric cars has been cut from £3,000 to £2,500. This is in addition to a decreased upper limit on the cost of the vehicle being purchased, which is now reduced to £35,000.



The Mustang Mach-1 has gone on sale in the UK. The Mach-1 is equipped with a 5.0-litre V8 producing 454bhp and 390lb ft, starting at £55,185. It has track focused suspension, plus upgraded aerodynamics and cooling systems. Prices start at £55,185.





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Peugeot's new 308 will offer two brand-new plug-in hybrid options when it goes on sale later this year. A 1.6-litre petrol engine in either 148bhp or 178bhp states of tune will combine with a 109bhp electric motor and a 12.4kWh battery to make a combined 177bhp or 222bhp respectively. The hybrids have the capacity for 37 miles on electric power alone.

More conventional offerings include a 1.2-litre three-cylinder petrol engine with either 108bhp or 128bhp, and a single 1.5-litre diesel unit producing 128bhp and 221lb ft of torque.

The new 308 sports a more upmarket-looking interior with a brand-new infotainment system on a 10-inch touch screen along with wireless Apple CarPlay and Android Auto, mobile wireless charging that can be found in the 34-litre centre console cubby, and luxurious options such as Nappa leather seats with massaging functions, and a widescreen sat-nav from Tom-Tom.

The car is also larger than its predecessor, with the wheelbase increased by 55mm which should mean more legroom for rear passengers. Boot space is 412 litres, making it larger than main rivals such as the VW Golf or Ford Focus.

An SW estate and a hot version with fourwheel-drive and 300bhp are expected to follow.



Toyota's Aygo X Prologue concept reveal creates "a new vision for the A-Segment"
Toyota's Aygo X Prologue concept shows the next Aygo will morph into a small-scale rugged crossover. From every angle, the design expresses attitude with the hope of providing an audacious design for the A-segment model.

Toyota designer Ken Billes said that Toyota has "demonstrated that a small car can still be big and bold in personality" with the Aygo X.

Appealing to youthful customers, the urban design includes a raised ride height, skidplates and a bike carrier. Toyota said the new look emphasises "the car's readiness to leap forward into action".

In 2005, the Aygo became the entry point into Toyota ownership in Europe which successfully provided personal freedom and mobility to its customers. Design Director Lance Scott said: "fun and playfulness has always been at the heart of the Aygo. Now we've added to its DNA an additional pinch of hot spice". Ryan Fernandez



Volkswagen introduces 4Motion system with new Golf R Performance package Volkswagen's newest Golf R makes use of 315bhp and 310lb ft of torque to outperform any of its predecessors. In addition to the higher power figures, Volkswagen has introduced a new all-wheel-drive system that makes use of torque vectoring on the real axle of the car to deliver the power to the road as effectively as possible

road as effectively as possible.

The optional R Performance package increases the top speed of the Golf R to 168mph, and allows drivers to use both the newly designed Drift mode, and Special mode – or Nurburgring mode.

Lead engineer of the Golf R, Jonas Thielebein, explained that Volkswagen's goal with the car was to minimize both under- and oversteer, keeping the driving characteristics of the car as balanced as possible. "It should be as straightforward as possible to control the car at all times. The selective wheel torque control allows you to take the car to new limits, and keep the handling neutral." Jae Pepper



NEW i4 LEADS BMW'S "BIG PUSH"



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BMW's fully electric four-door coupé, the i4, goes on sale later this year from around $\mathfrak{L}50,000$, a price similar to that of a Tesla Model 3.

The i4 is based on a modified version of the CLAR platform used on the 3-Series and 4-Series. This supports batteries up to 80kWh, giving the i4 a range of up to 366 miles on a charge (WLTP).

The i4 has a power output of up to 530bhp four-wheel drive, giving 0-62mph accleration in four seconds. A lower cost rear-drive variant with a smaller battery will also be available.

The styling of the i4 mimics the combustion engined 4-Series, retaining BMW's newly enlarged grille, but with added blue accents and aero wheels to distinguish the car from the upcoming 4 Series Gran Coupe.

BMW are "picking up the pace" with the electrification of it's vehicle range, said company CEO Oliver Zipse. "BMW certainly has all the capabilities it needs for the age of sustainable electromobility – which we launched ourselves almost a decade ago, with the BMW i3. Now, it is the time for the next big push."

A BMW M Performance version with even more power and visual changes is expected to follow.

AUTOMOTIVE

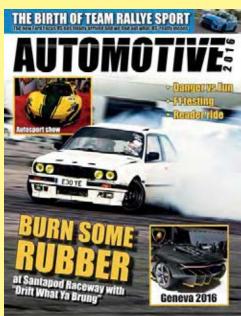
BACK ISSUES













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HONDA E

Does Honda's first mass market electric car stand up in the ever-growing electric vehicle market?



Sarah Shorter sarah@automotivejournalism.uk

amed 'City Car of the Year' at the UKCOTY Awards the Honda e is the first mass market all electric car from the Japanese maker. It's one of a new breed of electric hatchback, joining the Peugeot 208-e, Renault Zoe and Fiat 500e, all introduced in the last 18 months.

Standing out from the crowd in both appearance and price, the Honda e is packed with new technology. But is the cute look and the tech flair enough to get people paying out?

The cute retro-modern styling makes the e impossible to miss. The door handles pop out, and opening the door reveals a touchscreen display reaching all the way across the car. Press the power button and the car sings to tell you it is on, and you know that this is a car of the future.

The drive is fun, responsive and makes a trip round town a breeze. The little Honda is an easy fit through inner city streets and tight spots through town centres thanks to the wheels being set in the far corners, giving the car a turning circle of 4.3m.

The single pedal function allows you to accelerate and decelerate with the accelerator. You can adjust the rate of braking using the paddles on the steering wheels, which can be distracting while you get used to it but ensure it suitable for your driving style. Coming off the accelerator too quickly can lead to you decelerating quicker than planned to begin with, but it's easy to adapt to it and it's useful in stop start traffic. The brake pedal is still there for an emergencies.

On a longer journey the adaptive cruise control is excellent, adjusting the speed gently, unless it is reacting to a car pulling in ahead to closely. There is a handy indicator which appears if the car spots another vehicle wishing to move into your lane.

The Honda e offers superb parking assist – the car locates parking spaces and does a great job of parking itself. The screen advises the driver of its path, and you can easily take control by applying the brake but you never feel like you need to.

The Honda e has a 35kWh battery which is smaller than some of its competitors including the Peugeot e-208. Honda claims you can get 125 miles from a full charge. Realistically you will get 80 to 100 miles on a charge before you are looking for a charge point.

Searching for charge points is easy — the touchscreen lets you bring up a list of nearby fast charge points. You can also search for charge points near your destination, but only while stationary, so the driver is not distracted.

Inside, the dashboard is truly different, combining retro styling with modern, arguably futuristic technology. The vintage wood styling and



The curved rear end showing its 70s Civic inspiration with the standout circular lights adding to the car's overall blend of old meets new

"Press the power button and the car sings to tell you it is on, and you know that this is a car of the future"

vents do look quite plastic and flimsy but adds to the overall look of the car.

Instead of traditional side mirrors, the Honda e has two small cameras on the doors. The footage from these is displayed on a 12-inch screens at each end of the dashboard. Placed in a position which is natural, and you get used to them easily. All the cameras provide clear vision around the car, but they might tempt the driver to become too reliant on them, or to skip physical checks before making manoeuvres.

Two touchscreens make up the rest of the dashboard to provide all the information the driver may require. Each screen allows for an application to be open. This could be useful for the all-important tunes on a journey.

The front cabin is very smart, lots of room, comfy seats, and enough cubby holes for all your stuff including a hidden pull-out cup holder in addition to the three found in the centre console.

The back seat is a bench with no 50/50 split, so if you need more boot space, you cannot have a rear passenger. With the seat folded down, the boot offers a convincing 861-litres of space, which is needed given how the parcel shelf and awkward shape of the boot restricts how much you can stack into the back of the car while the seats are up.

All the technology that has been crammed into this small car does not only to increase the safety of driving but improves the day-to-day of usage and ownership of an electric car.

The Honda e is the perfect car for urban living. It is great for those with a short commute and who only occasional take long journeys. It is ideal for the school run and shopping trips.

The starting price for a Honda e is £27,160 which is almost £10,000 more than a base model Peugeot e-208, coming in at £17,575, but the Honda e is packed with driving aids and technology even at base model and offers a fun drive even to the local supermarket. It is ideal for people that are looking to standout in a high-tech, cute electric car and not concerned by the shorter range or the higher price tag.

Key Facts: Honda e Advance

Price: from £29,660

152bhp Power: 232lb ft Torque:

0-60: 8.0 seconds

100mph Top speed:

3.0 miles/kWh Test economy:

80-100 miles Test range:

Official range: 125 miles

Battery warranty:

Up to 100kW Charge speed: 8 years/100k miles





Left: The mix of retro interior with new technology. Right: Camera button allowing the driver to view all the car can assist with blind spots





Left: The power button alike those found on electronic devices Right: The screen filled dashboard with the shortcut to searching for a charge





Left: The army of connectors Right: The single pedal function can easily be turned on using the button below the electronic gear selector





Left: Switch easily been normal and sport Right: The instrument panel showing the driver with the information they need for a safe drive



Does Peugeot's inconspicuous small electric car have what it takes to bring electricity to the masses alongside the maturing competition?



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ooking for your first electric car but hate the idea of shouting to the world about it? Then the Peugeot e-208 should be on your shortlist. Electric cars are often flashy but the e-208 is remarkably subtle and apart from the aerodynamic alloy wheels and "e" badge, this truly is just another Peugeot 208.

Mind you, that's not a bad thing. The French brand has been on a roll with its styling in recent years – a far cry from the undesirable blobs of the 2000s. The current 208 has been around since 2019 and it continues the trend of attractively sharp styling that could only be recognised as a Peugeot – the "lion's tooth" daytime LED running lights are a great example. That's not to say it's perfect: the rear end is a lot more bulbous than the previous generation, and the black wheel arch trim makes the 17-inch alloys look tiny.



When you climb inside, you'll find it's difficult to avoid using French fashion clichés. The e-208's interior is radically different from other cars in the class, and it works to great effect. Just like the outside, you're greeted with a well-built plethora of sharp angles and strong lines coming together to make an expressive dashboard with a good amount of character. All the main touch points feel suitably premium and well-built (as they should for a car that costs £30,820 on the road) and with this being the high-end GT model you get extra goodies such as the 3D i-Cockpit an impressive-looking but ultimately gimmicky digital instrument panel. It uses a 3D effect to put important information such as your current speed in the foreground with less important information behind. You also get a wireless charging pad for your phone, and a larger-than-standard 10-inch touchscreen on the dash.

However, there are some penalties that must be paid for living with such a unique and desirable interior design. Firstly, the steering wheel is tiny and sits below the instrument panel. We didn't find the setup too compromising, but some people definitely do, so make sure you sit in the driver's seat and get comfortable before putting down that deposit. Secondly, and far more irritatingly, is that the touchscreen and toggle controls are impossible to reach without leaning forward if you have your seat far back. Of course, if you're six feet or



under, this will be a complete non-issue, but it does highlight that the e-208 is ergonomically imperfect.

