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Volkswagen

The new Passat – Driving presentation

Porto Cervo, Sardinia, October 2014

Note:

This press release and imagery relating to the new Passat are available online at: www.volkswagen-media-services.com. User name: **vwpassat8**; password: **sard2014**

All fuel consumption figures, emission levels and performance figures given in this press release for the Passat versions being launched in 2015 are forecasts as of October 2014. All specification details relate to the model range available in Germany. Variations may apply in other countries.

Contents.


WOB P 6002

Extra innovation, connectivity, efficiency and safety: **Volkswagen launches the best Passat ever**

Array of Passat driver assistance systems overcome class boundaries

240-PS diesel flagship with DSG and all-wheel drive consumes just 5.3 litres

Ten key facts about the new Passat:

1. Thanks to its innovative lightweight design, the new Passat is up to 85 kg lighter than the previous model.

2. All engines are new to the model range; they have been made up to 20 per cent more fuel efficient.

3. The most powerful diesel in the Passat is a new four-cylinder TDI delivering 176 kW / 240 PS. Fuel consumption: 5.3 l/100 km.

4. In 2015, this top-selling vehicle will be offered as the Passat GTE with a plug-in hybrid drive. System power: 160 kW / 218 PS.

5. In the top 'Highline' equipment line the new Passat has LED headlights as standard.

6. Making their debut in the Passat: City Emergency Braking function with Pedestrian Monitoring, Trailer Assist, Traffic Assist and Emergency Assist.

7. The new Passat is the first Volkswagen with an Active Info Display and head-up display.

8. The new Passat makes its debut as the eighth generation of this top-selling vehicle, which has sold nearly 22 million units since 1973.

9. The model series is the Group's number one seller with up to 1.1 million Passat cars sold annually (2013; including derivatives).

10. The European launch begins in November. Further international markets follow successively from 2015.

Wolfsburg / Porto Cervo, October 2014. In July, Volkswagen unveiled the new Passat at its world premiere in Potsdam. Just recently the eighth generation of this best-selling car celebrated its trade show debut as one of the highlights at the Paris Motor Show. And already the story continues: in the middle of November the new Passat is being launched initially in Germany; and the very next week the pan-European launch begins. Further international markets and the right-hand-drive versions will follow step-by-step from 2015. Everything in this car is new. Its design, technologies, engines and possibilities. The Passat sets new standards with an unladen weight that has been reduced by up to 85 kg and its fuel economy figures that have been improved by up to 20 per cent. For the first time there will also be a version with a hybrid plug-in drive system: the Passat GTE.

22 million units produced. The launch of the eighth generation Passat marks the debut of the latest version of a global bestseller. When all derivatives are included, nearly 22 million units have been built. In 2013 alone, over 1.1 million people chose to buy a model from this series. Last year, on average, somewhere in the world a Passat, or a Magotan in China, was sold every 29 seconds. That's two Passat cars a minute, 126 an hour and more than 3,000 a day. Every day. The Passat from Volkswagen is the Group's most successful model.

Positioning and design

Exterior. The new Passat's design combines stylish clarity with a high degree of power. A design that is not simply fashionable but is contemporary. A design that is not whimsical but is expressive. A design in which every line has a purpose. A design that will leave a mark on its era. The new Passat was created based on the modular transverse matrix – thanks to this platform, its proportions were made to be significantly more dynamic (including lower body, longer wheelbase and larger wheels) and its overall package was improved. While preserving all of its functional virtues, the Passat has gained noticeably in presence, exclusivity and dynamism. Even at night the Passat has an unmistakable look due to its newly developed LED headlights (standard on 'Highline' models and above) and standard LED rear lights. In the new Passat, Volkswagen has created saloon and estate cars that cross over into a higher class. As the most successful European business car, the Passat represents a new type of business class – a transition car between the mid- and premium classes and between the B and C segments.

Interior. Analogous to the expressive exterior is an interior that has been developed with the aesthetics, clarity and high value to match the sophisticated overall concept of the eighth-generation Passat. Based on numerous new design solutions such as a concise continuous horizontal band of air vents and technologies – such as an Active Info Display (interactive digital instruments), head-up display and an extremely low-profile ambient lighting strip – the interior has a more avant-garde and exclusive appearance than ever.

Assistance and drive systems

More convenience and safety. New assistance, infotainment and convenience systems make individual mobility more sustainable, interconnected and communicative; they also play an active role in the driving process and make it even safer. The Passat has advanced to become a vehicle whose technologies move beyond segment boundaries. These technologies include – along with the Active Info Display and head-up display – systems such as an app-based rear seat entertainment system for tablet computers, Front Assist plus City Emergency Braking with Pedestrian Detection and three world firsts: Emergency Assist (stops vehicle in an emergency), Trailer Assist (assisted manoeuvring with a trailer) and the traffic jam assistant.

Ten TSI and TDI engines. The new Passat will be available with 10 direct injection turbocharged engines (petrol / TSI and diesel / TDI) that cover a power range from 88 kW / 120 PS to 206 kW / 280 PS. All of the drive systems are new aboard the Passat. The engines' fuel consumption levels, and therefore their CO_2 emissions as well, have been reduced by as much as 20 per cent. All versions are equipped with a stop-start system and a regenerative braking mode. A dual clutch gearbox (DSG) is available as an option for all engine versions, and it is standard with the top engine.

Plug-in hybrid with 160 kW / 218 PS. For the first time, the range will include a model with a plug-in hybrid drive system (115-kW TSI plus 85-kW electric motor and externally chargeable battery): the Passat GTE. With a system power of 160 kW / 218 PS, it is the most powerful plug-in hybrid from Volkswagen to date. This Passat can be driven as a zero-emissions vehicle over a range of up to 50 km with all-electric power.

TSI – overview of the petrol engines. The petrol engines begin at a power output of 92 kW / 125 PS. At the next power level, there is a 110 kW / 150 PS TSI with active cylinder management (ACT); the turbocharged 1.4-litre direct injection engine has a fuel consumption figure of 4.9 l/100 km (equating

to 115 g/km CO_2) – 1.3 l/100 km / 20 per cent less than the comparable previous model. Other power output levels: 132 kW / 180 PS, 162 kW / 220 PS and 206 kW / 280 PS. As mentioned, the plug-in hybrid's TSI produces 115 kW / 156 PS. The models delivering 220 and 280 PS and the Passat GTE are in general equipped with DSG.

High-tech TDI with 240 PS. A powertrain highlight of the range is the most powerful four-cylinder turbocharged direct injection diesel engine (TDI) ever offered by Volkswagen: a new 2.0-litre twin turbo engine delivering 176 kW / 240 PS that consumes just 5.3l/100 km (equating to 139 g/km of CO_2) This engine gives the saloon a top speed of 240 km/h; in the case of the estate it is 238 km/h. Due to the high maximum torque of 500 Nm, the 240-PS Passat is fitted as standard with 4MOTION all-wheel-drive and a seven-speed DSG.

TDI – overview of the diesel engines. On the diesel side the engine range begins at launch with two 2.0 TDI engines: a 110 kW / 150 PS version (fuel consumption: 4.1 l/100 km, equating to 108 g/km of CO_2) and the top TDI version (176 kW / 240 PS). Also following later this year will be a 1.6 TDI delivering 88 kW / 120 PS and a 2.0 TDI with power output of 140 kW / 190 PS. In 2015, the Passat TDI BlueMotion will be introduced as an even more fuel-efficient model, also delivering 88 kW / 120 PS.

Equipment versions

Three equipment lines. As in the previous model, Volkswagen will be launching the new Passat on the market in three equipment lines: Trendline, Comfortline and Highline. Even the Passat Trendline is packed with features: 16-inch wheels with 215 tyres and LED rear lights add character to the exterior. While interior features include a front centre armrest with storage compartment and height adjustment for the front seats. Functional features include: Keyless Go (a button for starting and stopping the engine), Driver Alert, Automatic Post-Collision Braking, a tyre pressure indicator, the 'Composition Colour' radio system with 5-inch touchscreen, the 'Plus' multi-function display, daytime running lights, Hill Hold Assist, Auto Hold, a coasting function (with DSG) and air conditioning. All models also have a Stop-Start system and a regenerative braking mode. The Passat Comfortline, with an even more exclusive specification, additionally comes as standard with details such as Front Assist including City Emergency Braking. In the case of the top version, the Passat Highline, not only are classic features such as Alcantara/leather trim, but also LED headlights already included.

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The exterior.

Clarity and power cross over into a higher class: **Passat shows more presence, exclusivity and dynamism than ever**

Sporty proportions with longer wheelbase but nearly the same length overall

‘Cab-backward design’ with long bonnet creates high-class feel

Five key facts about the exterior:

1. The Passat's design has been reworked. Striking features now are the sporty proportions and powerful lines.
2. The saloon is 4,767 mm long (-2 mm), 1,832 mm wide (+ 12 mm) and 1,456 mm high (- 14 mm).
3. Although the car's length is almost exactly as the previous model, the wheelbase has been extended by a notable 79 mm.
4. The wheels have become larger, extending out further, which has thus enabled the vehicle body overhangs to be significantly shortened.
5. The passenger compartment's shift to the rear and the elongated appearance of the bonnet create the look and feel of a high-class model.

Wolfsburg / Porto Cervo, October 2014. The new Passat's design combines stylish clarity with a high degree of supreme power. Clarity and power – these two elements merge on the exterior of the eighth-generation Passat to create a design that conveys exclusivity. A design that is not simply fashionable but is contemporary. A design that is not whimsical, but is expressive. A design in which every line has a purpose. A design that will leave a mark on its era. While preserving all of its functional virtues, the Passat has gained noticeably in presence, exclusivity and dynamism. In the new Passat, Volkswagen has made a saloon car and an estate car with clarity and power that cross over into a higher class. As the most successful German business car, the Passat represents a new type of business class – a transition car between the mid- and premium classes and between the B and C segments.

Stylistic evolution of a model series

Initial situation. Volkswagen has been perfecting the Passat for over four decades. Internally, the now eight generations carry the designations B1 through B8. At Volkswagen, the B stands for the B-segment to which the Passat belongs (mid-class cars), and the number indicates the car's generation. In retrospect, the car's styling was primarily influenced by the B1, the original model of 1973, and all of the generations from the B5 (1996) onward. Volkswagen introduced a paradigm shift in the Passat B5.

While all previous Passat generations were balanced multi-talented cars that offered a high level of comfort, very good everyday features and above-average space, with this generation the quality and design made a leap forward, positioning the Passat in the top league of its class and making it the most successful business car. This path was consistently and successfully followed up by the B6 (from 2005) and the B7 (from 2010). Currently, the Passat – including its derivatives that have been individually tailored for the Chinese and American markets – is, as noted, the most successful car of the brand and of the Group with over 1.1 million units produced.

