

The T-Roc

Lisbon, October 2017

Notes:

This press kit as well as images and video footage of the new T-Roc are available online at: www.volkswagen-media-services.com. User-ID: newTROC10 ; Password: Lissabon17

Features and technical data of production models apply to models offered in Germany. Details for other countries may vary.

The T-Roc is a near-production concept vehicle. All performance, fuel efficiency and emissions figures mentioned in this press release are predicted figures, subject to official type approval, as of September 2017.

1 = This vehicle has not yet gone on sale, and therefore Directive 1999/94 EC does not apply.

2 = T-Roc 1.0 TSI, 85 kW – fuel consumption in I/100 km: urban 6.1 – 6.0 / extra-urban 4.6 – 4.5 / combined 5.2 – 5.1; CO<sub>2</sub> emissions in g/km: 118 – 116 (combined). Efficiency class: B.

3 = T-Roc 2.0 TSI 4MOTION DSG, 140 kW - fuel consumption in I/100 km: urban 8.5 - 8.4 / extra-urban 5.8 - 5.7 / combined 6.8 - 6.7; CO<sub>2</sub> emissions in g/km: 155 - 152 (combined). Efficiency class: D/C.

4 = T-Roc 2.0 TDI 4MOTION, 110 kW – fuel consumption in I/100 km: urban 6.0 - 5.9 / extra-urban 4.6 - 4.4 / combined 5.0 - 4.9, CO<sub>2</sub> emissions in g/km: 132 – 130 (combined). Efficiency class: B.

5 = T-Roc 2.0 TDI 4MOTION DSG, 110 kW – fuel consumption in I/100 km: urban 5.7 – 5.6 / extra-urban 4.8 / combined 5.1; CO<sub>2</sub> emissions in g/km: 135 – 133 (combined). Efficiency class: B.

 $\delta$  = Golf GTI - fuel consumption in I/100 km: urban 8.2 - 7.8 / extra-urban 5.5 - 5.3 / combined 6.4 - 6.3; CO2emissions combined: 148 - 145; efficiency class: D.



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<u>In brief</u>

### 'Ready to Roc' T-Roc – the SUV from the inventor of the GTI

# Volkswagen SUV campaign gains further momentum with the T-Roc

Future SUV range will extend from the T-Cross to the Touareg

### Facts overview – the new T-Roc

- **T-Roc from Volkswagen:** New crossover combines the dominance of an SUV with the dynamism of a compact hatchback.
- **Progressive T-Roc design:** Pioneering lines, coupé-style roof, distinctively wide front end, concise proportions.
- **SUV campaign:** Volkswagen is completing its range of new SUVs comprising the Tiguan, Tiguan Allspace, Atlas and Teramont with the T-Roc.
- **SUV outlook:** Three more new SUVs will follow with the next Touareg, the small T-Cross and the electric I.D. CROZZ.
- Automatically safe: Large range of assistance systems; Front Assist with City Emergency Braking and Lane Assist as standard.
- **Digitalised and connected:** Optional glass-encased infotainment systems and a new generation of the Active Info Display.
- Six TSI and TDI engines: Efficient turbocharged engines with outputs ranging from 85 kW / 115 PS<sup>1/2/3/4/5</sup> to 140 kW / 190 PS<sup>1/2/3/4/5</sup>.
- **4MOTION plus DSG:** The 190 PS engines come with 4MOTION all-wheel drive and a 7-speed DSG as standard.
- **Optimal package thanks to MQB:** Compact outside, enormous inside: this five-seater car has one of the largest luggage compartments in its class (445 litres).
- As you like it: T-Roc Style (with bi-colour design as standard) and T-Roc Sport (optional bi-colour design) permit extensive customisation.

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### Summary – T-Roc exceeds boundaries of its class

**Wolfsburg / Lisbon, October 2017.** Volkswagen is adding dynamism to the segment of compact SUVs with the new T-Roc. It is a crossover that combines seemingly contradictory aspects: performance and comfort, emotionality and rationality, urban lifestyle and multifaceted all-round properties. These parameters of different automotive worlds merge into a new idea of compact mobility – a sport utility vehicle the likes of which only the inventor of the GTI could develop.

Charismatic SUV. The T-Roc is the new face in the crowd. A versatile vehicle - available with front-wheel or all-wheel drive (with all-wheel drive, including the 4MOTION Active Control driver experience switch, as standard) – which combines the dominance of an SUV with the agility of a sporty compact. A car that is just as much at home in the city as it is on long journeys. On its exterior, crisp dimensions and a progressive design combine with eleven exterior colours, three roof colours and a total of 24 colour combinations. Inside, avant-garde design and a high level of functionality form an alliance. It is a five-seater with 445 litres of cargo capacity (the largest in its segment), seven different colour schemes and a cockpit that offers wide-ranging digitalisation and connectivity. That is because it is the first SUV in its class to offer optional digital instruments in a new generation of the Active Info Display. Together with the glassencased infotainment systems, it produces a digital viewing and control axis. This fits in well with the new connectivity matrix of 'Volkswagen Car-Net' with its apps and mobile online services.

**Six efficient turbocharged engines.** Pre-sales began in September with two petrol models (TSI with 85 kW / 115 PS<sup>2</sup> and 140 kW / 190 PS<sup>3</sup>) as well as a diesel (TDI with 110 kW / 150 PS<sup>1/4/5</sup>). Two other TDI<sup>1</sup> engines and a TSI<sup>1</sup> will follow. All six engines have turbocharging and direct fuel injection. The base price for the front-wheel drive T-Roc 1.0 TSI<sup>2</sup> with 85 kW in Germany: 20,390 euros – including the area monitoring system Front Assist with City



Emergency Braking and Pedestrian Monitoring, Automatic Post-Collision Braking system and the lane-keeping system Lane Assist. A personalisation function, which is included as standard, can be used to save the settings of the assistance, convenience and infotainment systems. These settings are called up via the vehicle key and are used to adapt the car to the individual driver. The official T-Roc launch begins in November.

Volkswagen SUV campaign. "The T-Roc sets a new benchmark in the booming SUV segment", says Dr Herbert Diess. The Chairman of the Board of Management for the Volkswagen brand continues: "With its functionality, dynamic handling and technology, the T-Roc embodies all good Volkswagen qualities and will further boost our SUV campaign." The green light for the significant expansion of the SUV range was given in 2016, when the second generation of the Tiguan made its debut. Following this in 2017, in the segment above the Tiguan, came the launch of the Atlas, which was developed for the USA. Launched nearly simultaneously was the Teramont – a sibling model of the Atlas adapted for the Chinese market. The new Tiguan Allspace is currently gaining momentum - it is an extended version of the Tiguan that seats up to seven people. Another milestone of the largest SUV campaign in the Volkswagen brand's history will follow in 2018 with the world premiere of the next generation Touareg. Volkswagen will also be expanding its range at the other end of the SUV spectrum with the compact T-Cross, which is positioned below the T-Roc. Another model featuring local zero emissions is also due to be launched as part of the SUV campaign: the I.D. CROZZ. It is the first all-electric SUV from Volkswagen. The I.D. CROZZ is scheduled to launch in 2020.