While the dashboard certainly looks pleasing, its actual functionality can be a mixed bag. The 10-inch screen is responsive to the touch, bright enough and almost never lags, but the menus can be illogical and confusing to navigate. The graphics, too, aren't quite up there with the best, thanks to a dull colour palette and uninspiring icon design. Under the screen but above the toggle switches, we have touch-sensitive capacitive buttons which act as shortcuts for menus on the infotainment screen. They do not depress like a normal button or provide any form of feedback, so you always have to actively take your eyes off the road to press them. Combined with the fact it's hard to reach them at all if you're of the taller variety, it makes for quite a frustrating experience. This can be combatted to some extent with a three-finger tap on the touchscreen to bring up your main menu – a small but handy easter egg from Peugeot that makes having to adjust the climate settings on the screen a little more bearable.

Visibility in the e-208 isn't brilliant. The C-pillar is massive, compromising your view at angled junctions, and the way that five doors have been squeezed into a supermini body means that if your seat is quite far back the B-pillar is directly in your line of sight to the side. But you do get parking sensors as standard across the range, and the GT model we have here has blind spot monitoring and a rear parking camera which incorporates a clever "bird's eye" top-down view that makes manoeuvring easier.





Inside, the e-208 is a nice place to spend time, with good quality switches and striking design. A few quirks in the shape of an engine start-stop button and old cruise stalk do remain, however



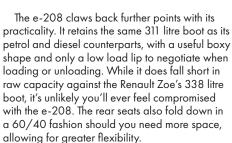




The e-208 gives off the impression of a normal car with very subtle styling cues, a 311-litre boot not compromised by batteries, and the bonnet hiding the 134bhp motor instead of a 'froot'







Inside the cabin, the car is generous with useful storage areas. Door bins are well-shaped for carrying large bottles of water, the cupholders can accommodate everything from small cans to large takeaway cups, and the aforementioned wireless charging pad doubles up as a well-sized spot for sunglasses. The only area where the e-208 does lose points is with the frustratingly small glovebox, which will barely contain the user manual.

While the e-208 is quite compact for a supermini these days, it can still seat four average adults in comfort for shorter trips. Both front and rear passengers are offered good head and leg room, and the car is wide enough not to feel too cramped laterally. The front seats in particular are a highlight, offering an excellent blend of comfort and support to both driver and passenger. They also have a wide range of adjustments to suit the needs of almost any size of occupant.

The e-208 is able to deliver a peak of 134bhp from its motor, allowing for an official 0-62mph time of 8.1 seconds and a top speed of 93mph. Around town, it feels every bit as nippy as the numbers would suggest. Up to 40mph, the e-208 responds with an urgency that would likely embarrass a few warm hatches away from the traffic lights. It's thanks in part to the sophisticated

Key facts: Peugeot e-208 GT

from £29,975* Price: Motor: Synchronous electric 134bhp Power: Torque: 221lb ft 0-60mph: 8.1 seconds Top Speed: 93mph 3.5 miles/kWh Test economy: 140-170 miles Test range: Official range: 217 miles Up to 100kW Charge speed:

*includes £3,000 plug-in government grant



traction control system, which is tuned well to never give the sensation of holding back the car too much. If you turn the system off, it allows the e-208 to lose grip and spin the front tyres way too easily, so best to let the computer do its work.

The regenerative braking allows for efficient driving around town, but it does give off a spongey and inconsistent pedal feel at times. A driver coming from a typical petrol or diesel vehicle will find the brakes very sharp at first, but it is something that you can adapt to after a few days.

The suspension is clearly tuned for comfort and ease of use, with most imperfections and bumps ironed out without a sweat. Only larger potholes or harsher speed humps can unsettle the e-208, and occasionally send a jolt through the body.

With comfort-orientated suspension the e-208 is not at its happiest on a twisty B-road. The car has a boat-like and wallowing effect through fast bends, and the steering is well-weighted but not particularly communicative. While it may have the initial speed off the line to challenge your conventional warm hatch, it's no replacement for the back road blast machine. With that being said, the car feels stable and sure-footed, with plenty of grip coming from the Michelin Primacy 4 tyres.

When you're not hunting for country roads, the otherwise excellent road manners of the e-208 really shine through. Along with the soft

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Battery warranty: 8 years/100k miles



"The car feels stable and sure-footed, with plenty of grip coming from the Michelin Primacy 4 tyres"

springs, Peugeot has done an excellent job with sound insulation, with wind noise almost non-existent and tyre noise minimal even at higher motorway speeds. Combined with the effortless steering, lack of gears to worry about and pedal action, it creates a very soothing experience that encourages gentle driving mannerisms.

The e-208 returns up to 217 miles on a charge on the European WLTP cycle (compared to 245 miles in the Renault Zoe) although this would certainly be on a perfect best-case scenario. During five days of testing on mild and dry February roads, the e-208 returned about 150-160 miles from a full charge at 3.5 miles per kWh. Expect to see around 180 miles from perfect

summer conditions, and about 140 miles on a 70mph motorway drive. Unlike traditional petrol and diesel cars that do well on fast cruises, the e-208 is at its best in urban environments, where it can make full use of the regen braking. From around 50mph and upwards, you get a distinct sense that the car doesn't want to be sitting at higher speeds by returning something closer to 3 miles per kWh instead of the typical 3.5, and overall feels far more natural and suited to the typical urban driving habits like stop-start traffic and darting into small gaps with its instant torque.

However, if you do find yourself making motorway stints the e-208 supports 100kW charging, allowing a 10-80% charge in just half an hour. In this area, it has the edge over the Zoe, which only supports up to 50kW.

The Peugeot e-208 has proven itself to be a solid and well-rounded electric car. It's not class leading with its range and practicality (the Zoe has it beaten in both distance between charges and boot space), but it also doesn't majorly disappoint in any area, either. The relaxing driving characteristics and sharp styling will appeal to many, as will the fact that it doesn't shout about its electric powertrain in the design.

Some costs do have to be paid for having such an eye-catching interior design. The steering wheel setup won't be for everyone, and the ease of use with the infotainment has room for improvement. That doesn't take away from the fact that overall, the e-208 is a really nice place to spend time, and the refined and meaty powertrain only adds to the quality ambience that the car brings.

Electric car ownership certainly won't suit every driver's needs at the moment, but that's less to do with the e-208, and more to do where the technology currently is in terms of innovation. Despite the technical limitations, the 150 miles of real-world range you can expect to see from the e-208 is usable for many drivers. It utilises current technologies with great execution, and has presented itself as an appealing mass-market option as many drivers' first ever electric car.



Suzuki has given its quirky mini SUV a midlife refresh. But do the updates keep the Ignis relevant in a competitive city car segment?



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There aren't many cars out there with a design that can put a smile on your face – but the Suzuki Ignis is one of them. The already charming Ignis now has a smarter interior with further sound deadening, a new Jimny style grille, and a standardised hybrid powertrain.

In a world of aerodynamics and curves, the second generation Ignis offers a unique boxy mini SUV shape combined with city car proportions. The new grille creates a real sense of presence, and the LED headlights – which are now standard across the range – give the car a much more premium look. The design is modern yet almost retro, with the Ignis featuring a tribute to the Suzuki Whizzkid of the 1970s with its three slots on the C-pillar. The back end is arguably the car's most awkward angle, but its wheel arch extensions and short overhangs help add to the car's quirky style. Overall, the design of the Ignis is refreshing – and it really stands out on the road.

The Ignis starts from £14,449 for a two-wheel drive manual SZ3, and moves up to £15,999 for the mid-level SZT, and £16,999 for the top-of-the-line SZ5. You can also spec your Ignis with All-Grip four-wheel drive – but you can only have that in the SZ5. Our fully-loaded SZ5 test car included four-wheel drive and the £650

Tough Khaki Pearl paint scheme. Considering the amount of equipment that comes as standard on the Ignis, such as air con, DAB radio, Bluetooth and parking sensors – even a base spec SZ3 is good value, and you get a lot of car for your money. But the SZT offers the best balance of value with creature comfort, adding a leather steering wheel, a seven-inch touch screen with Apple CarPlay and Android Auto, 16-inch alloys wheels, roof rails, and body coloured trims. The top trim SZ5 adds keyless entry, cruise control, foglamps, lane departure warning, and an autonomous emergency braking system. These latter two features lift the Ignis from a four star EuroNCAP safety rating to five stars in the SZ5.

The interior of the Ignis is a pleasant place to spend time. It won't go winning any awards for style or beauty – but it's sturdy, and all the controls are where you would expect them to be. The Suzuki infotainment system is simple and easy

to use, but most people will use the slightly more intuitive Apple CarPlay or Android Auto. Graphics are good too, but the touch sensitive buttons for the home screen and volume can be difficult to use whilst driving. The interior plastics are also hard and scratchy, but the touchpoints are good with solid feeling indicator stalks, climate controls and a soft leather steering wheel.

Getting comfortable behind the wheel is very easy. There is plenty of adjustment in the driver's seat, and the seats offer good support. Head and legroom in the back is plentiful, with space for six footers and the ability to tilt and slide the rear seats. The SZ3 has space for three on its 60/40 split rear bench, but the SZT and SZ5 have a 50/50 split with only room for two. The Ignis also has useful seat belt catches on the rear C-pillar, which help stop the seat belts getting trapped in the seats when folding. Boot space is very good for a car of this size, with 260 litres of capacity in

"The four-wheel drive adds to its ability, and the car can easily handle a dirt track or grassy field"

two-wheel drive models. Four-wheel drive models will have slightly less space with 204 litres, allowing room for the extra hardware.

There is only one engine choice with the Ignis – a 1.2 litre mild hybrid petrol. The powertrain is well suited to the car, and offers excellent fuel economy with a 48mpg average achieved from our test car. The engine is responsive and performs well in urban environments, and the 12 volt mild hybrid system assists with power at the lower rev range whilst also boosting fuel economy. The system also features regenerative braking, which recuperates energy from the braking to the battery for additional power assistance. As a mild hybrid the car is unable to run on electricity only, but the system subtly improves the cars performance, and you would never even know it was there.

On the road, the Ignis is surprisingly good fun to drive. The engine is peppy and likes to be revved, and the steering is light and perfect for darting around town. The car has a good turning circle and the gearshift is also very light, making it easy to manoeuvre in tight spaces. Visibility is great too, and parking is a doddle with the reversing camera. The car's 18cm of ground clearance and short overhangs are excellent for mounting kerbs or verges. The four-wheel drive adds to its ability, and the car can easily handle a dirt track or grassy field. There aren't many cars out there at this size that offer legitimate four-wheel drive, so it's a feature that really adds to its character. On the twisty stuff, the car rolls in the corners, and the ride can be a bit fidgety on bumpy roads with its narrow tyres. On the

motorway the Ignis performs well, although it doesn't take much of a liking to crosswinds and it could do with a sixth gear. On longer journeys the cruise control on the SZ5 really adds to the comfort, and is a must if you do a lot of mileage.

The Suzuki Ignis is now better than ever. Not only is it cheap to buy, but it's also well equipped, practical and fun to drive. Our recommendation would be a mid-level SZT – although the additional niceties in the SZ5 such as keyless entry and cruise control could easily justify the extra cash. We wouldn't blame you if you went for the All-Grip either, as it really gives the car that extra bit of quirk and go anywhere ability. It's not without its faults, but if you're on a budget and looking for a good all-rounder, the Ignis could certainly be the only car you would ever need.