Breathtaking proportions. In light of this history of success, Klaus Bischoff, Volkswagen Head of Design, and his team asked themselves the following question as they began to work on the B8: „What do we need to do to make a global best-seller even more visually attractive?“ The answer was clear: „Breathtaking proportions.“ And it was precisely this that the team succeeded in achieving more systematically than ever, as an entirely new design platform was made available for the Passat for the first time: the modular transverse matrix (MQB). Although it is almost exactly as long as the previous model, the car’s wheelbase grew by a considerable 79 mm; the front and rear wheels were made larger and are now positioned further out to the sides, making it possible to shorten the body overhangs significantly. At the same time, the Passat was made lower and wider. Because of the optimised engine orientation, it was possible to significantly lower the bonnet and shift the windscreen towards the rear. This „cab backward design“ with mature saloon proportions resulted in a very long bonnet look with the impression of a premium-class model. It was also clear that the new Passat should get dynamic proportions. But that did not define the entire style of the design, the orientation. Klaus Bischoff: „In the new Passat we wanted to make a formal jump to the next vehicle class up. Our objective was to sculpturally develop the potential of this vehicle into a business saloon. What was important for me was to develop significant design themes that radiate an impressive visual presence and express the powerful sporty character of the new Passat.“

Dimensions and design details

The dimensions. The saloon is 4,767 mm long and therefore 2 mm shorter than the previous model. At the same time, its wheelbase has been lengthened by the aforementioned 79 mm to 2,791 mm. The front wheels have been moved 29 mm towards the front bumper, and the rear wheels 17 mm towards the rear bumper (the occupant cell has been lengthened by 33 mm). The result: shorter body overhangs (67 mm less at front, 13 mm less at rear). At the same time, the Passat has been made

14 mm lower (1,456 mm) and 12 mm wider (1,832 mm). These dimensions enabled a ratio of proportions that provided ideal conditions for creating a design that was as powerful as it was exclusive.

Side profile with a distinctive character line. Those encountering the new Passat for the first time will notice that the car is not a typical mid-class car based on its design; the style would also be appropriate for a car in the upper mid-class or premium class. The exclusive image of the new Passat was achieved in part by a wide variety of extremely precisely drawn edges and creases which develop individual light-reflecting surfaces. Especially distinctive in side profile is the area between the window sill (beneath the side windows) and what is known as the character line (at the height of the door handles). Here, the creases and edges in the upper area of the side panels merge to form a horizontal surface from which – viewed from front to back – the distinctive and athletic shoulder section of the Passat develops. The character line starts at the front as a lengthening of the upper headlight border into the wing, and then it is briefly interrupted by the prominent front wheel arch and then rises slightly but continuously as an actual shoulder line towards the rear (the windows and roof pillars slope inwards as on a sports car). Tantalisingly, between the window sill and the character

line there is an alternation of light-reflecting surfaces. This modulation is subdivided into two areas. The upper area at the front of the wing forms a wide concave surface which becomes progressively narrower towards the C-pillar of the saloon or the D-pillar of the estate like a tapering triangle, meaning that this light-reflecting surface ends in the rear roof pillar. Beneath this, there is an area that runs in the opposite direction; it starts wide at the rear as a powerfully arched shoulder section and runs forward, also as a tapering triangle; this makes the side of the car appear more wedge-shaped than it actually is. The shoulder line and the powerful rear wheel arch are emphasised to the maximum by this intensive interplay of light and shadow surfaces.

High-end precision – including in production. The designers placed the door handles directly on the character line, which has been given an further crease – highly precise sculpting that requires production methods that are equally precise. And to date this know-how is unique to Volkswagen. Beneath the character line are the door surfaces that flare outwards and the dominant wheel arches. At the very bottom, the side profile is bordered by the shaped side sills. Between the door surfaces and the transition into the side sills there is another crease with an alternation of curvature that once again generates a muscular light surface. This light surface is continued along the sides and into the rear bumper. Elegant: wrap-around chrome trim at the height of the side sill (from ‘Highline’). The interplay of lines and light surfaces significantly lowers the height of the new Passat visually; as a result, the Saloon and Estate look much lower than they really are. Last but not least, another crease above the side windows and the wrap-around chrome trim of the long window surface (from‘ Comfortline’) and a double edge in the roof area all contribute towards this sporty and exclusive overall impression. As a result, when people look at the car they are certain, based on the extended volume of the side section, that the new Passat has been made significantly longer. In fact, however, it is 2 mm shorter than the previous model.

Front end has unmistakable charisma. The Passat arrives on the market with a completely re-designed generation of front ends. The radiator grille is designed to be significantly larger than the headlights. In all three equipment versions (Trendline, Comfortline and Highline) it is upgraded by four chrome bars. On the sides, these bars bend inward towards the headlights in a trapezoid shape. The lowermost chrome bar of the grille is continued into the headlights. Above the grille and the headlights there is another chrome accent which extends across the entire width of the front end, and it is continued laterally in the character line (from Highline). In general, the headlights and the grille

follow Volkswagen design DNA with their clear horizontal alignment, and they meld into a horizontal unit more than ever. Nonetheless, the designers did not rely on the width alone, but intentionally worked in parallel with diagonal angles to generate an impressive, prominent and unmistakable front-end image.

A face in the crowd. The 'face' itself – the cross-bar made up of the grille and headlights – reinforces the superior image of the Passat with its strong presence. The upper chrome bar of the Passat Highline further reinforces this dynamic effect. Distinctive is the bending edge beneath the grille and the headlights with a light surface that follows the upper course of the radiator and headlights as a line. The contours of the radiator grille and the headlights are reflected in the lower bumper area. The fog lights are each arranged on the outside.

LED headlights from 'Highline'. Volkswagen has developed a totally new design of vehicle lights for the eighth generation Passat. The car is being offered with halogen and LED headlights. In particular, the LED headlights that are offered in two versions create an unmistakable look.

LED headlights (level 1). The newly developed all-LED headlights in reflector technology form the entry-level version of a lighting system that replaces the xenon headlights on the Passat. Also designed in LED technology are the daytime running lights. The main areas of the daytime running lights also assume a turn indicator function. Twelve LEDs are used for this, which can be operated in white or yellow. Together with the two „eyes" in the reflectors, the daytime running lights' unique signature is unmistakable.

LED headlights (level 2). At the next lighting level the Passat has full LED headlights in projection technology. Arranged next to one another, two exceptionally low-profile lens modules project the light onto the road and generate a type of illumination that is similar to daylight. The centrepiece of these headlights is the outer multi-beam lens module. In addition to the dimmed and full beams (with adapted country road and motorway light), the module also generates the dynamic cornering light. The inner flat-beam lens module, meanwhile, is responsible for illuminating the road up ahead. Another highlight of the projection LED headlights is the daytime running lights with 32 LEDs. Their signature is made up of two separate modules: a large 'U' (that goes around the lens module) and a small 'U', which frames the contour of the multi-beam lens module. Beneath the daytime running light

the wide indicators (twelve LEDs) emphasise the headlight's design. LEDs for the static cornering light are also positioned on the inner side of the headlight.

LED headlights (level 2 plus Dynamic Light Assist). In the top version, the all-LED projection headlight is also controlled via a vehicle camera. For the first time, Volkswagen is combining Dynamic Light Assist (automatic main beam control) and LED technology. The camera recognises any traffic in front and any vehicles approaching from the opposite direction and balances the data using the headlight electronics, which coordinate the spread of light via the daytime running light's controller and pivoting multi-beam lens module.

Rear. Immediately noticeable at the rear is that the cab has a strong inward sweep, as on a sports car, and at the bottom it transitions into the wide, flared shoulder section. The rear lights have been made considerably wider and leaner. In this area, the saloon looks like a young sibling of the Phaeton with its large boot lid surface. Especially distinctive is the crease beneath the rear lights that extends across the rear. Under this edge, the rear body draws inward – the upper part of the rear protrudes more above the bumper than below it. Designers used this trick to exploit the greatest possible length in the

rear body while still satisfying the guidelines of numerous insurance classifications that prescribe a specific deformation zone in the area of the bumper.

Trapezoidal exhaust tailpipe trim panels. A love for detail is a common thread that runs right through the new Passat. One example is found at the rear of versions with larger engines: the trapezoidal chrome trim panels that are integrated to be flush with the rear bumper. The rear reflectors – trapezoidal like the tailpipes – were also worked into the bumper in an extremely precise fashion. In turn, they precisely define the termination point of the wrap-around chrome trim strip that is included from the Passat Highline. The saloon and estate both have these small yet refined details. The two body versions exhibit differences at the rear – beyond those directly related to the different body types – such as the positioning of the licence plate frame: this frame is in the bumper on the saloon, while it is on the tailgate on the estate.

Rear lights (level 1). The new Passat is being launched with all-LED rear lights as standard. In addition to the standard version there will also be a further customised top version. Both versions extend in two sections from the boot/hatch into the side panel. In the standard rear light unit, the tail light and brake light functions are located in the upper outer section, and the indicators are beneath. The inner segment (boot lid) integrates the reversing lights along with the tail lights and rear fog lights.

Rear lights (level 2). The top version's light design is extremely striking. The functionality of these LED rear lights can be seen during braking: the horizontal light signature then switches to the vertically oriented brake light signature which is produced by three vertical lines, two in the outer section and one in the inner section. The visual effect is of a flip-flop from the horizontal tail lights to the vertical brake light signature. The visual signal change makes the brake lights more perceptible, and this increases traffic safety. In addition to the tail and brake light the indicator light is also integrated within the outer rear light modules. Housed in the inner (boot lid) modules are the tail and brake light function, the reversing light and the rear fog light. These LED rear lights are also available in an optional smoked version ('R-Line').

Weight reduction

85 kg lighter. The new Passat was created based on the modular transverse matrix (MQB). It exploits synergies across vehicle segments such as progress in weight reduction measures. The result:

the eighth generation Passat weighs up to 85 kg less than the previous model. In the search for every possible reduction in weight, the development team left no stone unturned. The 85 kg of weight reduction come together from individual measures in five areas: chassis, power units, electrics, vehicle body and trim.

Hunting down every gram. The weight of the chassis was reduced by such measures as the use of lightweight metals. The rear axle, for example, weighs 4.7 kg less and the steering system 2.2 kg less. Overall, the chassis was made up to 9 kg lighter. The engines used in the Passat weigh appreciably less than in the previous model. Total weight savings here are up to 40 kg. Aluminium makes the electrical components, electronics and thereby the overall electrical system lighter. Wire gauges were also optimised. Overall, up to 3 kg was saved, even in the base version. Progressive steel construction with ultra-high strength and hot-formed steels reduce the weight of the car body. For the first time in a Passat, aluminium was also used in the body structure. Advanced materials and a new air conditioner lead to weight savings in the equipment area as well. In total, the entire superstructure was made up to 33 kg lighter.

Improved properties. Despite the weight reduction, improvements were made in body rigidity (a gain of 2,000 Nm/° to 25,000 Nm/° in the estate and 30,000 Nm/° in the saloon). The maximum trailer load was increased by up to 400 kg to 2,200 kg. It is also a fact that around half of a vehicle's fuel consumption is used to overcome sources of driving resistance – weight, air drag, rolling resistance. That makes the progress made in lowering the weight of the Passat by up to 85 kg all the more significant.

The interior.

More room on an almost identical vehicle footprint: **Space inside increased in length by 33 mm**

Innovative interior with new ventilation layout and powerful light staging

New infotainment generation with MirrorLink™ and mobile online services

Five key facts about the interior:

1. Although the new Passat is 2 mm shorter, interior length has grown by 33 mm.
2. The five-seat saloon's luggage compartment has been enlarged by 21 litres to an impressive 586 litres.
3. The luggage space of the five-seat estate has increased by 47 to 650 litres (loaded up to the roof, that's 1,780 litres).
4. The new Passat is the first Volkswagen with an Active Info Display and slide-out head-up display.
5. The central design element of the dashboard is an innovative air vent that extends across the entire width of the interior like a band and is designed as a functional decorative element.

Wolfsburg / Porto Cervo, October 2014. Analogous to the elaborately designed exterior, the interior designers developed an interior with levels of aesthetics, clarity and quality matching the sophisticated overall concept of the eighth generation Passat. Due to numerous new design solutions, precisely executed details and innovative technologies such as an Active Info Display and a head-up display, the interior is more avant-garde, distinctive and multifaceted than ever. The modular transverse matrix made it possible to further improve interior space as well.

