

The new Touareg

Offroad Media Drive in Morocco, October 2018



Contents

In brief

A technological overview of the new Touareg Page 03 Key aspects - drive and running gear systems in detail V6 engines Page 06 4MOTION all-wheel drive Page 06 **4MOTION Active Control** Page 06 Offroad package Page 07 Onroad and offroad running gear Page 08 Air suspension Page 08 Offroad parameters Page 08 Active roll compensation Page 09 All-wheel steering system Page 09

Notes:

This press release, image motif and films regarding the Touareg can be found online under www.volkswagen-newsroom.com

Equipment specifications and technical data of serial models apply to the model range offered in Germany. There may be discrepancies for other countries.

1 = Touareg V6 TDI 4MOTION, 170 kW/fuel consumption in I/100 km (NEDC): urban 7.7/extra-urban 5.9/combined 6.6; CO_2 emissions in g/km: 173 (combined), efficiency class: B.

2 = Touareg V6 TDI 4MOTION, 210 kW/fuel consumption in I/100 km (NEDC): urban 7.7/extra-urban 5.9/combined 6.6; CO_2 emissions in g/km: 173 (combined), efficiency class: B.

Technical data

Page 11



In brief

Supremely confident in any terrain: the Touareg with permanent all-wheel drive and four offroad driving programmes

- 4MOTION Active Control, provided as standard, activates ten onroad and offroad driving programmes
- Offroad package includes additional offroad driving programmes, a larger 90-litre fuel tank and underbody gu
- Air suspension and roll compensation with electromechan anti-roll bars complete the offroad features

Wolfsburg/Marrakesh, October 2018. The new Touareg^{1/2} is the flagship of the Volkswagen brand. More capable and comfortable than ever before, the third generation Touareg has mastered the challenge of balancing the highest level of comfort with outstanding offroad features. As a result this SUV, with its permanent all-wheel drive, is ideally suited for long-distance travel for business and leisure and for use on unsurfaced tracks. In the Touareg, architects can cruise comfortably along the motorways to on-site appointments and then confidently navigate right to the heart of the construction site using the car's 4MOTION all-wheel drive. For hunters, driving rapidly over roads to their chosen hunting ground and then through the hunting ground itself, the Touareg ensures that no compromises are necessary. And the same applies for journeys with a trailer. Whether towing a boat or horses, the Touareg is an exceptionally safe towing vehicle (with a maximum trailer weight of up to 3.5 metric tonnes), easily covering not only the kilometres to the destination, but also the final metres over often unsurfaced terrain to the trailer unloading point. This is precisely what distinguishes the Touareg: it enables the perfect integration of onroad and offroad worlds.

Contact:

Volkswagen Communications

Product Communications
Martin Hube
Spokesperson Midsize- / Fullsize
Tel: +49 5361 9-49874
martin.hube@volkswagen.de



You Tube

volkswagen-newsroom.com



Efficient V6 engines. The European Touareg's all-wheel drive is combined with six-cylinder engines that are as smooth and refined as they are efficient. There are currently two V6 TDI engines with 170 kW/231 hp¹ and 210 kW/286 hp² respectively (both EU6 AG), which are linked to an 8-speed automatic gearbox as standard. Both engines have a combined NEDC consumption of 6.6 l/100 km.

One of the most progressive SUVs today. Furthermore, the Touareg, launched in Europe towards the end of the summer, has already been heralded as one of the most progressive SUVs of its time. Equipped with a pioneering fusion of assist, comfort, light and infotainment systems, the fully networked all-rounder leads the way into the future. The design is also characterised by a special dynamic. With the Touareg, Volkswagen offers a model whose "Innovision Cockpit" is providing the blueprint for the digital interior of tomorrow. The close integration of the assist systems brings a new level of safety and comfort. For instance, if required challenging situations such as driving through narrow motorway construction sites are made easier using automatic driving functions. In parallel, new running gear systems, such as the dynamic roll compensation with electromechanically adjustable anti-roll bars, provide a level of agility that sets new standards in the Touareg segment.

Focus on people. One of the many technical innovations of the new Touareg is the "Innovision Cockpit". Here, the 12.0-inch display of the digital instruments and the 15-inch TFT touchscreen of the "Discover Premium" infotainment system are merged into a new digital operating, information, communication and entertainment unit that is always on and can be intuitively controlled and fully personalised. Using the "Innovision Cockpit", drivers can also adjust the assist, driving dynamics and comfort systems to their own taste. This opens up a world where the driver and guests on board no longer adapt to the car but the car adapts to them. Just like a smartphone, the Volkswagen is set up and tailored to your personal needs. This is made possible by a new, high level of networked systems



and programs – controlled via digital interfaces and the multifunction steering wheel.

