



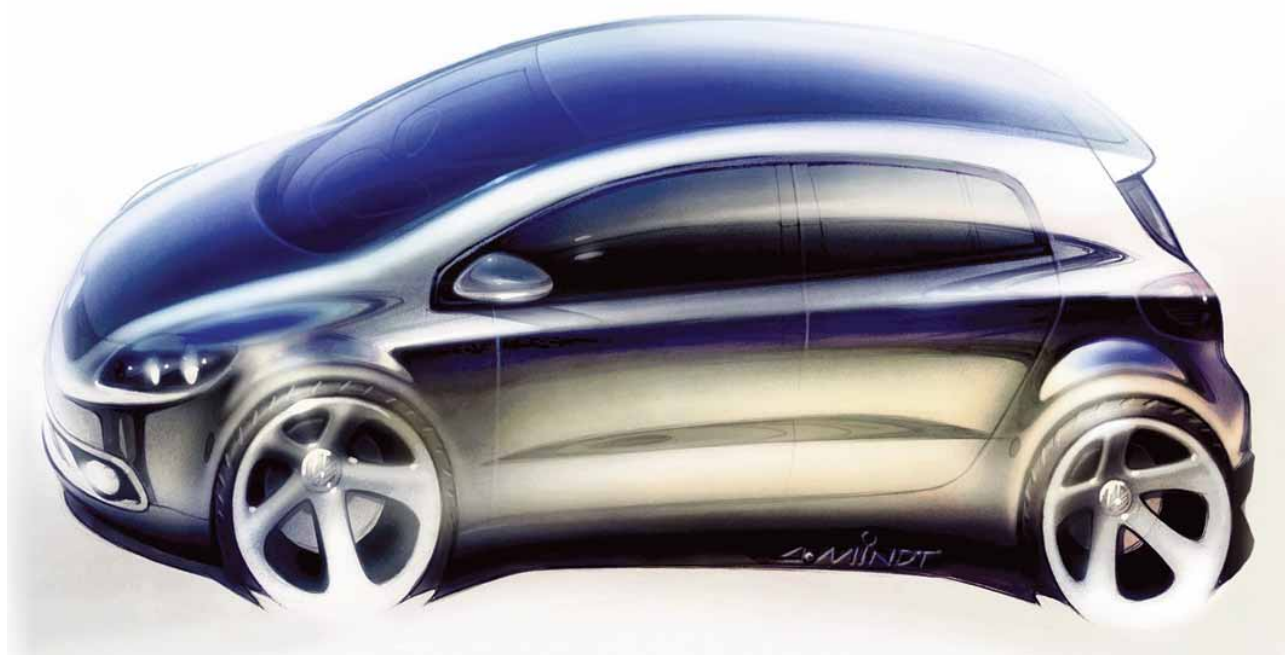
Self-study programme 338

The Golf Plus 2005



The Golf Plus is based on the Golf's successful history as the benchmark in the compact class, is positioned in the new segment of high-roof passenger cars and can therefore safely claim leadership in the Golf segment.

It is intended to continue to the "superior dynamics" positioning introduced by the Golf in 2004, extending this with characteristics such as spatial comfort, variability and functionality.



S338_105

This self-study programme provides an overview of the structure of the Golf Plus. It informs you of the special body features, which engines and gearboxes are installed, which front and rear axles carry the Golf, how the electronics are structured and what changes have taken place in the convenience system.

NEW



Attention Note

**The self-study programme portrays the design and function of new developments!
The contents will not be updated.**

For current testing, adjustment and repair instructions, please refer to the customer service literature intended for this purpose.



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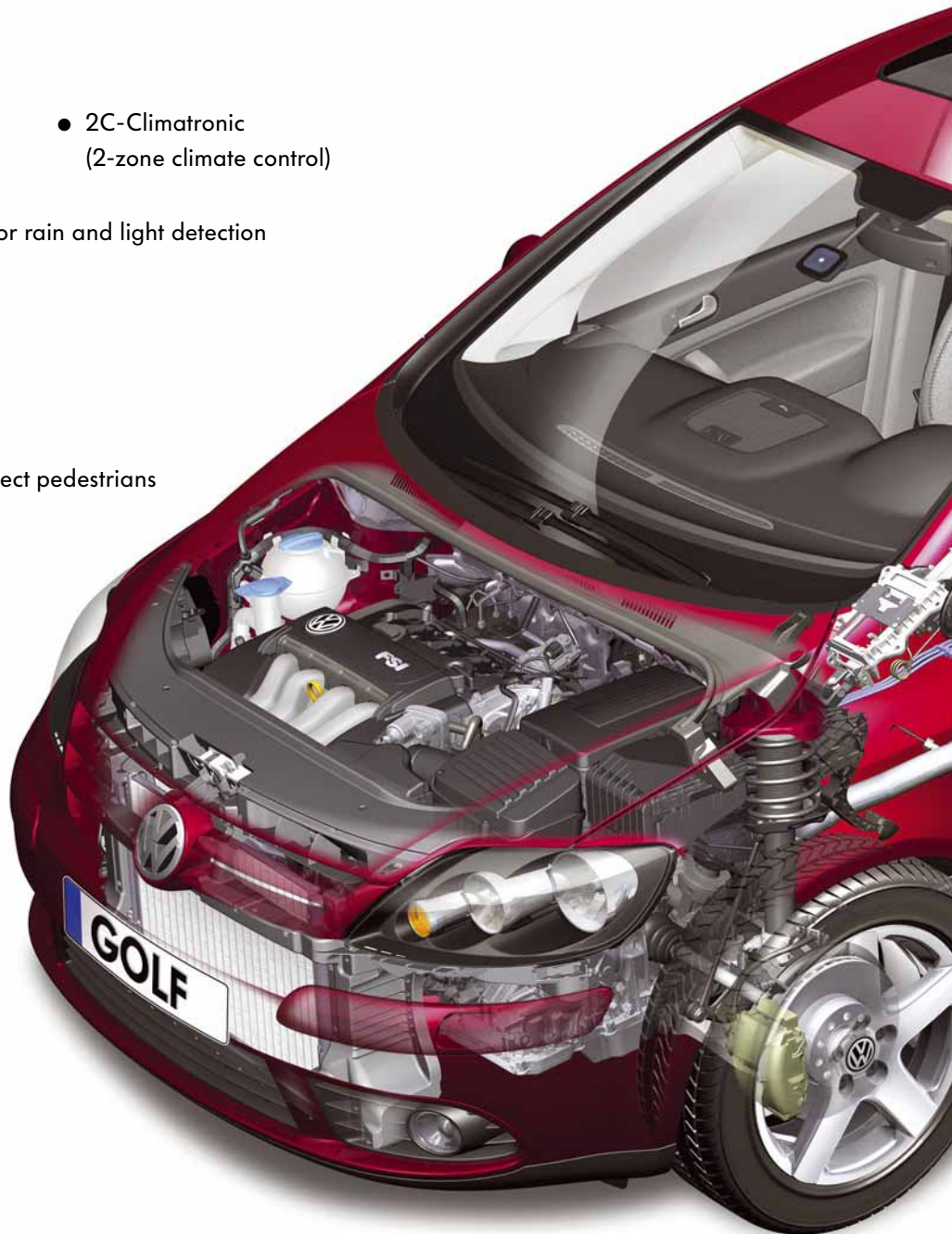


The Golf Plus 2005

In addition to the technology familiar from the Golf, the Golf Plus is equipped with a few further special features.