Dimensions, operation, design details

More room. Although the new Passat is 2 mm shorter than the previous model, interior length has grown by 33 mm. Cargo capacities have also increased. In the estate, cargo capacity has been increased by 47 to 650 litres; when the boot space is filled to the roof, cargo capacity grows to 1,780 litres. In the saloon, cargo capacity increased by 21 to 586 litres.

Horizontal ventilation strip. The goal defined when development began of creating a feeling of lightness and generous space in the interior was realised by the designers with a lean dashboard with a consistent horizontal structure, and the front door panels are stylistically incorporated into this

design. The central design element of the dashboard is an innovative air vent that extends across the entire width of the interior like a band and is designed as a functional decorative element. So there are no separately placed air nozzles in the new Passat, rather one continuous element that is only interrupted by the instruments and the analogue clock in the middle of the dashboard – it consistently unifies form and function. The clear architectural character is created by the impressive length of the chrome fins integrated in the air vents and a decorative panel integrated beneath it. The dimensions of the air vent not only affect the design of the dashboard; they also have a positive effect on climate control performance and ventilation acoustics.

Stylish ambient lighting. Beneath the air vent and the decorative panel there is an extremely low-profile ambient light strip that continues into the doors. Its wrap-around lighting effect defines the space and creates a pleasant mood. This show begins when the central locking system is unlocked by wireless remote control or by Keyless Access. In this case, the central lighting unit in the headlining fades up first and immerses the centre console in a warm light; immediately thereafter, the inside door handles are illuminated, and the wrap-around ambient light as a narrow, fine strip in the dashboard and door panels is activated (the three available colours of 'Cyan', 'White' and 'Amber' and the intensity can be set from the 'CAR' menu in the infotainment system). At nearly the same time, the footwell is also immersed in an orientation light. As soon as the ignition is activated, the wrap-around ambient lighting and the illumination of instruments and switches are dominant; all other light sources are dimmed to an individually preset level. When the ignition is shut off, all light sources are ramped up again to simplify orientation.

Driver-oriented architecture. The designers placed special value on a driver-oriented design and a very spacious feeling for the front interior area. Therefore, starting from the driver's seating position, the dashboard builds upwards in the space to the two sides of the instruments, inclined slightly towards the windscreen. This creates a spacious feeling as well as an ideal ergonomic environment. The centre console also has an extremely clean layout, is well organised, and the controls are easy to access. The infotainment system is integrated high on the console and is easy to see; the climate controls are positioned beneath it. Since the console between the driver and front passenger has a sporty incline up towards the infotainment system, the gear shift gate is up high, and the gear knob is in an ideal ergonomic position.

Infotainment systems

Active Info Display. In the Passat, Volkswagen is launching an instrument cluster that has been designed as a full interactive display: the Active Info Display. All instruments are implemented virtually via software. Only the icon lights on the upper border of the display are still implemented in hardware. Navigation information can be shown in 2D or 3D views on a 12.3-inch display. Its resolution of 1,440 x 540 pixels enables extremely precise, high-quality graphics and interactive display of all details. Take the Navigation mode, for instance: here, the speedometer and tachometer are relocated to the sides to make more room for the map. Information on driving, navigation and assistance functions can be integrated into the graphic areas of the speedometer and tachometer as needed. Data that is displayed on the centre console via the infotainment system, such as phone contact pages or CD covers, can also be shown in the Active Info Display in the Passat. Volkswagen is offering the Active Info Display as an optional alternative to analogue instruments.

Head-up display. The new Passat is the first Volkswagen also to be equipped with a head-up display. It projects key information such as vehicle speed or navigation pictograms directly into the driver's primary visual field. Projection of the head-up display lets drivers keep their eyes on the road while looking at data such as speed. Reaction time can also be significantly reduced by projecting warning messages directly into the driver's visual field. The Passat's head-up display is a 'combined solution': the data is projected onto an extendable glass panel in front of the windscreen. Developers succeeded in attaining the same display quality as in much more expensive windscreen systems. When it is not being used, the display panel is protected by lowering it into the dashboard, and the opening has a flush closure. From the driver's perspective, the projected data appears to be located two metres in front of the Passat. As a result, because drivers do not have to shift their gaze back and forth between the instruments and the street nearly as often, they do not have to constantly refocus their eyes, thus reducing eye fatigue. The head-up display is activated by a separate control next to the rotary light switch. Via the infotainment system's menu drivers can decide for themselves what information is to be displayed: current speed, permitted speed, navigation advice, assistance systems information and/or warning messages.

Infotainment systems... The new Passat is launching with the latest generation of Volkswagen infotainment systems. It facilitates an extremely high degree of connectivity in order to link up external devices. Its diverse interfaces include interfacing to smart phones and their apps via MirrorLink™.

In addition, the systems have been given much faster processors (optimised booting, quicker route calculation, smoother touchscreen performance, perfected language dialogues) and new higher-resolution displays (in the 6.5-inch systems). The Passat makes its debut with the 5-inch systems ' Composition Touch' and 'Composition Colour', the 6.5-inch systems 'Composition Media' and 'Discover Media' (plus Navigation) with a four-fold improvement in resolution (6.5-inch display compared to the first generation 5.8-inch display) and the latest version of the 8.0-inch 'Discover Pro' radio-navigation system.

...featuring greater performance and more interfaces. The new generation of infotainment devices is characterised by better system performance. Consider the 'Discover Media', the radio-navigation system with 6.5-inch display: Compared to the first generation, the performance of the CPU (main processor) has more than doubled from 950 MIPS (million instructions per second) to 2,500 MIPS. Even in the 'Composition Touch' (base device), music can be fed in via the AUX-IN socket, by SD card and/or optionally from a USB stick or via Bluetooth. In addition, an iPod/iPhone interface is available. Starting with the 'Composition Colour', a CD player is also integrated, and on the 'Composition Media' and above a Bluetooth interface and USB interface are included as standard. The 'Discover

Media' (entry-level navigation system) can be optionally equipped with Wi-Fi. The top 'Discover Pro' navigation system also comes with the Premium mobile phone interface (rSAP profile) and DVD drive; TV tuner is optional..

Smartphone integration via MirrorLink™. For the first time in the Passat, MirrorLink™ is available – with the 'Composition Media' system and above it is optional, while with the 'Discover Pro' it comes as standard. MirrorLink™ makes it possible to integrate numerous Android smart phone apps or functions into the infotainment system. Related apps will be offered directly from Volkswagen and from third party suppliers. The Volkswagen apps: 'Mobile Office', 'audioMOTION', 'ThinkBlue. Trainer', 'Shared Audio', 'Drive&Track' and 'My Guide'. Third-party apps include 'Audioteka' (audio books), 'Glympse' (social media), 'Aupeo!' (Internet radio), 'Life360' (family locator) and 'Kaliki' (news).

Optimised telephony. With the 'Composition Media' system and above, two mobile phones can now be called at the same time – e.g. a business phone and a private one. Optimised: speech quality (Wide Band Speech HFP 1.6). Also new: SMS messaging. Received SMS messages can be read aloud via TTS (* = Text-to-Speech). Predefined templates such as 'Call back' make answering safer while driving. With the 'Composition Colour' system and above, the optional 'Comfort' mobile phone preparation offers a compartment for inductive coupling of the smart phone to the Passat's external antenna.

More innovative navigation. As a further innovation in the Passat, the 'rubber band' function is used in the new 'Discover Pro' system. Just like on a tablet, the displayed route can be scrolled and varied by touching a point on the route by hand. Also as a standard feature of the 'Discover Media' and 'Discover Pro' systems is the ability to use speech commands to input the navigation destination ('one-shot destination entry').

Online via Car-Net. For the Passat, Car-Net is offered in combination with the 'Discover Media' and 'Discover Pro' radio-navigation systems. This new sub-brand incorporates mobile online services. For example, Car-Net makes it possible to integrate 'Traffic Information Online' into dynamic route guidance and to incorporate online public and personalised points of interest (POIs) into navigation. Using 'Google Street View', it will also be possible to integrate 360-degree panoramic images from the street-level perspective on the display screen and use the Google Earth™ map ser-

vice to call up a realistic photographic image of the map representation (Google Maps). Further functions available to 'Discover Pro' users are 'Parking place information' (number of available parking spaces in parking structures, including location), 'Petrol station prices' (current fuel prices, including location), 'Weather', 'News' and 'Vehicle status report' (e.g. maintenance related information). Also new: ‚POI and destination feed'; on the ‚Discover Media' system and above this lets you select destinations and POIs from a PC or tablet (currently: iPad Mini; iPad 2, 3 and 4; Samsung Galaxy Tab 3; Nexus 7; Microsoft Surface) and transfer it to the system later.

Rear-seat entertainment in detail. Integration of a wide variety of devices in the new Passat includes tablets. Volkswagen is offering a new app for tablets to access functions of the 'Discover Media' and 'Discover Pro' systems via Wi-Fi, and thus from the back of the car as well. The „Volkswagen Media Control" app lets users display sections of the infotainment system user interface on a tablet; this makes it easy to control individual functions via the app. The controllable functional features include the radio, all media sources (e.g. USB, CD or DVD, hard drive, online song search) and navigation. The media menu displays such content as the artist, album name and cover. On the radio, the user can change how station are selected from icons and lists, the station seek sequence and the display of RDS information and frequencies. In the Navigation menu, along with standard functions it is also possible to conduct an Internet address search and then have it entered as a destination. Volume control can be adjusted in every context. In addition, it is possible to adjust the balance and fader settings. Via the app, users can also control the selection of available audio sources, the display of folders and play lists as well as basic operating functions such as Start, Stop, Pause, Forward and Back. To optimise operating convenience or view movies conveniently, Volkswagen will be offering a tablet mounting bracket as an accessory for the Passat, which can also be used to supply power to the device.

Standard and optional features.

High-tech specification democratised:
Trendline with Keyless-Go, infotainment and multifunction steering wheel

Comfortline already with Front Assist, including City Emergency Braking function

Top Highline version with LED headlights and Alcantara/leather seats

Five key facts about the standard and optional features:

1. The Passat is launching in three levels of specification: Trendline (base), Comfortline (mid) and Highline (top).
2. Right from its launch, Volkswagen will be offering R-Line packages for the Passat, which will have a particularly sporty configuration.
3. Trendline: standard features include LED rear lights, Keyless-Go, multifunction steering wheel, Driver Alert system and ‘Composition Colour’ radio system with 5-inch touchscreen.
4. Comfortline extras: include 16-inch alloy wheels, comfort seats, rear-view and wing mirrors with anti-dazzle function, rain sensors and Front Assist, including City Emergency Braking function.
5. Highline extras: include LED headlights, LED rear lights with an especially innovative lighting concept, 17-inch alloy wheels and seats in Alcantara/leather.

Standard and optional features.

Wolfsburg / Porto Cervo, October 2014. As in the previous model, Volkswagen will be launching the new Passat on the market in three equipment lines: Trendline, Comfortline and Highline. Owners will additionally be able to personalise their saloons or estates further via R-Line packages and the range of special features.

Standard features

Passat Trendline. Even the Passat Trendline is packed with features. All models have a Stop-Start system and a regenerative braking mode. Standard exterior features (excerpt): 16-inch wheels with 215 tyres and LED rear lights. Interior features include a cooled glove compartment, front centre armrest with storage compartment and height adjustment for the front seats. Convenience features of the Passat Trendline include central locking with wireless remote control and Keyless Go (button for starting and stopping the engine), Driver Alert System, Automatic Post-Collision Braking System, tyre pressure monitoring, 'Composition Colour' radio system with 5-inch touchscreen, multifunction display 'Plus', multifunction steering wheel, daytime running lights, electronic parking brake with Auto Hold function, coasting function (with DSG) and air conditioning.