Space in the back is impressive for a city car



The interior is simple and feels sturdy



4WD models come with Hill Descent control

Key facts: Suzuki Ignis Hybrid

Price: from £14,449
Price as tested: £18,649
Engine: 1.2 litre four-

cylinder with 12

volt mild hybrid

Power: 83bhp Torque: 79lb ft

0-60mph: 12.8 seconds

Top speed: 103mph Fuel economy: 51.9mpg

(combined)

CO2 emissions: 123g/km Boot space: 260 litres

(204 with 4WD)

Kerb weight: 940kg
Gross weight: 1,330kg
Length: 3,700mm
Width: 1,690mm
Height: 1,595mm

Warranty: 3yr 60,000 miles





It's the latest collaboration between Mercedes and Chinese company BYD, but can the Denza compete with European electric SUVs?



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owadays, with European electric and hybrid car market growing faster than ever, an EV alliance is being built between Mercedes-Benz and China's BYD Auto. The Denza X is their latest model, and BYD says it may come to Britain in 2022. A similar car is already on sale in Norway, where it costs just £33,000. With the price tag starting from just a half of its European rivals, this new SUV from the east can challenge BMW iX3, Jaguar i-Pace and Audi e-tron with a more affordable approach.

The Denza X was originally exclusive to the Chinese, but after its success in China, BYD Auto and Mercedes-Benz are planning to expand their venture into Europe. The X is coming with fully electric and plug-in hybrid versions similar to its Norwegian counterpart, and because both have been designed and tuned by the brains responsible

for the Mercedes EQ line, some of its design philosophies will be applied to future Mercedes-Benz EQ electric models.

The X is quite a large seven-seater. It looks German: there is an old saying in China: the best way to learn is to learn from the best, and so Denza did really find itself a respected German mentor, and didn't hesitate to use various "styled by Mercedes" badges to emphasize it. The X has the same dimensions as the BYD Tang EV600 sister model, with 4,890mm of length, 1,950mm of width and 1,725mm of height. It can be categorized as a spacious midsize crossover. And since it has a curvy roofline, through-type LED lights, horizontaltype taillights and massive 22-inch wheel rims, the BYD's resemblance to more familiar family-size electric SUVs like the Mercedes EQC and the Audi e-tron is uncanny. But that is not a bad thing actually, since the popularity of these electric family SUVs is growing ever stronger among the European consumers.

The exterior of the Denza X is pretty Mercedesish, full of a sense of technology. Step inside and, if you're familiar with previous BYD models, you'll notice that this is nothing like you've seen before. It has implemented the embracing style of Mercedes' design into the core of the cabin. The layered centre console design is extended to the door panels on both sides, and together with the combination of atmosphere lights, leather trimmings, and carbon fibre or wooden plaques on the door handles, it takes the style to a higher level.

As an electric SUV in 2021, the Denza X is quite appealing to the younger generation as well. The 15.6-inch touchscreen on the center console can use applications downloaded similar to your Android smartphone, making it possible to sing karaoke and watch Tik-Tok in your car. Also, most of the functions can be voice controlled –such as the sunroof switch, seat ventilation, and air conditioning temperature adjustment. In addition, the Denza is equipped with a 360-degree high-

"There is an old saying goes in China: the best way to learn is to learn from the best, and Denza did find a respected German mentor"



The X's seats are comfortable and well-made







As an electric SUV in 2021, the Denza X is quite appealing to the younger generation, with various aids and technologies, even remote control







The X is feeling pretty confident with five different settings, can cope with both the icy-cold Nordic and the hot-sunny Mediterranean with ease

definition panoramic parking system, which can simulate the surroundings of the X, making parking in narrow space easy. And most surprisingly, Denza is armed with a remote control app: by simply touching your phone, the X can be started, stopped, and driven at low speed.

The vibe of being inside an authentic Mercedes-Benz is constantly there - the outlet of the air conditioner in the Denza X uses the same "jet engine" style which is common on other Mercedes-Benz models, and the infotainment system is also redesigned with a German touch. You can easily get lost in a continuous psychological debate about this vehicle's true identity – is it German? Made in China? Or a combination of both?

The owner of electric cars has several arch enemies: range anxiety, charging difficulty, and the worst of them - extreme weather. BYD took a bold move by launching the Tang EV600 in wintery Norway as the start of its European expansion. In fact, the X is pretty good under the cold too: it has shared the same drivetrain, battery, and electric motor from the all-wheel drive version of the Tang. BYD is well-renowned for its battery. The Denza

X's single-drive and dual-drive versions are both equipped with a 82.8kWh battery pack, and the energy density is 161 Wh/kg. The electric only range is up to 62 miles. Total combined output of the PHEV X is reaching 578 PS, and torque is up to 700 lb-ft, invading almost supercar territory. Furthermore, Mercedes-Benz engineers has tuned it with more performance oriented: the official 0-62mph time of the PHEV X is just 4.3 seconds, almost a second faster than Mercedes-Benz's own EQC 400 standard model.

In terms of driving experience, the X is not far behind most of the European midsize family SUVs. The feeling of the surface changes of the road is not well-transferred to the driver – that's deliberately done to improve comfort, but by comparison the Jaguar i-Pace, BMW iX3 and Audi e-tron SUV do provide more direct and engaging drivability.

Like the Tang EV600, the X is built on BYD's E-platform and DM 3.0 architecture, and since the X's chassis was tuned by Mercedes, the ride ability is improved by a great margin. When the soft damping system is subject to a large impact on the road, the electronic controlled FSD damper will

reduce its damping force, making big bumps much less noticeable. Also, the Denza X has a selectable driving system called ATS, which stands for All Terrain System. It has five different options: ECO, Sport, Dirt, Gravel and Snow, all of which enable the X to cope with the complex and changeable road conditions in both icy-cold Nordic and hotsunny Mediterranean with more confidence.

The Euro-Sino EV alliance by Mercedes and BYD Auto is contributing to both sides. In 2019, sales of Chinese electric cars accounted for only 0.6% in Europe. At less than half of the price of its European rivals, the Denza would be a competitive force in the electric SUV market. After all, the Tang EV600 is already here, and it's always good to have more variety of choice for customers.

Key facts: Denza X PHEV

Price: £33,000 0-62mph: 4.6 seconds Engine: 2.0 14 Turbo Length: 4,890mm Width: 1,950mm Height: 1,725mm Charging time: around 3hrs Curb weight: 1650kg 578PS Output:

160mph Top speed:

Battery warranty 5 years



The X's interior has implemented the embracing design philosophy into the core of the cabin



What does China's folk hero can do when it comes to electric? Can it really takes on the Renault Twizy?



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ver the years, "made in China" has become world renowned for its excellent price to performance ratio. Here's a great example: the Baojun E100, a stunning little car with a staggeringly low price. Later this year Latvian company FreZe will sell a version of the E100 in Europe starting at under £8,000. It will become the Renault Twizy's biggest rival in the entry-level electric car market.

Baojun is like a kind of folk hero in China, established in 2010 under the management of SAIC-GM-Wuling. During the past decade, it has been widely acclaimed for its reliable quality and affordable prices, and become one of the most recognized car brands among the working-class in China. Like the Renault Twizy, the Baojun E100 is a small electric city car, but it has a longer range than its French tival, bigger luggage and cabin space, a higher top speed and is shaped more like a real car. With the help of FreZe, the E100 will soon become one of the cheapest electric cars on sale in Europe. At the end of 2021, you probably can kiss the Renault Twizy a sweet goodbye.

At first glance, the E100 looks like a gadget from the Cyberpunk game. It's a three-door hatchback if you want to define it, but certainly it's a lot smaller than most of its European rivals. With a wheelbase of 1,600 mm and a height of 1,670 mm, the E100 can travel through the busy streets and narrow alleys with no comprise of speed.

Due to its low price and cute looks, the E100 is one of the best-selling electric vehicles in China. One internet-based company has even adopted it as a public shared vehicle, which proves the E100 is suitable for all ages.

The E100 is more mini than a Mini Cooper, and yet smarter than a Smart For Two. Even with this starting price, the E100 is comes with anti-lock brakes, power steering, parking sensors and brake force distribution. Also, Baojun does not neglect safety: the cabin of the E100 adopts a frame structure, which can provide reliable protection for the passengers in case an accident occurs. At the same time, the E100 is equipped with a pedestrian alert system, which can detect the surroundings and alert the driver. If a crossing pedestrian is identified, the system will brake the vehicle keenly and quickly. Last but not the least, the E100 is made with the latest ISOFIX attachment points, so your kids will be safe inside the car too. Simply put: if you just learned how to drive, or you're a parent who needs to pick up children, the E100 would be a terrific sidekick.

Compared to the Renault Twizy's go-kartlike interior, the Baojun E100's interior is more complete. Of course, with such a low price you're not expecting Bentley-level refinement. Everything you touch feels a little cheap and plasticky. The infotainment system and speedometer are integrated on two tablet-size screens, one behind the steering wheel and the other in the central console, and between them they control all in-car functions. The interior is lacking originality, but the twin color scheme does add some liveliness.

The cabin space is quite good in terms of the diminutive overall size. The E100 can seat up to two adults quite comfortably. However, the boot is far from ideal with a capacity of only 190 litres no more than a few bags of groceries.

Performance is adequate for urban commuting. The electric motor, can produce 40 PS of power and 81lb ft of torque, and can accelerate the E100 all the way up to 62mph. When you put the pedal down, this 849kg car accelerates briskly enough to keep up with any city traffic.

Compared to the Smart For Two, the body of the E100 is not rigid enough, and there is always a saggy feeling when cornering. During the rush hour, the E100 can shuttle freely on the busy streets, and at the same time, parking easily. A normal parking area can park two Baojun E100s. Because the design philosophy of the E100 is similar to the Japanese Kei-car, whose wheels are distributed in the four corners of the body, resulting a quite small turning radius of just 3.7 metres.

In 2020, Baojun launched tw upgraded versions of the E100 with names that are confusing to western ears: the Zhixiang and Zhixing. The Zhixing has a new storage box, while the Zhixiang



E100 only has 3 gears, it's easy to drive

20



E100 has a cheap, plasticky interior, but at least the orange colour highlights add some liveliness.

variant has an automatic folding rear-view mirror and parking camera. By the end of the year, the Latvian E100 will come to the UK – with revisions to meet UK safety regulations and probably a new look. Everything else will be the same as the Chinese version.

Finally, you can not talk about an electric vehicle without mentioning the battery. Though it is not really intended for long-range drives, the E100 can travel up to 190 miles on a single charge. The battery is equipped with heating and insulation technology, which can maintain the temperature even in the chilling winter, thus reducing unnecessary energy loss. However, turning on the

air conditioner will be a luxury you may not be able to afford in the hot summer as the range will fall to less than 120 miles.

Charging is the Achilles' heel of Baojun E100 – it does not support fast charge like some of its European rivals. In reality, as tested with a domestic 220V plug, the E100 needs more than nine hours to be fully charged, in which time, a Twizy can be charged three times. So, If you don't have a permanent garage or parking space with a charging point, you may not enjoy the convenience Baojun E100 brings to your life. After all, when it comes to cheap Chinese product, you gotta lose some to win some.