This includes its higher body, its rear lights in LED technology and also its split rear seat bench, which can be separately adjusted and moved.

- Extensive storage compartment concept
- 2C-Climatronic
(2-zone climate control)
- Sensor for rain and light detection
- Modified bonnet
Front area optimised to protect pedestrians
- Headlights in
bi-xenon technology with
cornering light function



- New headlights with three round elements



- Rear Seat Entertainment system

- 230V socket

- Body 95mm higher

- Rear lights in LED technology

- Variable load floor concept

S338_001

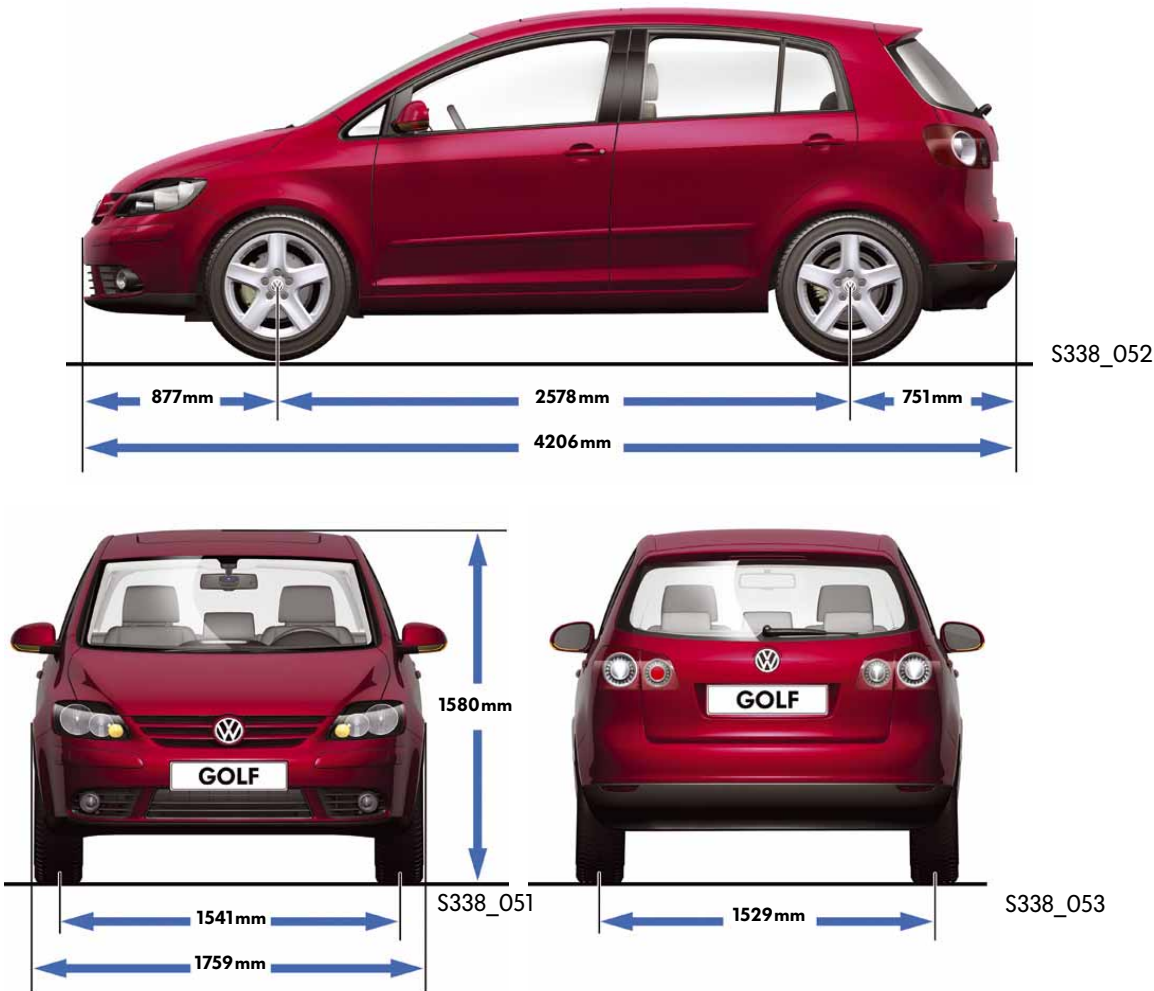
- Split rear seat bench, can be separately moved and adjusted