Passat Comfortline. Additional features of the Passat Comfortline include chrome trim around the side windows, an exclusive decorative panel, comfort seats in the front (12-way ergoComfort seat for the driver; lumbar support electrically adjustable on driver's side and manually adjustable on passenger's side), leather-trimmed multifunction steering wheel, automatically dimming rear-view mirror and door mirror (driver's side), rain sensor, ParkPilot, fog lights and Front Assist with City Emergency Braking. Also standard: 16-inch alloy wheels. The versions with a power output of 162 kW and 176 kW are also delivered with LED headlights, chrome trim on the front bumper and trapezoid chrome-plated exhaust tailpipe panels in the rear bumper. The Passat TDI with 176 kW also has DCC Dynamic Chassis Control as a standard feature.

Passat Highline. Along with Comfortline features, the Passat Highline adds these exterior features: a chrome strip above the radiator grille and standard LED headlights. Also as standard: a wrap-around chrome strip in the lower body area, LED rear lights with an independent lighting concept and 17-inch alloy wheels. Standard interior features include elegant dashboard inlays ('Brushed Aluminium' or 'Brilliant Pine' fine wood; centre console in 'Piano Black'), stainless steel door sill plates, seats in Alcantara/leather and heated seats in front. Added convenience features: automatic climate control (Climatronic with additional control panel for rear passengers), multi-coloured „Premium" multifunction display and automatically heated windscreen washer nozzles.

Optional features / driver assistance and convenience systems

Optional features. Volkswagen has developed a range of optional features that enable the Passat to be adapted systematically to suit the most diverse tastes and demands. These include, on the one hand, technological systems, such as the new Trailer Assist system for automated manoeuvring with a trailer, and, on the other, very traditional features, such as leather trim or alloy wheels. Particularly popular details can as an alternative also be ordered in packages. For the Passat Trendline, for example, there is the 'Business' package, which contains a 230-volt socket in the back, the 'Comfort' mobile phone interface, automatic air conditioning, lumbar support in the front, a massage function on the driver's side and the 'Composition Media' infotainment system. The extended 'Business Premium' package, meanwhile, offers – for all three lines – Adaptive Cruise Control (ACC), the 'Discover Media' navigation function for the 'Composition Media' system, heated windscreen washer jets (at the front) and heated front seats.

Maximum individuality. The range of optional features also includes all sorts of different decorative trim in aluminium and real wood, a panoramic tilt-and-slide sunroof, 3-zone automatic air conditioning (standard in Highline), 'Vienna' and 'Nappa' leather trim, 16, 17, 18 and 19-inch alloy wheels and features such as the new LED headlights (standard in Highline).

R-Line packages for the Passat. Volkswagen R has also developed three exclusive R-Line packages for the Passat: 'Interior', 'Exterior' and 'Sport'.

› **Features of the R-Line 'Interior' package include:** seat covers in 'Vienna leather / fabric' or sports seats in 'Nappa' leather with 'Carbon Style' applications, an R-Line multifunction sports steering wheel with shift paddles (for DSG), stainless steel foot pedals, R-Line inlays, black rooflining and R-Line door tread plates.

› **Features of the R-Line 'Exterior' package include**: R-Line bumpers in a striking, sporty look, dedicated radiator grille with R-Line logo, chrome-plated trapezoid tail pipe trim panels integrated into the rear bumper, side sill extensions, a roof edge spoiler (estate) and a black gloss diffuser. In addition, the Passat can be customised with a variety of 17, 18 and 19-inch alloy wheels.

› **Features of the R-Line ‘Sport’ package include:** also reconfigured, the R-Line ‘Sport’ package contains the progressive steering system, tinted rear windows (up to 65 per cent light absorption), the XDS electronic differential lock and a sports chassis with the vehicle body 15 mm lower. The R-Line ‘Sport’ package is also being offered in combination with Dynamic Chassis Control (DCC).

Assistance and convenience systems

Area View. Area View, the camera-based surroundings visualisation system, celebrated its world premiere in the Touareg in 2010. The system was developed to enable a 360-degree overview of the close surroundings and traffic situation. The system has been significantly enhanced for the new Passat. Volkswagen is using the new generation of Area View for the first time in the Passat. The new system offers extended functionality, better camera resolution and new 3D bird’s eye view perspectives. How Area View works:

› **Four cameras.** Area View utilises four cameras located in the boot lid (1), door mirrors (2) and radiator grille (1). With an aperture angle of over 180 degrees per camera, Area View captures the whole area around the car and projects it onto the infotainment system screen.

› **Full or split screen.** From the Display menu, the driver can select the camera views (front, rear, side or bird’s eye view), with either a full or split screen. In conjunction with the ‘Discover Pro’ radio-navigation system, the control unit takes the four camera images and generates an overall view of the Passat and its surroundings to create a 3D bird’s eye view. In contrast to the normal bird’s eye perspective, this view projects the view of the surroundings onto a hemisphere. The system permits a total of 17 different virtual camera positions. They are arranged so that all conceivable perspectives can be displayed around the vehicle.

Park Assist. Park Assist enables semi-automatic parking in parking spaces parallel or perpendicular to the road. It can also back the car out of parallel parking spaces. In the case of perpendicular parking spaces, not only is parking in reverse supported; it is also possible to park in a forward direction semi-automatically.

› **Park Assist 1.** The first generation of Park Assist made its debut in 2007; this assistant aided automatic steering in reverse into parking spaces parallel to the carriageway – a technological highlight.

› **Park Assist 2.** The second generation of Park Assist, presented in 2010, added automatic steering for reverse parking into spaces perpendicular to the carriageway; parallel parking spaces could also be smaller now (80 cm plus the car length sufficed). In addition, automatic exiting from parallel parking spaces was now also possible.

› **Park Assist 3.** The newly developed third generation of Park Assist adds the new feature of semi-automatic forward parking into spaces perpendicular to the road. The wide variety of functions of Park Assist 3 provides the driver with optimum assistance in difficult traffic situations, because it makes parking faster and, for less experienced drivers, simpler.

› **How it works.** After pressing the Park Assist button, the driver only needs to activate the accelerator pedal and brake (together with the clutch for a manual gearbox), as Park Assist automatically steers the Passat into the parking space. The system independently detects the type of parking space and initiates the necessary manoeuvre; at the same time, the driver is informed of the operation and given instructions via the multifunction display. The driver can make a manual selection of the desired parking space from the parking spaces that the system has automatically detected. The basic functions of Park Assist have been further improved by the use of what is known as a surroundings map. The system has sensors in all four wheels that detect turning direction; this enables precise locating of the Passat so that it can be parked more precisely than ever.

Trailer Assist. Driving in reverse with a trailer is a challenge even for drivers who are experienced in doing this. Volkswagen is the world's first carmaker to market an assistance system that makes manoeuvring a trailer easier than ever: Trailer Assist. It automatically controls lateral guidance of the car and trailer combination. Volkswagen is the first carmaker to offer an innovative system of this kind. And this is how Trailer Assist works:

› **Reverse gear.** To manoeuvre a trailer in reverse from the carriageway into a driveway, the driver stops at a suitable point and engages reverse gear. The system is activated by pushing a button.

› **Camera-based.** The current and possible steering angles are visualised in the instrument cluster. This is done based on image processing algorithms that evaluate the data from the rear view camera that observes the angle of the trailer in relation to the vehicle. The visually captured trailer angle is used to calculate the steering wheel angle independent of any special types of trailers or towbars.

› **Mirror adjustment as part of the system.** In this assistant, the mirror adjustment switch serves as a sort of joystick, and the driver can use it to adjust the desired driving direction of the car-and-trailer combination. The Passat takes the driver's steering commands via the mirror adjustment switch and steers the vehicle; all the driver needs to operate are the brake and accelerator pedals. The Passat is turned by automatic control of the electro-mechanical servo steering system. It is always possible to make a correction by mirror adjustment.

› **Driver is in charge.** Trailer Assist can be deactivated by pressing the activation button again or by making a manual steering intervention. In this case, the vehicle-trailer is braked to a standstill. Trailer Assist also automatically slows the car down as soon as it exceeds a defined speed.

Side Assist. Volkswagen has extended the functional range of its Side Assist driver assistance system by adding the new Rear Traffic Alert. The system can help to prevent serious accidents. Particularly in two situations. First, on the motorway, because it detects both fast overtaking vehicles and slow ones in the blind spot, warns the driver and thereby makes overtaking safer. Second, when reversing out of a parking space, because the sensors detect vehicles approaching from the side that are not visible to the driver. And this is how Side Assist works:

› **Radar sensors.** Automatically enabled at speeds of 10 km/h and above, Side Assist with Rear Traffic Alert uses two new-generation radar sensors (integrated in the rear bumper) to 'monitor' the surroundings at a range of up to 70 metres behind the Passat. The system alerts the driver to vehicles located alongside the Passat or approaching from the rear by lighting an LED in the wing mirror housing. When the driver activates the turn indicator in the direction of a detected vehicle, the Side Assist indicator flashes as the next warning stage, which draws the driver's attention to the mirror.

› **Countersteering.** If, in addition to Side Assist, the camera-based Lane Assist system is also installed, and a steering input is made in the direction of a hazard, the warning stage is activated (even if no turn indicator was set), and if the driver begins to change lanes, the vehicle actively countersteers. Of course, the driver retains control over the assistance system in this case too; the driver can override the system by an active steering intervention.

› **Rear Traffic Alert.** Rear Traffic Alert revolutionises reversing out of parking spaces that are perpendicular to the carriageway. The system detects vehicles that are approaching from the side. Rear Traffic Alert's radar-based sensor module detects objects up to 50 metres away. The system is activated by engaging reverse gear or by the optional Park Distance Control (PDC) when starting off. If a collision is imminent, Rear Traffic Alert first outputs a visual warning, then an acoustic one. If the driver does not react appropriately to the situation and there is an immediate risk of a collision, Rear Traffic Alert automatically initiates a braking intervention that can reduce the severity of the accident.

Traffic Jam Assist. Volkswagen developed its Traffic Jam Assist based on Lane Assist and Adaptive Cruise Control (ACC). The system makes traffic jams or stop-and-go driving much more comfortable. Lane Assist provides the basis for this system: adaptive lane guidance even at speeds of below 60 km/h. Here, the system not only countersteers to make corrections when the car leaves the lane, but, with adaptive lane guidance enabled, it also keeps the Passat in the middle of the driving lane or 'learns' the driver's preferred position. Adaptive Cruise Control (ACC) is another assistance system which is incorporated in Traffic Jam Assist. For with ACC, braking and accelerating is automatic even in the stop-and-go range. ACC and Lane Assist merge into Traffic Jam Assist: the system enables assisted sideways and forward guidance. The car steers, accelerates and brakes automatically, but only under the condition that the driver's hands are on the steering wheel and participating in steering, so that the driver can intervene at any time.