**Four letters, one statement.** The T-Roc name is easily recognisable worldwide, and it represents a bridge between two driving worlds. Dr Frank Welsch, Member of the Board of Management responsible for Development: "The 'T' refers to the car's successful frontrunners, the Tiguan and Touareg, whose SUV DNA and strengths have been transferred to the new model – the high seating position, the robust qualities of the



body and running gear and the all-wheel drive system that is included as standard for the top engines. The 'Roc' in the name has been derived from the English 'Rock', which stands for the positioning of the T-Roc as a crossover that combines the dominance of an SUV with the agility of a compact hatchback model. This car really rocks the segment – sometimes louder and sometimes more subdued, according to the optional equipment and colour combination selected. It is a new Volkswagen which takes the brand and its owners into the next decade of mobility."

**Compact SUVs are the next big thing.** The T-Roc will launch on nearly all of the world's key markets. For European markets, the new SUV will be produced at the Setúbal plant in Portugal (near Lisbon). Jürgen Stackmann, Member of the Board of Management of the Volkswagen Passenger Cars brand responsible for Sales, Marketing and Aftersales, comments on the sales markets for the T-Roc: "Nearly 80 per cent of compact SUVs are currently being sold in Europe and China. This type of SUV is also gaining in importance in Brazil, India, Russia and the USA. We assume that over the next ten years the annual global sales volume of these compact SUVs will grow from around 6.4 million units today to around 10.6 million units."

These SUVs are so successful, because they have a very dynamic appearance, a high level of functionality and elevated seat positions while maintaining compact exterior dimensions. In the T-Roc, the driver and front passenger seats are 572 mm above the road; the figure for the rear passenger seats is 618 mm. The new Volkswagen ideally meets the needs of car drivers who are often on the road in urban areas. For instance, the T-Roc targets the single person who enjoys many activities, as well as families who value its flexibility and couples whose children are already on their own. These target groups all want an SUV that is compatible with the urban world, that is fun to drive over every kilometre and whose design makes a confident style statement. The T-Roc meets these needs with its excellent comfort, high seating position, innovative safety systems, flexible interior, high reliability and unique design DNA. The new T-Roc exceeds the



boundaries of its class and is advancing to become a contemporary companion in the urban world, which can also handle a family weekend excursion with ease.



#### Key aspects

#### Avant-garde T-Roc exterior design

New Volkswagen SUV DNA. The design of the T-Roc follows a new expressive Volkswagen SUV DNA, which is similar to that of the Tiguan, Tiguan Allspace, Atlas and Teramont. It brings authentic off-road elements into harmony with dynamism and urban style. Essentially, the design of each new Volkswagen SUV will be interpreted individually based on this DNA. All SUV models are characterised by a unique design that is clearly unique to their product and market segment. The T-Roc illustrates this very well. It excites with a progressive design that right away etches itself into the mind as 'the T-Roc'. At the same time, however, it clearly remains a Volkswagen. Volkswagen Head of Design, Klaus Bischoff: "Volkswagen has created another authentic SUV with the new T-Roc. This car shows its underlying dominance. At the same time, however, in launching this crossover we are also bringing a very expressive and guite bold design to the streets. This emotional component makes it likeable. The T-Roc is therefore equally well suited for the urban world as it is for great adventures."

**Sporty style.** Visually and technically, the crossover also injects a powerful portion of dynamism into the compact segment. Klaus Bischoff again: "For me, the T-Roc is an SUV milestone, because it enriches the segment with an entirely unique and sporty style."

**Dynamic proportions.** The T-Roc is positioned in the segment beneath the Tiguan. Like that car, and the Atlas or Teramont, the T-Roc is based on the modular transverse matrix (MQB). Although these models share the same structural platform, they each have a completely independent body and interior layout. Thanks to the MQB, the development team was able to implement very dynamic proportions. This is especially true of the new T-Roc. The crossover model is 4,234 mm long (252 mm shorter than the Tiguan), and it has a 2,590 mm wheelbase. The SUV's width is 1,819 mm



(without exterior mirrors), and its height is 1,573 mm (4MOTION: 1,572). The relatively large width in comparison to the rather low roof structure underscores the vehicle's dynamic proportions. At the same time, the body's somewhat lower centre of gravity compared to other SUVs optimises handling properties. Its styling is also defined by its short overhangs (831 mm front, 800 mm rear) and large track widths of 1,546 mm (front) and 1,541 mm (rear).

Front-end design. Charismatic design elements dominate in the T-Roc, whose design is both avant-garde and expressive. In front, these elements are the wide radiator grille unit with integrated dual headlights. The top versions of the headlights use LED technology, while the headlight housings have an extremely low-profile design. This was enabled by separate housings in the bumper, each containing the turn signal, daytime running lights and cornering lights. The repositioned light signature makes the T-Roc unmistakable at night as well. A narrow chrome strip separates the radiator grille and headlights from the bonnet that is large in SUV style. Moving downward, the combination of radiator grille and headlights is framed by a wider chrome accent; this lateral element spans the entire front end. The chrome accent, radiator grille and headlights together underscore the width and dominance of the T-Roc. The bumper cross panel is also distinctive; it is painted in body colour and, as mentioned, it integrates the LED daytime running lights and turn signals. There are two versions of these light modules. The base version contains horizontal LED daytime running light units, and above them the turn signal units. In the top version, the daytime running lights and turn signal lights are formed by a single round LED element. The white daytime running lights switch to an orange colour for the turn signals. In this configuration, the fog lights with cornering lights are located in the plastic surfaces on the sides of the bumper.

**Design of the side profile.** The lines of the long, extended side profile are especially highlighted by a distinctive chrome element. It is a standard



feature that upgrades every version of the T-Roc, extending from the A-pillars over the entire side roof line and into the C-pillars. The latter are swept back, coupé-like, and have the visual look of a Targa bar in a longitudinal direction. Together with the chrome trim strips, they lend the side profile a fully unique dynamic character, whose form is reminiscent of that of a coupé. This effect is reinforced when the T-Roc is ordered in a bicolour design. The new model is the first Volkswagen SUV that can be ordered in a two-tone finish with a visually contrasting roof section (including A-pillars and exterior mirror housings). Essentially, the chrome strip, additional light edges on the roof, roofline that descends coupé-like towards the rear, distinctive C-pillars and bi-colour paint make the T-Roc appear lower than it actually is. Connecting to the area beneath the window surfaces is the character line. This light edge is designed as a sharp undercut. To the left and right it meets the muscular wheel arches. A strong shoulder section has been created in the radius of the rear wheel arch. Rugged are the dark plastic, wrap-around, off-road trim pieces that protect the body in the area of the wheel arches, the side sills and the front and rear body.

