

# RANGE ROVER VELAR ELECTRIFIES WITH PLUG-IN HYBRID AND STATE-OF-THE-ART INFOTAINMENT



New Range Rover Velar offers a perfect balance of sophisticated design and intelligent technology, now with the option of mild or plug-in hybrid electric engines

#### **OVERVIEW**

- Velar: The new Range Rover Velar features pioneering new technology and hybrid electrification, continuing Range Rover's 50-year history of innovation
- Electric: The Range Rover family is now fully electrified. The Plug-In Hybrid Range Rover Velar 'P400e' offers customers impressive all-electric range of 53km (33 miles)\* and CO<sub>2</sub> emissions of 49g/km\* for more efficient journeys, with 48-volt mild hybrids also available across the range\*\*
- Luxurious: Modern and sophisticated design, now with new exterior colour options including Lantau Bronze, exclusively available on the 'Range Rover Velar Edition'
- All-Terrain: Range Rover's unrivalled all-wheel drive capability on every terrain, with new mild-hybrid (MHEV) in-line six-cylinder Ingenium petrol and diesel engines with air suspension as standard. Next-generation four-cylinder mild-hybrid Ingenium diesels offer exceptional efficiency, power and on-road performance
- Refined: The interior is a calm sanctuary, with new Pivi infotainment, Active Road Noise Cancellation\*\*\* for quieter and more serene journeys, and new Cabin Air Filtration<sup>†</sup> for healthier, cleaner air inside



 Available to order now: New Range Rover Velar is priced from £46,110. Specify yours at: www.landrover.com/vehicles/range-rover-velar/index.html

**September 23 2020, Whitley, UK** – The Range Rover Velar is now even more desirable, sustainable and intelligent with the introduction of an electric plug-in hybrid option\*\*, advanced new infotainment technology and elegant new design features.

The mid-size luxury SUV, which sits between the Range Rover Evoque and Range Rover Sport in the family line-up, offers customers the perfect balance of design and technology – now with electric power. The new 2.0-litre four-cylinder P400e plug-in hybrid offers a smooth and refined drive, producing a combined 404PS and 640Nm of torque from its 300PS petrol engine and 105kW electric motor, with an impressive 0-60mph in 5.1 seconds (0-100km/h in 5.4 seconds). A 17.1kWh lithiumion battery, located under the boot floor, can be charged to 80 per cent in just 30 minutes tusing a fast DC charge point, or 1 hour 40 minutes using a standard 7kW wallbox. With zero tailpipe emissions in electric mode, an impressive real-world all-electric range of 53km (33 miles),\* fuel economy of up to 2.2 litres/100km\* (130.2mpg) and CO<sub>2</sub> emissions from just 49g/km\*, the Range Rover Velar is now even more sustainable by design.

A new family of 3.0-litre straight-six Ingenium engines is also introduced to the Range Rover Velar for the first time. The latest generation of smooth and efficient petrol and diesel engines are available with 48-volt mild hybrid electric vehicle (MHEV) technology for reduced fuel consumption and heightened refinement. The new straight-six engines, developed in-house, are available as D300 (300PS diesel) and P340 (340PS) and P400 (400PS) petrol all-wheel drive variants, each fitted with air suspension as standard for signature Range Rover comfort.

The new engines are available with mild-hybrid electric vehicle technology (MHEV) in addition to the latest engine technologies, for efficient performance. The MHEV system uses a Belt integrated Starter Generator (BiSG) in the engine bay to harvest energy usually lost under deceleration, which is then stored in a 48V lithium-ion battery located beneath the rear loadspace. It is able to redeploy the stored energy to assist the engine when accelerating away, while also delivering a more refined and responsive stop/start system.

The new P340 and P400 straight-six engines generate 480Nm/550Nm torque respectively, while the powerful P400 delivers an impressive 0-60mph time of 5.2 seconds (0-100km in 5.5 seconds.) Both engines feature an electric supercharger supported by a twin scroll turbocharger and Continuous Variable Valve Lift (CVVL), for refined performance.



The D300 diesel generates 650Nm torque, offering 0-60mph in 6.1 seconds (0-100km/h in 6.5 seconds) with fuel economy of up to 38.2mpg (7.4litres/100km) and CO2 from 194g/km. Series sequential turbos and an advanced after-treatment system make it one of the world's leading clean diesel engines.

The new in-line Ingenium diesel engine designs meet Real Driving Emissions Step 2 (RDE2) standards and Euro 6d-final real-world driving compliance with 48V Mild-Hybrid Electric Vehicle (MHEV) technology boosting responses and fuel economy. As a result, the new Ingenium diesel unit – also now available in the Range Rover and Range Rover Sport – is one of the world's leading clean diesel engines.

Additionally, the next generation four-cylinder Ingenium D200 (204PS diesel) is introduced on the Range Rover Velar, offering more power, lower  $CO_2$  and improved fuel economy. The engine is offered with the same 48-volt mild hybrid technology as the rest of the range, with  $CO_2$  from  $165g/km^*$  and fuel economy of up to 44.9mpg (6.3 litres/100km)\*.

Velar features a reductive design, emphasised with beautifully integrated digital screens that are now fitted with Land Rover's state-of-the-art infotainment system, Pivi and Pivi Pro. The intelligent and intuitive system, offered as Pivi Pro⁴ from an S-specification pack, transforms the digital experience inside Velar.

Pivi is designed around ease of use, with a simple interface reducing the number of interactions to enhance safety. Crisp new graphics and super-fast responsiveness are enabled with a new electrical architecture under the surface, ensuring the screens and navigation system are ready to go in seconds, thanks also to a dedicated power source. Customers can access software updates 'overthe-air' reducing the need to visit a retailer. An embedded data connection means customers have access to the latest maps, apps and vehicle software modules with updates scheduled via the touchscreen at a time to suit them.

Streaming music and media has never been simpler. Spotify is integrated directly within the infotainment menu for the first time, with data included  $^{\Delta\Delta}$ , while there's Bluetooth connectivity for two phones at once.

**Nick Rogers, Executive Director, Product Engineering Jaguar Land Rover, said:** "The Range Rover Velar's name and bloodline dates back to the code name of the original Range Rover prototypes. It has been fifty years since the introduction of the pioneering Range Rover in 1970, and now every family member is electrified with our awesome plug-in hybrid technology. Electrified powertrains and



cleaner mild hybrid diesel engines mean the Velar is an even more efficient and sustainable option for our customers. Jaguar Land Rover's new Electrical Vehicle Architecture – EVA 2.0 – supports the new Pivi and Pivi Pro infotainment, as well as Software-Over-The-Air (SOTA), and a whole suite of advanced driver assistance systems, cameras and clean-air technology, making the Range Rover Velar cleaner, safer and smarter than ever before and one of the most technologically advanced luxury SUVs in the world."

The experience inside the Range Rover Velar is now an even calmer sanctuary with the addition of Active Road Noise Cancellation\*\*\*. The intelligent technology works like a pair of high-end noise cancellation headphones, constantly monitoring vibrations from the road surface and calculating the opposite phase sound wave needed to remove the noise heard by the occupants. The effect is subtle, but the minimum reduction of 4 decibels ensures an even more refined and calming interior space. The system is even able to adjust the level and position of sounds played into the cabin based on the number of passengers and their position inside the vehicle by using the seatbelt sensors. This advanced system delivers a more serene experience inside Velar, even reducing driver tiredness, which can be brought about by extended exposure to low-frequency sound on long journeys.