"Latvian company FreZe will sell a version of the E100 in Europe starting at £8000"



It has 40PS of power and 81lb ft of torque AUTOMOTIVEJOURNALISM.UK



It has a tablet-style central control system

Key Facts: Baojun E100

£8,000 Price: Body style: Hatchback 28kWh Battery: Length: 2,488mm Width: 1,506mm Height: 1,670mm around 9hrs Charging time: Kerb weight: 849kg Output: **40PS** NEDC range: 190 miles Top speed: 62mph Battery warranty: 3 years



The E100 can go with a range of 120 miles

HIGH-VOLTAGE FUN

IF SOME OF OUR ROAD TESTS HAVE GOT YOU THINKING ABOUT GOING ELECTRIC, HERE ARE OUR TOP PICKS FOR SMALL ELECTRIC CARS









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MINI ELECTRIC

Mini's first all-electric car keeps the retro styling, premium interior and go-kart qualities from its petrol-powered siblings but adds a plug-socket. Due to the size of its battery, the maximum range is only 145 miles, which Mini believes is plenty for most commuters and the smaller battery pack means quicker charging. With 50kW fast charger can get up to 80% charge in 35 minutes.

The Mini Electric only comes in as a 3-door, but Mini has made it simple when it comes to trim levels – you can pick between levels 1, 2 and 3.

Our recommendation: Mini Electric Level 2 RRP: £30,500 Best lease deal: £279.84 per month (Lease4Less)

RENAULT ZOE

Unsurprisingly, Europe's most popular electric car had to be on this list. With a claimed 245 miles of range, and starting at £26,995 it is unmatched when it comes to value for money. With new styling and interior thanks to a refresh in 2019, featherwight controls and tight turning circle make the Zoe great for driving in town.

The base Play model only has the option of a 110bhp motor, whereas the more expensive Iconic and GT line are available with an optional 135 bhp motor. But, bear in mind that rapid charging capabilities are not standard on any Zoe model, and costs £1,000 to add.

Our recommendation: Renault Zoe GT Line R135 Rapid Charge RRP: £34,495 Best lease deal: £210.13 per month (Riverdale)

FIAT 500 ELECTRIC

The new Fiat 500 Electric packs lots of substance under its newly refreshed body. It's available in four trims, Action, Passion, Icon and La Prima, and for those who really want to bask in their emission-free glory, you can get a convertible Fiat 500 Electric with a sliding fabric roof.

The Action trim is a fairly basic model, with a smartphone cradle rather than an infotainment screen, but if you're looking for the cheapest way into a brand new electric car, nothing comes close to its £19,995 price tag. Higher-spec models get rapid charging, more powerful 118 bhp motors and extra luxuries.

Our recommendation: Fiat 500 Electric Icon RRP: £24,995
Fiat PCP: £294.97 per month with Fiat £500 deposit contribution

HONDA E

A concept car brought to life, the Honda e really does stand out whatever you park it next to. The only thing more eye-catching than its styling is the interior, with 5 screens enveloping you in pixels. Or a virtual fish tank, you get to choose. While for some the Honda E might be tech overload. But for tech lovers and those looking for an electric car that stands out, nothing else comes close.

But the Honda E is admittedly best described as an electric city car rather than a hatchback. That means it's smaller than its competition, with a 171 litre capacity boot, and a maximum range of just 137 miles. Plus, all that style and all those screens come with a hefty starting price of £27,160.

For our full review of the Honda E, turn to pages 20-24

Our recommendation: Honda E 'standard'

RRP: £27,160

Best lease deal: £295.86 per month

(Lease4Less)

PEUGEOT E-208

Peugeot's electric hatchback is a great transition car for people looking to get their first electric car, as it chooses not to shout about being electric.

The e-208 is based on the same platform as the Vauxhall Corsa-e, but we recommend the Peugeot for its superior interior design and sharper styling. The e-208 has an ample maximum range of 217 miles, a 311 litre capacity boot and can go from 0-80% in 30 minutes using a fast charger.

The e-208 is everything you expect from a modern Peugeot hatchback; practical and fun to drive, but with enough quirks to remind you it's not the typical offerings from Germany or Japan.

For our full review of the Peugeot e-208, turn to pages 25-29

Our recommendation: Peugeot e-208 Allure Premium RRP: £31,025 Best lease deal: £244.08 per month (Blue Chilli Cars)

VW ID.3

Following on from the Beetle and the Golf, the ID.3 is VW's first mass market electric car. With an estimated range of 205 to 342 miles depending on battery pack sizes, you won't be getting any range anxiety if you want an EV for commuting, or for the occasional longer journey. On top of the excellent range, VW has equipped the ID.3 its latest infotainment and offers drivers Passat levels of interior space, making it ideal for small families.

There are plenty of trim levels to choose, from the base Life model with an RRP of £31,760 all the way up to the highest spec Tour model with an RRP of £42,290. Each model offers drivers more tech, luxuries, alloys, and colour options, so there are plenty of options to find your perfect ID.3.

Our recommendation: VW ID.3 Business RRP: £35,400 Best lease deal: £298.37 per month (Britannia Car Leasing)

*Terms of all leases shown were: 8,000 miles per year, 9 months initial rental and for 36 months AUTOMOTIVEJOURNALISM.UK









Can Kia defend its reputation by pitching its Rio against the UK's most popular choice – the Ford Fiesta?



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ore and more buyers are turning to Kia, attracted by distinctive styling and the peace of mind offered by a seven year warranty. The Korean brand's smallest car is the Rio supermini. How does it measure up to the UK's best-selling car, the Ford Fiesta?

As you approach both cars the first thing you notice are their looks. The exterior build quality of both cars is on par with the best of the competition, with narrow consistent shut lines, and paintwork which has a consistent hue and thickness. The vibrant metallic Blaze Red paintwork enhances the Rio's sporty design while the Ford's Agate Black gives the Fiesta a somewhat sinister look.

The Rio's GT-Line exterior strikes you with a bold, purposeful look. At the front, it wears Kia's signature "Tiger-Nose" grill which stretches across the front of the car connecting both headlights with integrated U-shaped LED daytime running lights and xenons. It also boasts an aggressive front

bumper housing two clusters of four LED fog lights recessed in a black lined pseudo air scoop, one on each side. Its protruding side skirts with gloss black inserts, 17-inch two-tone multi-spoke alloys and twin tailpipes add to the car's GT flavour. Also, the upgraded S model, adds a shark fin roof antenna. As you step inside, the first thing you notice is the chunky three-spoke steering wheel, with a leatherwrapped, flat-bottomed rim, white stitching and integrated audio and cruise control switches. The dashboard lacks radical design and is covered in hard, dark plastics, though a slab of carbon-fibre effect insert adds to the Kia's GT ambiance. A single-piece infotainment system braced by a pair of air vents sits slightly off centre to the rest of the dashboard which looks awkward. The white piping and artificial leather on the seats lift the cabin

ambiance but the fit, finish, and general quality of the interior materials indicate a car which is built to a budget. But even though our car suffered from chips to the plastic parts of the rear door trims after just 7,000 miles, the cabin materials in general feel durable enough to wear off most damage that life will throw at them, like hits and spillages.

The Fiesta has evolved its previous generation's "Kinetic Design" into a more mature, simpler style with straighter, longer crease lines and a more pronounced squared-off rear end. The front is less daring than the Rio's and adopts a narrower variation of Ford's trademark trapezoidal grille. The ST-Line gets front fog lights, a subtle body kit with side skirts and a roof spoiler, 17-inch grey Y-spoke alloy wheels and a pronounced single tailpipe to set it apart from the rest of the range.

"The Rio feels unengaging to drive. The steering is heavier than the Fiesta's and isn't as sharp, but the ride is smoother"

To complement the sporty exterior, Ford's designers have raised the premium look and feel of the interior over the previous model. As you enter the cabin, you are welcomed by an interior which is calming and minimalistic, yet also has subtle sporty feel. You're drawn to the thick red-stitched, leather wrapped steering wheel with integrated audio and cruise controls. The floating 8-inch gloss-black colour touch screen mounted to the top half of the dashboard, glistens like the fascia of an IPad in the sun. You also get a brushed aluminium gear knob, padded leather on the centre armrest and handbrake lever, and carbon fibre inserts moulded into the dashboard. The fit and finish of the interior is better than the Rio's and impressive for a car in this class. The controls feel solid and sturdy - even the plastics fitted to the door bins.

Getting comfortable in the Rio can take time. The steering wheel can be adjusted for reach and rake, and the seat squab can be tilted and moved backwards and forwards, but the backrest adjustment is by a rachet lever and there is a limited number of positions. Both driver and front passenger benefit from recessed headrests which can be moved forward as well as for height unlike the height-only adjustable headrest in the Ford. Once positioned, the Rio's controls are easily accessible and straightforward to use. The part-leather, part-cloth seats are exceptionally comfortable in day-to-day use. The pronounced side bolsters hold you in place during cornering but can also make it difficult getting in and out.

Finding the right seating position in the Fiesta is easier. It has the same number of adjustments as the Rio but the rake of the seats is continuously variable. Our ST-line came with cloth seats which were comfortable and supportive thanks to additional thigh support and less-protrusive side bolsters that still provide sufficient support through corners. Driving confidence is enhanced thanks

to the lack of offset between the seating position, steering wheel, and pedals. The Fiesta's controls are within easy reach, well laid out and easy to use although you wish the infotainment system was angled towards the driver. The shortcut buttons that are virtually placed on the infotainment screen, and together with the screen angle, forces your need to take your eyes off the road in order to select the icon of interest, which is a problem.

The frontal visibility in each car is good, with large windscreens that provide good offside and nearside visibility. Both offer electrically adjustable mirrors, but the Ford's are smaller. Both cars have tinted glass on the rear windows, which offer sufficient visibility during the day, but proves inadequate at night, particularly with the Ford which has a darker tint. Additionally, the Ford also suffers from a rising window/beltline which reduces the size of the rear three-quarter window, compromising visibility over the shoulder. The rear pillars of both cars are large enough to create blind spots which can obscure narrower items such as lampposts or motorbikes.

Starting the Rio is done by pressing the start/
stop button mounted on the dashboard just below
the indicator stalk. The 1.0-litre T-GDI threecylinder engine propels it to a maximum speed
of 118mph and produces a 0-62mph time of 9.8
seconds making it 0.8 seconds slower than the
Ford. The Rio's six-speed manual gearbox is lighter
and slicker to use. The reverse gear position is
next to first and to prevent mistakes Kia has fitted
a switch beneath the gear knob which has to be
pressed for reverse to be engaged, but the switch is
easy to activated accidentally.

The Rio's handling is not on par with the Ford. It feels unengaging to drive with noticeable amounts of body roll and understeer. The steering is heavier than the Fiesta's and isn't as sharp, but the ride is smoother despite running on 17-inch rims.

The Fiesta is also by a dash-mounted start/stop button. The 1.0-litre three-cylinder ecoboost engine pushes the Fiesta to a top speed of 125mph and a 0-62mph time of nine seconds. While the six-speed manual isn't as slick as the Rio's, its reverse gear is easier to get familiar with.

Driving the car at speed through the corners is what impresses the most. The Fiesta maintains a direct line through bends with miniscule amounts of understeer. This combined with its direct steering and what feels like four-wheel drive like grip from



Ford's tablet screen gives premium look to Fiesta



Kia's interior is gadget laden with easy-to-use tech



Both cars feature unique side profile exteriors - the Kia's is agressive and sporty, while the Ford adopts a simpler, cleaner approach



Fiesta's boot has a larger opening but has a high load lip and its wheel arches impinge upon the boot space

one of Ford's more potent, performance machines create a sense of invincibility in the Fiesta's surefooted cornering ability.

