



**Volkswagen**

## **The New Golf GTD – International Driving Presentation**

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Note:

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## The New Golf GTD

### ■ To the Point

A brief summary of the GTD 02

### ■ Key Aspects

GTD-Concept 06

GTD-Drivetrain 07

GTD-Handling 09

GTD-Exterior 10

GTD-Interior 10

GTD-Fully equipped 12

GTD-Data 14

### Comeback of a Classic:

#### Volkswagen brings the new Golf GTD to market

High-tech diesel in the Golf GTD with 170 PS consumes just 5.3 liters

Golf GTD shows clear affinity to the Golf GTI

- Wolfsburg, June 2009. The Golf model lineup has been growing by leaps and bounds: At the end of 2008, the sixth generation of the bestseller was launched. Shortly thereafter, in early 2009, the new Golf Plus appeared. Then, the current Golf GTI was vaulted to center stage, closely followed by the new Golf Variant. And now the lineup continues: with the new Golf GTD. Its 125 kW / 170 PS power level makes it the highest-performance production Golf with a diesel engine today. The code letters GTD have a magical effect on diesel drivers and carry on a long tradition: 27 years ago the first GTD debuted and revolutionized the diesel market with its turbocharged diesel engine; for the first time, a diesel was not only economical but exceedingly sporty too. The GTD paved the way for the worldwide breakthrough of the TDI – the direct-injection high-tech diesel of the Volkswagen Group.
- **GTD key performance data:** The new Golf GTD generation is powered by a highly advanced common rail TDI engine, which makes it stronger (350 Newton-meter), more economical (5.3 liter), cleaner (139 g/km CO<sub>2</sub> / Euro 5) and quieter than ever before. The GTD is also sportier: 8.1 seconds for the sprint to 100 km/h and a 222 km/h top speed prove it.

- **GTD affinities:** The Golf GTD speaks to all diesel fans who value a maximum in dynamic performance. That is why the GTD shows such a clear affinity to the new Golf GTI (155 kW / 210 PS). While the GTI is in a league of its own with an efficient turbo gasoline engine that offers the performance of far more expensive sports cars, the Golf GTD is making its debut with phenomenal fuel economy and a range of approx. 1,000 kilometer (with a 55 liter fuel tank).
- **GTD high tech:** The car's technical ingredients are among the most advanced that the market has to offer. Naturally, the focal point of this high-tech composition is the TDI engine. Its specific torque is 177.8 Newton-meter per liter engine displacement. In practically any driving situation, the 16-valve four-cylinder engine offers the power of a sports car engine with six cylinders. Just as pioneering is the six-speed DSG gearbox from Volkswagen: Just as on the Golf GTI, on the Golf GTD too there will be an optional dual clutch transmission in place of the standard six-speed version; no other automatic performs more quickly or efficiently. The Golf GTD with DSG is capable of achieving 220 km/h, also accelerates to 100 km/h in 8.1 seconds and consumes just 5.6 liters of diesel per 100 kilometers on average (147 g/km CO<sub>2</sub>).
- **GTD exterior:** The car's visual appearance is impressive too. The GTD – equipped with a chassis lowered by 15 millimeters, 17-inch alloy wheels (“Seattle”) and 225 section tires – shows parallels and once again a similarity to the GTI in terms of its styling and features.

Consider the front end, for example: Among the hallmarks of the GTD and GTI are their bumper designs with standard front fog lights in a typical vertical layout. Their headlights and radiator grilles share the same construction as well. In the case of the GTD, the horizontal stripes in the radiator grille – typical of the GTI – are styled in chrome. At the rear, the turbo-diesel also has a diffuser, but it is modified: The diesel Golf can be recognized by the twin chrome tailpipes of its exhaust system in the diffuser. The taillights are smoked on both top Golf versions.

- **GTD interior:** The car's interior follows Volkswagen's GT philosophy as well. And this means ergonomics in its purest form, supplemented by features tailored to the Golf GTD. The "top sport seats" – the same as the ones used in the Golf GTI – define a higher standard. Their long-distance touring and racing properties are legendary, as is their styling. In contrast to the GTI, the black sport seats of the GTD are complemented by a light gray color in the diamond stripe pattern instead of red. Another highlight is the three-spoke leather sport steering wheel. And, as on the steering wheel, the parking brake grip and gearshift surround are also finished in leather. The instrument and door trim areas are treated with "Black Stripe" gloss-black accents.
- **GTD is fully equipped:** Furthermore, Golf GTD features include details such as chrome bezels for various switches, a black roof-liner and black roof pillar trim, automatic climate control,

multifunctional display “Plus”, center armrests and the RCD 210 radio system. Standard features also include lowering of the passenger’s side mirror when backing up, heated windshield washer nozzles, headlight cleaning system, “ParkPilot” (with sensors in front and rear bumpers), ESP with countersteer assist and braking assistant, as well as seven airbags, including a knee airbag on the driver’s side.