A new Cabin Air Filtration system enhances the relaxing and clean sanctuary inside Velar, reducing levels of harmful particulates, pollen and even odours. The new system – introduced in addition to the existing Cabin Air Ionisation feature – filters out fine particulate matter, allergens, pollen and even strong smells. Activated via a 'Purify' button in the lower touchscreen, it is capable of filtering ultrafine particulates (up to and even below PM2.5). Drivers and passengers can be assured the air they breathe inside the Range Rover Velar is cleaner than the air outside.

Also available is the new second-generation wearable Activity Key, which can totally replace the traditional key fob when necessary. The water-resistant and shock-proof wrist device now incorporates an LCD watch and allows customers to start, stop, lock and unlock the vehicle, with no need to take a traditional key fob out with them.

Additional new design features introduced on Velar include a new steering wheel design which has integrated smart buttons ready to receive the latest ADAS software updates over-the-air. A tactile new Drive Selector also replaces the rotary gear selector.

The 'Range Rover Velar Edition' provides even more customer choice and features a combination of exterior and interior upgrades. Based on the R-Dynamic SE specification, enhancements include a black contrast roof and matching 20-inch black alloy wheels, for sophisticated presence. The



distinctive new special edition model is available exclusively in Lantau Bronze metallic paint, as well as the new Hakuba Silver, Santorini Black or Eiger Grey.

- \*All emissions, fuel economy and EV-only range figures are EU–WLTP (TEL) Combined
- \*\*All derivatives of Velar are available to order now. Customer deliveries of Plug-in-hybrid models will begin early in 2021
- \*\*\* Standard on vehicles fitted with Meridian sound systems
- † Only compliant with Nanoe™ Ionisers and not suitable for China market please refer to in-market Cabin Air technologies
- <sup>††</sup> Charge time possible with 50kW & 100kW DC Rapid charger (actual charge into the vehicle will be limited to 32kW). Actual charge times may vary according to environmental conditions and available charging installation
- $^{\Delta}$  Pivi Pro available as standard on S, SE and HSE models
- $^{\Delta\Delta}$  Only available with the Pivi Pro and Online Pack options; Spotify Premium subscription is required
- □ Dependent on market whether S/SE



#### DESIGN

RANGE ROVER VELAR: MODERN AND SOPHISTICATED DESIGN

- Elegant simplicity: Seamlessly integrated 10-inch touchscreens now with faster
   Pivi infotainment, maintaining the reductive nature of the design
- Expanded customer choice: New sophisticated colour palette, plus new wheel designs available in two finishes
- Landmark Edition: New 'Range Rover Velar Edition' provides specially curated specification, with a black contrast sliding panoramic roof, unique detailing, 20-inch alloys and unique new colour including Lantau Bronze

The Range Rover Velar brings an enhanced dimension of modernity, sophistication and elegance to the Range Rover family, which celebrates its 50th anniversary year. The Velar's design is beautifully balanced, from its powerful proportions to the taut tapered lines of the rear. The generous wheelbase contributes significantly to its poise while helping to provide a spacious interior.

Elegant simplicity is delivered through a visually reductive approach, including flush deployable door handles and super-slim Matrix LED headlights, providing technical appearance and optimised visibility.

The refinement continues digitally with the introduction of the Pivi infotainment system via the vehicle's 10-inch upper and lower touchscreens. Switches remain at a minimum, with the touchscreen system the centrepiece of the interior, revealing itself when turned on. These slim, intuitive displays work in harmony with the cabin architecture while adding an overall sense of modernity congruent with the vehicle's exterior design. Screen design is integrated, elegant and intuitive. This also translates to the new feature-rich Head-up Display and 12-inch Interactive Driver Display, which are enhanced to reduce driver distraction.

Inside, the Range Rover Velar's calm sanctuary reaches new heights with the addition of Active Road Noise Cancellation<sup>†</sup>. The intelligent technology works like a pair of high-end noise cancellation headphones, constantly monitoring vibrations from the road surface and calculating the opposite phase sound wave needed to remove the noise heard by the occupants. The effect is subtle, but the estimated minimum reduction of four decibels ensures an even more refined and calming interior space. The system is even able to adjust the level and position of sounds played into the cabin based on the number of passengers and their position inside the vehicle by using the seatbelt sensors. This advanced system delivers a more serene experience inside Velar, even reducing driver tiredness, which can be brought about by extended exposure to low-frequency sound on long journeys.



A new Cabin Air Filtration system reduces levels of harmful particulates, pollen and even odours. The system – introduced in addition to the existing Cabin Air Ionisation feature – filters out fine particulate matter, allergens, pollen and even strong smells. Switched on via a 'Purify' button on the touchscreen, it is capable of filtering ultrafine particulates (up to and even below PM2.5) so occupants can be assured the air they breathe inside the Velar is cleaner than the air outside.

Uniquely in its segment, the Velar continues to offer a sustainable, premium textile seat material as an alternative to leather. The Dapple Grey material was developed with Kvadrat, Europe's leading manufacturer of premium design textiles, and is complemented with Suedecloth inserts in Ebony or Light Oyster.

#### New 'Range Rover Velar Edition'

The Range Rover Velar Edition provides enhanced customer choice, with a combination of exterior and interior specification options. Based on the R-Dynamic SE model\*, the special edition includes a black contrast roof and matching 20-inch black alloy wheels. The distinctive new addition to the range is available in exclusive Lantau Bronze metallic paint as well as the new Hakuba Silver, Santorini Black and Eiger Grey.

#### **Expanded customer choice**

Additional design features introduced inside the Velar include a new more ergonomic steering wheel design with integrated smart buttons ready to receive the latest software updates over-the-air. A tactile new Drive Selector replaces the rotary gear selector. Three new exterior colours are introduced for the first time on the Range Rover Velar – Hakuba Silver, Portofino Blue, and Lantau Bronze, the latter of which is available exclusively on the Range Rover Velar Edition. Additionally, two new alloy wheel designs are available in 19-inch or 21-inch with two finishes.

#### THE RANGE ROVER VELAR DESIGN PHILOSOPHY

Velar is both instantly recognisable as a Range Rover and radical in its interpretation of the brand's DNA. The mid-size luxury SUV is defined by formal, powerful volumes that are beautifully balanced by perfectly optimised volume and proportions. The large wheels – up to 22-inches in diameter – help to define the stunning silhouette while further enhancing the Velar's dramatic presence.



The floating roof and clamshell bonnet provide clear references to its lineage and visually reinforce the class-leading all-terrain capability for which all Range Rovers are renowned. The 2,874mm wheelbase (Evoque: 2,660mm; Range Rover Sport: 2,923mm) enhances Velar's visual length, and contributes to the exceptionally spacious cabin and luggage compartment – which offers up to an impressive 748-litres of space\*\*. The continuous waistline and tapering glasshouse balance formal elegance with a poised, sporting attitude.

The short front overhang and super-slim full-LED headlights further minimise visual weight. The powerful rear overhang provides balance and highlights the Velar's imposing length, and features a pronounced kick to add to the muscular stance. Twin chrome exhaust finishers are integrated perfectly into the rear bumper and provide a subtle reference to the Velar's power and performance.

**Professor Gerry McGovern OBE, Chief Creative Officer, Land Rover said:** "With beautifully balanced and optimised proportions, the Range Rover Velar brings an enhanced dimension of modernity to the Range Rover family which radically interprets the brand's DNA. Elegant simplicity is delivered through a visually reductive approach."

#### Beautiful details, advanced technology

An upright, bold front graphic and long bonnet set the tone for Velar's exterior design language. The form of the dominant, proud grille is further emphasised by slender full LED headlights, which deliver an emphatic slimline visual signature. The front bumper's pronounced air inlets and subtle skid plate hint at the Velar's performance and its class-leading all-terrain capability.