Entertainment and navigation in the Rio and Fiesta is achieved via Apple's CarPlay, Android Auto, USB connectivity, voice control, and GPS navigation. Active and passive safety is covered by anti-lock brakes (ABS) with electronic-brake force distribution (EBD), Hill Start Assist, emergency brake signalling, ISOFIX points for child seats, together with driver and passenger, side and curtain airbags. However, thanks to blind spot



Fiesta comes with full-size optional spare wheel



Fiesta's sunglass storage holder unit is a nice touch

collision warning, a rear-view camera and front parking sensors also coming as standard, the Rio takes the win for this section.

Despite their relatively compact dimensions, the Rio and Fiesta have generous amounts of cabin, storage, and boot space. The Rio has less front legroom but more rear legroom than the Fiesta. The Rio beats the Fiesta for headroom. A six-footer can comfortably sit in the front and back of both cars. However, with the front seat pushed as far back as possible, the Fiesta's rear is cramped. Cabin storage is an area which the Kia also excels over

Key facts: Ford Fiesta ST-Line Edition

Engine: 1.0-litre ecoboost 3-cylinder turbo

Power: 138bhp

Torque: 132lb ft @ 1500-5000rpm

0-60mph: 8.5 seconds
Top Speed: 126mph
Test mpg: 37mpg (urban)
Official mpg: 47.1 mpg (urban)

Fuel capacity: 42 litres

 Length:
 4,065mm

 Width:
 1,941mm

 Height:
 1,466mm

Legroom: 1,960mm (combined)
Headroom: 1,947mm (combined)

Boot: 303 litres
CO2: 102g/km
Price: From £19,840



Fiesta has cramped rear seat and trickier access

Ford Fiesta Cost of ownership

Purchase Price: £21,660 Residual value after 3 years: 69%

Car tax/year: £155 (102g/km)

Average service /year: £135 (1026)
Insurance/year: £350
Average mileage/year: 8000 miles
MPG: 43.8
Average fuel cost/litre: £1.24

the Fiesta. It has two centred cupholders, four bottle holders – one in each door, a deep central storage box with an integrated arm rest, a map pocket behind the passenger seat and an open double tray to place a mobile phone although there is no wireless charging dock like in the Fiesta. The door bins are a reasonable size for a car in this class, although the glovebox is shallow. The Rio also beats the Fiesta with boot space by an extra 22 litres. In the real world this equates to roughly ten standard size (450 x 380 x 180 mm) supermarket bags-for-life for the Rio and nine for the Fiesta. A



Fiesta's black headliner and black interior give the cabin a dark, claustrophobic feel especially at night



Rio has a wider opening for rear seat passengers

Kia Rio Cost of ownership

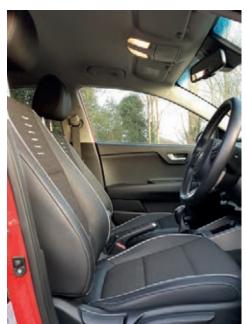
Purchase Price: £20,145 Residual value after 3 years: 63%

Car tax/year: £175 (125g/km)Average service /year: £153

Insurance/year: £300
Average mileage/year: 8000 miles
MPG: 43.4
Average fuel cost/litre: £1.24

60/40 split rear bench on both cars can increase their respective boot space even further, but high load lips on each car make lifting heavy loads into the boot a strenuous task.

The true cost depends on purchase price, residual value, car tax, service plans, insurance, average annual mileage, miles per gallon (mpg), and fuel costs. Performing back-of-the-envelope calculations based on the cost of ownership tables above, gives the average cost of ownership per year for the first three years for the Rio and Fiesta at £4,152, and £3,919 respectively. The Fiesta



Kia's grey headlining gives the cabin a spacious feel although the pillars are thicker than the Ford



No rear arch intrustion into the Rio's boot and plenty of space, but suffers from high load lip like the Fiesta

and Rio are also available to finance either by hire purchase or personal contract purchase. Our versions worked out at over £300/month over a 36-month agreement with a deposit of £1000.

Which car wins depends on your personal preferences. If you do a lot of city driving and are keen on space and equipment then the Rio is the better car, thanks to the roomier cabin, extra equipment and lower purchase price. The Fiesta has a more attractive, better-built interior, better handling and greater driver engagement. It's no wonder that it's such a perennial favourite.

Key facts: Kia Rio GT-Line S

Engine: 1.0-litre T-GDI 3-cylinder turbo

Power: 118bhp

Torque: 126lb ft @ 1500-4000rpm

O-60mph: 9.8 seconds Top Speed: 118mph

Test mpg: 37mpg (urban) Official mpg: 42.8mpg (urban)

Fuel capacity: 45 litres

Length 4,070mm

Width 1,725mm

Height: 1,450mm

Legroom: 1,920mm (combined)
Headroom: 1,984mm (combined)

 Boot:
 325 litres

 CO2:
 125g/km

 Price:
 From £20,145

Kia Rio

For: Spacious cabin, lots of equipment as standard, seven-year warranty

Against: Lack of refinement, un-inspiring to drive, cheap and dated interior feel

Ford Fiesta

For: Premium looking interior, entertaining drive, cheaper cost of ownership

Against: Cramped rear, high price, warranty only three years



Rio comes with tyre repair kit as standard



Rio's large interior lights illuminate cabin well



LAND ROVER DISCOVERY

3.0 TD6 HSE AUTOMATIC

If you take an off-road titan and use it purely as a machine for the road, is it just as good or does it just become a lacklustre, overweight SUV?



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ver since 1989, the Land Rover Discovery has been a landmark of British off-road engineering. While it's established that the car charges like a lion while off-piste, how well does it hold up as a car for the road?

As you climb aboard, taking hold of the steering wheel feels like taking the helm of a galleon. The towering driving position makes you feel truly in command of your surroundings, while the 15-inch steering wheel is large enough to make you feel like a ship captain.

But when you furl the sails and throw the wheel to one side, the steering feels light and the front end is surprisingly reactive. A car this big and heavy shouldn't feel that responsive. As the turns ahead get wider and faster, a lot of steering angle is needed, and the car begins to wallow. The soft suspension and elevated seating position exaggerate the body roll in such a way that can easily leave your passengers feeling a bit ill.

In an urban environment, the Discovery handles itself nicely. Graceful over speedbumps, a smart stop-start engine system that doesn't leave you waiting for ignition, and blind spot indicators bright enough to be spotted in your peripheral vision. Acceleration and braking are smooth and refined, so much so that you can easily climb above speed limits without even noticing.

The rev range is fairly narrow, with the engine starting to redline just beyond 4000RPM. The engine is quiet - a bit of a hum, transitioning to a gentle grumble if you put your foot down.

The eight-speed automatic aearbox feels seamless except for if you plant the throttle and force the car to move quickly from a slower speed. This Discovery's transmission also offers paddle-shifting – gear changes with the paddles give enough feedback to let you know that the shift has happened, but make sure you keep count, because the gear counter is small enough on the driver's heads up display that you'll have to take your eyes off of the road to check it.

Sat just to the right of the gear indicator on the instrument panel is a space for additional information - fuel remaining, current MPG, trip miles, or if you would prefer, a series of ratings that track how heavy footed you are and stare at you judgingly if you exceed the speed limit. They hardly dipped below four-out-of-four mind you, so it needs some serious pedal-to-the-metal action to get a poor score from the trip computer.

You can get easily get 30MPG over long trips, more if you drive conservatively - the car also uses AdBlue to reduce the nitrogen oxide emissions from the diesel engine. But when you do put your foot down, you'll feel the acceleration. Whether you're at a standstill or joining a motorway, the Discovery will pick up the pace effortlessly. The smooth transition between

speeds and three tonnes of weight fending off wind buffeting mean that cruising at speed is easy to do and a pleasant experience.

You get a similar satisfying experience being in cabin. The interior quality is superb, as you would expect from an SUV that cost just shy of £60,000. While the 10-inch infotainment screen has many features, key settings such as climate control, media playback controls and seating position are all controlled by physical buttons that are tactile and easy to find while focusing on the road.

The pair of stalks sat behind the wheel are clustered with controls. Each stalk can be pushed in four directions and has two rotational points. As

Key facts: Land Rover Discovery

Power: 253bhp 442lb ft Torque: 2,993cc Engine size: 0-60mph: 7.7 seconds Top speed: 130mph Fuel capacity: 85 litres Weight: 2230kg 4,970mm Length: Width: 2,220mm

Plenty of legroom for the middle row

"When you furl the sails and throw the wheel to one side, the steering feels very light and the front end is surprisingly reactive"



The back row has space for two adults



Absolutely no compromise between legroom for five people and generous boot space



The steering wheel spans 15-inches



Instrument panel is comprehensive and clear, but note the engine red line just over 4000rpm



Passengers get their own climate panel

a result, it can take a while to familiarise yourself with all of their functions. Conversely, the steering wheel remains fairly bare and easy to understand without having to look away from the road.

The on-board computer system is very capable – navigation, communication and media controls are as you would expect out of any half-decent modern system, but with a fully customisable home screen that lets you set up a dashboard exactly to your liking. The best thing about the touchscreen system is the speed. You don't find yourself waiting for up to a second for every character of the postcode you type into the satnav search function like you do with many other on-board computers, and you can find nearby petrol stations within no more than four or five button presses from the home screen.

One function that stands out is the ability to fold any of the five rear seats remotely from the centre console – no physical labour required. But the middle seat's centre headrest blocks vision through the rear-view mirror almost entirely.

Folding down the back row of seats reveals a generous boot capacity of 1137 litres, while also dropping the middle row of seats gives you enough space to rival purpose-built vans at a whopping 2406 litres of boot capacity.

Few other cars will rival the sheer practicality that the Land Rover Discovery offers. The surprising factor is the uncompromised driveability, giving a comfortable drive, bucket loads of functionality and enough performance on paved roads to rival the established capability of the Discovery off the beaten track.



ABARTH 595 V MINI COOPER S

They're both accessible bang-for-buck ways of putting a grin on your face, but which one should you spend your hard-earned cash on?



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ife's too short not to have a pocket rocket on your driveway at least once. Small, buzzy hot hatches have always been an enthusiast's favourite thanks to the sheer thrill they offer for very normal-looking running costs. There are several good options around but arguably nobody does it better than Mini and Abarth. Clean examples of both the R56 Cooper S and the Abarth 595 can be picked up for around £4,500 these days, and – spoiler alert – they both represent excellent cost-to-smile value.

You'll be forming your opinions of the two machines before you even get a chance to step inside them and crank their turbocharged engines into life. Both the 595 and the Cooper S are based on regular city cars that are distinctively retro in design, harking back to their ancestors from the 1950s. That, especially in 2021 as tastes have changed somewhat, makes them controversial in design to say the least. Some people will love the happy-looking rounded headlight design and clear 20th century silhouettes, whereas others will

resent how they don't look sharp or aggressive enough for our modern-day roads. Of course, with these being sporting versions they're covered in exterior trim that attempts to mask the cutesy insults they may otherwise receive. For example, the Abarth has a radically different front bumper design to the regular 500 that works to great effect, giving a rather imposing and meaningful face to a car that otherwise looks as harmless as they come. The smart 17-inch alloys fill the arches well, and the exterior is completed with a faux non-

functional rear diffuser, a sizeable rear wing, and two rather mean looking exhaust tail pipes.

