



Product Information 911 GT2

Product Information
Porsche 911 GT2

Foreword

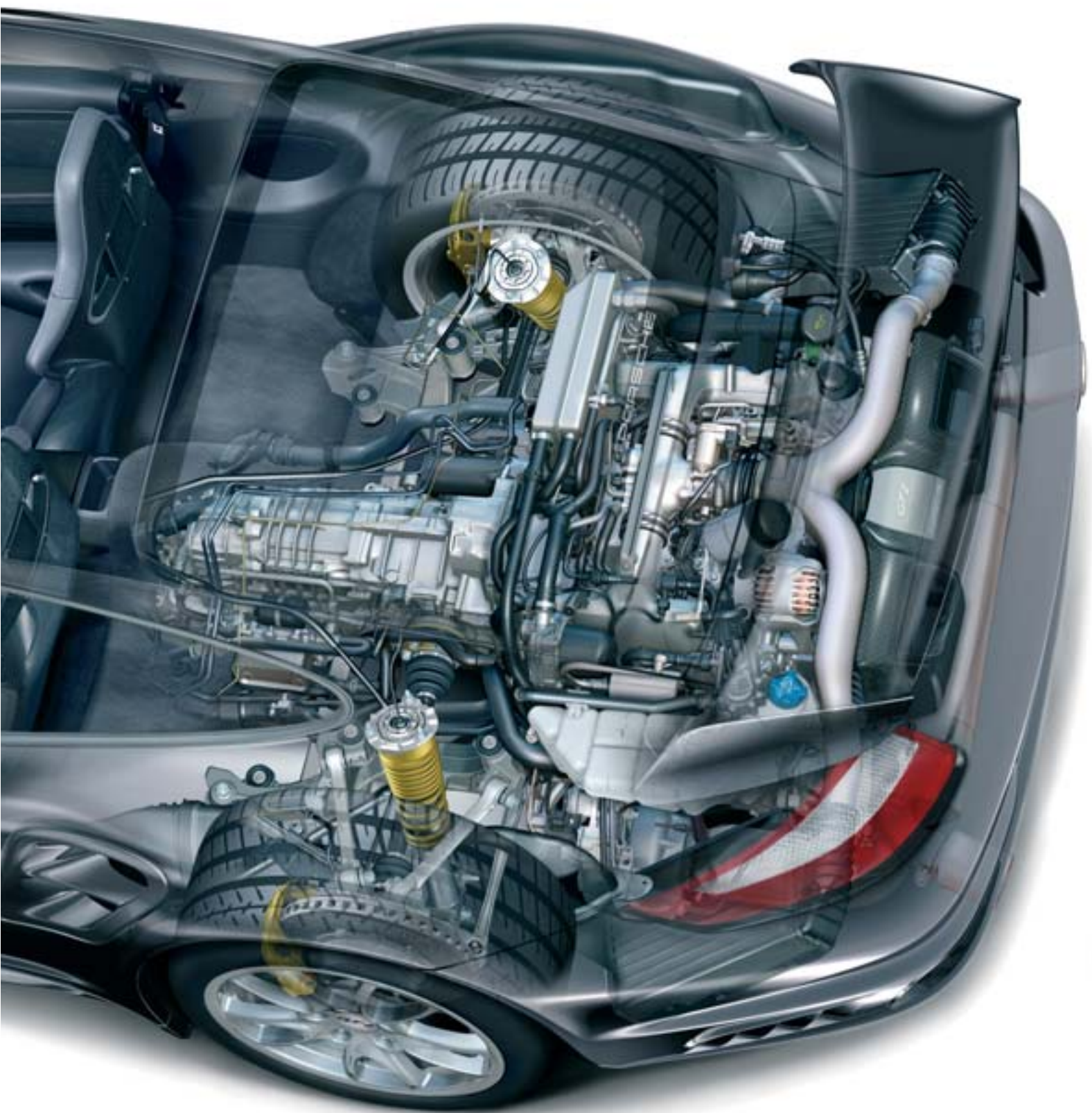
The new Porsche 911 GT2 of the 997 generation embodies outstanding performance. Just as its predecessors did, it convinces through output and improved driving dynamics that have been improved yet again. This training brochure provides detailed information on the new Porsche 911 GT2 and also looks at the vehicle's strategic competitors.

The aim of this brochure is to provide Porsche sales organisation staff with the ability to advise customers extremely competently concerning the new GT2.

For this purpose, the information is extremely detailed. Besides descriptions of the technical realisation, the resulting product advantages are also outlined. Thus, this Product Information includes all information tailored to the customers' needs and purchasing motives. This knowledge should, of course, be used selectively – that is, tailored to the individual customer's needs – when offering professional advice to customers.

Dr. Ing. h.c. F. Porsche
Aktiengesellschaft
Global Training





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Fig. 1: The new 911 GT2

Note:

All information provided in this document is correct as at May 2007. Porsche reserves the right to alter the design, technical specification, prices, equipment and final scope of delivery at any time prior to the market launch of the new 911 GT2. The basis of the descriptions in this chapter is the EU model.