- Seating level 80mm higher



Technical data

Exterior dimensions and weights



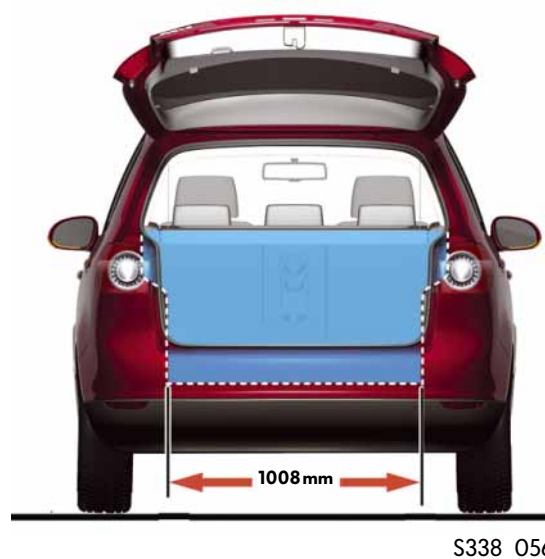
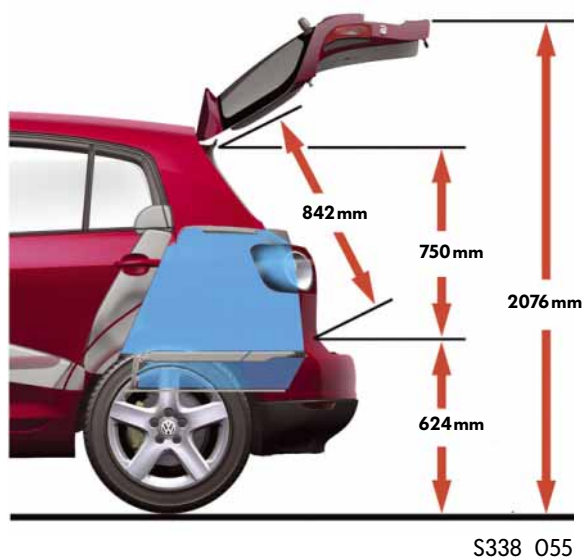
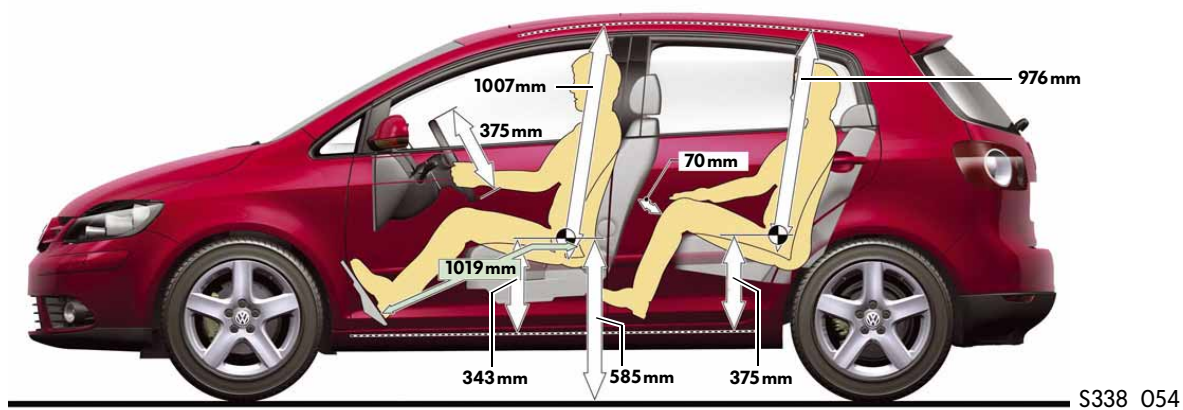
Exterior dimensions

| | |
|-------------|--------|
| Length | 4206mm |
| Width | 1759mm |
| Height | 1580mm |
| Wheelbase | 2578mm |
| Front track | 1541mm |
| Rear track | 1529mm |

Weights

| | |
|----------------------------------|----------------------|
| Permissible gross vehicle weight | 1900kg |
| Unladen weight without driver | 1293kg |
| Roof load | 75kg |
| Trailed load (braked) | 1200kg at 8% incline |
| Fuel tank capacity | 55l |
| Drag coefficient | 0.32 |

Interior dimensions



Interior dimensions and volumes

| | |
|--|---------------------------------|
| Total interior length | 1740 mm |
| Luggage compartment volume | 425 - 505 l * 402 - 443 l ** |
| Luggage compartment volume with rear seat backrest folded down | 1450 l * 1350 l ** |

| Interior dimensions, front | |
|----------------------------|---------|
| Headroom | 1007 mm |
| Elbow width | 1468 mm |
| Interior dimensions, rear | |
| Headroom | 976 mm |
| Elbow width | 1452 mm |

* - Without variable load floor

** - With variable load floor

Body

The body structure

Its concept has been integrated from the tried-and-tested Golf 2004 and adapted to the requirements of the Golf Plus.

By consistently employing high- and ultra-high-strength panels, its strength has again been optimised without significantly increasing its weight.

Special characteristics

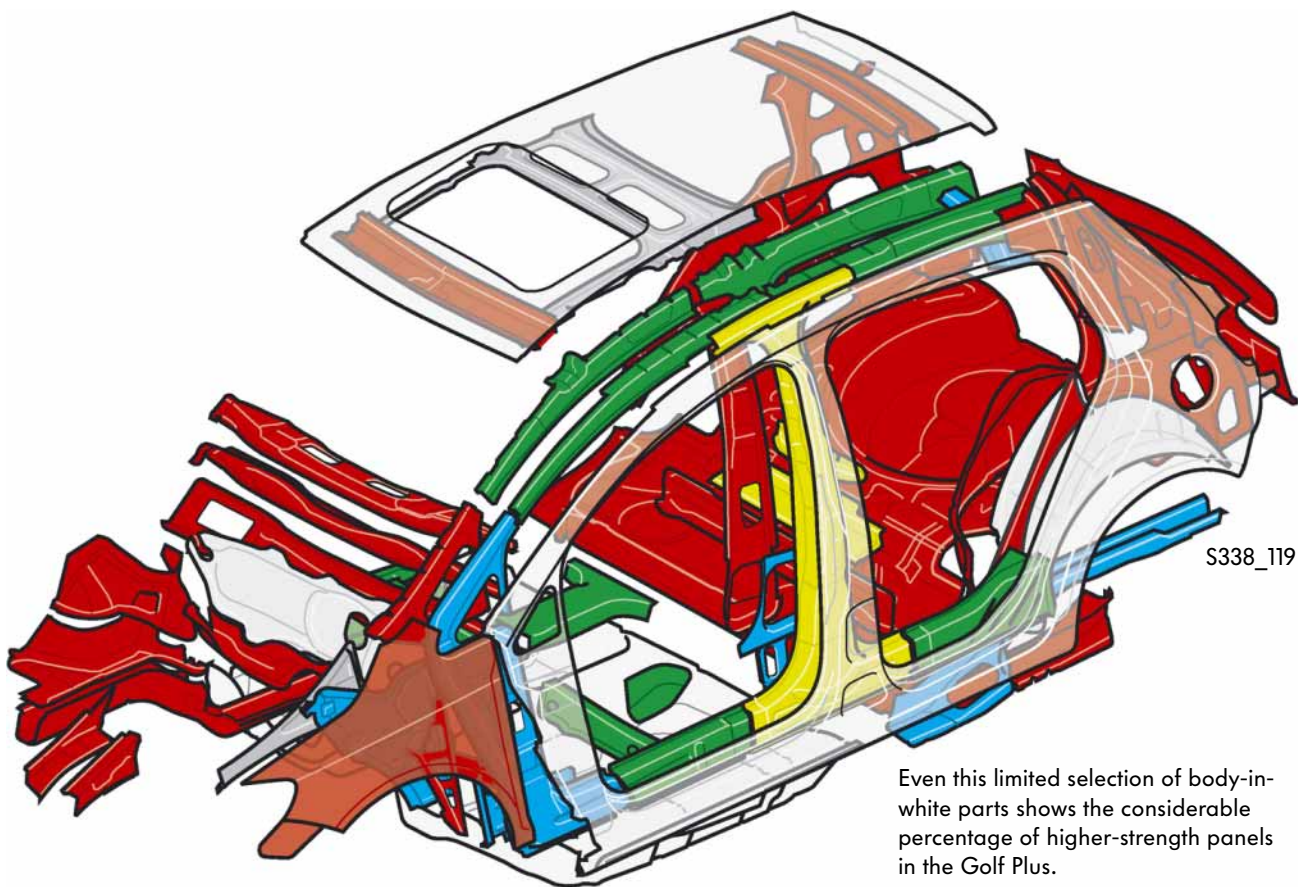
- The A-pillar has been modified to integrate the quarter light.
- The roof bow has been omitted thanks to the design of the side areas.