The fast windscreen angle intersects powerfully with the front axle line and flows into the Range Rover floating roof design, which can be specified in either body colour or Narvik Black contrast finishes. Fixed and sliding panoramic roof options highlight the Velar's exceptional interior space by allowing natural light to flood in.

The pure, simple yet strong form of the bodysides is testament to Range Rover's long history of lightweight aluminium construction. The clean, unadorned surfaces are punctuated by a strong shoulder line just below the glasshouse, while a thin, sweeping black graphic flows elegantly around the body's lower reaches.

Fender vents, which begin in line with the front axle, flow backwards to the front doors, emphasising Velar's dynamic character.



The relentless focus on clean, pure lines made it essential to achieve extremely tight panel gaps, a challenge the Design and Engineering teams met with absolute precision.

Flush deployable door handles emphasise how the Velar's striking design is enabled by technology. The handles, which feature subtle LED illumination, quickly deploy when the doors are unlocked using the key fob, or by pressing a discreet button set into the handle.

They retract smoothly when the car is locked, or at speeds above 8km/h (5mph), improving aerodynamic efficiency for greater fuel efficiency, and drawing further attention to the strikingly clean, uninterrupted form of the bodysides.

Every Velar features slimline full-LED headlights as standard. As well as superior illumination and energy efficiency compared to Bi-Xenon lights, LED technology has also enabled the designers to create the most slender headlight clusters ever fitted to a production Land Rover. They wrap dramatically around the front of the vehicle; a full-length black graphic within emphasises their narrowness. Distinctive daytime-running lights enhance the assertive road presence all Range Rover vehicles command. LED lights are designed to last the lifetime of the vehicle and use less energy. The quality of light produced is closer to daylight conditions, so driving at night becomes less tiring.

Driving at night or in poor visibility is made easier by the optional Auto High Beam Assist (AHBA) which detects lights ahead and automatically dips the main beam for oncoming traffic.

Four different LED headlight designs are available, culminating in segment-first Matrix-Laser LED headlights. The lasers provide even better visibility at night, extending the range of full beam to 550 metres. The Adaptive Front Lighting system matches the light beam to the steering wheel angle, while the matrix technology selectively dims individual LEDs to maintain optimum light distribution and ensure full beam can be used without dazzling oncoming traffic.

Optional Matrix LED headlights enable Adaptive Driving Beam (ADB). By splitting the main beam into imperceptible vertical strips, the ADB maximises the number of high beam sections around oncoming traffic for ultimate visibility, whilst casting a shadow in front of oncoming vehicles to prevent dazzling and for optimum safety. The Adaptive Front Lighting System (AFS) optimises the lighting beam to suit a range of driving conditions of town, country, motorway and bad weather. The systems work together to maximise visibility in all conditions.

The Matrix-Laser LED headlights are also distinguished by the signature daytime running lights and Animated Direction Indicators, which sweep across the lights in the intended direction of travel,



helping to improve safety. Laser high beam technology delivers five times higher luminance than standard LED lights. Becoming operational at speeds above 80km/h (50mph) and when no other external lights are detected, the system produces clear sight for over half a kilometre.

Slimline LED fog lights further enhance the Velar's technology-enabled design and are seamlessly integrated into the lower black feature line that wraps round the vehicle.

The LED tail lights echo the sophistication of the headlights with an eye-catching 3D appearance. They are complemented by a full-length high-level stop-lamp: hidden-until-lit and with a clear lens, it uses light-guide technology with integrated micro-optics to create smooth, homogeneous light. The LED rear fog lights blend into the sweeping black contrast graphic as it reaches the rear of the vehicle and are visible from the side.

#### The interior: a calm sanctuary

Mirroring the taut, uncluttered, and perfectly executed exterior design, Velar's precision-crafted interior embraces the latest technology, with a focus on luxury materials, exquisite detailing and exceptional refinement.

Positioned in the Sports-Command driving position, Velar's front seats balance performance-oriented design and support with opulent comfort and offer up to 20-way adjustment and heating, cooling and massage functions. Meticulously weight-optimised and designed to liberate additional interior space, the seats have also been carefully sculpted for ease of entry and egress to and from the cabin.

The 40:20:40 rear seats offer exceptional comfort too and are available with heating and electric recline options. The optional four-zone climate control and cabin air ionisation system make the Velar's interior even more comfortable for all occupants.

The instrument panel's strong, horizontal beam is the defining element of Velar's interior architecture. It rakes back dramatically towards the windscreen to create the fastest angle of any Land Rover and underlines Velar's dynamic driving characteristics. The slender air vents reinforce Velar's reductive, technology-enabled design.

Showcased in the centre are the two high-definition 10-inch touchscreens featuring the Pivi or Pivi Pro infotainment system. The thin capacitive polycarbonate precisely follows the subtle curvature of the instrument panel for seamless, perfectly flush surface integration. Integrating the Terrain Response and Terrain Response 2 controls into Pivi eliminates the traditional dial and hard buttons,



creating extra space in the centre console and further emphasising the visually reductive approach that drives every aspect of the Velar's design.

The infotainment system features two multi-function rotary controllers distinguished by their tactile, rubberised outer surface and Satin Chrome bezels. There are two seamlessly integrated digital display screens.

In front of the driver are twin analogue dials with a 5-inch TFT display between them, or, as standard from SE specification and above, a 12.3-inch Interactive Driver Display. This high-definition virtual instrument cluster delivers a rich, high-tech experience and allows the driver to prioritise key information: a two-dial layout with an information panel in the centre, a one-dial layout flanked by dual information displays, or a full-map view.

Key information such as speed, turn-by-turn navigation instructions and active safety system warnings can also be displayed to the driver using the latest-generation full-colour Head-up Display. The virtual images projected onto the windscreen appear to hover some two metres in front of the driver, allowing the driver to quickly and easily process the information while remaining focused on the road ahead. The steering wheel features capacitive switches which benefit from situation-based options and even allow the driver to programme specific functions.

**Professor Gerry McGovern OBE, Chief Creative Officer, Land Rover said:** "The Velar's precision-crafted interior embraces the latest technology, whilst maintaining a focus on the luxurious materials and exquisite detailing."

#### Authentic materials, innovative details

Authentic materials of the finest quality and contemporary finishes underline Velar's luxury status. The cockpit's distinctive horizontal architecture is celebrated with an embossed Cut Diamond signature design, which flows from the instrument panel through to the door casings to emphasise the width of the spacious cabin.

The design is subtly echoed throughout the interior: the Windsor Leather and Premium Textile seats feature a perforated interpretation, and the Cut Diamond motif forms an integral part of the stainless steel speaker frets' structure on the Meridian 17- and 23-speaker audio systems.

Unique to the luxury SUV segment, the innovative Premium Textile seat material is offered as a nocost alternative to leather upholstery. Developed with Kvadrat, Europe's leading manufacturer of



high-quality design textiles, this sustainable material comes in Dapple Grey and features wool-blend textile contrasted with a Suedecloth insert available in Light Oyster or Ebony.

The Suedecloth fibres are created from recycled plastic bottles and crafted into a textured non-woven material that's soft to the touch. An advanced coating system ensures the Premium Textile interior passes Land Rover's most rigorous tests for durability and can be easily cleaned.

Standard models feature Suedecloth and Luxtec upholstery with distinctive twin-needle stitching. S and SE models upgrade to high-quality, perforated grained leather. The top HSE specification is equipped with luxuriously soft perforated Windsor leather, which extends to the instrument panel and door casings.