The main focus of the features and equipment described here is on the new developments and modifications compared with the 911 GT2 (996) and the current 911 Turbo (997), and on the unique selling points of the new 911 GT2. Features adopted from the current 911 generation (997) are identified by a note. For detailed basic information, please refer to the appropriate Marketing Concept and/or Product Information release for the current 911 Turbo and the 911 GT3.

1 Entire vehicle

The current 911 product family of the 997 generation has already proved, in the 911 Turbo and 911 GT3 models, that it has sportiness and a high performance as well as individuality of design and character. An addition to this family, the new 911 GT2 is a model that surpasses the performance of the 911 Turbo and the sportiness of the 911 GT3 model.

The new 911 GT2 is the absolute top performer with street approval in the Porsche sports car range, and a real top performer in the high-performance sports car segment. As well as its classic 911 silhouette and characteristic design, the new 911 GT2 provides an exceptional performance, especially on race circuits.

1.1 Development objectives

The development objectives of a new model in the range of Porsche motorsports models, and especially of a new top model for the entire sports car range, naturally concentrate on the features relevant to the driving dynamics. The main challenge was to implement the objective of “pure driving dynamics” at the highest level.

It was only possible to implement this objective by developing well-known technologies intensively and consistently, and by using new technologies. This enabled us to increase the performance while maintaining high efficiency in power generation and during implementation in the driving dynamics. A further focus of development was to make the high performance potential available to ordinary as well as racing-oriented drivers, and at the same time to meet the high requirements of professional

racing drivers with individual requirements for extreme driving performance on the race circuit.

In order to meet these objectives, the following **development objectives** apply especially to GT vehicles:

- Unique visual differentiation from the current 911 models, and a clear indication that it is a motorsports vehicle
- Efficient, balanced aerodynamics (downforce)
- High engine power at moderate fuel consumption, paired with a low vehicle weight for the lowest possible power-to-weight ratio
- Perfectly coordinated overall system with maximum traction for efficient power transfer and exceptional performance
- Chassis tuning with direct feedback to the driver, for precise vehicle handling and individual performance requirements
- Overall motorsports-oriented concept, taking into account high day-to-day usability with a high level of road comfort and safety, and a large range of personalisation options

These have resulted in the following

development focus:

- Development of GT-specific body parts with improved aerodynamics, based on the empirical values from the 911 GT2 (1996) and the current 911 GT3/GT3 RS, with a noticeable downforce across the entire speed range.
- Enhancement of the 911 turbo engine with **variable turbine geometry (VTG)** and 3.6 l displacement with an optimum-efficiency power kit. For high performance, taking into account the fuel consumption and the globally valid regulations on exhaust fumes and sound emissions, including US legislation.
- Redesign of the turbocharger, for increased performance requirements. Development of an **expansion intake system** with an innovative operating principle and a **titanium rear silencer (incl. tailpipes)** to reduce the vehicle weight.
- Adaptation of the **transmission** to increased loads, and tuning of the transmission ratio (transmission and dynamic scrub radius), in order to transfer the available engine tractive force into the best possible acceleration, and to make the performance even more dynamic, especially at high speeds.
- Use and sporty tuning of an active chassis with the **Porsche Active Suspension Management (PASM)** adjustable damper system. For the highest requirements of driving dynamics and agility on the road. Design of individual components to suit use on a race circuit (e.g. adjustability of the axle geometry).

- Development of a unique **wheel/tyre combination** with a tyre width on the rear axle that is even greater than that on the current 911 Turbo.
- Development of the sporty stability system **Porsche Stability Management (PSM)**, for the first time with a function for switching off the lateral and longitudinal dynamics in two stages or completely; for individual, motorsports-oriented driving dynamics with an extreme performance on the race circuit.
- High braking performance due to the use as standard of the **Porsche Ceramic Composite Brake (PCCB)** with large brake discs on the front axle.
- Differentiation of the **interior** to the current 911 Turbo through an enhanced concept of ergonomics, colour and material, and through the use of high-quality functional materials and components.
- Offer of a comprehensive **personalisation programme**.

These focal development points make the new 911 GT2 the top model of the 911 series, and enhance the “best in class” claim in relation to technology and innovation among the competition.

1.2 The main highlights

Overview	
Entire vehicle	<ul style="list-style-type: none"> • Best power-to-weight ratio among the current Porsche standard production vehicles and the competition • Best performance among the current Porsche standard production vehicles
Body	<ul style="list-style-type: none"> • Unique GT2 vehicle design with large rear wing • Aerodynamic downforce on the front and rear axles
Drive	<ul style="list-style-type: none"> • Highest engine output among the current Porsche standard production sports cars (390 kW/530 bhp) • 6-cylinder biturbo engine with variable turbine geometry (VTG) • Expansion intake system • Rear silencer and tailpipes of light-weight titanium • Launch Assistant
Chassis	<ul style="list-style-type: none"> • Porsche Stability Management (PSM) (with sporty tuning and, for the first time, a two-stage complete switch-off function) • Porsche Active Suspension Management (PASM) adjustable damper system (sporty tuning) • Porsche Ceramic Composite Brake (PCCB) – as standard
Interior	<ul style="list-style-type: none"> • Sports bucket seats (Racing bucket seats with folding backrest and integrated thorax airbag and manual fore/aft adjustment)



Fig. 2: The new 911 GT2

The main highlights and product features are summarised briefly below.