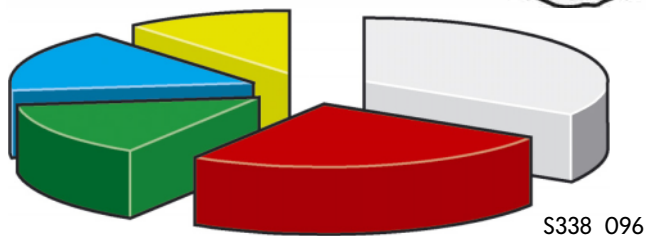
S338_023

Steel grades in the Golf Plus

Steels are classified according to their tensile strength. The higher the steel grade, the higher the tensile strength, which is measured in Megapascals. The higher material properties are achieved by alloying and hardening the steel in different ways. The Golf Plus body is essentially comprised of five different steel grades.



Even this limited selection of body-in-white parts shows the considerable percentage of higher-strength panels in the Golf Plus.



- Normal plate grade up to 180 MPa
- High-strength plate grade 220 - 240 MPa
- Higher-strength plate grade 280 -300 MPa
- Ultra-high-strength plate grade 320 -420 MPa
- Ultra-high-strength, treated plate grade over 900 MPa

1 MPa = 1 Newton/mm²

The specified values refer to the yield strength.

The storage compartments

Besides a multitude of storage compartments familiar from the Golf 2004, the Golf Plus additionally offers storage compartments in the centre console and drawers beneath the front seats.

In vehicles fitted with the Rear Seat Entertainment system, the DVD player is located in the storage compartment between the front seats beneath the armrest.



S338_057

The roof console

The Golf Plus is optionally available with a large roof console.

Three unfolding storage compartments are located in the front area. The rear area houses the fold-down monitor in vehicles fitted with the Rear Seat Entertainment system.



S338_027

Glazing



S338_071

The quarter light is bonded-in.

Body

The load floor

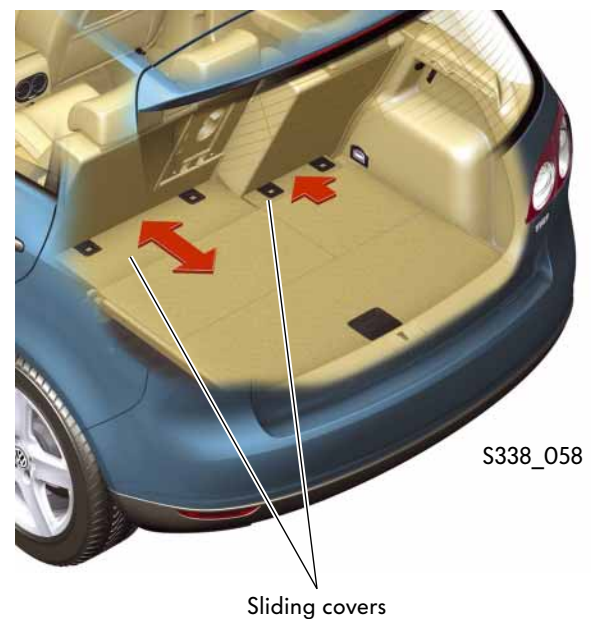
The Golf Plus has a variable load floor.
This means:

- The load floor is height-adjustable.
- The load floor can be removed.
- The length of the load floor adapts to the longitudinally-adjustable rear seat bench.



Longitudinal adjustment

This is carried out by means of movable covers, which are locked along with the rear seats. When the rear seats are moved, the covers therefore move back and forth together with the seats. The covers slide beneath the load floor in this case.

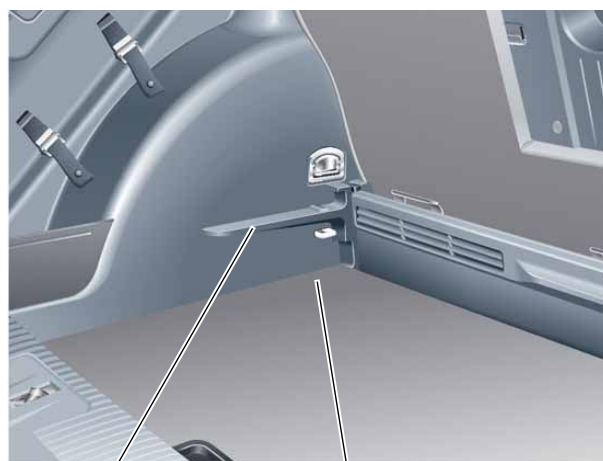




S338_029

Height adjustment

The load floor can be inserted at two heights.



S338_106

Top insertion option

Bottom insertion option



Transverse rail

S338_122

Removing the load floor

In addition to the load floor, the transverse rail can also be removed. This results in maximum luggage compartment volume.



Body

The seats

The front seats

The seat frames have been integrated from the Golf 2004.

The higher fastening bracket results in a seating position which is higher than that in the Golf 2004.

A front passenger seat with the through-loading option familiar from the Golf 2004 is also available as an optional extra.



Fastening bracket

S338_135

The rear side of the seat backrests are fitted with folding tables for the rear passengers.



S338_072

The rear seat bench

This is split into two. Both sections can be individually moved 160mm in the longitudinal direction. By pulling on the release straps, the inclination of these can be adjusted, the sections can be completely folded.