**Rear body design.** The consistently horizontal layout of the rear body is structured over three levels. Viewed from top to bottom, there is the roof transition including the rear window; then there is the middle surface with LED tail lights in 3D design, the VW badge and central T-Roc signature in chrome; finally, there is the bumper area. This three-level structure gives the SUV a lower, wider and more sporty look. At the top on the left and right, the boot lid is framed by the chrome accents of the C-pillars. Towards the rear, the C-pillars are completely under the glass of the tinted rear window, which creates a strong impression of width. The styling of the rear bumper is just as distinctive as that of the front bumper. Upward and to the sides it frames the rear lid. On the sides of the bumper there are black plastic elements (in honeycomb design) and reflectors on the painted



surface. On the lower-most level are the exhaust pipe trims towards the sides (in chrome look in the 'Style' and 'Sport') and a diffuser in the middle.

### Spacious interior with extensive digitalisation

**Package and ergonomics set standards.** The form and function of the T-Roc interior has been redefined for the era of digitalisation. A conceptual highlight here is the integration of increasingly digitalised display elements and controls. For instance, the T-Roc can be ordered with a new generation of the Active Info Display (fully digital instruments) as an option. Also implemented as state-of-the-art technology are the infotainment systems, with displays up to 8.0 inches in size. With regard to the ergonomics of controls and their visibility, the goal was set to design all on-board elements to be as clear and intuitive as possible. At the same time, the charismatic and independent interior design – with its SUV image that is both avant-garde and rugged – forges a link to the exterior design and its contemporary treatment of surfaces.

Lots of space for five occupants. In addition, the T-Roc development and design team utilised the wheelbase, which is conspicuously long in relation to the car's overall length, to create a lot of space for five occupants. The driver and passengers have high seating positions. In front, the seat height above the road is at least 572 mm, and at the rear 618 mm. If all five seats are occupied, luggage space when loaded up to the top edge of the rear seat backrests totals 445 litres – the best figure in the segment. The rear seat backrests can be folded with a 60/40 split; when folded this boosts the cargo capacity to as much as 1,290 litres. Hardly any other SUV in this class offers such a spacious package.

**New panel architecture for the digital era.** The T-Roc's dash panel features a crystal-clear horizontal structure. The instruments form a viewing and control axis together with the infotainment system, which is relatively high and is therefore optimally ergonomic. The infotainment system was



purposely positioned at the highest point on the dashboard, and in the version with an 8.0-inch display it has a large, glass-encased surface. This gives it a sophisticated look like that of a tablet screen. The instruments and the infotainment system are integrated in a decorative surface that runs from left to right through the dashboard. Depending on specific equipment, this accent might have a dark finish or else it is painted in a contrasting colour which matches the trim of the seats. The colour accents are repeated in the door trim according to the configured options. Rugged, cleanly-designed door pullers and armrests as well as large storage areas complete the door inserts. White or red ambient lighting may also be on-board according to the installed features.

**Clean and sporty structure of the centre console.** The surround of the centre console shares the same colour as the accents found on the dashboard. Integrated here, over three horizontal levels, are important vehicle functions (start/stop system, ESC, hazard warning lights, park assist functions) as well as the climate control functions and seat heating. Directly beneath the climate control panel is the storage box for smartphones with two easily accessible USB ports and optional inductive wireless charging and external aerial interface. Located on the centre console behind the gear knob in the all-wheel drive version is the intuitively operated multifunction switch for 4MOTION Active Control.

Active Info Display and infotainment. Volkswagen interface designers have systematically further developed the Active Info Display (11.7-inch display diagonal) and its high-quality graphics (133 dpi) and elevated the range of functions to a new level. The interplay between the Active Info Display and the selected infotainment system creates a new, digital and interactive cockpit. Standard equipment across all T-Roc versions includes the Composition Colour infotainment system with a 6.5-inch touchscreen. The next level up is the glass-encased 8.0-inch Composition Media system with CD player. The top system with an 8.0-inch display, Discover Media, also glass-encased, comes with a navigation module.



Fully connected. The Active Info Display and the infotainment system have been systematically customised for a maximum range of online services and apps via smartphone and Volkswagen Car-Net. The phone and media library have also been integrated optimally. Not only can these two functions be displayed and controlled via the infotainment system, but also via the Active Info Display. The 8.0-inch infotainment systems can be extended with App Connect (integrated MirrorLink®, Apple CarPlay<sup>™</sup> and Android Auto<sup>™</sup> from Google). In addition, Volkswagen also offers the 'Security & Service' service package in the new T-Roc which provides assistance in a wide variety of situations. Highlights include Emergency Call Service, Automatic Accident Notification and Breakdown Call. In conjunction with Discover Media, various online services can also be used via 'Guide & Inform'. They include Online POI Search, Online Destination Import, Filling stations (location and price), News, Parking Spaces (location, availability and price), Weather and Online Traffic Information.

Active Info Display in detail. The T-Roc's optional Active Info Display is a new development. The second generation of the Volkswagen digital instruments is distinguished by an 11.7-inch display (diagonal), very high-quality graphics (133 dpi; resolution 1,280 x 480 pixels) and a very extended range of functions. As a result, the display offers better graphic performance, higher pixel density, greater brightness and contrast, more intense colours and fewer conventional indicator lamps. Using a 'View button' on the multifunction steering wheel, the driver can now also switch between three basic layouts, easily and guickly.

**Completely new look and feel.** The high-quality graphics convey a completely new look and feel with their progressive design. The crucial aspect here is that Volkswagen has fundamentally redefined fully digital instruments. The interface designers have always aimed to utilise the digital display to integrate additional information levels into the instruments. The graphics of the round instruments (dials), such as the rev counter and speedometer, however, follow the appearance of their



analogue counterparts. At the next stage of digital instruments, interface designers have departed from the analogue look entirely and created a consistently digitalised world of instruments. They developed three basic digital layouts between which the driver can toggle with the 'View button':

- A view with two dials, one for the rev counter and one for the speedometer
- A digital view without dials
- A digital view without dials but with supplemental information. This supplemental information can be configured via the infotainment system.

**Example: classic view with two dials.** The view with two dials is organised as follows: Shown on the left border of the instruments is the vertical engine temperature gauge, and on the right border the vertical fuel tank gauge. The left dial shows the engine speed, and the engaged gear is shown in the middle. The representation of engine speed is interactive; whenever the next 1000 step is reached, it is shown with a large figure for example. The same applies to the right dial of the speedometer. The current speed is shown as an enlarged figure. This type of display makes it much easier to take in the information. It is also possible to have the precise speedometer reading shown together with a lot of other information, if desired. For instance, information such as album covers and song information from the media library might be displayed on the middle screen between the two dials, depending on the configuration. Information constantly placed in this area includes the outside temperature, odometer reading and indicators for assistance systems such as ACC.