Perfectly-crafted trim finishers celebrate the natural look and texture of authentic materials. Choices include Satin Blonde Linear veneer, which is pale-stained and has a satin feel open-pore finish to give a very modern, airy character, and the Argento Pin-stripe, which is distinguished by its high-gloss finish and silver streaks to emphasise the wood grain. Another highlight is Carbon Fibre Copper weave trim, created by weaving carbon fibre and copper filaments together under a high gloss finish to signify sporting luxury.

Ambient LED lighting casts a soft glow over the interior, subtly highlighting the strong architectural lines and authentic materials for a calming atmosphere. Configurable ambient lighting technology offers a choice of 10 different colour options.

#### **Flexible Interior Space**

While refinement is the priority for any Range Rover interior, flexibility remains a key strength. The inherent package-efficiency engineered into the Velar's Lightweight Aluminium Architecture, together with the 2,874mm wheelbase, delivers exceptional interior space for all occupants. The split, sliding front centre armrest allows row-one occupants to individually adjust each half, and concealed underneath is a cubby with a cupholder and 4.0-litres of storage space. Another cupholder is located under a flush-fitting cover next to the Drive Selector. The cooled glovebox provides 7.5 litres of storage.

Row-one occupants have access to two USB ports and up to three 12V power sockets for charging mobile devices. A further 12V socket can be specified in the front of the cabin, along with an additional four USB ports for row-two when Click and Go is specified.



Deep, wide stowage compartments in the lower door casings have been designed to accommodate 750ml drinks bottles with ease. The centre console provides additional storage behind the lower touchscreen – ideal for concealing smartphones and keys.

The luggage compartment delivers up to an impressive 748 litres of space\*\*. The 40:20:40 row-two seat features a ski-flap to enable long items to be through-loaded, while remote release levers are located in the luggage compartment to make lowering the rear seats even more convenient.

The powered gesture tailgate option makes loading bulky or heavy objects into the luggage compartment easier and more convenient: rather than reach for the keyfob or pressing the release button on the tailgate, customers have only to make a kick gesture under the rear bumper; sensors detect this movement and trigger the tailgate to open.

The Range Rover Velar brings an enhanced dimension of modernity, sophistication and elegance to the Range Rover family.

<sup>\*</sup> Dependent on market whether S/SE

<sup>\*\*</sup> Wet volume measured up to the headliner. Boot configuration and total loadspace will vary by vehicle specification (model and powertrain) and market

<sup>†</sup> Standard on vehicles fitted with Meridian sound systems



### SUSTAINABLE PERFORMANCE

NEW RANGE ROVER VELAR: EXPANDED CHOICE OF POWER FOR ELECTRIFIED LUXURY SUV

- Range Rover Bloodline: The new Range Rover Velar features pioneering technology and hybrid electrification, continuing Range Rover's 50-year history of innovation as the entire family is now electrified
- Plug-in Hybrid: Range Rover Velar P400e offers impressive all-electric range of 53km (33 miles)\* and CO2 emissions of 49g/km\* for more efficient journeys, with 48-volt mild-hybrids also available across the range\*\*
- Enhanced engine range: A family of new 48V mild-hybrid (MHEV) in-line six-cylinder
   Ingenium petrol and diesel engines and next-generation four-cylinder Ingenium diesels offer exceptional torque, efficiency, and on-road performance
- Agile and Refined: Velar's light, stiff, aluminium-intensive body structure enhances
  performance and efficiency with air suspension as standard on new six-cylinder models for
  unrivalled comfort and control
- All-terrain confidence: A suite of new off-road technologies complement the Velar's allwheel drive, with Intelligent Driveline Dynamics and active locking rear differential ensuring world-class all-terrain capability and maximum driver engagement on-road

The new Range Rover Velar has an expanded engine choice to suit every customer, with the new P400e Plug-in Hybrid delivering impressive range and CO2 from just 49g/km\*, a new family of in-line six-cylinder petrol and diesel engines, and more efficient four-cylinder diesel engines – all available as mild-hybrid options. The Range Rover family is electrified.

NEW PLUG-IN HYBRID 'P400e'

The Velar is the latest Range Rover to feature a plug-in hybrid\*\* (PHEV) powertrain, with the introduction of the P400e. The new 2.0-litre four-cylinder P400e plug-in hybrid offers a smooth and refined drive, producing a combined 404PS and 640Nm of torque from its 300PS petrol engine and 105kW electric motor, with an impressive 0-60mph in 5.1 seconds (0-100km/h in 5.4 seconds). A 17.1kWh lithium-ion battery, located under the boot floor, can be charged to 80 per cent in just 30 minutes† using a fast DC charge point, or 1 hour 40 minutes using a standard 7kW wallbox. With zero tailpipe emissions in electric mode, an impressive real-world all-electric range of 53km (33 miles),\* fuel economy of up to 2.2 litres/100km\* (130.2mpg) and CO2 emissions from just 49g/km\*, the Range Rover Velar is now even more sustainable by design.



The PHEV powertrain works with an advanced eight-speed automatic transmission, which combines lightweight construction and highly efficient operation to reduce fuel consumption and CO<sub>2</sub> emissions.

Colin Kirkpatrick, Chief Product Engineer, Range Rover Velar, said: "The New Range Rover Velar P400e delivers signature Range Rover refinement. It's smooth and enjoyable to drive, while delivering the same power as a 3-litre petrol engine with more torque and better fuel consumption. We've also maintained the Velar's all-terrain ability, with equivalent ground clearance on the plug-in hybrid versus its non-electric counterpart. Not only that, its impressive 53km\* all-electric range means customers can realistically choose to drive in pure-electric mode on the daily commute as well as around town. Combined with our latest Pivi infotainment and Remote App — which show nearby charging stations, vehicle charge status, and even allow you to pre-condition the vehicle for the best range before setting off — we believe we have a truly compelling offer for our Range Rover Velar customers wanting to explore electric vehicle ownership."

Customers can conveniently charge their Velar in three ways, the quickest of which uses fast 32kW public DC charging, ensuring 80 per cent vehicle charge in just 30 minutes<sup>†</sup>. Using a Mode 3 cable connected to a 7kW (32amp) wallbox, customers can expect an 80 per cent charge in just 1 hour 40 minutes<sup>†</sup>. Drivers can also use a traditional Mode 2 charging cable, which takes 5 hours 29 minutes for an 80 per cent charge (10 amp supply; varies by market, location and the type of hardware used) <sup>†</sup>. This ensures the Range Rover Velar P400e is even capable of overnight battery top-ups using just a domestic plug socket.

As well as saving money on energy and spending much less time at the pumps, PHEV customers can also expect to benefit from strong residual values as well as reduced annual taxation.

Drivers are able to select between three driving modes to best suit their requirements, whether they are making short urban journeys or long distance highway driving:

- 1. EV (Electric Vehicle) mode enables the vehicle to prioritise running solely on the electric power using the energy stored in the battery, for quiet, zero-tailpipe emissions journeys.
- 2. HYBRID mode (the default driving mode) combines petrol and electric drive. This mode optimises the comfort and efficiency of the hybrid system, automatically and seamlessly combining the electric motor and petrol engine. The strategy adapts to the driving conditions and the remaining charge in the hybrid battery. Additionally, entering a destination in the navigation system enables the Predictive Energy Optimisation (PEO)



- function, which intelligently integrates route and GPS location data to maximise efficiency and comfort for the selected journey.
- 3. SAVE mode prioritises the combustion engine as its energy source, maintaining the battery State of Charge at the chosen level, for deployment at a specific point in the journey for example when entering urban areas.