S338_073



S338_074

As an additional storage option, a multi-function box can be secured to the folding centre armrest.

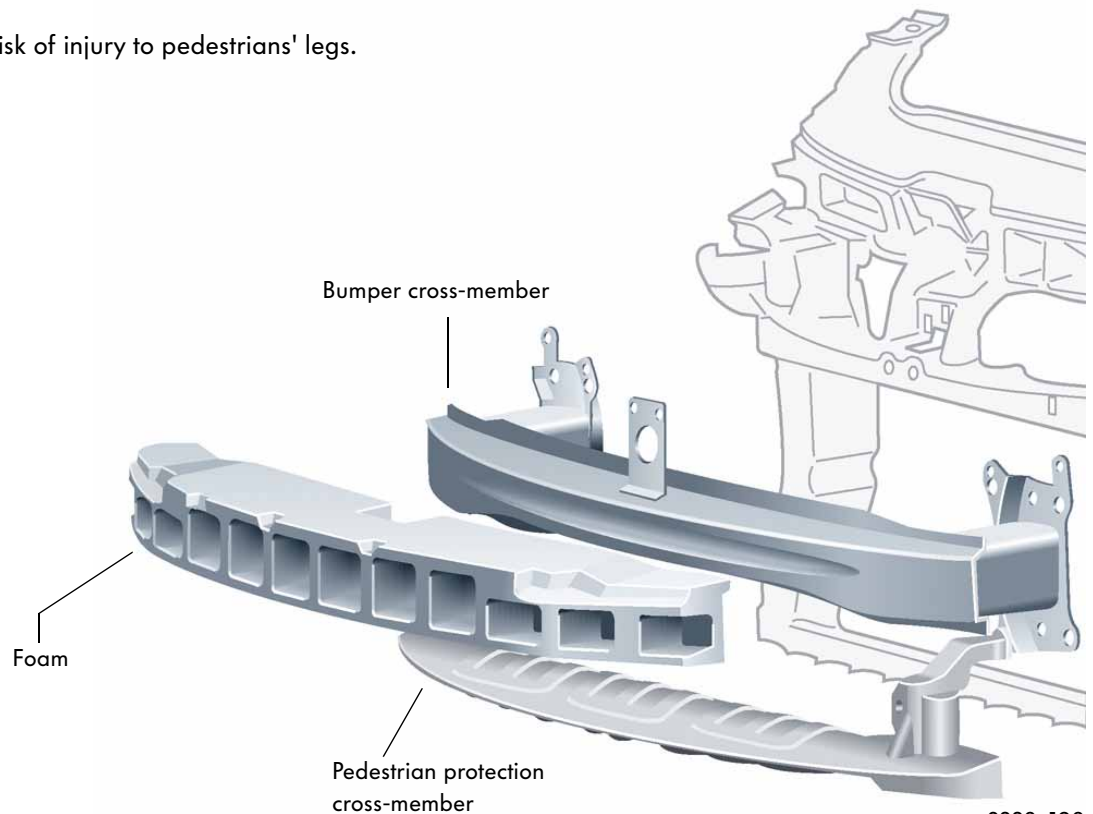
Pedestrian protection

The bumper

To reduce the risk of injury to pedestrians, the bumper cross-member is covered with a foam part.

The pedestrian protection cross-member is located beneath the bumper cross-member.

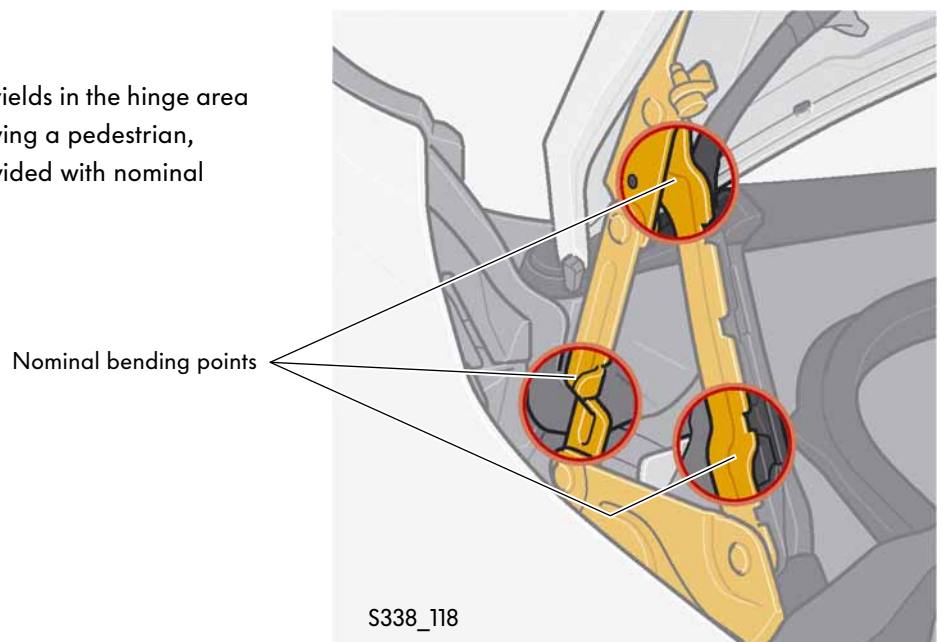
This reduces the risk of injury to pedestrians' legs.



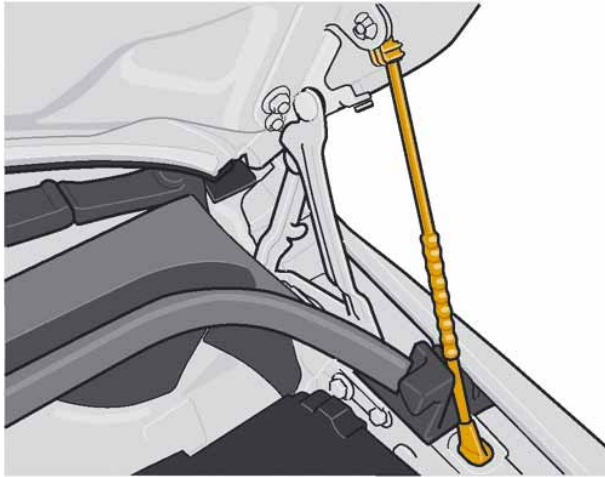
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The bonnet hinge

To ensure that the bonnet also yields in the hinge area in the event of an impact involving a pedestrian, the hinges have also been provided with nominal bending points.



The bonnet support



S338_117

This area has also been optimised for pedestrian protection by using a bonnet support instead of a gas pressure spring.