Emergency Assist. Another system in which Lane Assist and ACC merge to create a new assistance system is Emergency Assist: as soon as the sensors detect that the driver is not exhibiting any steering, braking or acceleration activities, the system initiates various escalating actions to rouse the driver, and if the driver remains inactive, it initiates an emergency stop. The hazard lights unit is automatically activated, and the Passat executes a slight steering manoeuvre to make surrounding traffic aware of the hazardous situation. ACC prevents the vehicle from colliding with the traffic ahead. Emergency Assist from Volkswagen is the first system of its kind in the world. It is also possible in every Passat with an integrated mobile phone interface to use 'SOS Emergency Call' via the infotainment system to enable the so-called 'Euro Emergency Call 112' function in order, if it should become necessary, to call for the help of the emergency services. The only prerequisite for this is a telephone linked via Bluetooth to the infotainment system or an enabled SIM card in the 'Premium' mobile phone interface slot.

Front Assist including City Emergency Braking function with Pedestrian Detection. Front Assist is a system for warning the driver and braking automatically if a collision is looming. One component of the Front Assist system is the City Emergency Braking function with Pedestrian Detection. While it is Front Assist that warns drivers against getting too close to the vehicle in front and of any potential collision at higher speeds, City Emergency Braking performs this role in slower urban traffic. Up until now, the City Emergency Braking system exclusively detected vehicles. In the new Passat the enhanced system now reacts for the first time to pedestrians. And this is how the system works:

› **Safety on the motorway.** Front Assist uses a radar sensor integrated in the front of the car to monitor continuously the distance to the traffic ahead. The system assists the driver in critical situations by preconditioning the brake system and alerting the driver to any required reactions through visual and audible warnings, and in a second stage by a brief warning jolt. If the driver fails to brake hard enough, Front Assist generates sufficient braking force to avoid a collision. If the driver fails to react at all, Front Assist automatically slows the vehicle down. One component of the Front Assist system is the City Emergency Braking function.

› **Safety in the city.** City Emergency Braking with Pedestrian Detection is an extension of the Front Assist system and – at speeds of up to 65 km/h – it monitors the area in front of the Passat. In an emergency, the system instantly and automatically applies the brakes. The enhanced combination of Front Assist and City Emergency Braking function with Pedestrian Detection now for the first time also links the radar with the Passat's front camera so that it can detect, in addition to vehicles, any pedestrians at the edge of the road or on the carriageway. If City Emergency Braking with Pedestrian Detection detects a risk of the Passat potentially colliding with a pedestrian, it alerts the driver with a visual and audible warning. If the driver fails to react to these warnings, the system

automatically triggers emergency braking. From 2016, Emergency Braking with Pedestrian Monitoring will be taken into consideration in Euro NCAP's star rating system.

Progressive steering. Thanks to its progressive steering, drivers of the Passat will not need to turn the steering wheel as much to turn through any desired radius. When going around tight bends they will also not need to move their hands so often around the wheel. The progressive steering system in the new Passat is being offered in combination with a sports chassis or DCC Dynamic Chassis Control. With progressive steering, it takes 2.1 turns of the wheel to reach the end stop, while without this option it takes 2.75 turns. At medium to high speeds, progressive steering enables a more precise and relaxed style of driving. On winding country roads and when turning at junctions, drivers will notice enhanced dynamic performance thanks to the more direct configuration. At low speeds, for example in the city or when parking, the Passat is appreciably easier to handle thanks to the reduced need to turn the wheel.

Easy Close. Easy Open – the counterpart to Easy Close – was introduced in 2010 with the seventh-generation Passat estate: if the car is equipped with Keyless Access (an automatic locking and starting system), a purposeful movement of the foot at the back of the vehicle is all that is needed to open the boot. The interface between man and machine is formed by a proximity sensor near the bumper, which detects the virtual kick movement. On the 8th generation Passat estate this automatic boot lid opening function is now being supplemented by the Easy Close function. And this is how the system works:

› **Extended function.** Easy Close is an extension of the Easy Open function. The estate's boot lid closes as soon as the person with the Passat key moves away from the back of the car. The vehicle is also automatically locked. The closing function is activated by a double button in the boot lid. Via the button, the Passat user is able to choose between the customary immediate closing of the boot lid or the new delayed closing option.

› **Key as interface.** When delayed closing is in use, antennae mounted in the rear car body search for the Passat key. The person with the key receives a status response that the function has been activated via an LED integrated into the Easy Close button. If the key is found, the system locks the

vehicle's doors. However, the boot lid remains open so that you can use both hands to comfortably unload things like drink crates. If the person with the Passat key moves away from the vicinity of the boot lid, the antennae recognise this. The hatch is then automatically closed and locked. If you return with the key during the closing process, the process is aborted and the boot lid opened again. Meanwhile, if after activating Easy Close you remain near to the boot lid for longer than 20 seconds, the function is aborted. In this case the boot lid does not get closed and the fact that the process was aborted is displayed on the LED integrated within the button.

The engines and gearboxes.

New TDI engines / plug-in hybrid from 2015:
Engines up to 20 per cent more fuel-efficient and EU6-compliant

Petrol engines: new TSI engines offer a power range from 125 to 280 PS.

Diesel: new TDI engines range from 120 to 240 PS

Five key facts about the engines:

1. Petrol engines available at launch: 1.4 TSI delivering 92 kW / 125 PS and 1.4 TSI with cylinder management and power of 110 kW / 150 PS.

2. Further petrol engines from 2015: 1.8 TSI delivering 132 kW / 180 PS and a 2.0 TSI delivering 162 kW / 220 PS or 206 kW / 280 PS.

3. Diesel engines available at launch: 1.6 TDI delivering 88 kW / 120 PS and a 2.0 TDI delivering 110 kW / 150 PS, 140 kW / 190 PS or 176 kW / 240 PS.

4. The new 2.0 TDI delivering 240 PS is the most powerful four-cylinder TDI yet built by Volkswagen; as standard plus DSG and 4MOTION all-wheel drive.

5. Passat GTE with a 160 kW / 218 PS plug-in hybrid drive launches in 2015.

Wolfsburg / Porto Cervo, October 2014. The new Passat is being launched with ten direct injection turbo engines and a power output range of 88 kW / 120 PS to 206 kW / 280 PS: there are five petrol engines, four diesels and one petrol-hybrid. All are new to the Passat and comply with the demanding EU6 standard. The petrol (TSI) engines available at launch come from the EA211 and EA888 engine families; in the Passat they develop up to 206 kW / 280 PS. Leading efficiency is also provided by the new diesel (TDI) engines from the EA288 range; they deliver up to 176 kW / 240 PS. All engines are compact, lightweight and strikingly fuel-efficient: the drive system's fuel consumption and thus CO_2 emissions as well have been reduced on the Passat by as much as 20 per cent. Always fitted as standard: a Stop-Start system plus a regenerative braking mode. A dual clutch gearbox (DSG) will also be available as an option for all engine versions and as standard for the top engine configurations. For the first time there will also be a plug-in hybrid drive for this model range – powering the new Passat GTE. With a system output of 160 kW / 218 PS, it is the most powerful plug-in hybrid from Volkswagen to date. This Passat can be driven as a zero-emissions vehicle over a range of up to 50 km with all-electric power. The plug-in hybrid drive's maximum system torque is 400 Nm. It utilises performance and power in an efficient, environmentally friendly manner: based on NEDC, standard consumption will be below 2.0 l/100 km and 13.0 kWh/100 km; figures that equate to CO_2 emissions of less than 45 g/km.

Driving profile selector. Available as a new option is the driving profile selector. A total of four programmes are available, and in conjunction with DCC (Dynamic Chassis Control) five driving programmes: Eco, Sport, Normal, Individual and in combination with DCC the additional Comfort. In the Eco driving profile, the engine controller, air conditioning and other auxiliary units are controlled for optimal fuel economy. The DCC, including driving profile selector, comes as standard on the Passat TDI with power output of 176 kW / 240 PS.

Coasting function. In the case of Passat versions with the driving profile selector and DSG, when in Eco mode a coasting function further reduces consumption: if a driver releases the accelerator – for example, when drawing up to traffic lights or on downhill stretches – the DSG disengages and the engine idles. This enables optimal utilisation of the Passat's kinetic energy.

TSI – overview of the petrol engines

125 PS to 280 PS. The petrol engines begin at a power output of 92 kW / 125 PS (1.4 TSI). At the next power level, there is a 110 kW / 150 PS 1.4 TSI with active cylinder management (ACT); the turbocharged direct injection engine has a fuel consumption figure of 4.9 l/100 km (equates to 115 g/km of CO_2) – 1.3 l/100 less than the comparable previous model; for the estate it is also an efficient 5.1 l/100 km. The 150 PS TDI will be available straight from the launch; the 125 PS TSI will follow a short time later. Next year, Volkswagen will in addition be expanding the range of engines on offer by adding four further TSI power output levels: a 1.8 TSI delivering 132 kW / 180 PS, two 2.0 TSI with outputs of 162 kW / 220 PS and 206 kW / 280 PS and the 1.4 TSI of the Passat GTE.

The TSI engines debuting in 2014 in detail.

Two 1.4 TSI engines from the EA211 range. The 1.4 TSI (1,395 cm^3) engines with the previously mentioned power output of 125 and 150 PS, which are being used straight from the launch or from later this year, belong to the EA211 engine range, which was developed specifically for use in the modular transverse matrix. Thanks to an ultra-rigid crankcase made of die-cast aluminium, the petrol engines are extremely light; for example, the 1.4 TSI delivering 92 kW / 125 PS weighs just 104 kg.

EA211 engine innovations. The engines' technical concept is characterised by numerous innovative solutions. One example: by fully integrating the exhaust manifold in the cylinder head, the engines

heat up quickly from a cold start, while simultaneously supplying ample heat to the car's climate control system to warm up the interior. At high loads, on the other hand, the exhaust gas is more effectively cooled by the coolant, which reduces fuel consumption significantly. By means of innovative engineering of the exhaust manifold, Volkswagen was also able to use just a very narrow single-scroll compressor when choosing the turbocharger. The effect was that the weight of the cylinder head turbocharger component group went down. On the EA211, the intercooler is integrated in the induction pipe which is made of injection-moulded plastic. The advantage of this is significantly accelerated pressure build-up, which leads to very dynamic performance in downsized engines that have smaller displacements. The engines' further technical attributes include a control assembly with low-maintenance drive belt, the innovative thermal management system with its twin-circuit cooling and a regulated oil pump. To reduce emissions and fuel consumption further, and to improve torque in the lower rpm range, the intake camshaft can be varied over a crankshaft angle range of 50 degrees – on the 150 PS TSI the exhaust camshaft is variable as well. It sets the desired spread of control times and thereby allows even more spontaneous response from low engine speeds; at the same time, the pull is improved at high engine speeds.

1.4 TSI with 92 kW / 125 PS. The new Passat's base engine shows that Volkswagen's TSI engines provide a high level of efficiency and dynamic torque characteristics at every level of power. Delivering 92 kW / 125 PS, the Passat 1.4 TSI has fuel consumption of 5.3 l/100 km, equating to 123 g/km of CO_2 (saloon). The engine's maximum power is available over the engine speed range of 5,000 to 6,000 rpm. The TSI outputs its maximum torque of 200 Nm between 1,500 and 4,000 rpm – a very broad spectrum. At this power level, the Passat saloon has a top speed of 208 km/h and accelerates from 0 to 100 km/h in 9.7 seconds (estate: as an alternative to the six-speed manual gearbox, this engine will also be offered from 2015 with a seven-speed DSG (the corresponding fuel consumption and emission levels and performance figures for the DSG version and the Passat estate will follow in due course).