 Classic view with information profiles. Instead of placing information such as the engaged gear in the centre of the rev counter or the precise driving speed in the centre of the speedometer, information profiles can also be integrated here. For example, navigation information could be shown in the rev counter



while information about the remaining driving time and distance might be shown in the speedometer. In this case, the selector lever position display and the precise speed are shifted down to the lower edge of the Active Info Display and are shown smaller.

**Example: Digital view without dials.** In this layout the driver might personalise the screen with a dominant display of the current album cover and song information from the media library, for instance. In this case, the display of the engaged gear and the precise speed move down to the lower edge of the display in large numerals. Alternatively, the entire 'driving information since the start' can be displayed centrally. A further option: the telephone display with contact images and call information or full-screen navigation. Types of information that are shown constantly such as trip mileage and outside temperature always stay in the same positions.

**Example: Digital view without dials but with supplemental information.** In the third view, various supplemental information can be shown. For example, navigation information, information about the assistance systems, on-board computer information and the media library. Here the Active Info Display is personalised by the driver to a large extent.

#### Infotainment and Volkswagen Car-Net in detail

**New cockpit environment.** A digital and interactive cockpit environment has been created in the interplay of the Active Info Display and the infotainment system. Volkswagen is introducing the latest generation of infotainment systems in the T-Roc, which have display sizes ranging from 6.5 to 8.0 inches. Specifically, these are the Composition Colour (6.5-inch radio-infotainment), Composition Media (8.0-inch radio-infotainment with CD player) and Discover Media (8.0-inch radio-navigation infotainment with CD player). The 8.0-inch systems are glass-encased units. Depending on the selected system, it may be possible to extend system functionality with digital radio reception (DAB+), speech recognition and an 8-channel



sound system by US manufacturer 'beats' with 300 watts of system power. With the optional 'Comfort' mobile phone interface, compatible smartphones can be charged inductively and be coupled to the external aerial. All this requires is placing the smartphone in a storage box (with mobile phone interface) in front of the gear lever.

**Composition Colour.** The Composition Colour infotainment system boasts a touch-sensitive 6.5-inch colour display (16.5 cm screen diagonal), good resolution (800 x 480 pixels) and a design that immediately appeals to users of smartphones and tablets. Its surface is clear and elegant. In addition to two rotary/push-button switches, there are six flat menu buttons. Its 2 x 20 watts of audio power is output over four loudspeakers. If eight loudspeakers are installed in the car, the power is increased to 4 x 20 watts. Along with the FM radio, the infotainment system also offers an integrated SD card interface over which music can be played back in MP3 or WMA format. Like the next larger Composition Media system, the Composition Colour is also equipped with a diversity antenna; there are several antennas, and signal noise can be filtered out by linking them. A USB interface is offered as an option (Apple compatible).

**Composition Media.** The Composition Media features a glass surface design with an 8-inch colour display. This glass surface creates a tablet-like look. In addition to two rotary/push-button controls, the system has eight function buttons. The sound of the infotainment system (4 x 20 watts) is output over eight loudspeakers. Along with the SD card and AUX-IN interfaces, it also offers a USB port (compatible with Apple), a Bluetooth connection and a CD drive.

**Discover Media.** Discover Media is the radio navigation system for the T-Roc. It is based on the Composition Media system and includes additional navigation functionality. Updates to the navigation software are provided free-of-charge for the first five years. In addition, this includes a licence for Car-Net 'Guide & Inform' services which is also free-of-charge (for one or three years depending on country).



**Volkswagen Car-Net.** The T-Roc brings connectivity to the driver and other vehicle occupants more innovatively and easily than ever before. They are 'always on', which is to say they are online whenever they wish. The Volkswagen Car-Net applications 'App Connect', 'Guide & Inform' (wide variety of online information) and 'Security & Service' (online services) are provided for this purpose.

**App Connect.** The latest generation of the modular infotainment matrix creates the right conditions for connecting the T-Roc with today's Apple and Android smartphones via App Connect. Along with MirrorLink<sup>®</sup> (Android), App Connect now also integrates Apple CarPlay<sup>™</sup> and Android Auto<sup>™</sup> (Google) into the infotainment systems.

**Car-Net 'Guide & Inform'.** 'Guide & Inform' lets customers use a wide range of online services. These include Online POI Search, Online Destination Import, Route Import, Filling stations (location and price), News, Parking Spaces (location, availability and price), Weather, Charging Stations (for electric and plug-in hybrid models) and Online Traffic Information.

**Car-Net 'Security & Service'.** The services package 'Security & Service' enables drivers to access assistance in a wide range of situations. Highlights include services such as "Emergency Service", "Automatic accident reporting", "Roadside service" and "Service scheduling" (scheduling service with the service garage). Over and above this, 'Security & Service' offers functions such as checking whether the car is locked or whether the lights have been switched off (query via Car-Net on a smartphone or via the Car-Net portal on a PC). Anyone who has someone in the family who is learning to drive will appreciate "Area alert" (automatically notifies you if the T-Roc enters or leaves a predefined area) and "Speed alert" (activated as soon as a certain driving speed is exceeded). Another useful feature is the "Online anti-theft alarm"; if an attempt is made to break into the car, the T-Roc sends you a warning



message by push notification to the Volkswagen Car-Net app (including via smartwatch) and/or notification by email.

**Wireless Charging & Keyless Access.** In the new T-Roc with the 'Comfort' phone interface, it is also possible to supply power to smartphones inductively (for compatible phones). This phone interface can also be used to inductively connect smartphones to the car's external aerial.

### 'Y' logical structure for personalisation

Three equipment lines. The T-Roc is based on what is known as a 'Y' logical structure. Here the SUV is following the example of the new Arteon. It is a 'Y' structure, because the base model branches into two equal-ranking trim lines. They are the 'T-Roc Style' and 'T-Roc Sport'. Based on this matrix, the new T-Roc can be very significantly personalised. Even the 'T-Roc' base version comes with high-tech systems such as the area monitoring system Front Assist with City Emergency Braking and Pedestrian Monitoring, the Automatic Post-Collision Braking System and the lane-keeping system Lane Assist. Another standard feature is the characteristic chrome strip in the area of the A-pillars, the roof section and the C-pillars. Other details which are always on-board include an air conditioning system, Composition Colour infotainment system, LED tail light cluster, stylised underbody guard (black) and LED daytime running lights in the bumper. The base version is equipped with 16-inch wheels ('Yorkville'). Optional features for the T-Roc Style and T-Roc Sport include alloy wheels up to 19inch, LED headlights and - with this headlight selection - a ring-shaped LED daytime running light unit with turn signal function and fog lights (fog lights included as standard for 'Sport').