### **Sporty Statement:**

Golf GTD is completely redefining dynamics in the diesel segment

**New Golf GTD was developed using the legendary GTI as a basis**

**GTD engine is fuel-efficient (5.3 l), clean (Euro-5) and sporty (170 PS)**

Wolfsburg, June 2009. Volkswagen is launching a new Golf highlight on the market: the GTD. The acronym GTD has a long tradition: Back in 1982 the first Golf GTD appeared – the GTI among diesels. The new Golf GTD with its 125 kW/170 PS speaks to all diesel fans who value a maximum in dynamic performance. That is why the GTD shows such a clear similarity to the new Golf GTI (155 kW/210 PS). While the GTI is in a league of its own with an efficient turbocharged gasoline engine that offers the performance of far more expensive sports cars, the Golf GTD is making its debut with phenomenal fuel economy. Every 100 kilometers, just 5.3 liters of fuel flow through the piezo injection valves of the common rail engine that can hardly be pegged as a diesel. That is equivalent to CO<sub>2</sub> emissions of just 139 g/km. This contrasts with a top speed of 222 km/h and 8.1 seconds for the sprint to 100 km/h. When the driver accelerates, the TDI surprises with exceedingly sporty sound, while still offering excellent long-distance touring comfort thanks to its very good acoustic properties.

Like the GTI, the GTD will also be offered with an optional six-speed DSG instead of the standard six-speed transmission version. In the opinion of many experts, this is the most efficient automatic of our times. The Golf GTD with DSG reaches a top speed of 220 km/h, and it too accelerates to 100 km/h in 8.1 seconds and consumes 5.6 liters

of diesel on average (147 g/km CO<sub>2</sub>). Thanks to these excellent fuel efficiency values, GTD cars with either transmission version can travel about 1,000 kilometers on one tank of fuel (55 liters).

### **GTD drive – TDI technology in detail**

The most important conceptual component of the Golf GTD is the common rail TDI with 170 PS being used in this model series for the first time. The 1,968 cm<sup>3</sup> displacement engine is part of a new generation of TDI engines that is more fuel-efficient, low-emitting and more powerful. In parallel, Volkswagen significantly improved the acoustic properties of new generation TDI engines.

The maximum power of the GTD engine lies at 4,200 rpm. Between 1,750 and 2,500 rpm is where the engine – as sporty as it is economical – develops its maximum torque of 350 Newton-meters. Its specific torque is 177.8 Newton-meter per liter displacement. In practically any driving situation, the 16-valve four-cylinder engine offers the power of a sports car engine with six cylinders!

Fuel induction is handled by the latest generation common rail system. Fuel injection pressures of up to 1,800 bar and special eight-hole injection nozzles achieve especially fine atomization of the diesel fuel. The injection nozzles equip the piezo in-line injectors. The electrically controlled piezo crystals – boosted by hydraulics – initiate trigger injection in fractions of a second. Compared to conventional solenoid valves, piezo technology enables greater flexibility in injection

processes with smaller, more precisely metered fuel quantities and multiple injections with up to seven individual injections per working cycle. The results are a very quiet and pleasantly smooth-running engine, exceptionally quick response, excellent fuel economy and low emissions. Naturally, the Golf GTD meets limits of the Euro-5 emissions standard.

Engine acoustics are also improved by a fully maintenance-free toothed belt drive for the exhaust camshaft. For the first time on this TDI, Volkswagen is using an exceptionally low-noise, ribbed V-belt covered by an elastomeric film to drive ancillary components. The conversion to common rail technology and numerous other acoustic measures – such as a damping film in the windshield, an extensive noise attenuation package and aero-acoustic fine tuning of the body – have made the new Golf GTD one of the quietest diesels in its class.

Sound – sporty sound – was not exactly a strength of diesel engines until now. However, the GTD's new common rail engine is in fact different. Like the new Golf GTI, the GTD also has an innovative engine sound system that acoustically underscores the engine's power. In addition, the common rail TDI itself has a positive effect on passive safety: Compared to the pump-nozzle TDI of the previous Golf generation, the new turbo-diesel has a significantly lower vertical profile. This improves pedestrian safety, since the engine hood now exhibits a larger deformation area.

### **GTD handling – chassis has optional DCC**

The new Golf GTD is equipped with a sport chassis lowered by 15 millimeters. The entire architecture of springs, dampers and rear stabilizer were completely retuned for the sporty turbo-diesel. Up front, the familiar strut-type suspension operates with helical springs and telescopic dampers. In the rear, the innovative multi-link suspension ensures that the ESP system seldom needs to intervene.

As an option, the new Golf GTD can be ordered with dynamic chassis control (DCC). The system continually reacts to the roadway and driving situation and modifies the damper characteristic accordingly. DCC also reacts to acceleration, braking and steering inputs. This resolves the apparent conflict in goals between a stiff, sporty layout and a comfortable one. Background: A gain in sportiness generally means a loss of comfort, and the opposite holds true as well. An ideal chassis continually adapts to roadway conditions and the driver's wishes or those of the passengers. However, that would require electrically adjustable damping. DCC is precisely such a system. Along with the damper characteristic, the electro-mechanical power steering is tuned as well. Dynamic chassis control offers three programs: "Normal", "Sport" and "Comfort". "Sport" and "Comfort" are selected via a button located in front of the gearshift lever.