1.2.1 Design

The design of the new 911 GT2 is in keeping with its intended character as a thoroughbred standard production sports car and the top model among the current sports car models. The striking design with the large air intakes in the front end and the characteristic wing design makes a statement about the performance potential of the new 911 GT2 from the very outset. In respect to visual dynamics, the aerodynamic function and the unique form, the new 911 GT2 provides ideal conditions for continuing the successful tradition of the 911 GT2.

Front

The new front end of the 911 GT2 takes up the design language of the current 911 Turbo and integrates the enhanced, GT-specific characteristics of large air intakes and additional air vents. The powerful appearance of the new 911 GT2 is enhanced by the broad exterior cooling air intakes. Thanks to the removal of the fog lights used for the 911 Turbo, it is possible to ensure the supply of cooling air required for the high engine power by using openings with the largest possible cross-section. Vanes, horizontally integrated in the air intakes, add to the unique design of the new 911 GT2. A broad spoiler lip concludes the front end and adds to the downforce on the front axle by its low position.

The additional air outlet in front of the luggage compartment lid is another striking design feature. As in the 911 GT2 (996) and the current 911 GT3 models, this air outlet allows the air from the central radiator to escape upwards. This makes it possible to improve the radiator through-flow and make cooling more efficient, and to additionally support the aerodynamic downforce on the front axle.

Side view

The new 911 GT2 is instantly recognisable as part of the 911 model series through the classic 911 silhouette. Its side view is differentiated mainly by the vehicle position, which is approximately 25 mm lower than that of the 911 Carrera, the muscular GT2-specific rear wings with sideplates and the GT-specific wheel design.



Fig. 3: The new 911 GT2



Fig. 4: The new 911 GT2

The side air inlets behind the doors have been redesigned and are different to those on the 911 GT2 (1996). They have the same shape as those on the current 911 Turbo, and enable an efficient supply of cooling air to the charge-air coolers. In addition to this functional benefit, the proportions and the dynamic contours of the air inlets are perfectly adapted to the shape of the rear wing. The horizontal trim strip, which is integrated elegantly into the air inlets, gives the side view an even more dynamic look and continues the design theme begun with the strip-shaped LED direction indicator lights on the front end. The rigidly designed surfaces of the front wings and aluminium doors emphasise the new rear side panels, which are wider compared to the previous model. A black plastic sill cover designed specifically for the new 911 GT2 protects the lower edges from stone impacts and lends the side view a more muscular appearance.

The new redesigned 19-inch GT2 wheels provide an especially stylish accent. Their 10-spoke design with the large cross-sections between the spokes not only makes brake cooling more efficient, but also provides an unimpeded view of the standard ceramic brake system PCCB with large brake discs and yellow brake callipers.

The exhaust channel openings for the charge-air coolers are integrated in the sides of the rear apron, and their gill look was designed specifically for the new 911 GT2. They round off the dynamic overall impression of the side view and support an efficient through-flow of the charge-air coolers.

Rear wing

The dominant fixed rear wing is a traditional component of the 911 GT2 models, and together with the front end is also the most striking design characteristic of the new 911 GT2. The old 911 GT2 (1996) wing design with large sideplates has been re-developed completely, and a unique integrated spoiler lip added to the rear spoiler completes the design.

The enhanced wing profile plays an important part in the aerodynamic performance by adding downforce to the rear axle. As well as the functional shape, the rear wing provides the new 911 GT2 with the typical powerful appearance.

The form and position of the ram air boxes, which provide the engine with combustion air, are a new feature. In the 911 GT2 (1996), they were integrated vertically in the rear wing supports. In the new 911 GT2, they were horizontally integrated in a striking manner in the



Fig.5: Rear wing



Fig. 6: The new 911 GT2

lateral wing supports in order to improve efficiency. This new form and positioning of the ram air boxes not only improves the use of the aerodynamic air flow around the vehicle for increased ram air, but also provides a visual differentiation for the new 911 GT2.

Rear

The new muscular rear apron was developed specifically for the 911 GT2 and is fitted with two GT2-specific puristic single tailpipes in a round design, which are integrated laterally in the rear apron in the same manner as on the 911 Turbo. The bottom section of the new

rear apron is painted Black and fitted with an integrated and striking lip to finish off the design and emphasise the horizontal lines of the broad rear of the vehicle.

The additional air vent openings around the tailpipes are another characteristic design feature. They take up the stylistic theme of the gill-like vent openings of the charge-air coolers and continue it laterally up to the tailpipes. These additional gill-like vent openings are also painted black, and support the dissipation of heat from the engine compartment, which is subject to substantial thermal loads, and the new titanium rear silencer.

Interior

The interior of the new 911 GT2 is based on that of the current 911 GT3, with the addition of a black leather interior and some features borrowed from the Carrera GT.

The steering wheel of the new 911 GT2 has a rim that is lightly upholstered with Alcantara, and is the same as that in the current 911 GT3. The gear lever, handbrake lever, centre strips of the sports bucket seats, roofliner, door handles, door panels, lids of the door storage boxes and the storage box in the centre console are all finished with Alcantara. This consistent material concept is not only a visual upgrade of the interior with motorsports associations, but also increases the functionality by improving the grip, especially of the steering wheel, gear lever and handbrake lever.