In contrast to a gas pressure spring, the bonnet support is able to bend in the event of an impact.

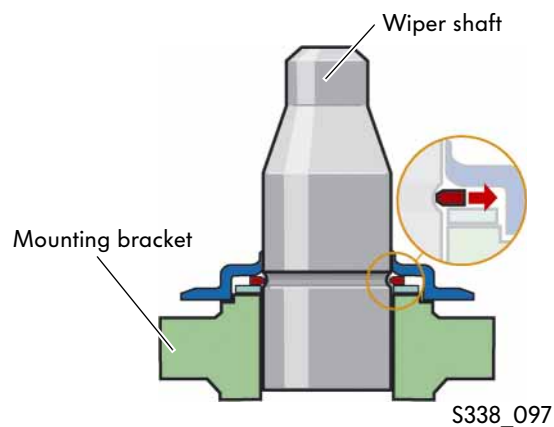


The windscreen wiper shafts

The wiper shafts have also been revised to enhance pedestrian protection.

In the event of an impact, the shafts slide into the mounting bracket and thereby reduce the risk of injury to the pedestrian.

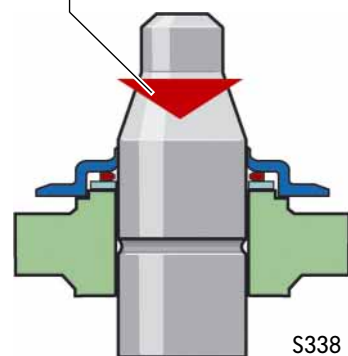
Operating position



S338_097

Situation following impact

Wiper shaft slides into the mounting bracket



S338_098

Occupant protection

The airbags

The airbag system familiar from the Golf 2004 is also fitted in the Golf Plus:

- Driver and front passenger airbag
- Side airbag in the front seats
- Head airbag for the front and rear passengers
- 3-point seat belts on all seats
- Seat belt pretensioner, belt tension limiter and seat occupied sensor for the front passengers.
- Active headrests on the front seats
- Seat belt prompt for the driver and front passenger
- Optional rear side airbag in the wheel housing trim in combination with rear seat belt pretensioner



The following crash sensors, which are already familiar from the Golf, are installed:

- Pressure sensors in the front doors
- Acceleration sensors in the area of the rear wheel housing




















S338_067







Engines

Engine-gearbox combinations

| Engine | Gearbox | | | |
|--|---------|--|---|--|
| | |  0AF: 5-speed manual gearbox |  0AG: 6-speed manual gearbox |  0A4: 5-speed manual gearbox |
| 1.4l 55 kW SRE engine  | |  | | |
| 1.4l 66 kW FSI engine *  | |  | | |
| 1.6l 75 kW engine *  | |  | | |
| 1.6l 85 kW FSI engine  | | |  | |
| 2.0l 110 kW FSI engine *  | | | | |
| 1.9l 66 kW TDI engine *  | | | |  |
| 1.9l 77 kW TDI engine  | | | |  |
| 2.0l 103 kW TDI engine  | | | | |

The engines and gearboxes marked with a * will be launched at a later point in time.

|  <p>02S: 6-speed manual gearbox</p> |  <p>02Q: 6-speed manual gearbox</p> |  <p>09G: 6-speed automatic gearbox</p> |  <p>DSG 02E: 6-speed Direct- Shift Gearbox*</p> |
|--|---|--|---|
| | | | |
| | | | |
| | | ✓ | |
| | | ✓ | |
| ✓ | | ✓ | |
| | | | |
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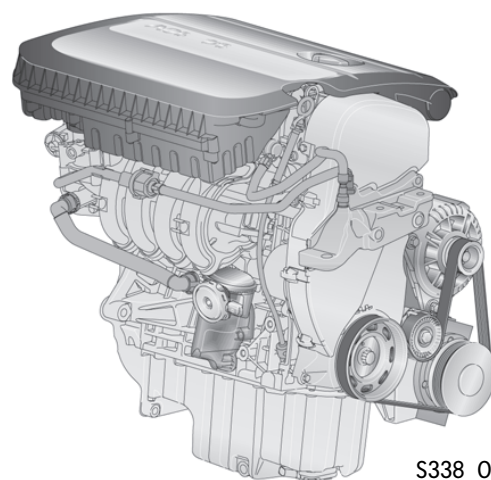
Engines

The 1.4l 55 kW engine

The 1.4l 55 kW engine is the entry-level engine for the Golf Plus. This has been taken over from the Golf 2004 and adapted to the package conditions in the Golf Plus.

Special characteristics

- Return-free fuel system
- Crankshaft sealing flange with magnetised sender wheel for engine speed
- Accelerator pedal module with contact-free accelerator pedal position sender
- Clutch module with contact-free clutch position sender
- Throttle valve control unit with contact-free throttle valve position angle senders
- Primary catalytic converter with ceramic substrate and reduced precious metal charge
- Main catalytic converter with reduced precious metal charge

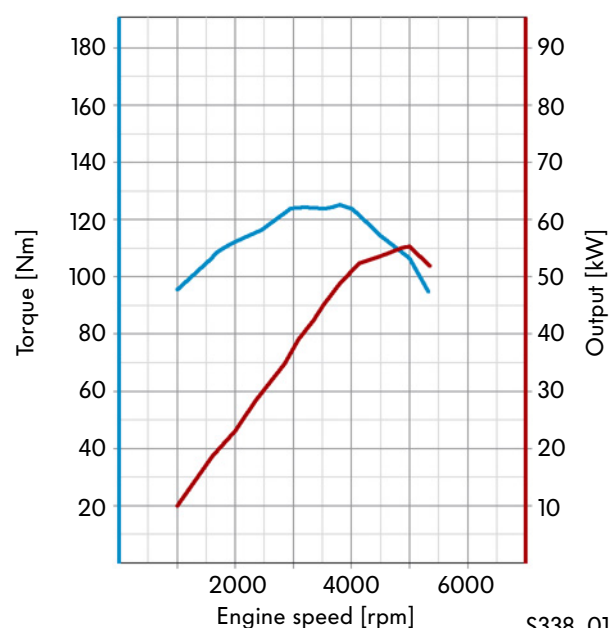


S338_014

Technical data

| | |
|----------------------------|---|
| Engine code | BCA |
| Design type | 4-cylinder in-line engine |
| Displacement [cm³] | 1390 |
| Bore [mm] | 76.5 |
| Stroke [mm] | 75.6 |
| Valves per cylinder | 4 |
| Compression ratio | 10.5:1 |
| Max. output | 55kW at 5000 rpm |
| Max. torque | 126Nm at 3800 rpm |
| Engine management system | Bosch Motronic ME 7.5.10 |
| Fuel | Super unleaded RON 95 Normal unleaded RON 91 (with slightly reduced output) |
| Exhaust gas aftertreatment | Primary catalytic converter, main catalytic converter, lambda control |
| Exhaust emission standard | EU4 |

Torque and output graph



S338_015

The 1.6l 85 kW FSI engine

This engine originates from the Golf 2004. It differs from this only due to its switch to lambda 1 operation and super unleaded RON 95.