'Style' and 'Sport'. Further personalisation begins by selecting one of the two higher positioned equipment lines 'Style' or 'Sport'. They build on the base version and are on an equivalent level in terms of equipment features. However, their configurations differ significantly from one another. Their



names already refer to the focal points of their respective basic configurations. The T-Roc Style is marked by exclusive accents such as the interior trim panels that can be ordered in one of four colours. Meanwhile, the emphasis of the T-Roc Sport is on sporty features such as the standard sport comfort seats. Both versions are also offered with different bi-colour paints (standard for 'Style', optional for 'Sport'). In addition, the 'Style' and 'Sport' can be extended with an R-Line exterior and interior package. An overview of the key characteristics which differentiate the two exclusive and equivalently featured trim lines 'Style' and 'Sport' from one another and from the base version 'T-Roc' (sample features):

### T-Roc Style:

- Ambient lighting (white)
- Connectivity package
- Roof in contrasting colour including A-pillars and exterior mirror housings (four colour variants)
- Trim strips on the dash pad and door trim panels available in one of four colours
- Tailpipe trims in chrome
- Comfort seats
- 17-inch 'Mayfield' alloy wheels (four colour variants)
- Reading lights, front and rear, and footwell lighting
- Driver Alert System
- Stylised underbody guard, front, in silver
- Stylised underbody guard, rear, in silver
- Door trims in chrome

T-Roc Sport:

- Smoked tail lights
- Smoked windows in rear seating area



- Aluminium pedals
- Ambient lighting (red)
- Brake callipers, offset in red
- Tailpipe trims in chrome
- 17-inch 'Kulmbach' alloy wheels (two colour variants)
- Fog lights
- Stylised underbody guard, front, in silver
- Stylised underbody guard, rear, in silver
- Progressive steering
- Black rooflining
- Sport comfort seats
- Door trims in chrome

**'R-Line' packages.** The new T-Roc acquires further exclusivity with the R-Line exterior and interior packages. An overview of all components of the R-Line packages:

R-Line exterior:

- Design panel with R-Line logo on side panels and front doors
- Diffuser in sporty design, black textured
- LED tail light clusters in Dark Red
- Air intake screen in sporty design, black textured
- R-Line logo in radiator grille
- Bumpers in R-styling, front and rear, painted in body colour
- Door add-on parts are painted in body colour

R-Line interior:

- Rooflining in black
- Door sill trim, front, with R-Line logo



- Floor mats with decorative stitching
- Pedal caps and foot rest made of stainless steel
- R-Line logo on the welcome screen
- R-Line multifunction sport steering wheel, leather trimmed with decorative stitching and R-Line logo
- R-Line cloth/microfibre 'Carbon Flag'/'San Remo' seat covers with R-Line logo on front seats
- Wheels: 18-inch 'Sebring' alloy wheels in Grey Metallic, 19-inch 'Suzuka' alloy wheels in Dark Graphite with high-gloss surface
- Gear shift boot with decorative stitching
- Outer seat bolsters, head restraints and centre armrest in leather look with decorative stitching
- Door armrests in leather look

T-Roc body is true to its colours. On the T-Roc Style, the entire roof, including the A-pillars and exterior mirrors, may optionally be painted in one of three contrasting colours. The additional colours of these two-tone paints are 'Deep Black', 'Pure White Uni' and – following at a later time – 'Black Oak Brown Metallic'. The T-Roc Sport is offered in the additional colour 'Black' as an option. In addition, ten different conventional paints are available for all versions of the SUV. The range of ten exterior colours comprises 'Deep Black', 'Pure White Uni', 'Black Oak Brown Metallic', 'White Silver Metallic', 'Turmeric Yellow Metallic', 'Energetic Orange Metallic', 'Indium Grey Metallic', 'Urano Grey Uni', 'Atlantic Blue Metallic' and 'Ravenna Blue'.

**Different interior colours.** The interior is colourful as well. The base version of the T-Roc is finished with a dashpad in the decorative colour 'Deep Black matt'. The T-Roc Sport is available with the colour 'Caribou Grey'. Volkswagen offers a choice of four different colours for the T-Roc Style:



'Black Oak Brown', 'Ravenna Blue', 'Energetic Orange Metallic' and 'Turmeric Yellow Metallic'. In the T-Roc Style and T-Roc Sport, the door accents and trim around the centre console are also finished in the selected dashpad colour as standard. Overview of colour combinations for the T-Roc

T-Roc version equipment line

• Exterior colours

'Urano Grey', 'Pure White', 'Energetic Orange Metallic', 'Indium Metallic', 'Turmeric Yellow Metallic', 'Ravenna Blue Metallic', 'White Silver Metallic', 'Deep Black Pearl Effect'

Decorative inlays in dash pad
 'Deep Black matt'

T-Roc Style equipment line

• Exterior colours

'Flash Red' / 'Pure White', 'Flash Red' / 'Black', 'Pure White' / 'Black', 'Urano Grey' / 'Pure White', 'Atlantic Blue Metallic' / 'Pure White', 'Black Oak Brown Metallic' / 'Pure White', 'Energetic Orange Metallic' / 'Pure White', 'Indium Grey Metallic' / 'Pure White', 'Turmeric Yellow Metallic' / 'Pure White', 'Ravenna Blue Metallic' / 'Pure White', 'Black Oak Brown Metallic' / 'Black', 'Energetic Orange Metallic' / 'Black', 'Indium Grey Metallic' / 'Black', 'Turmeric Yellow Metallic' / 'Black', 'Ravenna Blue Metallic' / 'Black', 'White Silver Metallic' / 'Black', 'Deep Black Pearl Effect' / 'Black'

• Decorative inlays in dash pad



'Black Oak Brown matt', 'Energetic Orange matt', 'Turmeric Yellow matt', 'Ravenna Blue matt'

### T-Roc Sport equipment line

• Exterior colours

'Urano Grey', 'Pure White', 'Indium Grey Metallic', 'Ravenna Blue Metallic', 'White Silver Metallic', 'Deep Black Pearl Effect'

'Flash Red' / 'Black', 'Pure White' / 'Black', 'Black Oak Brown Metallic' / 'Black', 'Indium Grey Metallic' / 'Black', 'Ravenna Blue Metallic' / 'Black', 'White Silver Metallic' / 'Black'

• Decorative inlays in dash pad

'Caribou Grey'

The wheels of the T-Roc. Even the base version of the T-Roc comes equipped with 16-inch wheels. The 'Style' and 'Sport' come with 17-inch alloy wheels as standard. The T-Roc Style gets 'Mayfield' wheels with tyres sized 215/55 R 17. The '-Roc Sport comes from the factory with 'Kulmbach' wheels, which also have 215/55 tyres.

Optional 16-inch 'Chester' alloy wheels are available for the T-Roc base version, which comes with 215/60 sized tyres. Four types of 17-inch alloy wheels are also available. For the T-Roc Sport, the standard silver 'Kulmbach' wheels can be ordered in an exclusive 'Adamantium Silver' finish. For the T-Roc Style, Volkswagen offers the standard 'Mayfield' wheel in three personalised versions with three colours and looks: in 'Atlantic Blue', in black with a polished surface and in black with 'Glaze Orange' paint. The 'Sport' and 'Style' can also be configured with 18- and 19-inch wheels. Specially developed for the 'Sport' and 'Style' are the 18-inch wheels 'Grange Hill' in 'Adamantium Silver' or 'Sterling Silver' and



'Montego Bay' wheels. The largest wheels for the two top equipment lines are the 19-inch 'Suzuka' wheels from Volkswagen R.