Another upgrade for the new 911 GT2 is the instrument cluster already used in the 911 GT3, but given a new unique colour concept. As in the Carrera GT, the pointers and increment markings are yellow, while the central rev-counter catches the eye with its titanium instrument dial and "GT2" logo.

The new sports bucket seats are a special highlight, and the 911 GT2 is the first Porsche vehicle to feature them as standard. They are light racing bucket seats with folding backrest, integrated thorax airbag and manual fore/aft adjustment. These seats thus combine the excellent lateral support potential of a racing bucket seat with a high day-to-day usability and protection of the occupants. The seat shell is made from a combination of glass and carbon fibre-reinforced plastic (GFRP/CFRP) with a surface of exposed carbon. The seat



Fig. 7: Interior

covering in the new 911 GT2 is made of leather with a centre strip in Alcantara.

A Clubsport package is available at no extra cost for the new 911 GT2, as it was for its predecessor (not available in the USA, Canada and Mexico). It contains a bolted-on rear roll-over frame, a 6-point belt on the driver's side, a fire extinguisher with holder and the preparation for a battery main switch. In combination with the Clubsport package, the sports bucket seats are upholstered in flame-resistant fabric instead of leather/Alcantara.

In addition to the Clubsport package, the following parts are available from the Porsche motorsports department for use at motorsports events with FIA-GT regulations: the battery main switch, and lateral bars for the roof and A-pillars (to complete the safety cage).

The passenger-compartment ergonomics are improved by the new interior design and by elements from the current 911

generation. Examples include the pedals that have been moved forward, and the additional height adjustment for the steering wheel. Another improvement on the 911 GT2 (996) is the enhanced side impact protection system POSIP with individual head and thorax airbags.

Thanks to the range of individual options which has been further extended since the predecessor model, the new 911 GT2 can also be personalised to an even more individual level.



Fig. 8: Sports bucket seat

1.2.2 Performance

The new 911 GT2 is the most agile vehicle with the best performance of the entire range of Porsche models, especially on race circuits. Alongside an exceptional chassis, a very low vehicle weight and a dynamic drive concept are also crucial for achieving this high performance. Another important aspect is that the individual components are coordinated to provide efficient aerodynamics.

The engine is essential for the delivery of a high performance. In the new 911 GT2, it is based on that of the current 911 Turbo, with the tried and tested turbocharging with variable turbine geometry (VTG). This technology facilitates both a high maximum power and a dynamic responsiveness of the

turbocharger, with high torque values even at low revs.

With a maximum output of 390 kW (530 bhp) the new 911 GT2 delivers 50 bhp more than the current 911 Turbo. The maximum torque of 680 Nm is 60 Nm above the base value for the 911 Turbo. While the 911 Turbo in combination with the optionally available Sport Chrono Turbo package can also achieve 680 Nm, this utilises the overboost feature which has a time limit. In the new 911 GT2, the maximum torque of 680 Nm is available over a rev range between 2,200 and 4,500 rpm without a time limit.

The increase in performance compared to the current 911 Turbo is achieved mainly by the redesign of the turbocharger with a turbine optimised for flow and with a larger compressor, and

by a newly developed expansion intake system. It is also assisted by the newly constructed titanium rear silencer with a reduced flow resistance, and by the fine tuning of the engine control, including the injection and ignition.

The completely newly developed expansion intake system with an innovative operating principle is a unique selling point and a special highlight. It has revolutionised the existing processes for providing the engine with air. In intake manifolds, the air flows as well as vibrates. These vibrations consist of a compression phase, during which the air is compressed, and of an expansion phase, during which the air expands. It has always been assumed that an increased amount of air increases the performance. The compression phase of the air vibrations in the intake system is

Performance data (changes compared with the 911 Turbo are marked in **bold**)

	new 911 GT2 (997)	911 Turbo (997)	911 GT2 (996)	
	MY 08	MY 08	MY 04 - 05	MY 01 - 03
Engine power				
Max. power at	390 kW (530 bhp) 6,500 rpm	353 kW (480 bhp) 6,000 rpm	355 kW (483 bhp) at 5,700 rpm	340 kW (462 bhp) at 5,700 rpm
Max. torque at	680 Nm 2,200 – 4,500 rpm	620 Nm 1,950 – 5,000 rpm	640 Nm 3,500 – 4,500 rpm	620 Nm 3,500 – 4,500 rpm
with overboost (optional) at	–	680 Nm 2.100 – 4,000 rpm	–	–
Specific output	108.3 kW/l (147.2 bhp/l)	98.1 kW/l (133.3 bhp/l)	98.6 kW/l (134.2 bhp/l)	94.4 kW/l (128.3 bhp/l)
Specific torque	188.9 Nm/l	172.2 Nm/l	177.8 Nm/l	177.8 Nm/l
with overboost (optional)		188.9 Nm/l		
Performance				
0 - 100 km/h with Tiptronic S	3.7 s –	3.9 s 3.7 s	4.0 s –	4.1 s –
0 - 200 km/h with Tiptronic S	11.2 s –	12.5 s 12.2 s	12.5 s –	12.9 s –
Top speed	329 km/h	310 km/h	319 km/h	315 km/h

used to press more air into the combustion chamber. The disadvantage of this principle is that the charge effect heats the air while it compresses it. This means that the fuel-air mixture cannot be ignited with the best possible efficiency.