### Range Rover Velar P400e

- Total power/torque output: 404PS / 640Nm<sup>++</sup>
- 0-60mph 5.1 seconds (0-100km/h 5.4 seconds)
- Combined WLTP fuel economy: 2.2L/100km\* (130.2mpg) \*
- Combined WLTP CO2 emissions: 49g/km\*
- EV-only range: 53km (33 miles) \*
- Rapid charging time (32kW): 0-80 per cent in 30 minutes<sup>†</sup>

#### NEW IN-LINE SIX-CYLINDER INGENIUM PETROL AND DIESEL ENGINES

A new family of 3.0-litre straight-six Ingenium engines has also been introduced to the Range Rover Velar. The latest generation of smooth and efficient petrol and diesel engines – developed in-house by Jaguar Land Rover – are available with 48-volt mild hybrid electric vehicle (MHEV) technology for superior efficiency and immediate power delivery.

Advanced 48V mild hybrid technology (MHEV) ensures the new engines meet the most stringent global emissions regulations. The MHEV system uses a Belt integrated Starter Generator (BiSG) in the engine bay to harvest energy usually lost under deceleration, which is then stored in a 48V lithium-ion battery located beneath the rear loadspace. It is able to redeploy the stored energy to assist the engine when accelerating, while also delivering a more refined and responsive stop/start system. As a result, the new in-line Ingenium diesel engines meet the latest and most stringent Real Driving Emissions Step 2 (RDE2) standards, which govern nitrogen oxide (NOx) emissions.

Jaguar Land Rover's latest straight-six Ingenium petrol engine is now available in the Range Rover Velar, available in two power outputs. The P340 delivers 340PS and 480Nm of torque, with acceleration from 0-60mph in 6 seconds (0 - 100km/h in 6.3 seconds). The more powerful P400 delivers 400PS and 550Nm of torque, with acceleration from 0-60mph in 5.2 seconds (0 - 100km/h in 5.5 seconds) with CO<sub>2</sub> from 221g/km\*. The P400 is the most powerful non-SV engine ever offered on a Range Rover Velar.



The straight-six Ingenium petrol engine is lightweight – with a 12.9kg saving on the unit it replaces – and features a number of innovations. An electric supercharger, supported by a twin-scroll turbocharger, features an exhaust manifold split into two 'scrolls' that each feed the turbo from three cylinders. This separates the flow and creates greater spacing between exhaust pulses for improved driveability from low engine speeds.

Continuous Variable Valve Lift (CVVL) also allows the engine to produce power and torque as efficiently as possible by varying the extent to which inlet valves are opened for enhanced response.

Meanwhile, the new straight six D300 diesel engine is also 7kg lighter than the previous V6, producing 300PS and 650Nm of torque to deliver powerful performance, with acceleration from 0-60mph in 6.1s (0-100km/h in 6.5 seconds). Series sequential turbos and an advanced after-treatment system make it one of the world's leading clean diesel engines. Pioneering technologies include a new high-pressure fuel injection system, which operates at up to 2,500 bar and is able to deliver five injections per cycle with quantities as small as 0.8 milligrams in just 120 microseconds (0.00012 seconds) for enhanced efficiency and refinement.

State-of-the-art Exhaust Gas Recirculation techniques also optimise efficiency and refinement while close-coupled, sequentially arranged turbos feature electric variable nozzle turbines for precise control and immediate responses. At 2,000rpm the new engines can deliver 90 per cent of their peak torque in just over one second.

The new in-line Ingenium diesel designs meet Real Driving Emissions Step 2 (RDE2) standards and Euro 6d-final real-world driving compliance with 48V Mild-Hybrid Electric Vehicle (MHEV) technology boosting responses and fuel economy. As a result, these new straight-six Ingenium units are among the world's cleanest engines.

#### EFFICIENT FOUR-CYLINDER INGENIUM DIESEL

A next-generation 2.0-litre, four-cylinder Ingenium diesel engine – badged D200 – now replaces the previous D180 and D240 options, producing 204PS with  $CO_2$  emissions from 165g/km $^*$  and fuel consumption of up to 44.9mpg (6.3l/100km) $^*$  with strong performance and keen responses. This engine and is also available with Mild-Hybrid technology (MHEV) to offer improved efficiency over the outgoing engines.

The new engine is 2kg lighter than its predecessor thanks to a weight-saving regime combining new technology and engineering that also results in fuel economy and refinement improvements. The



engine gets up to temperature more quickly from cold due to a split-cooling system that features a variable flow coolant pump and mapped thermostat. To conserve energy the lubrication system is capable of varying its output depending on the load on the engine and its speed.

Changes to the combustion and boosting systems also contribute to the reduction in weight, while internal friction has been reduced by 17 per cent. A combination of scissor gear balancer shafts, solenoid injectors and the stiff lightweight aluminium block improve refinement for the driver. The scissor gear balancer shafts work to oppose and counter any vibrations and minimise rattles, while the 1,800 bar solenoid fuel injection system has a finer spray pattern to reduce noise. This gives smoother and more consistent combustion.

The Range Rover Velar engine range comprises:

#### Diesel

- D200 204PS, 2.0-litre four cylinder diesel MHEV, 430Nm of torque at 1750-2500rpm, eightspeed automatic, AWD
- **D200** 204PS, 2.0-litre four cylinder diesel, 430Nm of torque at 1750-2500rpm, eight-speed automatic, AWD
- D300 300PS, 3.0-litre six cylinder diesel MHEV, 650Nm of torque at 1,500-2,500rpm, eight-speed automatic, AWD
- **D300** 300PS, 3.0-litre six cylinder diesel, 650Nm of torque at 1,500-2,500rpm, eight-speed automatic, AWD

#### **Petrol**

- P250 250PS 2.0-litre four-cylinder petrol, 365Nm of torque at 1300-4500rpm, eight-speed automatic, AWD
- **P340** 340PS, 3.0-litre six-cylinder petrol MHEV, 480Nm of torque at 1500-4500rpm, eight-speed automatic, AWD
- P400 400PS, 3.0-litre six-cylinder petrol MHEV, 550Nm of torque at 2000-5000rpm
- P400e 404PS, 2.0-litre four-cylinder petrol PHEV, 640Nm of torque at 1,500-4,400rpm

#### SUPREME CAPABILITY AND REFINEMENT

Velar's advanced chassis offers the ultimate in comfort, dynamics and all-terrain capability. The sophisticated double-wishbone front suspension follows sports car design principles, with knuckles and bearings engineered for particularly high stiffness to deliver exemplary steering and handling response and precision. Aluminium is used extensively to save weight, while steel front lower control arms provide maximum durability in challenging off-road conditions.

An Integral Link rear axle with forged aluminium toe links and upper control arms delivers the high lateral stiffness required for exceptional handling precision, together with the longitudinal



compliance needed for outstanding ride comfort and refinement. The most sophisticated and capable rear suspension system available, Integral Link is also highly space-efficient, minimising intrusion into the luggage compartment

The suspension systems also offer outstanding wheel articulation and ensure the Velar can outperform the competition no matter what the terrain. With an approach angle of up to 27.5 degrees, breakover angle of up to 23.5 degrees and a departure angle of up to 29.5 degrees, the Velar sets new standards for off-road capability in the mid-size SUV segment.

The Velar is offered with the option of air suspension as standard on all six-cylinder engines and four-cylinder HSE models, with coil springs offered as standard on S and SE four-cylinder models as well as Plug-in Hybrid.\*\* This offers ground clearance of 213mm for coil suspension and 251mm for air. This system delivers truly outstanding comfort and significantly increased off-road capability.