1.4-litre TSI delivering 110 kW / 150 PS: The Passat's 110 kW / 150 PS 1.4 TSI engine is equipped with active cylinder management (ACT). This temporarily shuts off the second and third cylinders, which, depending on driving style, facilitates a reduction in consumption of over 0.5 litres of fuel per 100 km. The new Passat 1.4 TSI with a power output of 150 PS and ACT thus consumes just 4.9 l/100 km, equating to CO_2 emissions of 115 g/km). In the case of the Passat estate the figures are

5.1 l/100 km and 119 g/km. ACT is active over an engine speed range between 1,400 and 4,000 rpm and speeds of up to 130 km/h. If the driver presses the accelerator pedal hard, cylinders 2 and 3 begin to work again, without a noticeable transition. The high efficiency of the system does not have any negative effects on smooth running. All mechanical switchover processes take place within one camshaft rotation; depending on engine speed this takes just 13 to 36 milliseconds. Accompanying interventions in ignition and throttle valve processes smooth the transitions. The ACT engine achieves its highest power output at between 5,000 and 6,000 rpm and its highest torque level of 250 Nm within the range from 1,500 to 3,500 rpm. The manual version of the Passat 1.4 TSI ACT has a top speed of 220 km/h and accelerates from 0 to 100 in 8.4 seconds (estate: 218 km/h, 8.6 seconds). As with the 1.4 TSI with power output of 125 PS, the 150 PS TSI will also be available from 2015 with a seven-speed DSG.

TDI – overview of the diesel engines

120 PS to 240 PS. On the diesel side the engine range begins at launch with two 2.0 TDI engines: a 110 kW / 150 PS version and a completely newly developed engine delivering 176 kW / 240 PS – the most powerful four-cylinder turbo diesel yet from Volkswagen. Both engines are extremely efficient.

Also following later this year will be a 1.6 TDI delivering 88 kW / 120 PS and a 2.0 TDI with power output of 140 kW / 190 PS.

The TDI engines debuting in 2014 in detail

EA288 engine innovations. The new Passat's TDI engines belong to the EA288 range. Defining components of these four-cylinder engines are utilised in a modular design. They include emissions-relevant parts such as the fuel injection system, the turbocharger and the intercooler integrated within the induction manifold. In addition, a complex exhaust gas recirculation system is used. A further feature of every TDI engine is the layout of emission control components, designed to locate them nearer to the engine. To fulfil various emissions standards worldwide, an oxidation catalytic converter and diesel particulate filter are used in the Passat as emissions control components. The nitrogen oxides are reduced via an NOx storage catalytic converter or – as in the case of the new top TDI with a power output of 176 kW / 240 PS – by means of an SCR system (selective catalytic reduction, using the AdBlue reducing agent).

High-tech for greater fuel economy and sporty performance. In order to reduce the engines' consumption further, all the TDI engines have been optimised for minimal internal friction. The measures taken in this regard include the use of piston rings with less pre-tension and of very low-friction bearings for the camshafts and balancer shafts (2.0 TDI). In the oil circulation loop, energy usage has been optimised by an oil pump with two pressure levels and volumetric flow control. During the warm-up phase, an innovative thermal management system utilises separate cooling circuits for the cylinder head and the cylinder crankcase with a water pump that can be deactivated. The TDI engines thus get up to operating temperature far more quickly and in winter the Passat's interior also warms up faster. Another independently controlled cooling circuit enables on-demand control of charge air temperature with additional emissions control benefits. The Passat's TDI engines are not only very low in emissions, fuel-efficient and high in torque, they are also very smooth-running and comfortable. In the case of the 2.0-litre engines, for example, two balancer shafts are used, as mentioned above. They reduce free inertial forces that occur in any piston engine system.

1.6-litre TDI delivering 88 kW / 120 PS: Even the new Passat's smallest turbo diesel impresses with a superb level of maximum torque: the 88 kW / 120 PS (3,500 to 4,000 rpm) 1.6 TDI (1,598 cm^3)

develops at between 1,500 and 3,250 rpm maximum torque of 250 Nm. One of the factors that helps to achieve this outstanding torque performance is a turbocharger specially developed for use in the Passat. The fuel consumption, emission and performance figures for this engine version will follow later this autumn.

2.0-litre TDI delivering 110 kW / 150 PS: The Passat's three 2.0-litre TDI engines have, as mentioned above, two balancer shafts. At the first of three power levels the 1,968 cm^3 TDI develops 110 kW / 150 PS; the four-cylinder engine delivers this power at between 3,500 and 4,000 rpm. The TDI makes its maximum torque of 340 Nm available from as low as 1,750 rpm (up to 3,000 rpm). The 150 PS Passat 2.0 TDI has a top speed of 220 km/h (estate: 218 km/h) and accelerates to 100 km/h in 8.7 seconds. Fuel consumption is just 4.0 l/100 km, equating to 106 g/km of CO_2. This Passat can be ordered with a dual-clutch gearbox (6-speed DSG) as an option. In this case, fuel consumption comes out at 4.4 l/100 km and CO_2 emissions at 116g/km (estate: 4.5 l/100 km, 119 g/km).

2.0-litre TDI delivering 140 kW / 190 PS: The Passat's second 2.0 TDI develops 140 kW / 190 PS (at 3,500 to 4,000 rpm). Equipped with a redesigned turbocharger, the four-cylinder engine sends a supreme 400 Nm, the maximum torque, powering in the direction of the six-speed manual gearbox or (as an option) the six-speed DSG from as low as 1,750 rpm; up until 3,250 Nm this level remains constant. Used for the first time at this power level, the engine is set to impress with sporty performance and low fuel consumption. The relevant figures for this engine version will follow later this autumn.

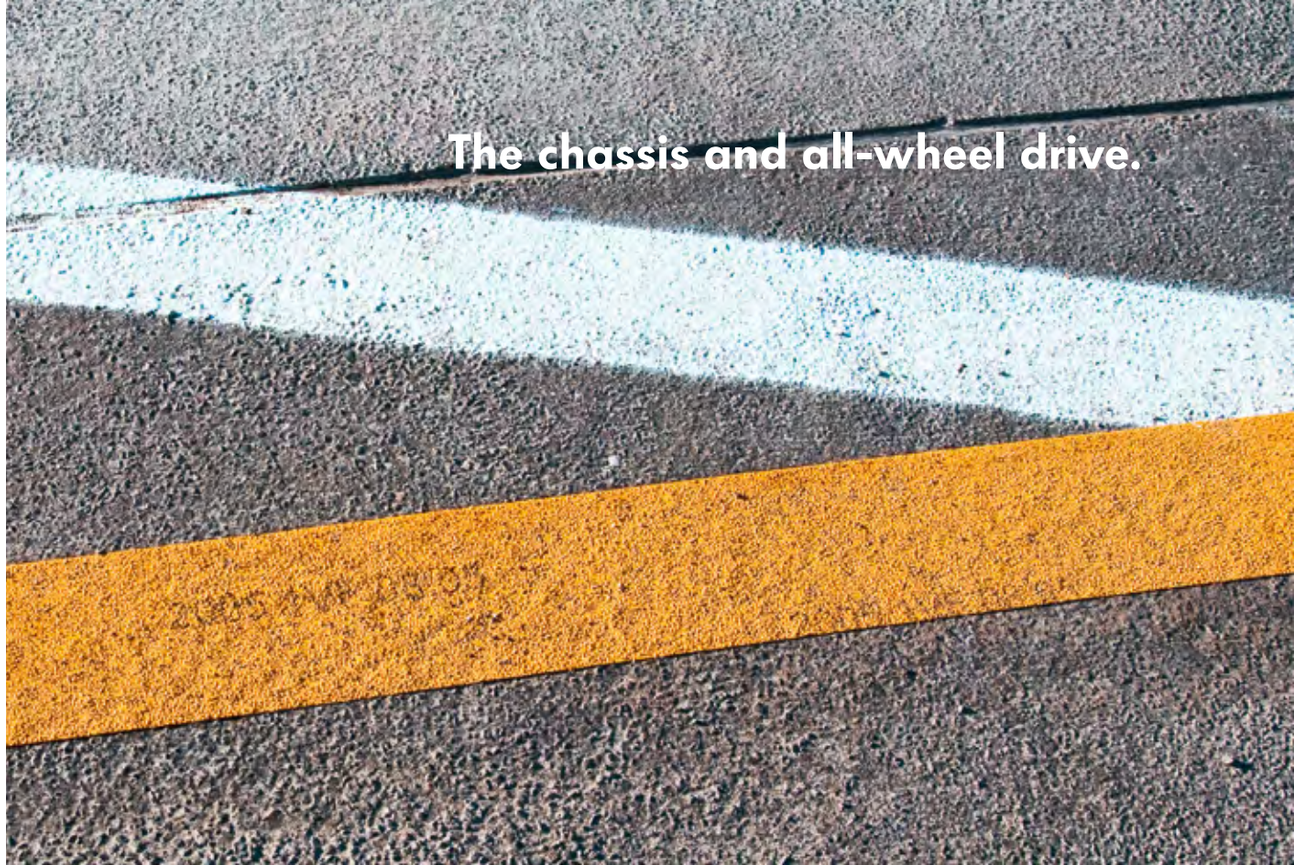
2.0-litre TDI delivering 176 kW / 240 PS: One engine that has been completely redeveloped is the most powerful four-cylinder turbo-diesel direct-injection engine ever offered by Volkswagen: a 2.0 TDI delivering 176 kW / 240 PS (at 4,000 rpm). In order to achieve the high specific output of 120 PS per litre of cubic capacity, a compact bi-turbo module with a high-pressure and a low-pressure turbocharger has been developed for the engine. The module enables turbo boost levels of up to 3.8 bar. The cylinder crankcase, crankshaft, connecting rods and pistons have been adapted to the high maximum combustion pressure of 200 bar. In addition a high-performance cylinder head is also being used for the first time. Another new feature is the newly developed injection system with piezo injectors. This fuel injection system enables injection pressures of up to 2,500 bar. In order to optimise comfort at low engine speeds, Volkswagen uses a newly developed centrifugal pendulum absorber in the gearbox of the 2.0 TDI. This enables the gear shift points to be lowered still further, lowering the rpm levels, which contributes to the excellent fuel consumption figures of the TDI.

› **Great efficiency.** With the new top TDI, the saloon achieves a top speed of 240 km/h; in the case of the estate it is 238 km/h. Due to the high maximum torque of 500 Nm (1,750 to 2,500 rpm) the 240 PS Passat and Passat estate are equipped as standard with 4MOTION all-wheel drive and seven-speed DSG. In light of the high power output, the fuel consumption figures are remarkably low: 5.3 l/100 (saloon) and 5,4 l/100 km (estate). The CO_2 emissions: 139 and 140 g/km. Another integral component of the emissions control system is an SCR catalytic converter.

› **SCR catalytic converter.** Positioning the oxidation catalytic converter, diesel particulate filter and SCR system (selective catalytic reduction) close to the engine makes the emission control components react especially quickly. Using a specially coated diesel particle filter (the actual SCR catalytic converter), the SCR system converts the nitrogen oxides (NOx) in the exhaust gas into nitrogen (N2) and water (H_2O). This conversion takes place using synthetically produced AdBlue, which is carried in a 13-litre tank and in the Passat only has to be topped up every 9,000 kilometres. Additionally, being used for the first time in the Passat is a second-generation SCR tank system, which features very simple topping up via a separate filler neck under the fuel tank flap. That is, drivers of the TDI can, as necessary, refill the AdBlue when refuelling.

DSG / dual-clutch gearbox

Six- and seven-speed DSG. Every Passat engine (some versions as of 2015) can be combined with a dual-clutch gearbox (DSG). This will be either six- or seven-speed. Besides the number of forward gears, other technical aspects differentiating the DSG versions include the clutch type. While in the ‘small’ seven-speed DSG two dry clutches are used, in the six-speed DSG and the ‘big’ seven-speed DSG the dual clutches run wet in an oil bath.