The new expansion intake system utilises the air vibrations in a completely different way. It takes advantage of the expansion phase, during which the air cools down while it expands. This principle means that the mix in the combustion chamber is slightly cooler and can therefore be ignited in a more efficient manner. As a result, the efficiency of the engine increases, thereby improving the engine power and reducing fuel consumption at high loads and engine speeds.

The principle of the expansion intake system can only be applied in turbo engines. The cylinders are filled with slightly less air during the expansion phase than during the compression phase. This effect is compensated in the new 911 GT2 by a slightly increased boost pressure. At maximum power output, fuel consumption when using an expansion intake system is up to 15% lower than for turbocharging with a conventional intake manifold.

The titanium rear silencer is another special feature. The tailpipes are also made of very light titanium. The new 911 GT2 is the first Porsche vehicle with road traffic approval that contains this material in its exhaust system. Titanium was selected because it weighs little and has high temperature stability and material strength. The advantage of weight against the exhaust tailpipe of the 911 Turbo, which consists of stainless steel, is 50% including all technical innovations.

As in its predecessor, the propulsion force is transmitted to the rear axle in the new 911 GT2 via a reinforced 6-speed manual transmission with steel synchroniser rings in the second to fifth gears. This drive concept which is characteristic of the GT models is compact and light, and thus offers the best prerequisites for racing-oriented performance potential. The shift throws in the new 911 GT2 were also reduced to support dynamic gear changes.

Just like the 911 GT2 (996), the new 911 GT2 also features an asymmetrical differential lock as standard. The locking values are 28% for traction and 40% for overrun. These values have been reduced from the previous model (40% for traction, 60% for overrun), and enable more neutral handling, especially for load changes on bends. In extreme driving situations, the asymmetry of the differential lock provides good traction on varying road surfaces, and increased driving stability for the overrun during load changes. Overall, it improves cornering agility with high lateral acceleration.

For the first time, a chassis with actively adjustable shock absorbers is used in a 911 GT2. Porsche Active Suspension Management (PASM) is used as standard and was tuned specifically for the new 911 GT2. It enables extremely sporty driving with superior handling, even on race circuits. The basic tuning of the new 911 GT2 (PASM in Normal mode) is similar to that in the current GT3 models. This basic tuning creates the right preconditions for good driving dynamics, e.g. on wet public roads and race circuits. The new 911 GT2 can also be set to Sport mode by pressing the PASM button. The characteristic map of this chassis setting was made harder for the

911 GT2, and enables extremely sporty driving with superior handling on dry race circuits.

As in the 911 GT2 (996), it is possible to tune the anti-roll bars, the height, the track and the camber separately for an individual chassis setting on the race circuit. (Note: These changes are not permissible for driving on public roads).

The steering corresponds to the current 911 generation and has a variable steering ratio with an increasingly direct ratio from approximately 80% steering angle. This increases agility on winding roads and improves driving stability at high speeds. For outstanding deceleration, the new 911 GT2 like its predecessor boasts the Porsche Ceramic Composite Brake (PCCB) as standard. However, the brake disc chamber on the front axle is made from aluminium instead of stainless steel, and the front brake discs have been enlarged from 350 mm to 380 mm in diameter.

The wheels have also been enlarged. As compared to the 18-inch wheels on the 911 GT2 (996), the new 911 GT2 has wide 19-inch wheels using the GT design. The type and width of the rear tyres have also changed. The standard tyres on the previous model have been replaced by performance-oriented sports tyres, and the width of the rear tyres has been enlarged from 315 mm to 325 mm.

For the new 911 GT2, the familiar vehicle stability system Porsche Stability Management (PSM) will be available as standard for the first time in the GT models of the 911 line. Thus, the new 911 GT2 avails itself of a control system that provides a significant increase in active safety. This system was specially modified anew for the 911 GT2 and, in

particular, to the driving dynamic demands of extremely sporty drivers. A new shift strategy for deactivating PSM has been developed especially for **sports use on race circuits.**

In the new 911 GT2, the system is not deactivated using a PSM OFF button, as in other Porsche models, but in 2 stages using an SC OFF and an additional SC+TC OFF button. As for the familiar PSM OFF button, these buttons are located in the front centre console. The SC OFF button (SC = Stability Control) deactivates the lateral dynamics control and hence the wheel-selective braking when over- or understeering. The SC+TC OFF button (TC = Traction Control) additionally deactivates the longitudinal dynamics control for spinning drive wheels. Traction Control uses the ABD (automatic brake differential), ASR (anti-slip regulation) and MSR (engine drag torque control) systems.

Another special feature concerns the reactivation of the deactivated stabilisation systems. In the case of the familiar PSM OFF function, the lateral and longitudinal dynamics control is automatically reactivated when braking in the ABS control range in order to stabilise the vehicle. In the new 911 GT2, the lateral and longitudinal dynamics control is not reactivated during braking when either SC OFF or SC+TC OFF is operated. This function and shift strategy, especially developed for the new 911 GT2 is an enhancement of PSM for GT vehicles and hence for **drivers with extremely sporting ambitions** who place extreme and individual demands on performance and driving dynamics.