### Six efficient turbo engines, front- and all-wheel drive

**Six engines, three power levels.** Like the larger Tiguan, the new T-Roc is offered with efficient turbocharged engines: three petrol engines (TSI) and three diesels (TDI). These come in three power levels: 85 kW / 115 PS, 110 kW / 150 PS and 140 kW / 190 PS. The 115-PS versions are offered with front-wheel drive and a manual gearbox. In conjunction with the 150-PS engines, buyers can choose front-wheel drive or all-wheel drive (4MOTION) as well as an automatically shifting dual clutch gearbox (7-speed DSG). The 150 PS petrol engine is equipped with Active Cylinder Management (automatic deactivation of two cylinders). The two 190 PS engines are equipped with 7-speed DSG and 4MOTION as standard. Illustrating just how efficiently these engines run are the two TSI engines with 85 kW and 140 kW and one TDI (110 kW) that can be ordered at the launch of pre-sales:

**1.0 TSI<sup>2</sup>.** The base engine has three cylinders. This TSI develops, from 999 cc of engine displacement, an output of 85 kW / 115 PS (5,000 to 5,500 rpm) and maximum torque of 200 Nm (2,000 to 3,000 rpm). The SUV completes the sprint from 0 to 100 km/h in 10.1 seconds. The front-wheel drive vehicle has a top speed of 187 km/h. Fuel consumption: 5.2 to 5.1 l/100 km (combined). With its fuel tank capacity of 50 litres, the vehicle has a theoretical driving range of around 960 kilometres between refuelling stops.

**2.0 TSI**<sup>3</sup>. The TSI with a displacement of 1,985 cc and an output of 140 kW / 190 PS (4,180 to 6,000 rpm) accelerates the T-Roc to 100 km/h in just 7.2 seconds. On German autobahns, the SUV reaches a top speed of 216 km/h. Supreme: the engine boasts a superlative maximum torque of



320 Nm (1,500 to 4,180 rpm). Fuel consumption (combined) of the T-Roc 2.0 TSI 4MOTION DSG is 6.8 to 6.7 I/100 km.

**2.0 TDI**<sup>4/5</sup>. The turbodiesel of the T-Roc 2.0 TDI 4MOTION (110 kW / 150 PS from 3,500 to 4,000 rpm) is an extremely efficient and powerful engine. It develops its maximum torque of 340 Nm from a low 1,750 rpm (up to 3,000 rpm). With the optional DSG, this SUV – with a top speed of 200 km/h – accelerates from 0 to 100 km/h in 8.4 seconds. Its performance contrasts with its low fuel consumption of 5.1 l/100 km.

### An overview of all powertrain versions:

### **Petrol engines:**

1.0 TSI<sup>2</sup>, 85 kW / 115 PS, 200 Nm, 6-speed gearbox, front-wheel drive
1.5 TSI<sup>1</sup>, 110 kW / 150 PS, 250 Nm, 6-speed gearbox, front-wheel drive
1.5 TSI<sup>1</sup>, 110 kW / 150 PS, 250 Nm, 7-speed DSG, front-wheel drive
1.5 TSI<sup>1</sup>, 110 kW / 150 PS, 250 Nm, 7-speed DSG, 4MOTION
2.0 TSI<sup>3</sup>, 140 kW / 190 PS, 320 Nm, 7-speed DSG, 4MOTION

#### **Diesel engines:**

1.6 TDI<sup>1</sup>, 85 kW / 115 PS, 250 Nm, 6-speed gearbox, front-wheel drive
2.0 TDI<sup>1</sup>, 110 kW / 150 PS, 340 Nm, 6-speed gearbox, front-wheel drive
2.0 TDI<sup>4</sup>, 110 kW / 150 PS, 340 Nm, 6-speed gearbox, 4MOTION
2.0 TDI<sup>1</sup>, 110 kW / 150 PS, 340 Nm, 7-speed DSG, front-wheel drive
2.0 TDI<sup>5</sup>, 110 kW / 150 PS, 340 Nm, 7-speed DSG, 4MOTION
2.0 TDI<sup>1</sup>, 140 kW / 190 PS, 400 Nm, 7-speed DSG, 4MOTION



**4MOTION all-wheel drive.** The 4MOTION versions of the T-Roc are equipped with a permanent all-wheel drive system. Drive torque is distributed between the front and rear wheels via an electronically controlled multi-plate clutch according to various factors such as the engine's momentary torque output. This distribution is need-based – the focus here is on always maintaining optimal traction, and thereby driving safety, while attaining the best possible fuel economy. Under low engine drive torque conditions, or during kick-down, forward propulsion comes primarily from the front axle, while the rear axle is partially decoupled. This basic drive configuration saves fuel. If necessary, the rear axle can be variably engaged within fractions of a second. Excursions on unpaved terrain are no problem in the T-Roc with its all-wheel drive system and ground clearance of 161 mm.

4MOTION Active Control and driving profile selection. All of the all-wheel drive versions of the T-Roc have 4MOTION Active Control with driving profile selection as standard. The system is operated via the 4MOTION Active Control switch on the centre console. The driver uses it to activate four higher-level modes and various pop-up menus. When the rotary switch is turned to the left, one of the two on-road profiles can be activated: 'Street' and 'Snow'. When the switch is turned to the right, the two off-road modes are available: 'Offroad' (automatic setting of off-road parameters) or 'Offroad Individual' (variable settings). 4MOTION Active Control adapts all relevant assistance systems to the driving situation in just seconds. Driving profile selection is also included as standard in the 4MOTION models. It allows the driver to individually control - depending on the installed standard and optional equipment - parameters for DSG, automatic air conditioning, electromechanical power steering, adaptive chassis control (DCC) and Adaptive Cruise Control (ACC). The driver can choose from the five profiles Comfort, Normal, Sport, Eco and Individual. For models with front-wheel drive, driving profile selection can also be ordered as an option.

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### Progressive range of convenience and assistance systems

Adaptive chassis control and progressive steering. The T-Roc can be further adapted to the driver's personal preferences via a range of convenience systems that is exceptionally large for this vehicle class. They include features such as adaptive chassis control (DCC). The system's electrically adjustable dampers enable the T-Roc running gear tuning to be very sporty, or more pliant, as an alternative to the normal tuning. The car's dynamic character and comfort are also optimised by progressive steering, which was originally introduced in the Golf GTI<sup>6</sup> (enables better control in a sporty mode of driving and makes manoeuvring easier). It is included as standard in the T-Roc Sport. Other convenience systems include electric actuation of the boot lid, the keyless locking and starting system Keyless Access, auxiliary heating and ventilation, a two-zone Climatronic system and steering wheel heating. The optional panoramic sunroof brings ample light into the T-Roc interior. It is 870 mm wide and 1,364 mm long, which makes this tilting/sliding sunroof - consisting of two glass parts - the largest in the market segment.