The air suspension's ride height drops by 10mm when cruising at speeds above 105km/h (65mph) to reduce aerodynamic drag, improving fuel efficiency. The Auto Access Height function automatically lowers the suspension by 40mm when the ignition is turned off, making it easier to get in and out.

Off-road mode increases the ride height by 46mm compared to Normal mode at speeds below 50km/h (32mph) for a class-leading ground clearance of 251mm, but automatically lowers by 18mm between 50-80km/h (32-50mph) to provide an ideal combination of stability, comfort and ground clearance during longer journeys on rutted, unpaved roads or surfaces.

The air suspension also helps drivers when wading too. The Grounding Detection function can automatically raise the vehicle to help clear underwater obstacles the driver may not have seen. The additional ground clearance can be requested by pressing the brake pedal and a button on the touchscreen. And because air suspension is self-levelling, it maintains the optimum ride height when towing or carrying heavy loads, improving occupant comfort. It also brings benefits when hitching a trailer, or when loading or unloading: controls inside the luggage compartment allow the suspension to be raised or lowered by 50mm.

#### **OPTIMISED DYNAMICS**

Adaptive Dynamics is standard on all six-cylinder and PHEV models as well as all HSE-specification four-cylinder models. By monitoring wheel movement 500 times per second and body movements 100 times per second, the system continuously varies the damping forces at all four corners of the



vehicle. This ensures suspension stiffness is optimised for the driving conditions, improving ride comfort and handling. There's even a specific calibration for off-road driving.

Configurable Dynamics allows the driver to tailor vehicle settings to their individual preference using the touchscreen. In Dynamic mode's default setting, throttle response is increased, gear shifts anticipate a sportier driving style, the suspension stiffens and power-steering assistance is reduced for extra driver feedback. Configurable Dynamics allows each parameter to be individually adjusted, so increased throttle response can be combined with, for example, the default suspension setting.

The Velar's electric power-assisted steering (EPAS) system has been developed for exceptional driver feedback, precision and feel. Optimised friction and inertia compensation algorithms ensure completely intuitive steering responses, and an active return system promotes a natural self-centring effect as the steering returns to the straight-ahead position. The variable-ratio system also ensures the driver benefits from greater responsiveness the more they turn the wheel.

EPAS improves efficiency as well as the driving experience. Because it only uses energy when the wheel is turned, it can cut fuel consumption by as much as three per cent on the European combined cycle compared to hydraulic systems.

The Torque Vectoring by Braking (TVB) system, standard on all models, further enhances agility. If the system detects the onset of understeer during corner entry it can initiate light braking of the inside wheels – in particular the inside rear – to help the driver maintain an ideal line through the corner. TVB is also beneficial at lower speeds when driving on slippery surfaces such as mud or snow.

#### CAPABILITY AND COMPOSURE ON ALL SURFACES

Velar is equipped with a range of advanced technologies to deliver exceptional composure and agility on-road, and class-leading capability off-road.

The most significant of these is an intelligent, efficient, torque on-demand all-wheel-drive (AWD) system, which provides the optimum torque distribution to suit the conditions, whether dynamic driving on the road or pulling away on polished ice.

The system is built around a single-speed transfer case featuring a multi-plate wet clutch and a chain drive to the front axle. Designed to be compact and quiet in operation, the transfer case's main advantage is its speed: depending on conditions it can make the transition from 100 per cent rear bias to fully locked in only 165 milliseconds; transient torque delivery to the front axle can take as



little as 100 milliseconds. This makes the AWD system incredibly responsive, which delivers exceptional performance in all conditions.

Torque distribution between the front and rear axles is managed by Intelligent Driveline Dynamics (IDD), a highly-sophisticated control system developed in-house. IDD takes information from a number of sensors around the vehicle, including steering wheel angle, throttle position, yaw rate and lateral acceleration. Using this data, IDD continuously estimates the friction between the tyre contact patch and the surface – and how much of the available grip is being exploited.

With this level of intelligence, IDD can use both pre-emptive and reactive control strategies in order to optimise torque distribution, maximising traction and also enhancing vehicle dynamics. To make IDD even more effective, it is networked to the vehicle's Dynamic Stability Control system, Torque Vectoring System and – where fitted – the Active Locking Rear Differential.

The Active Locking Rear Differential, available on all six-cylinder models, also delivers benefits onand off-road. Electronic control of the wet clutch pack means the differential can optimise the torque distribution between the rear wheels as a function of load transfer and surface friction: this maximises traction during launch and corner exit, and when traversing challenging off-road terrains.

Land Rover's world-leading Terrain Response 2 system allows the driver to adjust vehicle settings to suit prevailing surface conditions, with a choice of Eco, Comfort, Grass-Gravel-Snow, Mud-Ruts, Sand, Dynamic and Automatic mode. Each alters the calibration of the engine, transmission, all-wheel drive system, suspension, and stability control systems for optimum traction and composure, and is accessible through the infotainment system.

A comprehensive portfolio of off-road technologies supports Velar's class-leading all-terrain capability. New for 2020 is a suite of cameras enabling two key new features – 3D Surround Camera and ClearSight Ground View, both of which are fitted as standard.

The 3D Surround Camera displays a real-time external 3D perspective of the vehicle via the 10-inch touchscreen – useful for low-speed manoeuvres across different terrain. The 3D surround camera can even display a plan view from above, seemingly making the car disappear – useful when manoeuvring across different terrains.

Another new innovative camera feature for the Range Rover Velar is the award-winning ClearSight Ground View, enabled by the 3D Surround Camera. This feature cleverly stitches together camera feeds to offer a virtual view below the bonnet, making it seem invisible. Cameras positioned in the



front grille and on the door mirrors offer an accurate representation of different terrain or potential hazards. A virtual 180-degree view helps make manoeuvring easier at speeds up to 30km/h (18mph).

All Terrain Progress Control (ATPC) functions like a low-speed cruise control and provides added composure in adverse conditions by managing vehicle speed, allowing the driver to concentrate solely on steering – use of the throttle and brake is not required. The system is activated with the press of a button, and the desired speed set using the cruise control switches on the steering wheel.

ATPC works in both forward and reverse gears and is operational from 3.6km/h to 30km/h (2.2mph to 18mph). It is particularly beneficial in challenging off-road environments where a constant crawl speed is desirable in order to maintain vehicle composure and occupant comfort.

Low Traction Launch is designed to help drivers pull away smoothly from a standstill on very slippery surfaces. Activated through the infotainment system's lower touchscreen, Low Traction Launch provides a very progressive throttle pedal calibration, reducing the possibility of wheelspin. Above 30km/h (18mph), the throttle calibration automatically reverts back to the Terrain Response setting that was previously selected.

Hill Descent Control (HDC) uses the ABS system to maintain a controlled vehicle speed on steep inclines without driver intervention. HDC incorporates Gradient Release Control to progressively release the brakes when moving away on an incline.

The latest development of the 4x4i menu offers slope information – displaying the degree of incline and front and rear camera views – as well as familiar information such as steering wheel angle, driveline torque distribution, suspension articulation and Wade Sensing data.