This is also the first Porsche vehicle with road traffic approval with an assist system for maximum acceleration from 0 km/h. This system, called Launch Assistant in the new 911 GT2, achieves this effect together with the 6-speed manual transmission fitted as standard. The system is activated when the clutch pedal and the accelerator pedal are depressed, without any additional buttons being pressed. The engine speed increases and is limited to approximately 5,000 rpm. The boost pressure also increases to approximately 0.9 bar within a short time. Once these preconditions have been fulfilled, the vehicle moves off at maximum acceleration through the fastest-possible release of the clutch. The Launch Assistant is easy to use and enables the best possible move-off performance that can be repeated easily.

As in its predecessors, the objectives for the new 911 GT2 were a low weight for high performance, and a great range.

This was effected by placing the drive in the rear axle and by the box-shaped body shell of the current 911 Turbo. As in the 911 GT2 (996), this combination enables both a low vehicle weight and the use of a fuel tank enlarged to 90 l (911 GT2/996: 89 l). The weight is also reduced by the aluminium luggage compartment lid (as in the current 911 generation) and the aluminium doors (as in the 911 Turbo and 911 GT3); the entire weight is 1,440 kg (DIN empty).

The aerodynamic tuning of the new 911 GT2, especially of the new front, the exhaust air outlets in front of the luggage compartment lid and the new rear wing with the additional spoiler lip, has improved the aerodynamic downforce.

Conclusion

The new 911 GT2 is a real top performer in the high-performance sports car segment. It is the top model in the entire sports car fleet and offers extraordinary performance and maximum power. As a result it ties in seamlessly with the successful concept of the GT2 model, last offered some two years ago with the 911 GT2 of the 996 model line. The recipe for the success of the 911 GT2 was low weight paired with a high engine output, racing-oriented chassis components including outstanding braking performance, extremely efficient aerodynamics and attractive styling. The new 911 GT2 based on the overall concept of the current 997 line has again raised the bar for road-suitable racecars. Like its predecessor, the new 911 GT2 also offers extraordinarily good preconditions for use as a competitive racing machine.

1.2.3 Product description

The following pages describe the most important details of the new 911 GT2.

The product description is based on the EU model and shows the changes from the 911 GT2 (1996). Subject to changes in offering, technical data and availability until start of production.

911 GT2 (1997)	Changes compared with the 911 GT2 (1996) are marked in bold .
Offering	<ul style="list-style-type: none"> • 2-seater Coupé • Offered worldwide (testing for Korea. Results of measurements on the meeting of sound emission limits expected 08/2007)
1. Engine	<ul style="list-style-type: none"> • 6-cylinder horizontally-opposed biturbo engine, 3.6 l displacement, • Maximale Leistung: 390 kW (530 PS) @ 6.500 1/min • Maximales Drehmoment: 680 Nm @ 2.200 – 4.500 1/min • Volumetric efficiency: 108.3 kW/l (147.2 PS/l) • Specific torque: 188.9 Nm/l • Max. engine speed: 6,750 rpm • Aluminium engine block and cylinder head • Water cooling • Four-valve technology • Forged pistons and connecting rods • 2 turbochargers with variable turbine geometry (VTG), 2 charge-air coolers • Camshaft control and valve lift adjustment VarioCam Plus • Hydraulic valve clearance compensation • Dry-sump lubrication with external engine oil tank • Electronic engine management (Motronic 7.8.1) • Electronic throttle • Hot-film air flow sensor • Sequential fuel injection (multipoint) • Cylinder-specific knock control • Two 3-way catalytic converters • Stereo lambda control circuits • Individual ignition coils, static high-voltage distribution system • Upper shell of the air cleaner housing made of carbon fibre (exposed carbon) • Expansion intake system • Rear silencer and tailpipes made of titanium • Round, GT2-specific tailpipes integrated in the rear end • On-board diagnosis for monitoring the emission control system • Double oil extraction in the crankcase
2. Transmission	<ul style="list-style-type: none"> • 6-speed manual transmission with dual-mass flywheel and transmission oil cooling • Steel synchroniser rings 2nd – 5th gear • Short shifter • Rear-wheel drive • Locking differential with asymmetrical action (28% traction, 40% overrun) • Launch Assistant
3. Chassis	<ul style="list-style-type: none"> • 8.5J J x 19 GT2 alloy wheels with 235/35 RO 19 sports tyres at front, • 12J x 19 GT2 alloy wheels with 325/30 ZR 19 tyres at rear and 5 mm wheel spacers (not available in Japan) • Wheel hub cover with GT2 logo