Innovative assistance systems. In its market segment, the T-Roc is in a league of its own when it comes to its assistance systems. Standard features on all T-Roc vehicles include: the Automatic Post-Collision Braking System, the active lane keeping system Lane Assist and the Front Assist area monitoring system with Pedestrian Monitoring and City Emergency Braking. The T-Roc Style is also equipped with the Driver Alert System as standard. Other options that can be configured for the SUV include numerous additional assistance systems. A summary of all systems offered for the T-Roc (for details, see 'Technical Glossary' section):

- Adaptive Cruise Control (ACC)
- Emergency Assist
- Light Assist main-beam control system



- Driver Alert System
- Automatic Post-Collision Braking System
- Park Assist park-steering assistant with the manoeuvre braking function
- Proactive occupant protection system
- Rear View camera system
- Lane Assist lane keeping system
- Blind Spot Monitor lane change system with Rear Traffic Alert
- Traffic Jam Assist
- Front Assist area monitoring system with Pedestrian Monitoring and City Emergency Braking
- Dynamic Road Sign Display

Personalisation is standard. It is very easy to adapt the convenience, assistance and infotainment systems in the T-Roc to the individual driver. This is done via the personalisation function that is included as standard. From the multifunction display, the driver can save individual settings for more than 100 parameters which depend on the features that are installed. They are activated as soon as the driver opens the T-Roc with his or her personal key.

#### Technical glossary – how the T-Roc works

**ACC – Adaptive Cruise Control.** Adaptive Cruise Control (ACC) uses a sensor to measure the distance to vehicles driving ahead and their relative speed. Using the related buttons on the multifunction steering wheel, the driver sets a desired time value for following distance and desired speed (between 30 and 210 km/h in the T-Roc with manual gearbox, and 0 to 210 km/h with DSG). When following other vehicles, the driver may optionally choose to have a comparison of the target and actual gaps shown on the multifunction display. A sensor constantly monitors the zone in front of the vehicle. The driver can interrupt ACC control and accelerate



more vigorously by pressing the accelerator pedal. Use of the brake pedal immediately deactivates the ACC function.

Active Cylinder Management. Active Cylinder Management is a cylinder deactivation system. When travelling within certain engine and driving speed ranges, two of the four cylinders can be deactivated regardless of which gear is selected – a process that is essentially imperceptible to the driver. This optimises the engine's operating efficiency while significantly reducing fuel consumption. The multifunction display indicates which engine mode is currently active.

Active Info Display. Volkswagen is offering fully digital instruments for the T-Roc in the form of the Active Info Display. The high-resolution screen (11.7-inch) makes it possible to adapt instruments to personal needs in various screen views. For instance, in navigation mode the speedometer and rev counter are shifted to the screen borders to provide more space for the map. If desired, information on driving, navigation or assistance functions may be integrated into the graphic display areas of the speedometer and rev counter and rev counter. Infotainment system data that is displayed on the centre console (e.g. phone contact images or CD covers) can also be shown in the Active Info Display.

**App-Connect.** Car-Net 'App-Connect' makes it possible to connect a smartphone to the Composition Media radio system or Discover Media navigation system. This enables users to operate selected mobile phone apps from the touchscreen. App-Connect integrates three interfaces to connect to smartphones: MirrorLink<sup>™</sup>, Android Auto<sup>™</sup> from Google and Apple CarPlay<sup>™</sup>. This means that it is compatible with all of today's smartphones running Android 5.0 or higher and Apple iOS 8.1 or higher.

**ASR – traction control.** The traction control system (ASR) offers added convenience and safety, particularly when driving on slippery roads or surfaces with differing degrees of grip. The traction control system facilitates smooth drive-off and acceleration without wheelspin or



fishtailing. ASR interacts with the electronic accelerator pedal; it also makes use of the wheel speed sensors of the anti-lock braking system (ABS). If a sudden increase in speed is detected from a wheel (i.e. slip), the system intervenes in the engine controller to counter this effect by throttling back engine power.

**Rear Traffic Alert.** Rear Traffic Alert enhances safety. It is offered in combination with the Blind Spot Monitor. Rear Traffic Alert takes much of the risk out of reversing from driveways and parking spaces that are at right angles to the road. The innovation here: the system not only 'recognises' stationary or moving vehicles directly behind the T-Roc, but also vehicles approaching from the side which are barely visible to the driver. The radar-based sensor module even detects objects at distances of up to 40 metres and recognises objects moving at speeds of 4 km/h or faster. If a collision is imminent, the system produces an audible warning. If the driver or other road user does not take action to avert the danger, or if there is a risk of immediate collision, the Rear Traffic Alert system automatically activates the car's brakes.

**Blind Spot Monitor – lane change system.** The Blind Spot Monitor assists the driver in changing lanes. Two radar systems at the rear of the vehicle scan zones up to approx. 50 metres behind the vehicle as well as the blind spot next to the vehicle. Whether or not the driver is changing lanes, the Blind Spot Monitor shows all vehicles that are located in a critical zone for lane changes. Active from 30 km/h, the system alerts the driver of a potential hazard by activating a constant light in the relevant exterior mirror. If the driver activates the turn indicator despite the warning, the LED on that side begins to flash at a higher light intensity to call the driver's attention to the hazard.

**DCC** – **Adaptive chassis control.** Adaptive chassis control (DCC) makes it possible to adjust the running gear to a normal, sporty or comfortable mode. The electrically adjustable damping system adapts automatically to this setting, as does the electromechanical power steering. DCC responds



continually to changing driving situations and takes braking, steering and accelerating actions into account.

**DSG** – dual clutch gearbox. Dual clutch gearboxes (DSG) consist of two independent gearbox units. As they move through the gears, the dualclutch mechanism enables alternating engagement with the engine via two drive shafts – one for each of the two gearboxes. The dual clutch gearbox enables automatic gear changes without any interruption in power transmission. The gearbox is controlled by a mechatronics module, which houses the electronic transmission control unit, various sensors and hydraulic actuators in a single compact unit.

**Emergency Assist.** Emergency Assist monitors driver activity – such as use of the accelerator pedal, brakes and steering – and helps, within system limits, to prevent accidents and reduce the potential consequences of an accident if the driver is incapacitated for health reasons. If the driver fails to respond, the system prompts the driver to correct the steering, by means of repeated brake jolts, and it automatically applies the brakes. In this process, ACC monitors the distance to traffic ahead, while Lane Assist ensures that the vehicle stays within its lane. Emergency Assist alerts other road users with the hazard warning lights and with gentle steering movements and safely slows the vehicle down – all the way to a standstill.