The Cooper S we have here has the optional JCW body kit, but even still, it looks more restrained than the Abarth. Even with the upgraded 17-inch alloys, non-functional bonnet scoop and centre-exiting twin exhaust, it would be possible for the untrained eye to just see it as another Mini Cooper on the road. They both aren't bad looking cars by any stretch of the imagination, but the lunacy of the Abarth has to be especially admired – even more

"The Abarth is more boisterous with a fat turbo dial stuck on the dashboard - because why not?"



so when you consider this is just the base spec 595. Go for the higher-end Turismo or Competizione models and you'll have something that looks positively mental on your driveway.

It's a similar deal inside: they're both humdrum with sporting touches here and there. Again, the Abarth is more boisterous with a fat turbo dial stuck on the dashboard – because why not? Otherwise, the details are subtle in either machines, with red accenting in the Mini's steering wheel or 'Abarth' stitched on the 595's supportive seats.

The overall quality is certainly better in the Mini with more premium soft-touch materials used, but that's not to say it's immune from annoying trim rattle when on the move, likely amplified by the stiffened suspension. Since both the Cooper S and the 595 are based off normal cars, both interiors are logical enough to use and offer creature comforts desired in daily drivers, such as air conditioning, Bluetooth, electric mirrors, and multiple cup holders. The Mini's fiddly radio controls do come with a small learning curve and the Abarth's climate adjustment switches wouldn't look out of place on a washing machine, but there's nothing overly offensive going on in either.

The two cars certainly won't win prizes for practicality, with the Abarth's 185-litre boot just edging out on the Mini's 160 litres. However, they both offer split folding rear seats, and when combined with their boxy shapes mean a trip to



The infotainment system has been updated over the years, but the 595 still shows its age inside



The MINI is similarly outdated with its monochrome displays, but uses more premium materials

Key facts: Abarth vs Mini

595

Cooper S

Engine: 1.4l "T-Jet" turbo 4-cylinder Power: 144bhp @ 5500rpm Torque:

152lb ft @ 3000rpm 0-60mph: 7.8 seconds

Top Speed: 130mph (210km/h) Fuel capacity: 35 litres (7.7 gallons) Official economy: 47.0mpg combined

Real-world range: 270 miles Weight: 1035kg Length: 3660mm Width: 1627mm

1.6l "Prince" turbo 4-cylinder 181 bhp @ 5500rpm

177lb ft @ 1600-5000rpm

6.9 seconds

142mph (228km/h) 50 litres (11 gallons)

48.7mpg combined

385 miles 1130kg 3714mm 1683mm



JCW bodykit lifts the Cooper S into something more sporty, but it's still more restrained than the Abarth. Rev counter thankfully hosts a speedo, as the central guage is out of your line of sight.



squeeze for your next flat-pack bookcase. But anyway, while practicality and ambience

Ikea isn't completely out of the question, if a bit of a

must be considered with a daily driver, can these cheeky speed machines deliver grins on the move?

Right from the offset, it becomes obvious that there's quite a difference between the characters of the hot hatches. The Mini, while firm, has a sense of normality about it with softly padded leather seats and an engine note that more or less sounds like a generic four-cylinder from the inside. It encourages smooth and gentle pootling about, making use of the turbocharged torque to never realistically exceed half of the usable rev range. Just be sure to take it easy on the bumps and potholes.

Meanwhile, the Abarth continues its anarchic attitude with the exhaust grumbling as soon as you switch its 144bhp 1.4-litre turbo engine on. Even in gentle driving, you can always hear that exhaust complimenting the gruff engine by growling from behind, which not only pleases the inner boy racer from within, but gives a better sense of drama and flamboyance when compared to the Mini's rather muted soundtrack. However, the Cooper S does claw back points with some ECU-controlled pops and bangs from the exhaust when in sport mode.

The Abarth has a large power deficit against the Mini's flexible 181 bhp 1.6-litre engine, but it never feels much slower. Part of the reason is that straight line speed is one of the lower priorities for a B-road weapon, but it also helps that the 595 has a bark much bigger than its bite, with the exhaust tone giving the illusion of speed. Either way, a 0-60 time of under 8 seconds and a top speed of 130mph remains admirable. The Mini's 6.9-second and 142mph stats are indeed quicker, but nowhere near enough to put it in a different league, and you're certainly never left wanting more from the 595 when giving it some extra beans.

Both cars are brilliantly composed around bends, offering tonnes of grip, minimal body roll, and reasonable feel through their electric power steering systems. The Mini offers better seat-of-the pants feel, mostly because you sit much further down in the car with your legs almost fully unbent to the pedals. You can chuck the Cooper S into a bend at what you think are daft speeds, and yet it handles the corner in its stride and asks for more. It's at these times when you start to understand why the Mini brand is so synonymous with go-kart clichés. In contrast, it feels like you sit on the Abarth rather than in it, which does impact how the car feels around you as you give it input. The high seating is a relic from the 500 family tree, and is far from ideal. However, the seats themselves offer plenty of lateral support and a good deal of comfort and adjustability, so you won't be sliding





around holding on for dear life, at least. Cornering is slightly more vague than the Mini, but the Abarth still sits flat and offers good grip levels. When paired with the entertaining engine and exhaust note, you'll soon forget the 595 isn't quite as technically polished as the Mini on the B-road.

Ultimately, both cars deliver on the back roads in slightly different ways. The Mini is a little more controllable and in turn gives you that bit more confidence, whereas the Abarth is more of a drama queen when hustling it. They're both equally entertaining, but it would be down to what you value more in a fun car to decide what's best for you as an enthusiastic driver.

However, no B-road lasts forever, and you'll soon find yourself having to live with these cars on a daily basis. As cars that are set up for sporty driving they are never going to ride like a Rolls-Royce Phantom, but are they bearable?

In short: yes, so long as you temper your expectations. Both offer unsurprisingly firm suspension setups and will send crashes right through the body should you take a bump at speed. But, crucially, they're liveable – helped a lot by the comfortable seating offered in both. The Mini's front mud flaps scrape along the road on anything more than a very minor speedhump whereas the Abarth doesn't suffer from this at all, helping to make it a slightly less stressful machine to get along with on a daily basis.

Thankfully because the ride quality of these cars isn't unbearable, the Cooper S and 595 shine just as bright in town as they do on a country lane. Both offer light steering, dinky dimensions for the car parks, and reasonable urban MPG figures sitting in the low 30s to ensure your bank isn't broken. The Mini is equipped with stop-start, too, if you're a fan of those systems. At the bottom line, these sporty variants are no more difficult to drive in town than the standard Mini Cooper or Fiat 500 models, meaning practically anyone can quickly adapt to them without a learning curve.

Motorway driving isn't what the two cars are built for, but a good daily driver should still be able to take extended trips in its stride. Although it's fairly obvious that both the 595 and the Cooper S are not set up for long-distance cruising, it's not a miserable experience, either. At 70mph, both cars sit at just under 3000rpm through the five speed 'box in the Abarth and a six speed in the Mini, meaning they're not buzzing their engines too unnecessarily. They can return nearly 50MPG if you're careful, too, and while road and wind noise are not their strong points (the Mini in particular), it's nothing that cranking up the radio won't solve.

If at this point you're being tempted by having your own cheap pocket rocket on your driveway,



Despite being the base model, the 595 looks purposeful with appealingly sporty trim and subtle nods to its Italian heritage. LCD instrument cluster helps hide the age of the car somewhat, too.



it's good to know that it isn't always necessarily happy days. Just by their very nature, both the Mini and the Abarth are likely to have endured quite a hard life from previous owners – you don't buy a hot hatch to drive like a saint, after all. So, while checking for proper maintenance is always a good idea, it's doubly important for hot hatches that have spent a decade being ragged.

More specifically, Minis of this generation love to eat through timing chains and high-pressure fuel pumps with their less-than-perfect Prince engines, so be sure to check that the one you're looking at has had them sorted, especially if it's a leggy example. Owners report the later N18 family of Prince engines are vastly more reliable than the original N14, but even the revised motor will require plenty of care and attention if you're wanting to avoid a heart-stopping bill. Abarths tend to be more mechanically solid, but they're



not immune from classic Italian electrical gremlins. Ensure the check engine light is not on, and that all electrical functions such as Bluetooth connectivity and the windscreen washer jet motors (both common to fail) work properly.

Realistically, whatever flavour you have your small hot hatch in will quench your thirst for thrills, and then some. Choosing between the Mini and the Abarth is a difficult one, because they both have a very similar amount of key strengths in slightly different areas. The Mini may have the edge with better day-to-day liveability with a plusher interior and a smoother, quieter engine from the cabin, but the Abarth takes a clear lead when it comes to the sheer drama of hot hatch tomfoolery and creating a sense of occasion.

Are you going to listen to your head or your heart? Your head might say the refined Mini, but sometimes, life is just too short to ignore the heart.



Need an all-terrain load carrier, but bored with SUVs? Check out this selection of lofty estates that will do the same job, but for a lot less



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Wo inches can go a long way in life. At least that's what a lot of car manufacturers were thinking back in the late 1990s, when adding two inches of ride height to an estate was all the rage. First it was Subaru who brought us the Outback in 1994, followed by Volvo with the V70 XC in 1997, and then Audi in 1999 with the Allroad. BMW and Mercedes decided to go an entirely different route, embarking into the world of SUV – the impact of which we are still seeing in huge numbers today.

The recipe for a high-riding estate was much simpler than that of an SUV: add two inches of ride height to an A6 Avant, plus some rough-and-tough body cladding and all-wheel drive to go with it, and hey presto – you have an Allroad. As it turns out the sector proved to be highly successful, with many modern options still available to buy new today. If buying a new one simply isn't an option though, then have a look through this list of cars that will do exactly the same job, but for a fraction of the price.

VOLVO XC70

The Volvo XC70 is one of the best when it comes to rugged estates. Delightfully simple and impressively practical, the XC70 is a car that can be picked up for as little as £2,000. If you want a really cheap one, you'll have to look out for a second generation model produced between 2001-2007, as prices for the first gen are creeping up. A good condition third generation model can be found at around £9,000.

Pick of the range: The 2.4 D5 diesel. It's no rocket ship, but the D5 is a great choice for all-round performance, reliability and running costs. For city dwellers, look out for the much more potent 2.5T five-cylinder and 3.2 six-cylinder petrol models, which comply with London's October 2021 ULEZ expansion.

What to look out for: A lot of XC70s have been used as rugged work horses, so look out for suspension issues, interior wear and a regular service history. Electrical issues are also common, so make sure everything is working correctly.







SUBARU OUTBACK

There is great debate to the source of the high-rise estate car, but all roads lead to the Outback. Introduced to the North American market in 1994, the Legacy Outback quickly became popular with families and outdoorsy types. However in the UK, the car was unusually popular with the landed gentry who traded in their lofty Range Rovers for the much more understated Subaru. Prices for an Outback are deliciously cheap too, so keep an eye out as they can get snapped up pretty quickly.

Pick of the range: A third generation model (based on the fourth generation Legacy) with the 3.0 flat six. Reliable, swift, but can be thirsty if you have a heavy right foot. Avoid going for the smaller four-cylinder engines, as the potential reliability risk could counterbalance the savings made via the lower fuel consumption.