911 GT2 (997)	Changes compared with the 911 GT2 (996) are marked in bold .
3. Chassis	<ul style="list-style-type: none"> • Anti-theft protection for wheels • Tyre Pressure Monitoring System (TPM) • Tyre sealing compound with electric compressor • Power steering with variable steering ratio • McPherson strut suspension with special spring and damper tuning, support bearings with ball joints • Rear multi-link suspension axle LSA with fixed bolted axle carriers and special spring and damper tuning • Aluminium rear cross member • Specially tuned front and rear anti-roll bars, can be tuned for race track use • Adjustable chassis for race track use (height, track and camber) • Vehicle stability system PSM (Porsche Stability Management) with sporty tuning, including ABS, ASR, ABD and MSR • PASM (Porsche Active Suspension Management) adjustable damper system (sporty tuning)
4. Brake system	<ul style="list-style-type: none"> • Porsche Ceramic Composite Brake (PCCB) with 6-piston fixed monobloc brake callipers at front, 4-piston fixed monobloc brake callipers at rear, brake discs internally vented and cross-drilled, aluminium brake chamber on front axle • The diameter of the brake discs is 380 mm at the front, 350 mm at the rear. • Brake callipers painted yellow • Vacuum-controlled brake system with 9-inch tandem brake booster • ABS 8.0 (integrated in PSM) • Brake pad wear indicator on each brake pad • Additional cooling air ducts for the brake system at the front axle and rear axle
5. Body	<ul style="list-style-type: none"> • Two-seater Coupé with wide body and specific side skirts • Sheet steel hot-dip galvanised on both sides • Body features preparation for roll-over frame (fastening plates) • Front end with front lights, direction indicator lights and additional exhaust air vent in front of the luggage compartment lid • Rear side sections with air inlets for charge-air cooling • Rear end with air outlets for charge-air cooling and raised integrated tailpipes • Reduced underbody protection • Rear lid with fixed rear wing incl. spoiler lip and wing supports with integrated ram air boxes • Black GT2 logo on the rear lid • Underbody panelling • Aluminium luggage compartment lid • Aluminium doors • Bow-tube door handles • Door stops with 3 stop positions • Front side windows with hydrophobic coating • Fuel tank refill volume 90 l (RoW LHD), 67 l (USA), 66 l (RHD) • Metallic paint
6. Electrics	<ul style="list-style-type: none"> • Power windows with one-touch operation and short-stroke lowering • Front wiper system with 2 wiping speeds, adjustable intermittent wipe and heated washer jets • Electrically adjustable heated exterior mirrors (double-arm), aspherical on driver's side • Heated rear window • Porsche Communication Management (PCM): information system consisting of 5.8-inch colour display with twelve buttons, double tuner with antenna diversity, integrated CD audio player with MP3 play function, on-board computer with extended functions and parallel display of basic information on the instrument cluster • Audio system 2x25 Watt and 4 loudspeakers • Uniform lighting concept for the entire interior with variable dimming in white • Interior orientation lighting • Footwell lighting

911 GT2 (997)	Changes compared with the 911 GT2 (996) are marked in bold .
6. Electrics	<ul style="list-style-type: none"> • Central locking system with remote control including luggage compartment lid release • Electric unlocking of the luggage compartment and engine lids • Weight-optimised battery (70 Ah)
7. Lighting system	<ul style="list-style-type: none"> • Bi-Xenon headlights with headlight cleaning system • (Note: Without automatic headlight levelling system) • Separate auxiliary lights in front end with LED direction indicator lights (Note: no fog lights) • Rear fog light on driver's side • High-level third brake light in LED technology • Automatic coming home light
8. Instruments	<ul style="list-style-type: none"> • Cluster of five dial-type instruments integrated into cockpit • Instrument cluster with yellow pointers and increment markings and multi-function display in dot-matrix technology • Central rev counter with titanium-coloured background, GT2 logo and shift indicator • Analogue displays for revs, speed and oil pressure, oil temperature, coolant temperature and fuel level • Continuous digital display of total mileage, trip mileage, time, outside temperature and speed • On-board computer with boost pressure gauge
9. Passive safety	<ul style="list-style-type: none"> • Full-size airbags for driver and passenger • Porsche Side Impact Protection System (POSIP), comprising side impact protection in the doors, thorax airbags integrated in the side sections of the front seats and head airbags for driver and front passenger integrated in the door panels • 3-point automatic front seat belts, with buckle on seat • Seat-belt height adjustment, seat-belt pretensioners and force limiters at front • Preparation for retrofitting the ISOFIX child seat anchoring system on passenger seat and switch-off function for passenger airbag • Engine immobiliser, safe lock system, alarm system with radar interior surveillance • Deformation zones at front and rear with integrated alloy bumpers
10. Air conditioning	<ul style="list-style-type: none"> • Climate control with integrated active carbon filter • Green-tinted heat-insulating glass
11. Interior equipment	<ul style="list-style-type: none"> • Black leather interior with plastic components painted in Black soft-touch paint. • Interior equipment in Alcantara: steering wheel rim, gear lever and handbrake lever, roofliner, door handles, exterior mirrors, lids of door storage boxes and centre console • Interior equipment painted Volcano Grey: Trim for steering wheel spokes, gear lever and shift pattern. • Sports bucket seats with folding backrest, integrated thorax airbag and manual fore/aft adjustment. The seat shell is made from glass and carbon fibre-reinforced plastic (GFRP/CFRP) with a surface of exposed carbon. Leather covering with seat centre in Alcantara, without rear seat system • 3-spoke GT3 steering wheel with upholstered steering wheel rim in Alcantara and upholstered airbag module, spoke trim painted in Volcano Grey, with manual reach and height adjustment. • Lockable, large glove box • Three storage compartments in the centre console • Cup holder located above the glove box (integrated in the switch panel behind the decorative trim) • Illuminated vanity mirrors in both sun visors • Door sill covers and rear carpet with GT2 logo
12. Colours	<ul style="list-style-type: none"> • Solid colours – exterior: Black, Guards Red, Carrara White, Speed Yellow • Metallic colours – exterior: Basalt Black Metallic, Arctic Silver Metallic, Midnight Blue Metallic, Macadamia Metallic, Meteor Grey Metallic • Interior colour: Black

1.2.4 Product differentiation

The new 911 GT2 is sold as a 2-seater Coupé with 6-speed manual transmission. The main differences between the product features of this model and the current 911 Turbo Coupé are described below.