**4MOTION – all-wheel drive.** 4MOTION is Volkswagen's permanent all-wheel drive system. It distributes the engine's power to all four wheels as the situation demands. In vehicles with transverse-mounted engines, an all-wheel drive coupling is used. 4MOTION offers a high level of active safety, reliable traction and optimal directional stability at all times. 4MOTION operates together with all of the car's dynamic control systems such as ESC, ASR and EDS.

**4MOTION Active Control and driving profile selection.** All of the all-wheel drive versions of the T-Roc have 4MOTION Active Control with driving profile selection as standard. The system is operated via the 4MOTION



Active Control switch on the centre console. The driver uses it to activate four higher-level modes and various pop-up menus. When the rotary switch is turned to the left, one of the two on-road profiles can be activated: 'Street' and 'Snow'. When the switch is turned to the right, the two off-road modes are available: 'Offroad' (automatic setting of off-road parameters) or 'Offroad Individual' (variable settings). 4MOTION Active Control adapts all relevant assistance systems to the driving situation in just seconds. Driving profile selection is also included as standard in the 4MOTION models. It allows the driver to individually control - depending on the installed standard and optional equipment - parameters for DSG, automatic air conditioning, electromechanical power steering, adaptive chassis control (DCC) and Adaptive Cruise Control (ACC). The driver can choose from the five profiles Comfort, Normal, Sport, Eco and Individual. For models with front-wheel drive, driving profile selection can also be ordered as an option.

**Front Assist – area monitoring system.** The Front Assist area monitoring system uses sensors (radars/lasers) to detect situations where the distance to the vehicle ahead is critical, and it helps to shorten the vehicle's stopping distance. In dangerous situations the system alerts the driver by visual and audible signals and a jolt of the brakes. Front Assist operates independently of Adaptive Cruise Control (ACC). It also 'prepares' the brake system for emergency braking. If the driver then applies the brakes, full braking power is available immediately. If the braking is not forceful enough, Front Assist increases the braking pressure to the degree needed. In the T-Roc, Front Assist also offers assistance at low driving speeds via City Emergency Braking System. If the driver does not react, Front Assist automatically and independently initiates automatic partial braking, in order to slow the vehicle down sufficiently and regain the driver's attention. In situations where a collision is unavoidable, the driver is also assisted by automatic hard braking.



**Pedestrian monitoring.** Pedestrian Monitoring is an extension of Front Assist with City Emergency Braking System. The system utilises two sensors at the front of the vehicle – a radar sensor in the radiator grille and a camera in the base of the interior rear-view mirror – to acquire information on the zone in front of the vehicle. Within system limits it can, for example, detect a pedestrian suddenly stepping out onto the carriageway. This immediately triggers audible and visual signals to warn the driver. If the driver does not brake, a brake jolt provides a warning of the critical distance, and the brake system is simultaneously prepared for possible hard braking. If the driver does not respond, the system automatically initiates emergency braking within system limits.

Lane Assist – lane-keeping system. The lane-keeping system Lane Assist is started from the multifunction display and is then active from a driving speed of 65 km/h. A camera module in the area of the interior mirror acquires lane markings and evaluates the vehicle's position. If the vehicle begins to leave its driving lane, Lane Assist warns the driver – within its system limits and depending on the model – by means of an audible signal, vibrating of the steering wheel or a corrective steering intervention. The signal is always made unobtrusively to avoid annoying the driver. The system does not react if the turn signal was set before driving over a lane line.

**Light Assist – main beam control system.** Light Assist improves comfort and safety by automatic main beam control. A camera on the rear-view mirror monitors traffic. Light Assist automatically switches the main beam on starting at a driving speed of 60 km/h and in completely dark conditions. The system recognises vehicles driving ahead and oncoming traffic, and it automatically dips the headlights before drivers of those vehicles are dazzled. This automatic switching between the main and dipped beam ensures optimal illumination of the road ahead.

**Driver Alert System.** The Driver Alert System recommends that the driver take a break whenever necessary. It detects deviations from normal driving



behaviour and is helpful on long journeys. The system continually evaluates driving behaviour at speeds from 65 km/h and determines whether the driver is fit to drive. It evaluates various signals such as steering inputs. If it detects driver fatigue, the system gives both visual and audible cues to the driver to take a break.

Automatic Post-Collision Braking System. Around one-quarter of all accidents that result in personal injury involve multiple collisions. Volkswagen's Automatic Post-Collision Braking System can help to avoid secondary collisions or reduce their severity. After an initial collision, the Automatic Post-Collision Braking System automatically initiates a braking action – within system limits – even before the driver can react. This can reduce the severity of the accident and ideally prevent secondary collisions.

**Park Assist – park steering assistant including manoeuvre braking.** Park Assist automatically guides the T-Roc into parallel or perpendicular parking spaces, and it can also pull out of parallel parking spaces. The system helps the driver by autonomously making optimal steering wheel movements to follow an ideal line when parking in reverse. Park Assist automatically scans the parking space, assigns a starting position and makes the steering movements – the driver only needs to accelerate and brake. The manoeuvre braking also works to reduce parking and manoeuvring collisions when reversing.

**Proactive occupant protection system.** The proactive occupant protection system uses sensors of the ESC system and the Front Assist area monitoring system to detect critical situations with increased potential of accidents. If the system detects such a situation, the vehicle occupants and the vehicle are prepared for a potential crash. This involves tensioning the seat belts being used in the front to securely hold the driver and front-seat passenger and, but for a small gap, closing any open windows and sunroof.

**Progressive steering.** Compared to a conventional steering system, progressive steering takes significantly fewer turns of the steering wheel to



reach its end stop. The progressive steering ratio reduces steering work when parking, for example. It also leads to optimised, more direct and controlled steering response, which makes everyday driving more comfortable and enhances handling on roads with a lot of bends.

**Traffic Jam Assist.** Traffic Jam Assist utilises functions like ACC and Lane Assist to enable convenient and safe stop-and-go driving in a traffic jam. In heavy traffic at driving speeds from 0 to 60 km/h, the system responds to other vehicles and autonomously handles steering, accelerating and braking. When traffic comes to a standstill, it also brakes the vehicle to a stop and can drive off again within a predefined time interval. In contrast to pure Adaptive Cruise Control (ACC), Traffic Jam Assist uses a camera behind the windscreen to detect lane markings. This enables the vehicle to be kept in the lane via Lane Assist.

**XDS** – electronic differential lock. The electronic differential lock (XDS) is an extension of the familiar EDL function. However, XDS does not respond to loss of traction, but instead to any loss of load on the front wheel on the inside of a bend during fast cornering. XDS applies pressure to the wheel on the inside of the bend using the ESC hydraulics to prevent it from spinning. This improves traction and reduces the tendency to understeer. The hydraulic pressure applied ranges from approximately 5 to 15 bar. The impression when driving is similar to that of a differential lock in a toneddown form. The precise build-up of brake pressure on one side of the vehicle makes cornering even sportier, quicker and more accurate.