Special characteristics

Stratified charge and homogeneous lean operation have been omitted due to the switch to lambda 1 (homogeneous operation). This leads to the occurrence of less nitrogen oxide, and the omission of complex trapping and regeneration of this.

This leads to the following changes:

- The exhaust gas temperature sender has been omitted,
- instead of the NO_x storage reduction catalytic converter, a three-way catalytic converter has been installed, and
- instead of the NO_x sender, a transient lambda probe has been installed.

Technical data

| | |
|----------------------------|--|
| Engine code | BLF |
| Design type | 4-cylinder in-line engine |
| Displacement [cm³] | 1598 |
| Bore [mm] | 76.5 |
| Stroke [mm] | 86.9 |
| Valves per cylinder | 4 |
| Compression ratio | 12:1 |
| Max. output | 85kW at 6000 rpm |
| Max. torque | 155Nm at 4000 rpm |
| Engine management system | Bosch Motronic MED 9.5.10 |
| Fuel | Super unleaded with RON 95 (super plus RON 98 leads to an increase in torque in the medium engine speed range) |
| Exhaust gas aftertreatment | Primary catalytic converter, main catalytic converter, lambda control |
| Exhaust emission standard | EU4 |

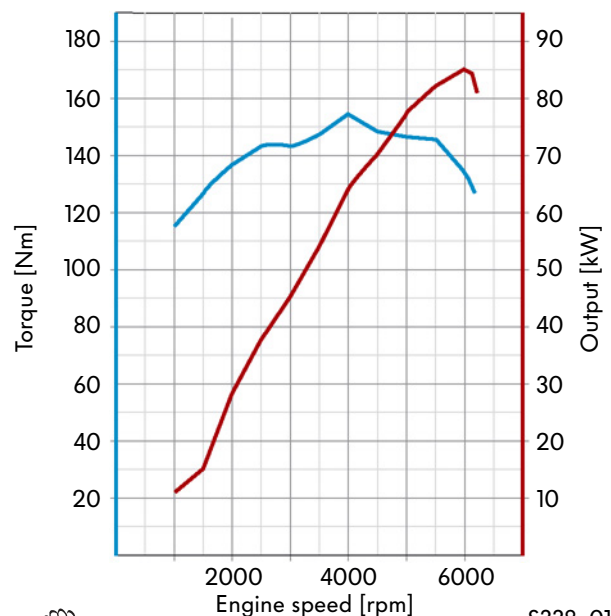


S338_016

The switch from super plus RON 98 to super unleaded RON 95 is achieved via ignition angle adjustment. Operation with RON 91 is not permitted, as ignition is retarded to the control limits in this case.



Torque and output graph



S338_017



Information on the fuel system can be found in self-study programme No. 334 "The FSI engine fuel system".

Engines

The 1.9l 77 kW TDI engine

This engine originates from the Golf 2004.

Special characteristics

- Switchable exhaust gas recirculation cooler,
- Crankshaft sealing flange with integrated engine speed sender wheel,
- Accelerator pedal module with contact-free accelerator pedal position senders,
- Contact-free clutch pedal switch.

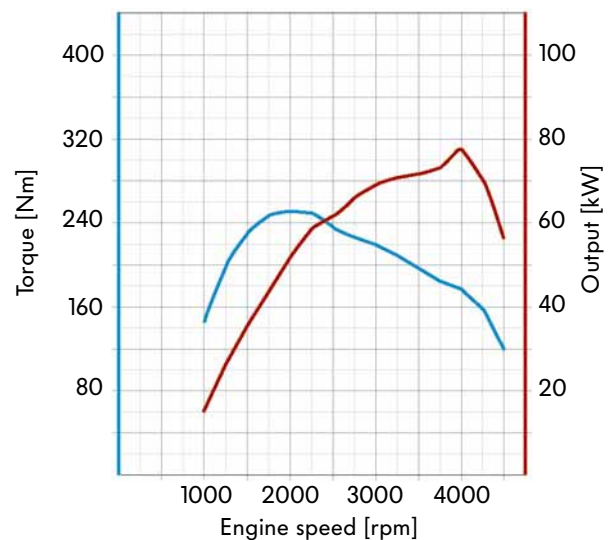


S338_018

Technical data

| | |
|---------------------------------|---|
| Engine code | BKC |
| Design type | 4-cylinder in-line engine |
| Displacement [cm ³] | 1896 |
| Bore [mm] | 79.5 |
| Stroke [mm] | 95.5 |
| Valves per cylinder | 2 |
| Compression ratio | 19:1 |
| Max. output | 77kW at 4000 rpm |
| Max. torque | 250Nm at 1900 rpm |
| Engine management system | Bosch EDC 16 with unit injector system |
| Fuel | Diesel, at least 51 CN |
| Exhaust gas aftertreatment | Exhaust gas recirculation and oxidising catalytic converter |
| Exhaust emission standard | EU4 |

Torque and output graph



S338_020

The 2.0l 103 kW TDI engine

This engine is identical to the 2.0l 103 kW TDI engine fitted in the Golf 2004.

Special characteristics

- 4-valve technology,
- Two camshafts, driven by toothed belts,
- New unit injectors which have been adapted to the 4-valve technology,
- Switchable exhaust gas recirculation cooler,
- Crankshaft sealing flange with integrated engine speed sender wheel,
- Accelerator pedal module with contact-free accelerator pedal position senders,
- Contact-free clutch pedal switch.