The chassis and all-wheel drive.

McPherson-type front suspension and performance rear axle:
Passat chassis now lighter, more comfortable and more dynamic

New 240 PS TDI with all-wheel drive and XDS+ vehicle dynamics function as standard

New Passat being offered for the first time with optional progressive steering

Five key facts about the chassis and all-wheel drive:

1. Front axle: enhanced McPherson system using coil springs with telescopic shock absorbers.
2. Rear axle: latest generation of the performance axle.
3. DCC Dynamic Chassis Control and XDS+ vehicle dynamics function (standard from 162 kW) provide added dynamism and comfort.
4. Optional progressive steering reduces turns of the steering wheel from one end point to the other from 2.75 down to 2.1.
5. New Passat 2.0 TDI with power output of 240 PS, DSG and 4MOTION four-wheel drive is designed to tow loads of up to 2,200 kg.

Wolfsburg / Porto Cervo, October 2014. The new Passat is equipped at the front with the latest generation McPherson-type suspension; the coil springs are integrated here with telescopic shock absorbers as a unit within the spring strut. The wheels are suspended via the spring struts and the lower wishbones with a track-stabilising scrub radius. At the rear, enhanced performance suspension – a four-link axle with independent wheel suspension – provides a high level of comfort and agile, secure chassis handling; the suspension per se is provided by gas-filled shock absorbers with separate springs. At both front and rear stabilisers are used. The chassis can optionally also be customised by addition of the XDS XDS+ (standard from 162 kW) vehicle dynamics function (standard on the 240 PS TDI), DCC Dynamic Chassis Control and progressive steering (much less need to turn the wheel). In general the new Passat is equipped with a very robust brake system, including Brake Assist, ESC and an electronic parking brake; the front brake discs are internally ventilated.

MacPherson-type front suspension. Used at the front of the new Passat is enhanced MacPherson suspension (spring struts). All components have been reworked for improved functionality, weight and costs. This was made possible, for example, by the use of high-strength steel in the transverse links. The sub-frame is centrally positioned on the front axle; its frame – designed for maximum transverse

rigidity – handles loads from the engine mounts and steering as well as front suspension component loads. Now fully tubular in shape and thus also lighter, the anti-roll bar has with its spring rate been specifically adapted to the both comfortable and agile handling of the new Passat. The rubber bearings are vulcanised directly onto the painted anti-roll tube; this assures optimal acoustic properties and optimises the responsiveness of the anti-roll bar which is important to vehicle dynamics. A new aluminium pivot bearing has been developed for the Passat. The use of aluminium and the bionic design of this pivot bearing enabled a further weight reduction. Last but not least, the suspension characteristics and spring rates have been adapted to the Passat; in combination with now 30 mm wider track, they provide outstanding vehicle dynamics with optimum vibration comfort at the same time.

Modular performance rear axle. The new Passat's performance rear axle is an enhancement of the familiar four-link axle. It has been reworked from the perspectives of improved kinematics, acoustics, weight situation and modularity. However, nothing has changed with regard to its fundamental approach of beneficially separating longitudinal and transverse rigidities. The low longitudinal rigidity has been preserved by the trailing link's soft axle control; this was a necessary precondition for further improving ride comfort. Furthermore, Volkswagen has successfully improved the transverse rigidity of the modular performance axle, which is important for steering behaviour, by adjusting the steering link's bearings. Key design changes to the rear axle are the connections of the tubular anti-roll bar and of the axle damper, which are now made at the spring link. This reduces forces within the axle; there are also significant package advantages. In addition, the axle has been made lighter by structural optimisation of many components and the use of high-strength steels.

The Steering. The Passat's electromechanical steering system has also been enhanced and made lighter. In addition, optional progressive steering is now included. Drivers of the Passat will not need to rotate the steering wheel as much to turn through any desired radius. When going around tight bends they will also not need to move their hands so often around the wheel. With progressive steering, it takes 2.1 turns of the wheel from one end stop to the other, while without this option it takes 2.75 turns. On winding country roads and when turning at junctions, drivers will notice enhanced dynamic performance thanks to the more direct configuration. At low speeds, for example in the city or when parking, the Passat is even easier to handle thanks to the reduced need to turn the wheel.

XDS+. Technically, the XDS+ electronic differential lock is a vehicle dynamics function that is integrated within the ESC. XDS+ is an extension of the XDS function familiar from the previous model; its functionality has now been extended to cover all driving situations where the brakes are not applied. XDS+ improves agility and reduces the need to turn the steering wheel through systematic application of the brake to the wheels of both axles on the inside of a bend. In addition, XDS+ is effective at all levels of friction, thus, for example, making the Passat easier to steer even on snow. The well-known benefits of XDS – such as significantly less tendency to understeer and improved traction – have also been further enhanced. With all engine specifications of 162 kW and above the Passat is equipped with XDS+ as standard; for all other versions the system is available as an option.

DCC Dynamic Chassis Control. Second-generation Dynamic Chassis Control (DCC) is used in the new Passat. Compared to the normal chassis the vehicle body sits 10 mm lower with the DCC version. The system offers three driving modes: 'Comfort', 'Normal' and 'Sport'. In the 'Sport' mode, a very agile style of driving is implemented, while the 'Comfort' mode makes riding in the Passat exceptionally comfortable. Via the driver profile selector it is also possible in the 'Individual' profile to assign any other driving profile properties to the DCC mode. The system adaptively controls the damper valves via an enhanced and refined Volkswagen control algorithm and thereby sets the damper characteristic. DCC utilises the input signals from wheel displacement sensors and accelerometers as well as vehicle information from the Chassis-CAN bus; in cycles of one millisecond, it uses these values to compute and adaptively adjust the optimal damping force for every driving situation. Furthermore, the damping forces selectively applied to the four wheels are individually regulated. Exclusively in combination with the dynamic chassis control system, new hydro-mounts are used on the rear axle to connect the trailing arm to the sub-frame. They further optimise the vibration characteristics, namely through better damping of the lengthways vibrations that occur when driving over individual bumps. With lengthwise rigidity reduced at the same time, the result on uneven surfaces is that the back wheels roll off bumps in a much softer and more comfortable way. The valves for the adjustable dampers have also been modified for further improved response. The fact is that in comparison to the first-generation DCC, the developers have succeeded in further optimising the driving dynamics and comfort. This largely resolves the conflict between comfortable and sporty chassis set-up.

All-wheel drive

4MOTION. Equipped with a fifth-generation Haldex coupling, the 4MOTION four-wheel drive is activated even before any wheel starts to slip. This almost entirely eliminates any loss of traction. To do this the system uses an advance control function based on the respective driving conditions. When under a relatively low load or when coasting, forward drive comes primarily from the front axle, and the rear axle is decoupled. This base driving set-up saves fuel. If needed, however, the rear axle is seamlessly engaged in an instant. This is done by the Haldex coupling, activated via an electro-hydraulic oil pump.

Situation-based power distribution. A control unit continually calculates the ideal drive torque for the rear axle and controls via activation of the oil pump how much the multi-plate clutch should be closed. The oil pressure increases the contact pressure at the clutch plates proportional to the desired torque at the rear axle. So, the level of pressure applied to the clutch plates can be used to continuously vary the magnitude of the transmitted torque. Even when driving off and accelerating, the wheels of the Passat are prevented from spinning, because the control unit regulates the torque distribution as a function of dynamic axle loads. Activation of the Haldex 5 coupling is based primarily on the engine torque demanded by the driver. In parallel, what is known as a driving status identification system

within the all-wheel drive control unit evaluates parameters such as wheel speeds and the steering angle. If necessary, nearly 100 per cent of the drive torque can be directed to the rear axle.

Rear axle always available. When manoeuvring or going around tight corners any build-up of pressure on the drive train is avoided by reducing the torque exerted on the Haldex coupling. The opposite happens in the event of heavy and rapid acceleration. In this case the coupling torque is increased with corresponding speed. Meanwhile, at high speeds the pre-control of the coupling, which is based on engine torque, is disabled in order to minimise fuel consumption. In this case front-wheel drive dominates. However, even in this situation 4MOTION remains a permanent all-wheel drive system, as the rear axle is instantly re-engaged as soon as any slippage registers on the front axle or the Passat is driven with increased lateral acceleration.

Four-wheel EDS and XDS+. In addition to the Haldex coupling that acts as a longitudinal lock, four electronic differential locks (EDS) integrated into the electronic stability control act as transverse locks. If a wheel starts to spin, they ensure that drive power is directed to the wheel on the opposite side within fractions of a second. While due to the design of the system the front-wheel drive Passat is fitted with EDS on the front axle alone, on the all-wheel drive Passat 4MOTION the electronic differential locks are used as so-called four-wheel EDS on the rear axle as well. The new Passat 4MOTION is also equipped on the front and rear axles with the additional XDS+ function, which during fast cornering slows down the wheels on the inside of the bend, thus optimising steering. In technical terms, XDS+ is a functional extension of the electronic differential locks.

Up to 2,200 kg towing capacity. With its combination of EDS and XDS+ systems and a rear axle seamlessly engaged via the Haldex 5 coupling, the Passat with all-wheel drive provides significant enhancements in terms of safety and handling. It also makes a very good towing vehicle: in the case of the 240 PS Passat TDI the braked towing capacity up a 12 per cent incline is up to 2,200 kg.

Passat 1.4 TSI ACT BMT		110 kW (150 PS)
Engine, electrics		
Type of engine		4-cyl. petrol engine TSI ACT BMT
Effective displacement	cm^3	1,395
Valves per cylinder		4
Injection / Charge		Direct injection / Turbocharger with single scroll turbine
Power output	kW (PS) at rpm	110 (150) 5,000 - 6,000
Max. torque	Nm at rpm	250 / 1,500 - 3,000
Performances (at curb weight + 200 kg)		
Acceleration 0 - 80/100 km/h	s	6.1 / 8.4
Acceleration 80 - 120 km/h, 4th/5th gear		7.5 / 9.5
Top speed	km/h	220
Fuel consumption (99/100/EC)		
Fuel type		Premium 95 RON
Combined cycle	l/100km	5.0 - 4.9
Emissions (CO_2) combined	g/km	116 - 115
Efficiency label		B - A
Exhaust emissions classification		Euro 6
Power transmission		
Gearbox		6-speed manual gearbox

Exterior dimensions		
Number of doors		4
Length/width/height	mm	4,767/1,832/1,456
Wheelbase	mm	2,791
Track, front/rear	mm	1,549/1,520
Luggage compartment		
Length, rear seat raised/folded down	mm	1,194/2,052
Volume by VDA measurement: rear seat raised/folded down	l	586 - 1,152
Weights		
Unladen weight (EU, incl. 75 kg driver)	kg	1,387
Permitted gross weight	kg	1,940
Payload	kg	628
Permitted axle load, front/rear	kg	980/1,010
Permitted trailer load up to 12% / 8%, braked	kg	1,600/1,900
Permitted trailer unbraked	kg	690
Capacities		
Fuel tank	l	ca. 66