### **GTD exterior – visual appearance and features**

The styling and features of the Golf GTD and GTI clearly show overlaps. Consider the front end, for example: Among the hallmarks of the GTD and GTI are their bumper designs with standard front fog lights in a typical vertical layout. Their headlights and radiator grille are also identical in construction. In the case of the GTD, the horizontal strips in the radiator grille – typical of the GTI – are styled in chrome. The gran turismo diesel also shares the honeycomb structure of the radiator grille's lower and upper protective screens with the GTI.

Consider the rear: The turbo-diesel has a modified diffuser here. Even if no GTD emblem is ordered with the car purchase, the diesel Golf can be recognized by the exhaust system's twin chrome tailpipes on the left side of the diffuser (GTI: one tailpipe on the left and one on the right). The taillights on both Golf top versions are smoked. The special exterior colors "Black" and "Tornado red" can also be ordered on either car at no additional charge; they emphasize the dynamic character of the two "GTs".

### **GTD interior – look and features**

The car's interior follows Volkswagen's GT philosophy as well. And this means ergonomics in its purest form, supplemented by features tailored to the Golf GTD. As in every sixth generation Golf, the exceptionally high-quality materials that are used make an immediate impression in their pleasing look and feel. The "top sport seats" – the

same as the ones used in the Golf GTI – define a higher standard. Their long-distance touring and racing properties are legendary, as is their styling. In contrast to the GTI, the black sport seats of the GTD are complemented by a light gray in the diamond stripe pattern instead of red. The name of the pattern is identical: “Jacky”. As a color for the so-called cap stitching, an elegant light gray (“Art Grey”) is used here instead of red (“Flash Red”). The driver and front passenger seats are height adjustable and equipped with a lumbar support. On this car, the seating system can be ordered with full “Vienna” black leather upholstery as an option.

Another highlight is the standard leather three-spoke sport steering wheel. Its lower radius is noticeably flattened, a feature usually reserved for race cars. The horizontal spokes were integrated in the styling of the grip recesses for the hands. The ergonomically ideal grip recesses are covered with smooth leather, while other areas of the wheel feature perforated leather. Also as elegant as it is sporty is the chrome look of the three spokes; the GTD signature was worked into the vertical spoke. The wheel is also available as a multifunctional steering wheel as a special option. When the Golf GTD appears with a DSG transmission, its steering wheel functionality is extended by the addition of shift paddles (“-” left, “+” right) located by the two horizontal spokes.

Also fitted in standard black leather are the parking brake lever and the gearshift surround. Here too, the light gray stitching provides a color contrast. Chrome surrounds are standard on the rotary light switch,

controls for the power windows, air vent nozzles and accents for the power mirror adjustment switches. Meanwhile, the instrument and door trim areas are treated with “Black Stripe” gloss-black accents. The pedal caps and foot support are made of stainless steel with an integrated anti-slip rubber profile.

#### **Fully equipped GTD – everything on board**

Moreover, interior features of the Golf GTD include additional details (baseline comparison: Golf Trendline) such as a black roofliner and black roof pillar trim, dual-zone climate control system (“Climatronic”), reading lights in front and rear, multifunctional display “Plus” with trip computer, center armrests, front and rear, two additional air vents and cup holders in the rear, pass-through cargo capability in the rear bench seat, an additional cargo bin in the trunk area and an RCD 210 radio system.

Standard exterior features include a passenger’s side outside mirror that lowers for backup driving, front fog lights with chrome frames, a winter package (with heated windshield washer nozzles, heated front seats, headlight cleaning system and warning indicator for low washer fluid level) and the “ParkPilot” (with sensors in the front and rear bumpers). Standard safety features include ESP (with countersteer assist, braking assistant and trailer stabilization) and seven airbags, including a knee airbag on the driver’s side.

As an option, Volkswagen is offering the same Bi-Xenon headlights on the Golf GTD as on the Golf GTI, including dynamic curve lighting. The headlights swivel through a steering radius of up to 13 degrees to the outside and seven degrees to the inside. The styling of the headlights closely matches the GTD's sporty character. The embedded dual modules (Xenon outboard, parking light / turn signals inboard) each have a chrome pod through which a very impressive visual image projects.

Another high-end technology of the new Golf GTD is the optional "Park Assist". The second generation of the system is used here. It enables nearly automatic back-up parking parallel to the roadway. The driver just needs to actuate the gas pedal, brake and (in the manually shifted version) the clutch, while the GTD steers into the pre-scanned space by sensor control. Previously, the space had to be at least 1.4 meters longer than the vehicle; now 1.1 meters is sufficient. In addition, the system now enables multiple forward-reverse stages in parking. "Park Assist" deactivates itself as soon as the driver manually intervenes in steering.