<sup>\*</sup>All emissions, fuel economy and EV-only range figures are EU–WLTP (TEL) Combined

<sup>\*\*</sup>All derivatives of Velar are available to order now. Customer deliveries of Plug-in-hybrid models will begin early in 2021

<sup>†</sup> Charge time possible with 50kW & 100kW DC Rapid charger (actual charge into the vehicle will be limited to 32kW). Actual charge times may vary according to environmental conditions and available charging installation

<sup>††</sup> Peak internal combustion engine and electric power not delivered at same engine speed



#### **TECHNOLOGY**

NEW RANGE ROVER VELAR: PIONEERING TECHNOLOGY

- State-of-the-art infotainment: Land Rover's most advanced system, Pivi and Pivi Pro, now available on the Range Rover Velar. A new electrical architecture delivers responsive, crisp HD graphics on beautifully-integrated 10-inch touchscreens
- Greater connectivity: Online entertainment includes Spotify integrated directly within the infotainment menu for the first time, with data included,\* Bluetooth connectivity for two phones at once, in addition to up to six USB points offered including two new USB points on the rear seat when Click and Go is specified\*\*
- Software-Over-The-Air: Dual-modem embedded SIM allows scheduled free vehicle software updates 'over-the-air,' ensuring customers always have the most up-to-date maps, apps, services and vehicle software\*\*\* without needing to visit a retailer
- A Sense of wellbeing: A quieter and healthier place to be, thanks to Active Road Noise Cancellation for more serene journeys, and Cabin Air Filtration for cleaner air inside
- Wearable Key: New second-generation Activity Key replaces the traditional key fob; wristworn wearable device incorporates an LCD watch, and is capable of unlocking/locking and even driving the vehicle without the need for a traditional key fob inside
- 360 virtual views: New smart camera technology incorporates ClearSight Ground View, offering a view 'beneath the bonnet' in addition to a 360-degree camera, for simpler, safer manoeuvring at low speeds across all surfaces
- Intelligent ADAS: Comprehensive new technology for 2020 includes new Rear Collision Monitors which automatically applies brakes if a collision is imminent
- Smartphone App: InControl Remote App allows users to remotely lock/unlock, check fuel
  and electric charge levels (on Plug-in Hybrid models), schedule charging and remotely precondition cabin temperature\* for optimum comfort and battery performance

The Range Rover Velar, Land Rover's luxury SUV which blends sophisticated design and intelligent technology, is now even more advanced with the introduction of new infotainment, wellbeing and safety features.

#### PIVI AND PIVI PRO

The Range Rover Velar now features one of the most advanced infotainment systems available on a luxury SUV – capable of voice control, automatic software updates 'over-the-air' and self-learning technologies.

Land Rover's state-of-the-art infotainment systems 'Pivi' and the more advanced 'Pivi Pro†' launch on Velar, offering a fast, responsive and intuitive interface, delivered in beautifully crisp high-definition on the vehicle's two 10-inch touchscreens and the 12.3-inch Interactive Driver Display.



A new electrical architecture – EVA 2.0 – underpins the new infotainment, safety and cabin air technologies, ensuring fast responsiveness. It comprises 85 ECUs to support the next-generation of driver assistance and customer convenience systems. Featuring two embedded Qualcomm 4G/LTE modems – one dedicated to the Software-Over-The-Air (SOTA) technology and another looking after music streaming and apps – the new electrical architecture ensures seamless connectivity and a quick start-up. Pivi Pro has its own separate power source, so customers don't need to wait for the system to load before performing actions such as entering navigation details. The system also has high-performance Snapdragon processors and an advanced QNX operating system for a responsive and intuitive experience.

Nick Rogers, Executive Director, Product Engineering Jaguar Land Rover, said: "From the start, Range Rover Velar has been about stripping back the unnecessary to reveal simplicity and beauty — we've applied that philosophy to transform our digital experience, ensuring that Velar is always on, always connected and always up to date. This includes simplifying the user experience in our all new infotainment system by flattening the menu structures so our customers can now access 90 per cent of what they need to do via the vehicle's home screen in just one or two taps. The Range Rover Velar is also more refined and calm inside, with Active Road Noise Cancellation giving an effect similar to high-end noise cancellation headphones, creating a tranquil sanctuary.

"The Range Rover Velar pioneered clean cabin-air technology for Range Rover with the introduction of Cabin Air Ionisation. The new Cabin Air Filtration system", activated through the PURIFY button, filters microscopic particles up to and even below PM2.5 – reducing the number of allergens, pollutants and potentially harmful particles within the cabin. Customers can be assured that the Range Rover Velar is cleaner, safer and smarter than ever before."

The customisable home screen is at the heart of the system. It can be set up according to the driver's preferences, for example providing 'at-a-glance' information such as traffic updates and when to take the next turn. An intuitive flat menu structure ensures customers can carry out everyday tasks directly from the home screen in one or two taps across phone, media and navigation systems — helping to significantly reduce driver distraction.

Pivi also allows two smartphones to be connected via Bluetooth at once, making life simpler for families or people with two devices such as home and work smartphones. For outgoing calls, users can switch between phones directly from the homescreen in just two taps.



The more advanced Pivi Pro system – fitted as standard from S Spec – includes its own dedicated rechargeable power source. This allows it to remain in a 'sleep' state when the vehicle is off. When the driver unlocks the vehicle, Pivi Pro is ready to go again in seconds, allowing customers to begin music streaming or entering navigation destination details straight away. New USB sockets (USB-C and USB-A) throughout – including the option of having two fitted to the rear seats – enable faster charging of smartphones or tablets than before, with up to six sockets available.

With the Pivi Pro system and Online Pack, customers need no longer be concerned about data usage or buying a SIM. The vehicle comes with a dual modem embedded SIM (eSIM) and complimentary data plan which enables unlimited music streaming (depending on subscription) via the embedded Spotify, Deezer or TuneIn apps. Meanwhile, map, weather, calendar and traffic updates are available as well as live on-street parking payments through the Park & Pay app.++ For those working or needing to access their schedules on the move, a new Agenda app works with Microsoft or Google calendars, allowing customers to dial into conference calls or even set a meeting location as their vehicle's destination.

Customers can also opt in for Wi-Fi Enabled with data plan<sup>+++</sup>, allowing up to eight devices to connect.

Pivi Pro will also personalise the driver's experience based on habits and preferences learned over time. The new navigation system uses self-learning algorithms to optimise routing, while the Smart Voice Guidance even knows to remain quiet when the driver is travelling on regular routes, to minimise interruptions. Smart Settings allows users to set a profile, storing personal vehicle settings such as seat position and heat preferences, mirror position and media settings. The vehicle will identify who is driving the car through the key fob and connected smartphone, learning and automating their preferences over time, so the vehicle is just as they like it when they open the door and sit down.

Customers will also no longer need to drive their vehicle to a retailer to benefit from the latest software updates. Velar features 'Software-Over-The-Air' (SOTA), to ensure customers always have the latest maps, apps and vehicle software. The vehicle automatically searches for software updates and notifies the driver via the touchscreen when a new download is available. Installation starts once the vehicle is stopped, locked and alarmed with all windows closed. The remaining time shows on a pop-up notification. Customers can schedule software updates up to 14 days in advance, at a time that suits them – just like a smartphone operating system update. Multiple modules can be updated wirelessly. These span telematics, infotainment and vehicle control systems, improving the



performance of core software to ensure the vehicle is operating at the latest level. A single software update can target multiple vehicle systems.

For customers with the new plug-in hybrid P400e engine, Pivi Pro makes it easier to use public charging networks; showing where charging stations are, if they're available and what they cost to use (where supported). The system will also display charge status and enable drivers to choose between three driving modes to best suit their needs: Hybrid mode, Electric Vehicle (EV) mode and Save mode. Using the new Park and Pay app, which supports in-car payments, drivers can pay for parking using the vehicle touchscreen without the correct change or even having to retrieve their smartphone.

A Smartphone Pack with Apple CarPlay is offered as standard. It also includes Android Auto and Baidu CarLife, depending on market applicability, as standard.