Fusion of new assist, driving dynamics and comfort systems. The Touareg has the widest range of assist, driving dynamics and comfort systems that has ever been integrated in a Volkswagen. This includes technologies such as "Night Vision" (detects people and animals in the dark using a thermal imaging camera), "Traffic Jam Assist" (partly automated steering and lane departure warning up to 60 km/h, acceleration and braking), "Front Cross Traffic Assist" (responds to cross traffic in front of the Touareg), active allwheel steering (making the Touareg even easier to handle, much like a compact car), a new roll stabilisation system with electromechanically controlled anti-roll bars, the "IQ.Light - LED Matrix Headlight" (interactive low beam and main beam controlled by a camera), and a head-up display projected directly onto the windscreen (windshield head-up display). The driver experiences these systems in the new Touareg as one unit. They are simply there - networked via a new central control unit - to operate unobtrusively in the background and make travel and offroad use safer, more comfortable and more intuitive than ever before.



Key aspects - drive and running gear systems in detail

Permanent all-wheel drive for business and adventure

V6 engines. Volkswagen currently offers the new Touareg with efficient and refined V6 turbo diesel engines (3.0 litre capacity). They are all designed on board the SUV for maximum trailer weights of 3.5 metric tonnes (braked up to a gradient of 8 per cent). The V6 diesel engines with 170 kW/231 hp¹ and 210 kW/286 hp² respectively (TDI/both EU6 AG) only consume 6.6 l/100 km (NEDC, combined). The 231-hp TDI generates a maximum torque of 500 Nm; this is 600 Nm for the 286-hp TDI.

4MOTION all-wheel drive. The new, third generation of the Touareg is also equipped with permanent all-wheel drive (4MOTION) as standard. The all-wheel drive is linked to an 8-speed automatic gearbox ("Shift by Wire" gear shift, gear display in the gear lever and on the instruments) as standard. This can transmit drive torque of up to 1,000 Nm using the torque converter lock-up clutch. A centre differential lock with asymmetric dynamic torque distribution acts as a transfer box for the flow of forces between the front and rear axle. A maximum of 70 per cent of the drive force reaches the front axle and up to 80 per cent reaches the rear axle.

4MOTION Active Control. The Touareg is equipped with 4MOTION Active Control featuring driving profile selection as standard. The system is operated via a so-called operating unit for driving mode selection in the centre console. Drivers use it to activate higher-level modes and different pop-up menus. If drivers turn the dial to the left, they access onroad profiles. Turn the switch to the right and the offroad profiles and snow mode open. 4MOTION Active Control can be used to adapt all relevant assist systems to the drive situation in seconds. Driving mode selection is also provided as standard. Depending on the series and optional equipment, this enables the driver to individually control the parameters for the automatic gearbox, automatic air conditioning, steering system, different assist systems, and air suspension as well as Adaptive Cruise



Control (ACC), and response of the engine. The driving profiles can be selected via a corresponding menu in the infotainment system and/or 4MOTION Active Control.

Overview of the onroad driving profiles

- "Normal" (balanced standard/as standard)
- "Sport" (increased dynamics/as standard)
- "Comfort" (optimised for comfort on long trips/as standard)
- "Eco" (optimised for consumption/as standard)
- "Snow" (optimised for slippery roads/as standard)
- "Individual" (parameters can be individually selected/as standard)

Overview of the offroad driving profiles

- "Offroad Auto" (as standard/optimised for general offroad situations)
- "Sand" (optional with "Offroad package"/adapted for deep sand, without Hill Descent Control)
- "Gravel" (optional with "Offroad package"/for light terrain such as dirt roads)
- "Expert" (optional with "Offroad package"/offroad parameters can be individually selected)

Offroad package. The driving modes of the Touareg are available in conjunction with the Offroad package, available as optional equipment. As well as the additional driving modes, it also includes two towing eyes, a fuel tank increased from 75 to 90 litres with an underseal system and radiator grille, a reinforced underbody guard, a protective part for the 12-V battery, and particularly robust aerodynamic fairing, tank guard and stone deflector.

Onroad and offroad running gear. The running gear of the Touareg has largely been developed from scratch to further perfect the car's comfort and dynamic properties. Volkswagen is once again offering optional all-



round air suspension with electronic damping control for the Touareg. The system has been significantly enhanced. The active roll compensation with electromechanically adjustable anti-roll bars is a completely new development. An all-wheel steering system that broadly makes this large SUV as agile and manoeuvrable as a compact car has also been newly developed. Across all models five-link axles with a light aluminium/steel design are used. The air suspension, roll compensation and all-wheel steering system also help to optimise the offroad features of the Touareg.