What to look out for: The 2.0 Boxer Diesel and 2.5i are the cheapest at around £1,000-£2,000. But they are cheap for a reason, as the diesel is prone to crankshaft issues and the 2.5i petrol suffers from head gasket problems. The 3.0 will be more expensive at around £5.000-£6,000, but it should hold its value well and be are also prone to rust, so keep an eye out in the





AUDI A6 ALLROAD

The patriarch of the Audi SUV line-up, the A6 Allroad was Audi's first attempt at an SUV. It proved so popular in fact that it was joined by a smaller A4 Allroad in 2009. Prices for those are still comparably high though, so for now we'll focus on its more established older brother. But make sure when browsing you're not fooled by its devilish good looks, as the A6 Allroad (the first generation in particular) can cause trouble that not even a mother could forgive.

Pick of the range: A first generation 2.5 TDI V6, or a second generation 3.0 TDI V6. Or if you're feeling frivolous, a 3.2 V6 or 4.2 V8 petrol. The petrols will be more enjoyable to drive, but the diesels offer the best balence of performance and fuel economy. Avoid the 2.7 BiTurbo V6 petrol in the first generation.

What to look out for: Allroads can be riddled with problems, hence the cheaper price tag (which is often well below £5,000). The BiTurbo V6 in particular is troublesome, as both its turbos



SKODA OCTAVIA SCOUT

The Skoda Octavia Scout is a rugged estate that people tend to forget about. This is partly due to the success of its sought after cousin, the Yeti, but luckily you can pick up a Scout at a much cheaper price. The pre-facelift first generation Scout (based on the second generation Octavia) will be the cheapest at around £2,000. But look out for the slightly more expensive facelifted model, or even a second generation Scout, which are both much easier to come by.

Pick of the range: The first generation Scout had two powertrain offerings: a 2.0 TDI diesel and a 1.8 TSI petrol, whilst the second genereation only offered the 2.0 TDI. The TDI diesels are very economical, but if you're not keen on a diesel, look out for a first generation car with the much more refined 1.8 TSI.

What to look out for: You will no doubt have heard from your local cabby that Octavias are bulletproof, and they're not wrong. It's very easy to find high mileage cars with well over 100,000 miles on the clock, and some with over 200,000 miles. The automatic DSG cars are less reliable however, and can be uneconomical to repair if they fail. A manual car with regular service history will be the safest option, and should provide many miles of troublefree motoring.

SAAB 9-3X

Saab was a little late to the party when it launched the 9-3X in 2009. However the car is still a worthy contender, offering an irresistible Swedish charm and clever all-wheel drive system. But there's a catch - it's only all-wheel drive if you go for the 2.0T petrol model, as the 1.9 diesel is front-wheel drive only. Either way, the 9-3X is a unique offering and was one of the last new models to come out of the brand before it closed its doors for good in 2011.

Pick of the range: Like the Skoda, the Saab only had two powertrain offerings. The 2.0T petrol will offer good performance and refinement, but you might have to settle for the 1.9Tidd which is cheaper at the £3,000 mark, and much easier to get hold of.

What to look out for: Check for a full service history with regular intervals. Also make sure cam belts have been changed every four years and that all the electronics work correctly Otherwise. the 9-3 has a good reputation for reliability.



It was the runt of the classifieds, but now this Mazda MX-5 is better than new. Was it worth the money that has been invested into the car?



Joe Pepper

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llie McConnell bought the cheapest Mazda MX-5 in Britain four years ago for just £600. "It wouldn't even idle properly," he says. "It ran so lumpy that you couldn't even hold it at a constant speed."

Project cars are one of many methods for car enthusiasts to turn their interest into a hobby. They can range from fixing a car that needs some work to run properly, altering cosmetics to suit personal taste, all the way to completely transforming the performance and appearance of the car.

Adopting one can be the perfect way to drive and work on a car that you love, but can also end up becoming very costly, says McConnell.

"Before I even got the thing home for the first time, I'd spent another £100 at Halfords on a few bits and pieces. I already knew that this was going to be the beginning of a very long journey." The same day, McConnell took one of his friends out for a drive. "I felt a bit like Mike Brewer in an episode of Wheeler Dealers," he says.

"My best memory with the car was throwing it around snowy Coventry roundabouts with the soft top down the first winter I had the car, at which point the car was still pretty much stock," says the owner of the 1998 Mazda MX-5 NB.

While the stock condition of the car didn't prevent its enjoyment, it accurately reflected on what McConnell had spent on the car.

"I drove this Mazda around for the first year with horrible rusty seals, frosted headlights and terrible wheels – but I didn't care because I saw the vision of what I wanted it to become."

Having that vision was good enough for McConnell. "I could get in the car and it would feel finished. But when you stop looking through rose-tinted glasses, you suddenly realise the task you have at hand. The closer you get to finishing, the further from that vision it feels."

"It's almost like a honeymoon period, eventually you start to see the car for what it is"



An average amount of rust for an old MX-5



The steering wheel came covered in mould





McConnell goes on to describe the unexpected challenge that he faced. "It's almost like a honeymoon period. There's all these hopes and dreams you have about building the perfect car, and by the time you've spent so much money on rust repairs, you start to see the car for what it is."

It becomes daunting at that point, he says: "It's very hard mentally, you've spent a lot of money and don't have the car that you've been envisioning. But you have to make something of it, so you have to ignore that, push through and endure with the task at hand."

One of the first improvements McConnell made was a change to Michelin Pilot Sport tyres, which he recommends. "The increase in grip is tremendous, and having that grip may end up saving your life one day if you're pushing the car on a country road. Good brakes make a huge difference too. £400 on new Ferodo brake calipers, pads and discs, and £500 on Gaz gold coil-over suspension made me trust the car a lot more, but also made it feel sportier."

As well as the upgrades, he also invested in repair work. "The amount that these MX-5s rust is hilarious. Initial repairs on the rear sills, the wheel arches and the front sub frame cost £3,500. That's not even all I've spent on rust repairs."

Vital repairs and upgrades came first and were the more expensive changes to make. "A lot of the other costs are either relatively small or are luxuries, like the £800 I just spent on new custom leather seats. That's more than the car cost."

Having spent over ten times the car's initial value in repairs and upgrades, McConnell discusses whether or not he thinks he made the right decision to buy the car.

'For me it's not a financial investment, it's an emotional one. If I didn't buy this MX-5 it would've been scrapped, and for what it's worth, it probably would've been easier for the guy to scrap it. But I know that I've saved it."

"Fixing the car is almost irrelevant, it's almost nothing to do with the actual car at all," McConnell says. "For me, having a project car isn't just about the physical labour of fixing the thing, it's about the experiences with the car, and wanting to make those experiences better."

McConnell explains that you can not quantify a project car. "There's so much value in the things you learn, the people that you meet, and the places that you go. How on earth can you put a number on all of those things?"

McConnell describes how buying a brandnew Caterham kit car would be "fantastic", but that there's no promise that you will connect emotionally with it. "With something like this MX-5, nine out of ten times you'll create that connection and have it for the rest of your life."

"With a project car like mine, sometimes you'll drive it and think 'what am I doing throwing all of this money at this rubbish?' But other times you'll drive it and be absolutely blown away. You'll feel that same fantastic sensation that you felt the very first time you drove it, and then it'll all be worth it."

BUT AT WHAT COST?

The car may have cost just £600 initially, but Ollie McConnell has spent much more than that to restore the Mazda MX-5 to its current condition. He outlines everything that he has spent on the car here:

Mazda MX-5 £600

Rust repairs (rear sills and chassis, front and rear wheel arches, front subframe, bonnet, driver's side door, front bumper) and labour £5,900 Initial replacement tyres £250 Japan Racing 15-inch wheels £400 4x Michelin Sport tyres £500 Wheel spacers £100 Hard top roof £250 Hard top body mounts £60 Replacement soft top £330 Ferodo brakes £400 Gaz coil-over suspension £500 Polybushes £300 Spring height risers £50 Cambelt & water pump £300 Spark plugs £10 Oil change & filter £35 Cobalt exhaust back-box £160 Gearbox oil change £20 Rear differential oil change £20 New battery £70 New front bumper £50 New driver's side door £330 TR Lane roll bar £250 Ducktail spoiler £70 New leather seats £800 Leather interior panels £250 Replacement floor mats £10 Centre console lid £50 Metal handbrake button £10 Red handbrake handle £20 Replacement air vents £12 Replacement gearstick £10 Vintage window switches £80 DAB radio £180 JVC speakers £40 LED side indicators £50

TOTAL £12,589

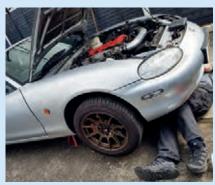
Headlight bulbs £20

Haynes Manual £12

Tool kit £40

Windshield wipers £20

Custom rubber boot floor £30



The MX-5 having some work done



CLASSIC CAR TIMESHARE

COULD SHARING THE COSTS, AND THE CAR, BE YOUR WAY INTO A CLASSIC SPORTS CAR FOR YOU AND YOUR FRIENDS?



The idea of owning a classic sports car is a common one, but with so many obstacles and challenges to owning a vintage speed machine, most of us don't take the plunge into classic car ownership. So, could investing in one car between you and your friends be how you get yourself in the driver's seat of your dream car?

Geoff Hibbert, Gary Hyde, and Iain Mills had talked about the classic cars they dreamt of owning since primary school their friendship began in primary school. When a mutual friend offered them the opportunity to buy a 1971 MG Midget MKIII for £3,750, it was too much of a risk for just one of them to take on. But, by pooling their money together, they felt it might just work. Three men buying one, two-seater convertible – makes sense, right? The words "classic sports car" might make you think "expensive". But not only was this car far cheaper than other examples on the market, it was in good condition and had been well cared for by its previous owners.

They could tell this by the sheer thickness of the binder of paperwork they were given after purchasing their 50-year-old MG. Hyde says: "We made sure we had a professional check the car over before we brought it. If amateurs like me go along and saw all the things that are wrong, no one would buy a classic car. The difference is knowing what is repairable. It just gave us peace of mind before buying a car that hadn't really moved in a while. That is probably the best advice I could give to anyone looking to share a sports car like we've done."

Though the MG was in fundamentally good condition, it still had to be fully serviced and recommissioned before being taken out on the road again, which is another necessary expense to consider if purchasing a car which has been parked in a garage for a long time.

The trio also had to get insurance. Classic car insurance can often be cheaper than normal insurance for cars of similar value, for a number of reasons. Their good driving record, the limited number of miles per year for the MG, and the fact the vehicle would be stored in one of the men's locked garage all kept the cost down.

Where you will store your classic car is something every potential buyer of one needs to consider. If you don't have the space, companies can charge upwards of £150 per month to store your car. But, those facilities do offer added security and professional maintenance.

One vital step in maintaining a classic car is also how you fuel it. Not just whether it runs on petrol or diesel but, like many cars from this period, the MG Midget requires leaded petrol, which has been banned in the UK since 1999.

Therefore, additives need to be combined with the unleaded petrol when anyone tops up the tank. "It's simple enough," Hibbert says. "We've got a 10-litre fuel can in the boot, so whenever I put more petrol in, I know I can mix it in that and get the ratio right."

While simple to do, at £5 or more for a single bottle of lead replacement it's an extra cost you will need to consider before buying a car of this vintage that runs on leaded petrol.

So far, to buy and restore the 50-year-old MG to the condition it is today, excluding insurance, the trio have spent a total of just over £5,000 – less than £2,000 each. And the MG has been



steadily improved during their ownership, as Hibbert explains: "It's had new rear suspension, new brake discs and pads, new seat cushions runners, new carpets, new steering gator and oh, a new gear knob."