#### HEALTH AND WELLBEING

The Range Rover Velar pioneered clean air technology from its introduction in 2017 with Cabin Air Ionisation. The introduction of the new Cabin Air Filtration<sup>11</sup> moves Velar a step on when it comes to safe and pleasant-smelling cabin air.

The new Advanced Cabin Air Filtration<sup>1</sup> system, available as an option for the first time, filters out fine particulates – often found in polluted cities – and purifies and recirculates air in the cabin to ensure the air customers breathe inside the vehicle is purer and cleaner than the air outside.

When switched on via the Purify button within the vehicle touchscreen, the system will reduce the number of cabin allergens and fine particulates up to 2.5 microns in size. The Advanced Cabin Air Filtration<sup>®</sup> system also incorporates an active carbon filter, to remove unpleasant odours and Volatile Organic Compounds (VOCs).

Customers can also enable automatic activation of Purify mode. In this instance, when the sensors detect an increase in harmful allergens or particulates, the system will turn on automatically and begin to purify the cabin.

Cabin Air Ionisation further enhances the air quality within the vehicle. The Cabin Air Ionisation System – which has been available on the Velar since 2017 – uses Nanoe technology to condense moisture from cabin air, breaking it into tiny electrically charged particles that react with air contaminants, to neutralise odours, bacteria and allergens. Shielded by water, the particles last



longer and disperse further than those from conventional ionisers, helping to maintain a healthier cabin atmosphere for longer.

The experience inside the Range Rover Velar is now an even calmer sanctuary with the addition of Active Road Noise Cancellation. The intelligent technology works like a pair of high-end noise cancellation headphones, constantly monitoring vibrations from the road surface and calculating the opposite phase sound wave needed to remove the noise heard by the occupants. The effect is subtle, but the minimum reduction of four decibels ensures an even more refined and calming interior space. The system is even able to adjust the level and position of sounds played into the cabin based on the number of passengers and their position inside the vehicle by using the seatbelt sensors. This advanced system delivers a more serene experience inside Velar, even reducing driver tiredness, which can be brought about by extended exposure to low-frequency sound on long journeys.

#### SAFETY AND SMART CAMERA TECHNOLOGY

The Velar's light, stiff, aluminium-intensive body, together with double-wishbone front and Integral Link rear suspension provides the perfect basis for agile handling, superior ride comfort and outstanding refinement. It also delivers exceptional levels of crash protection, and the Velar has been developed to meet the most demanding crash test regulations worldwide, securing a five-star Euro NCAP rating. Velar scored 93 per cent for adult occupant protection, 85 per cent for child occupant protection and 74 per cent for pedestrian protection.

To further enhance safety, Velar now features a suite of advanced driver assistance technologies, including Rear Collision Monitor which applies automatic braking when a collision is deemed unavoidable. The new feature uses radars to constantly monitor the vehicle's rear, ensuring the vehicle is primed to reduce the severity of any impact. This technology complements the existing automatic braking technologies, such as Autonomous Emergency Braking.

Customers can choose from two specification Packs; a Blind Spot Assist Pack, or the Driver Assist pack with a comprehensive set of technology features which includes the new Rear Collision Monitor in addition to Rear Traffic Monitor, Adaptive Cruise Control and Blind Spot Assist.

The new Range Rover Velar is also fitted with a suite of new cameras enabling two key new features – 3D Surround Camera and ClearSight Ground View, both of which are fitted as standard.



The 3D Surround Camera displays a real-time external 3D perspective of the vehicle via the 10-inch touchscreen – useful for low-speed manoeuvres such as parking by a kerb and getting in and out of tight spaces or junctions. The 3D surround camera can even display a plan view from above – seemingly making the car appear transparent, a feature useful for manoeuvring across different terrains.

Another new innovative camera feature, enabled by the 3D Surround Camera, is the award-winning ClearSight Ground View. It cleverly stitches together camera feeds to offer a virtual view underneath the bonnet, rendering the bonnet seemingly invisble. Cameras positioned in the front grille and on the door mirrors offer an accurate representation of different terrain or potential hazards. A virtual 180-degree view helps make manoeuvring easier at speeds up to 30km/h (18mph).

#### REMOTE ACTIVATION AND WEARABLE DEVICE

A second-generation Activity Key can also be specified, in addition to the pair of standard fobs for heightened convenience. The water-resistant and shock-proof wrist-worn device now incorporates an LCD watch. It conveniently allows customers to unlock any door, lock or even start the vehicle just by being nearby – so customers don't need to take a separate key fob with them on their journey.

Smartphone users can also use the Remote App to check key information about their Velar, including its fuel level, location, journey history, to lock or unlock the vehicle and even initiate the climate control through the Park Heat function to heat or cool the cabin before a journey. For PHEV models, owners can check the level of remaining electric range, the charge status, charging time and set the cabin temperature through Pre-Conditioning, which uses the mains power rather than vehicle battery power. The ability to send favourite places and destinations to the vehicle's navigation system via the Remote App will be available soon.

Only compliant with Nanoe™ Ionisers and not suitable for China market – please refer to in-market Cabin Air technologies

<sup>\*</sup> Dependent on region. Only available with the Pivi Pro and Online Pack options; Spotify Premium subscription is required

<sup>\*\*</sup> Dependent on Click and Go being specified

<sup>\*\*\*</sup> Only available with Pivi Pro

<sup>†</sup> Pivi Pro available as standard on S, SE and HSE models

<sup>††</sup> Live parking payments require a payment plan and this service is only available in the UK

<sup>+++</sup>Fair use policy may apply. After 20GB of data is used within a month, data speeds and functionality on vehicle may reduce for the rest of the month. For details of the Fair Usage Policy associated with this feature, please refer to the Pivi Pro Terms at www.landrover.com/pivi-pro-terms.

<sup>&</sup>lt;sup>4</sup>4G data plan is subject to market availability. The unlimited data is provided by the eSIM and applies to connected services and features for their respective subscription periods; Connected Navigation is initially included for three years and the Online Pack connected services subscription is provided for an initial period of one year

<sup>&</sup>lt;sup>A</sup> Subject to market applicability. Fair use policy may apply. After 20GB of data is used within a month, data speeds and functionality on vehicle may reduce for the rest of the month

<sup>□□</sup> Standard on vehicles fitted with Meridian sound systems



#### **ENDS**

### **Further Information**

Media website: www.media.landrover.com

**Land Rover Channels:** 

Facebook: <a href="http://www.facebook.com/LandRover">http://www.facebook.com/LandRover</a>

Twitter: <a href="http://twitter.com/LandRover">http://twitter.com/LandRover</a>
Instagram: <a href="http://instagram.com/LandRover">http://instagram.com/LandRover</a>
YouTube: <a href="http://www.youtube.com/LandRover">http://www.youtube.com/LandRover</a>

#### **Notes to Editors**

#### **About Land Rover**

Since 1948 Land Rover has been manufacturing authentic 4x4s that represent true 'breadth of capability' across the model range. Defender, Discovery, Discovery Sport, Range Rover, Range Rover, Range Rover, Range Rover Sport, Range Rover Velar and Range Rover Evoque each define the world's SUV sectors, with 80 per cent of this model range exported to over 100 countries.

#### Important notice

Jaguar Land Rover is constantly seeking ways to improve the specification, design and production of its vehicles, parts and accessories and alterations take place continually. Whilst every effort is made to produce up-to-date literature, this document should not be regarded as an infallible guide to current specifications or availability, nor does it constitute an offer for the sale of any particular vehicle, part or accessory. All figures are manufacturer's estimates.