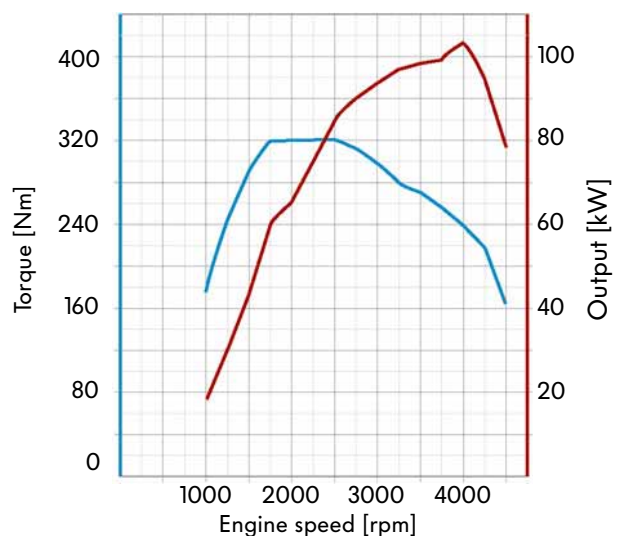
S338_019



Technical data

| | |
|---------------------------------|---|
| Engine code | BKD |
| Design type | 4-cylinder in-line engine |
| Displacement [cm ³] | 1968 |
| Bore [mm] | 81 |
| Stroke [mm] | 95.5 |
| Valves per cylinder | 4 |
| Compression ratio | 18:1 |
| Max. output | 103kW at 4000 rpm |
| Max. torque | 320Nm at 1750 rpm up to 2500 rpm |
| Engine management system | Bosch EDC 16 with unit injector system |
| Fuel | Diesel, at least 51 CN |
| Exhaust gas aftertreatment | Exhaust gas recirculation and oxidising catalytic converter |
| Exhaust emission standard | EU4 |

Torque and output graph



S338_021



Further information on this engine can be found in self-study programme No. 316 "The 2.0l TDI engine".

Power transmission

The 6-speed Direct-Shift Gearbox 02E

Following its successful, initial launch in the Golf and Touran, the Direct-Shift Gearbox is now also being fitted in the Golf Plus.

The Direct-Shift Gearbox combines the advantages of a manual gearbox:

- High efficiency
= low fuel consumption and
- Sportiness
= short shift times

with the advantages of an automatic gearbox:

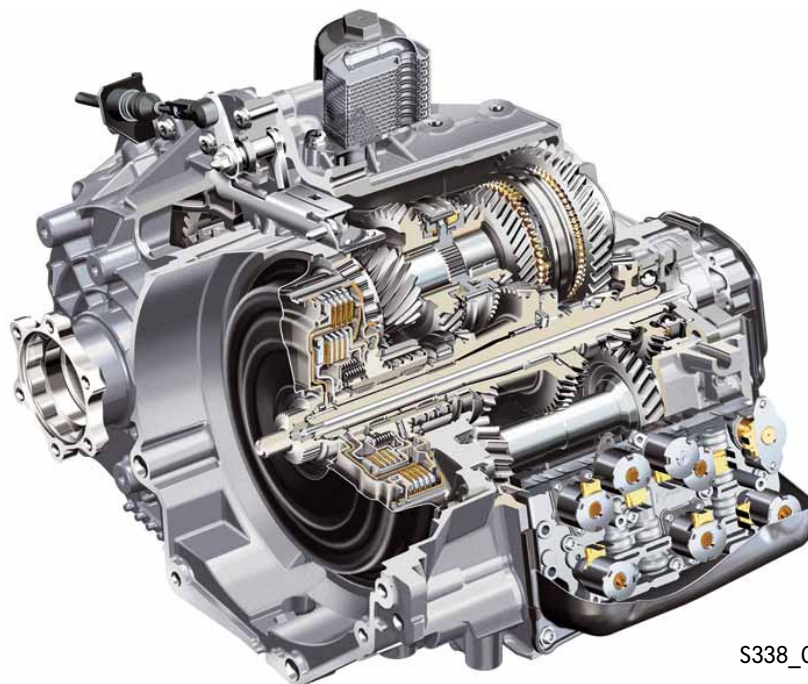
- High comfort
= no manual clutch actuation or shifting

Thanks to its design, it meets both the requirements of sporty drivers and also the comfort requirements of drivers who prefer automatic gearboxes.

Special characteristics

- Six forward gears and one reverse gear,
- Standard and sports gearbox programmes,
- Tiptronic selector level and steering wheel switches,
- Mechatronics,
- Hill-holder function,
- Creep control,
- Pressure oil filter and oil cooler mounted on the gearbox,
- Maximum torque 350 Nm.

The design and function of the selector lever and ignition key removal lock correspond to those in the Golf.



S338_049



Further information on the Direct-Shift Gearbox can be found in self-study programme No. 308

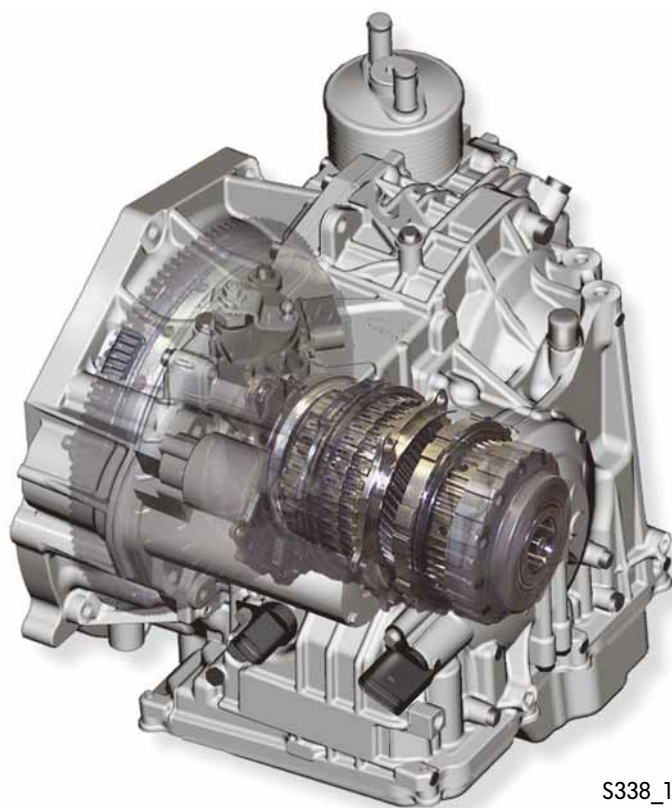
The 6-speed automatic gearbox 09G

The 6-speed automatic gearbox 09G is already very popular amongst customers in the Golf, Touran and New Beetle. It sets new standards in terms of dynamics and economy in the segment of transversely mounted stepped automatic gearboxes.

Special characteristics

- Low weight,
- High shifting comfort,
- Compact gearbox dimensions and
- High ratio between first and top gear.

The design and function of the selector lever and ignition key removal lock correspond to those in the current models.



S338_120



Further information on these automatic gearboxes can be found in self-study programme No. 309