A big part of how they've managed to keep spending low is thanks to Hibbert's mechanic skills and knowledge of cars. This allows him to work on the car rather than sending it out to garages or restoration specialists.

"He's the real enthusiast", Hyde says. "We put our money into a pot whenever Geoff thinks something needs doing, and he gets it done. I don't think the MG would look the way it does or drive like it does now without all his work on it."

Thanks to Hibbert's skills and commitment to maintaining the MG, the group admitted they had dodge one significant expense: servicing.

If you choose to purchase a classic sports car to share which is more than 40 years old it is exempt from MOTs, so it doesn't need the same yearly check-up your regular car does – though if it lapses into a dangerous condition, you can still be fined up to £2,500 if you take it on the road.

This where the group urges those looking to buy and share a classic sport like they have done to spend the most. By spending on services it ensures your car stays in the best possible condition.

Other than expenses, you might also need to consider how three or more people can share

a classic two-seater. Hyde says: "When the weather is great or the forecast says it will be anyway, we've got a group chat and organise it between ourselves who gets to take the car out."

But, should you do the same? Each of the men will admit their classic car experience has been better, and cheaper, than most, because of the condition of the MG when they brought it and Hibbert's ability to maintain it. But also because they shared in it. Hyde says of his experience: "It's something we thought about for a long time. Oh, no, it's not for everyone. But it's an easier way into a classic car like ours. Anyone could do it with their friends if they want to spread costs, save money and just have fun with a sports car when the weather is just right."

Mills has even started thinking about which classic car the group could take on to share next, if they were to sell the MG Midget. "I would say next car up would be an MGB GT," he says. "They are the next one up the ladder: a little bit more room, and quite a lot quicker."

Of course, the sum at the heart of this story, three men buying one two-seater convertible, was never going to quite add up. But buying a classic sports car, or even a third of one, isn't about logic. Nor was it about getting a return on an investment for these men and their MG.

Mills says: "I fancied the idea of running down to the coast in an old English convertible on a sunny day. I didn't imagine it would probably take a week to get there and back."

From Hibbert's perspective it was more personal: "My dad worked in Canada for four years, and brought back with him his own MG. That car is in Belgium now, but you know, it's why I fell so hard for this MG when we all saw it."

It doesn't need to all make sense. Whether you buy it just for fun, because it reminds you of the car your dad drove or your inherent petrolhead passions, the second you get in a classic like this it makes you smile. Sharing a classic sports car might have some compromises, the result is still the same. But this way you get to share the fun.

"Oh, no, it's not for everyone. But it's an easier way into a classic car like ours"



Wanting to start a restoration project? Unsure where to start? Here are 10 things to consider before starting a project.



ver dreamed of restoring a rusty relic of a car to its former glory? It may look like a huge job to take on, but it can be done. Two keen restorers Ben Straw and John Shorter gave us 10 tips to help get a project started – and finished.

1. CONSIDER YOUR ABILITY

Straw is an avid Land Rover restorer. "Baby steps sometimes can be best for a first project," he says. "Nothing is wrong with buying a car with 12 months MOT and that is roadworthy for you to 'gently restore' while you find your feet." Shorter, meanwhile, has recently been working on a 1949 Chevrolet 3100. "You will be surprised at what you can achieve yourself with a little research," he says. "You need to also research where you are going to get necessary parts from. If you are considering buying a 70+ year old American vehicle, parts are possibly not going to be readily available in the UK."

2. BUYING ADVICE

"Know your model inside out by reading ahead on forums, buyers guide or in magazines", Straw says. Shorter suggests inspecting any potential purchase thoroughly: "Ensure you look all around and underneath. Speak to the owner, ask them to show you all they know about it. The more you investigate and understand at this point, the less chance of nasty surprises further down the line." Straw adds: "Unless you are a dab hand with a welder/metal work or are prepared to spend a lot of money on a project car, avoid rust like the plague. Don't buy an unfinished project unless you know what you're getting yourself in for."

3. WHAT SPACE DO YOU HAVE?

"You will need a safe area to work in," Shorter says. Straw agrees: "If you have a garage make sure it is big enough to work on the car." The vehicle needs to be kept and worked on where it is safe from the elements.

4.SET A BUDGET

"It's all well and good buying the most expensive classic you can but if you've no money to repair it you'll have a garage queen!" warns Straw. And Shorter says there are other costs to consider: "Quality tools are expensive to buy – factor in the cost to your initial project."

5.WHAT TOOLS DO YOU NEED?

"Buy a decent sized but fair priced tool/socket set. Start small and build it up," says Straw. Shorter adds: "Shelving or storage boxes or empty sweet tins to store parts as you remove them from your vehicle. Label to indicate what is in them. This speeds up putting the vehicle back together."

"Baby steps sometimes can be best for a first project"

Essential Equipment Checklist

Breaker bar Spanners Torque wrench Ratchet Sockets Angle grinder Screwdrivers Hacksaw **Files** Allen keys Metal chisel Wire brushes Mechanics gloves Hammers G-clamps Goggles and mask

Steel toe-capped boots

6. WHERE TO GET YOUR PARTS?

"Know the places to buy, brands to use and when a secondhand/donor part with some work is worth the effort," says Straw. "Don't be afraid to buy that secondhand bumper on eBay that needs a lick of paint if it's a one eighth of the price of a new one."

7. GET YOUR MANUALS

Many of the workshop manuals you will need are now available online. "They contain extensive information on how to dismantle all areas of the specific vehicle," says Shorter. "They also contain handy tips on troubleshooting and various guides on how to resolve issues." Straw says a parts manual is also incredibly useful: "The exploded views are useful for understanding how things go together. And the part number for the screw you dropped and can't find again!"

8. GET A HELPING HAND

Get someone to help even with the little jobs, Straw says: "You'd be surprised sometimes how much it helps just having someone to spur you on." Shorter suggests consulting internet forums: "Often someone will surface who is willing to assist for a low cost or advise for free. YouTube offers a lot of assistance with mechanical subjects". And don't forget friends and family – as Shorter says: "You will be surprised what your personal network can offer."

9.LIST YOUR JOBS

"It is a good idea to itemize the work that you intend to carry out," Shorter says." There is no better satisfaction than crossing those tasks off as you complete them."

10. ENJOY IT!

The most important tip, Straw says: "Love it. Cherish it. Nothing puts a bigger smile on your face than driving the car you have always dreamed of down the road with the exhaust burbling for first time. Don't lose faith and stick with it!"





John Connor Prize

Presented to the student who produces the best
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The prize is named in memory of John Connor, a long-standing
Midland Group of Motoring Writers member and official,
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Winners of the John Connor Prize have gone on to automotive media careers with *Evo, Autocar, Pistonheads, Road & Track, The Week, UKI Media* and SEAT PR.



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ELLIS HYDE ON: PLUG-IN HYBRIDS



Ellis Hyde ellis@automotivejournalism.uk

nce again I find myself confronted with the moral dilemma of being asked to recommend a plug-in hybrid by someone. Living and breathing cars means I can easily tell you which plug-in hybrids get the best reviews, what's coming onto the market soon or even which have the hottest deals on them right now. But I am also very aware of the studies, surveys and articles that have demonstrated plug-in hybrid's excessive fuel use and horrific emissions in the real world. Figures which are far different, and far worse, than the manufacturers' claims.

A recent study by Which? found that on average plug-in hybrids were using 61% more fuel than their manufacturers claimed. A truly shocking statistic that at this stage is about as unprecedented as it raining somewhere in the British Isles. Try Googling plug-in hybrids yourself and you'll immediately be greeted by a slightly horrifying swarm of studies and articles presenting plug-in hybrid's unseen, far more polluting, nature. Even Greenpeace described plug-in hybrids as "a wolf in sheep's clothing."

So could I in good conscience suggest anyone go out and buy one of a plug-in hybrid? I'm not sure. Not just because I read those same studies and articles on the real world emissions and fuel consumption of plug-in hybrids, but also because I know what is required of plug-in hybrid owners to get closest to achieving the manufacturer's claimed figures. Most importantly, that means owners charging their plug-in hybrids regularly.

My concerns stem from a pattern which has emerged from my interactions with plug-in hybrid owners. Concerningly, many were unaware of the responsibility of charging their cars. Or worse still, the consequences of choosing not to, like so many plug-in hybrid owners I know.

In my opinion, the greatest flaw of plug-in hybrids is the convenience they offer their owners. If you don't charge your electric car, you're stuck feeling like a moron trying to explain to your boss how you can't come into work today because you didn't plug your car in. Likely trying doing so

in between them either calling you synonyms for idiot or just laugh at you down the phone. But, with plug-in hybrids, owners needn't worry. The fossil fuel powered engine will continue to work, regardless of whether or not you've charged the car at any point since it was delivered.

As a result, you get the horrific fuel economy and emissions because, due to their large battery packs, plug-in hybrids are extremely heavy. Not only that, but they're often fitted with much smaller engines to further reduce their engines, theoretically. If you fail, forget or neglect to charge plug-in hybrids' batteries, you end up with a Ford Fiesta's engine trying to push a Land Rover Defender up a hill – It doesn't work. To make matters worse, as a result it dumps out even more emissions because the already overworked engine also has to devoted energy and, more importantly, fossil fuel to then charge the batteries.

Uncharged batteries or plug-in hybrids having to use fuel to recharge them is the biggest contributing factor in the alarming results from studies on plug-in hybrids emissions and fuel consumption. So even if I did believe the manufacturer's claims, do I trust the people asking me if they should buy to actually charge them? Will those individuals who are looking at buying a plug-in hybrid over an electric car because they say they'll never remember to charge it; they're going to commit to charging a plug-in hybrid?

Of course many do, and many people also drive plug-in hybrids, and other types of hybrids, because electric cars don't fit into their lives or their careers at the moment. If your Uber driver needed to stop halfway on your journey home to juice up their electric car, both of you would be annoyed by their poor purchase choice.

Plus, there will always be people willing to buy plug-in hybrids, despite knowing of their true environmental impacts, because of the benefits owners will receive regardless. For some that's just lower company car taxes or not having to pay the London congestion charge. For others, plug-in hybrids are their way of getting a well-known, well respected premium car maker's badge on their bonnet while manufacturers are still developing their electric car models. Those are certainly the two groups of plug-in hybrid drivers I've encountered, and maybe that has made me cynical of those who buy these cars.

But whatever the reason, the truth is we have known about plug-in hybrid's alarming flaws for years. But we buy them in their droves and so manufacturers keep making them.

Which is why I cannot deny the fact that plug-in hybrids are great cars. Not only that, but plug-in hybrids remain an extremely appealing concept. The idea that just by adding a few batteries and an electric motor to an already brilliant BMW, Audi or Volvo, and you can save money, fuel and the environment by doing absolutely nothing is an idea I could have got behind. It's probably why in February 2021 sales of plug-in hybrids were double what they were the year before.

But, I know that in reality, it's not that simple. Their convenience has allowed plug-in hybrids to became a moralistic grey area, which I for one do not intend on contributing to.

So if you do ask me to recommend a plug-in hybrid, I will tell which gets the best reviews or even which have the best deals on them right now. But I will not sugar coat what is required of plug-in hybrid owners, or the gloss over the damage these cars can do if they're misused.

"The greatest flaw of plug-in hybrids is the convenience they offer"

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Adolphus Duru (Jnr) 2017-18 (Jan entry)