All-round air suspension. The new generation all-round air suspension not only perfects the level of comfort, but also the aerodynamics and driving on rough terrain. The new, open air suspension system operates quickly and silently and is not influenced by fluctuations in temperature and outside pressure (at altitude, for example). The air suspension is set to "Normal level" or "Comfort level" as standard. In addition, a "Terrain level", raised by 25 mm, and a "Special terrain level", raised by 70 mm, are also available. At speeds from 120 km/h, the running gear is automatically lowered by 15 to 25 mm using the air suspension (low level) to reduce drag and optimise handling. Last, but not least, a "Load level" (minus 40 mm) is available that makes it easier to load and unload the luggage compartment.

Offroad parameters. The offroad parameters change depending on the suspension. The maximum climbing capability (60 per cent) and transverse gradient (35 degrees) are identical with steel and air suspension. The front ramp angle is 23.3 degrees and the rear ramp angle is 17.2 degrees. The breakover angle amounts to 13.5 degrees. With steel suspension the ground clearance totals 215 mm and with air suspension its normal levels is 188 mm. As the ground clearance can be increased by up to 70 mm with air suspension, the maximum fording depth also increases (from 480 to 550 mm). The manually adjustable level of the air suspension is activated using rotary switches in the centre console.



Active roll compensation with electromechanical anti-roll bars. The adaptive roll compensation is a new development. It is referred to as "electromechanical active roll stabilisation" ("eAWS") on the basis of its structural design. The most important components of eAWS are the antiroll bars at the front and rear axle. Conventional running gear set-ups are equipped with a steel anti-roll bar at the front and rear that stretches from one side of the axle to the other. The two sides of the anti-roll bar twist against each other when cornering (or when driving over larger bumps on only one side of the vehicle). The kinematics cause the roll angle of the car to be reduced when cornering. This works even more efficiently with "eAWS" active roll stabilisation. To extend the limits of driving physics, the Touareg is equipped with eAWS and has electromechanical anti-roll bars at the front and rear axle. A central control unit coordinates its use. In this case, the two sides of the relevant anti-roll bar are connected via a control motor. Depending on the driving situation, the two halves of the anti-roll bar are either twisted against each other (stiffened) or decoupled using an electric motor. The high voltage (48-V) required to activate the powerful electric motors is briefly established using so-called "Super Cabs" (capacity accumulators). The lean of the Touareg is significantly reduced due to the active anti-roll bars. Directional stability is also increased significantly on roads where one side is uneven. On rougher terrain, the interlacing of the axles and therefore the traction can be improved thanks to the electromechanical decoupling of the anti-roll bars.

All-wheel steering system. Another innovation on board this Volkswagen is the optional all-wheel steering system. All four wheels are consequently steered at the same time depending on the driving situation. The all-wheel steering system helps the Touareg to be the most agile, large SUV available. The all-wheel steering system essentially affects two driving states: speeds below 37 km/h and speeds over 37 km/h. Up to 37 km/h – including under tough offroad conditions – the rear wheels are moved automatically at an opposing angle to the front wheels. As a result, agility



and manoeuvrability are improved. Thanks to all-wheel steering, the turning circle is reduced by one full metre: from 12.19 m to 11.19 m. This is, of course, particularly noticeable when manoeuvring at slower speeds. If the speed increases to more than 37 km/h, the rear wheels automatically turn in the same direction as the front wheels when steering. This allows the driving behaviour to be significantly smoother, as the all-wheel steering stabilises lane changes and evasive manoeuvres.



Technical data of the new Touareg

	Touareg V6 TDI 170 kW	Touareg V6 TDI 210 kW
Engine	V6 TDI (2,969 cm ³)	V6 TDI (2,969 cm³)
Power	170 kW/231 PS	210 kW/286 PS
Max. torque/rpm	500 Nm (1,750 - 3,000)	600 Nm (2,250 - 3,250)
Gearbox	8-speed automatic	8-speed automatic
All-wheel drive	4MOTION	4MOTION
Vmax, steel spring susp.	218 km/h	235 km/h
Vmax, air suspension	221 km/h	238 km/h
0-100 km/h	7.5 seconds	6.1 seconds
Consumption	6.6 l/100 km	6.6 l/100 km
CO ₂ emissions	173 g/km	173 g/km
Weight	2,070 kg	2,070 kg
Length	4,878 to 5,008 mm	4,878 to 5,008 mm
Width	1,984 mm	1,984 mm
Height	1,717 mm	1,717 mm
Wheelbase	2,894 mm	2,894 mm
C_d value	0.32	0.32
Luggage compartment	810 litres	810 litres
Wheel sizes	18, 19, 20, 21 inch	18, 19, 20, 21 inch
Turning radius	12.19 m	12.19 m
Turning radius	11.19 m	11.19 m
(all-wheel steering)		