Passat 2.0 TDI BMT		110 kW (150 PS)
Engine, electrics		
Type of engine		4-cyl. diesel engine TDI BMT
Effective displacement	cm^3	1,968
Valves per cylinder		4
Injection / Charge		Common Rail / Turbocharger
Power output	kW (PS) at rpm	110 (150) 3,500 - 4,000
Max. torque	Nm at rpm	340 / 1,750 - 3,000
Performances (at curb weight + 200 kg)		
Acceleration 0 - 80/100 km/h	s	6.3 / 8.7
Acceleration 80 - 120 km/h, 4th/5th gear		7.0 / 9.0
Top speed	km/h	220
Fuel consumption (99/100/EC)		
Fuel type		Diesel min. 51 CN
Combined cycle	l/100km	4.1
Emissions (CO_2) combined	g/km	109 - 108
Efficiency label		A
Exhaust emissions classification		Euro 6
Power transmission		
Gearbox		6-speed manual gearbox

Exterior dimensions		
Number of doors		4
Length/width/height	mm	4,767/1,832/1,456
Wheelbase	mm	2,791
Track, front/rear	mm	1,584/1,568
Luggage compartment		
Length, rear seat raised/folded down	mm	1,194/2,052
Volume by VDA measurement: rear seat raised/folded down	l	586 -1,152
Weights		
Unladen weight (EU, incl. 75 kg driver)	kg	1,475
Permitted gross weight	kg	2,020
Payload	kg	620
Permitted axle load, front/rear	kg	1,070/1,000
Permitted trailer load up to 12% / 8%, braked	kg	2,000/2,000
Permitted trailer unbraked	kg	730
Capacities		
Fuel tank	l	ca. 66

Passat 2.0 TDI BMT DSG		110 kW (150 PS)
Engine, electrics		
Type of engine		4-cyl. diesel engine TDI BMT
Effective displacement	cm^3	1,968
Valves per cylinder		4
Injection / Charge		Common Rail / Turbocharger
Power output	kW (PS) at rpm	110 (150) 3,500 - 4,000
Max. torque	Nm at rpm	340 / 1,750 - 3,000
Performances (at curb weight + 200 kg)		
Acceleration 0 - 80/100 km/h	s	6.3 / 8.7
Top speed	km/h	218
Fuel consumption (99/100/EC)		
Fuel type		Diesel min. 51 CN
Combined cycle	l/100km	4.5
Emissions (CO_2) combined	g/km	119 - 118
Efficiency label		A
Exhaust emissions classification		Euro 6
Power transmission		
Gearbox		6-speed direct shift gearbox (DSG)

Exterior dimensions		
Number of doors		4
Length/width/height	mm	4,767/1,832/1,456
Wheelbase	mm	2,791
Track, front/rear	mm	1,584/1,568
Luggage compartment		
Length, rear seat raised/folded down	mm	1,194/2,052
Volume by VDA measurement: rear seat raised/folded down	l	586 -1,152
Weights		
Unladen weight (EU, incl. 75 kg driver)	kg	1,501
Permitted gross weight	kg	2,040
Payload	kg	614
Permitted axle load, front/rear	kg	1,090/1,000
Permitted trailer load up to 12% / 8%, braked	kg	2,000/2,000
Permitted trailer unbraked	kg	750
Capacities		
Fuel tank	l	ca. 66

Passat 2.0 TDI SCR BMT 4MOTION DSG		176 kW (240 PS)
Engine, electrics		
Type of engine		4-cyl. diesel engine TDI SCR BMT
Effective displacement	cm^3	1,968
Valves per cylinder		4
Injection / Charge		Common Rail / 2 Turbocharger
Power output	kW (PS) at rpm	176 (240) 4,000
Max. torque	Nm at rpm	500 / 1,750 - 2,500
Performances (at curb weight + 200 kg)		
Acceleration 0 - 80/100 km/h	s	4.2 / 6.1
Top speed	km/h	240
Fuel consumption (99/100/EC)		
Fuel type		Diesel min. 51 CN
Combined cycle	l/100km	5.3
Emissions (CO_2) combined	g/km	139
Efficiency label		B
Exhaust emissions classification		Euro 6
Power transmission		
Gearbox		7-speed direct shift gearbox (DSG), 4MOTION four-wheel drive

Exterior dimensions		
Number of doors		4
Length/width/height	mm	4,767/1,832/1,456
Wheelbase	mm	2,791
Track, front/rear	mm	1,584/1,568
Luggage compartment		
Length, rear seat raised/folded down	mm	1,194/2,052
Volume by VDA measurement: rear seat raised/folded down	l	586 -1,152
Weights		
Unladen weight (EU, incl. 75 kg driver)	kg	1,721
Permitted gross weight	kg	2,260
Payload	kg	614
Permitted axle load, front/rear	kg	1,160/1,150
Permitted trailer load up to 12% / 8%, braked	kg	2,200/2,200
Permitted trailer unbraked	kg	750
Capacities		
Fuel tank	l	ca. 66

Passat Variant 1.4 TSI ACT BMT		110 kW (150 PS)
Engine, electrics		
Type of engine		4-cyl. petrol engine TSI ACT BMT
Effective displacement	cm^3	1,395
Valves per cylinder		4
Injection / Charge		Direct injection / Turbocharger with single scroll turbine
Power output	kW (PS) at rpm	110 (150) 5,000 - 6,000
Max. torque	Nm at rpm	250 / 1,500 - 3,000
Performances (at curb weight + 200 kg)		
Acceleration 0 - 80/100 km/h	s	6.1 / 8.6
Acceleration 80 - 120 km/h, 4th/5th gear		8.0/10.0
Top speed	km/h	218
Fuel consumption (99/100/EC)		
Fuel type		Premium 95 RON
Combined cycle	l/100km	5.2 - 5.1
Emissions (CO_2) combined	g/km	120 - 119
Efficiency label		B
Exhaust emissions classification		Euro 6
Power transmission		
Gearbox		6-speed manual gearbox

Exterior dimensions		
Number of doors		4
Length/width/height	mm	4,767/1,832/1,477
Wheelbase	mm	2,791
Track, front/rear	mm	1,584/1,568
Luggage compartment		
Length, rear seat raised/folded down	mm	1,172/2,018
Volume by VDA measurement: rear seat raised/folded down	l	650 - 1,780
Weights		
Unladen weight (EU, incl. 75 kg driver)	kg	1,429
Permitted gross weight	kg	2,000
Payload	kg	646
Permitted axle load, front/rear	kg	980/1,070
Permitted trailer load up to 12% / 8%, braked	kg	1,600/1,900
Permitted trailer unbraked	kg	710
Capacities		
Fuel tank	l	ca. 66

Passat Variant 2.0 TDI BMT		110 kW (150 PS)
Engine, electrics		
Type of engine		4-cyl. diesel engine TDI BMT
Effective displacement	cm^3	1,968
Valves per cylinder		4
Injection / Charge		Common Rail / Turbocharger
Power output	kW (PS) at rpm	110 (150) 3,500 - 4,000
Max. torque	Nm at rpm	340 / 1,750 - 3,000
Performances (at curb weight + 200 kg)		
Acceleration 0 - 80/100 km/h	s	6.4 / 8.9
Acceleration 80 - 120 km/h, 4th/5th gear		7.5 / 9.5
Top speed	km/h	218
Fuel consumption (99/100/EC)		
Fuel type		Diesel min. 51 CN
Combined cycle	l/100km	4.2 - 4.1
Emissions (CO_2) combined	g/km	110 - 109
Efficiency label		A
Exhaust emissions classification		Euro 6
Power transmission		
Gearbox		6-speed manual gearbox

Exterior dimensions		
Number of doors		4
Length/width/height	mm	4,767/1,832/1,477
Wheelbase	mm	2,791
Track, front/rear	mm	1,584/1,568
Luggage compartment		
Length, rear seat raised/folded down	mm	1,172/2,018
Volume by VDA measurement: rear seat raised/folded down	l	650 - 1,780
Weights		
Unladen weight (EU, incl. 75 kg driver)	kg	1,505
Permitted gross weight	kg	2,070
Payload	kg	640
Permitted axle load, front/rear	kg	1,050/1,070
Permitted trailer load up to 12% / 8%, braked	kg	2,000/2,000
Permitted trailer unbraked	kg	750
Capacities		
Fuel tank	l	ca. 66

Passat Variant 2.0 TDI BMT DSG		110 kW (150 PS)
Engine, electrics		
Type of engine		4-cyl. diesel engine TDI BMT
Effective displacement	cm^3	1,968
Valves per cylinder		4
Injection / Charge		Common Rail / Turbocharger
Power output	kW (PS) at rpm	110 (150) 3,500 - 4,000
Max. torque	Nm at rpm	340 / 1,750 - 3,000
Performances (at curb weight + 200 kg)		
Acceleration 0 - 80/100 km/h	s	6.4 / 8.9
Top speed	km/h	216
Fuel consumption (99/100/EC)		
Fuel type		Diesel min. 51 CN
Combined cycle	l/100km	4.7 - 4.6
Emissions (CO_2) combined	g/km	122 - 121
Efficiency label		A
Exhaust emissions classification		Euro 6
Power transmission		
Gearbox		6-speed direct shift gearbox (DSG)

Exterior dimensions		
Number of doors		4
Length/width/height	mm	4,767/1,832/1,477
Wheelbase	mm	2,791
Track, front/rear	mm	1,584/1,568
Luggage compartment		
Length, rear seat raised/folded down	mm	1,172/2,018
Volume by VDA measurement: rear seat raised/folded down	l	650 - 1,780
Weights		
Unladen weight (EU, incl. 75 kg driver)	kg	1,541
Permitted gross weight	kg	2,130
Payload	kg	664
Permitted axle load, front/rear	kg	1,100/1,080
Permitted trailer load up to 12% / 8%, braked	kg	2,000/2,100
Permitted trailer unbraked	kg	750
Capacities		
Fuel tank	l	ca. 66

Passat Variant 2.0 TDI SCR BMT 4MOTION DSG		176 kW (240 PS)
Engine, electrics		
Type of engine		4-cyl. diesel engine TDI SCR BMT
Effective displacement	cm^3	1,968
Valves per cylinder		4
Injection / Charge		Common Rail / 2 Turbocharger
Power output	kW (PS) at rpm	176 (240) 4,000
Max. torque	Nm at rpm	500 / 1,750 - 2,500
Performances (at curb weight + 200 kg)		
Acceleration 0 - 80/100 km/h	s	4.2 / 6.3
Top speed	km/h	238
Fuel consumption (99/100/EC)		
Fuel type		Diesel min. 51 CN
Combined cycle	l/100km	5.4
Emissions (CO_2) combined	g/km	140
Efficiency label		B
Exhaust emissions classification		Euro 6
Power transmission		
Gearbox		7-speed direct shift gearbox (DSG), 4MOTION four-wheel drive

Exterior dimensions		
Number of doors		4
Length/width/height	mm	4,767/1,832/1,477
Wheelbase	mm	2,791
Track, front/rear	mm	1,584/1,568
Luggage compartment		
Length, rear seat raised/folded down	mm	1,172/2,018
Volume by VDA measurement: rear seat raised/folded down	l	650 - 1,780
Weights		
Unladen weight (EU, incl. 75 kg driver)	kg	1,735
Permitted gross weight	kg	2,310
Payload	kg	650
Permitted axle load, front/rear	kg	1,140/1,220
Permitted trailer load up to 12% / 8%, braked	kg	2,200/2,200
Permitted trailer unbraked	kg	750
Capacities		
Fuel tank	l	ca. 66


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IMAGE SOURCES

WWW.PHOTOCASE.DE: Page 22-23: Matrikz / Page 44-45: MediaUp / Page 62-63; Cover: joexx / Page 112-113: Nordreisender

WWW.VOLKSWAGEN-MEDIA-SERVICES.COM

Page 90-91: Ingo Barenschee

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