	Package 911 GT2
Design/Body	<ul style="list-style-type: none"> • GT2 front end with additional exhaust air vent for centre radiator in front of the luggage compartment lid • GT2 rear end with air outlets for charge-air cooling and unique rear apron • GT2 rear lid including wing supports with integrated ram air boxes • Fixed rear wing with separate spoiler lip • GT2 side skirts • Underbody panelling with additional cooling air ducts for the brake system at the front axle and rear axle • Reduced PVC underbody protection • Body featuring preparation for roll-over frame • Tank-Nachfüllvolumen 90 l (911 Turbo: 67 l) • Black GT2 logo on the rear lid • Lighting system with Bi-Xenon headlights without dynamic headlight levelling system, without fog lights
Interior	<ul style="list-style-type: none"> • 2-seater with sports bucket seats including seat centre strips in Alcantara. • Interior equipment in Alcantara: steering wheel rim, gear lever and handbrake lever, roofliner, door handles, exterior mirrors, lids of door storage boxes and centre console • Interior equipment painted Volcano Grey: trim for steering wheel spokes, gear lever and shift pattern. • 3-spoke GT2 steering wheel with steering wheel rim upholstered in Alcantara • GT2 instrument cluster with yellow pointers and increment markings, rev-counter with titanium-coloured instrument dial and shift indicator • Door entry guard and rev-counter with GT2 logo • Reduced sound damping • PCM (Porsche Communication Management) with amplifier 2x 25 Watt and 4 loudspeakers • Optional navigation module and BOSE Surround Sound System
Engine	<ul style="list-style-type: none"> • Max. power output 390 kW (530 bhp), max. torque 680 Nm • Max. speed 6,750 rpm • Modified turbocharging with variable turbine geometry (VTG) • Air cleaner housing with carbon fibre (exposed carbon) upper shell and sticker with GT2 logo • Expansion intake system • Rear silencer and titanium tailpipes specific to GT2 • Battery 70 Ah
Transmission	<ul style="list-style-type: none"> • 6-speed manual transmission with short ratios and transmission oil cooling • Steel synchroniser rings 2nd - 5th gear • Short shifter • Rear-wheel drive • Locking differential with asymmetrical action (28% traction, 40% overrun) • Launch Assistant

	Paket 911 GT2
Chassis	<ul style="list-style-type: none"> • McPherson strut suspension with special spring and damper tuning, support bearings with ball joints (Uniball) • Rear multi-link suspension axle LSA with fixed bolted axle carriers and special spring and damper tuning, aluminium rear axle cross member • Specially tuned front and rear anti-roll bars • Adjustable chassis for race track use (height, anti-roll bars, track and camber) • PASM (Porsche Active Suspension Management) active damper system (sporty tuning) lowered by approximately 25 mm as compared to the 911 Carrera • Vehicle stability system PSM (Porsche Stability Management) with sporty tuning • PCCB (Porsche Ceramic Composite Brake) with yellow brake callipers and aluminium brake chamber on front axle • The diameter of the brake discs is 380 mm at the front • Brake system without brake assist and pre-filling of the brake system • 19-inch GT2 wheels including wheel hub cover with GT2 logo • 5-mm wheel spacers and tyres 325/30 on the rear axle (not in Japan) • Sports tyres
Options	

1.2.5 Dates

Lifting of press restrictions	30.07.2007
1st trade fair introduction	IAA (Frankfurt): 11. - 23.09.2007
Presentation to the press	24.09. - 05.10.2007
Start of production (SoP)	<ul style="list-style-type: none"> • 10/2007 (LHD) • 01/2008 (RHD/USA)
Market launch (PoS)	<ul style="list-style-type: none"> • Left-hand drive worldwide (except for USA) -> market-specific from 11/2007 • Right-hand drive worldwide and USA -> market-specific from 02/2008 <p>Note: Launch in Taiwan not yet confirmed. Statement expected at the end of 08/2007.</p>

2 Engine

2.1 Overview

The 6-cylinder horizontally opposed engine of the 911 GT2 is a performance-oriented enhancement of the current 911 Turbo engine with 3.6 l displacement.

Like the current 911 Turbo, the new 911 GT2 now offers turbocharging utilising the Variable Turbine Geometry (VTG). It is well-known that this technology provides for extremely fast boost pressure build-up with good responsiveness, high torque values even at low engine speeds across a broad rev range, as well as facilitating a high maximum power output at low fuel consumption. For basic and detailed information on variable turbine geometry, please refer to the Product Information for the 911 Turbo (997).

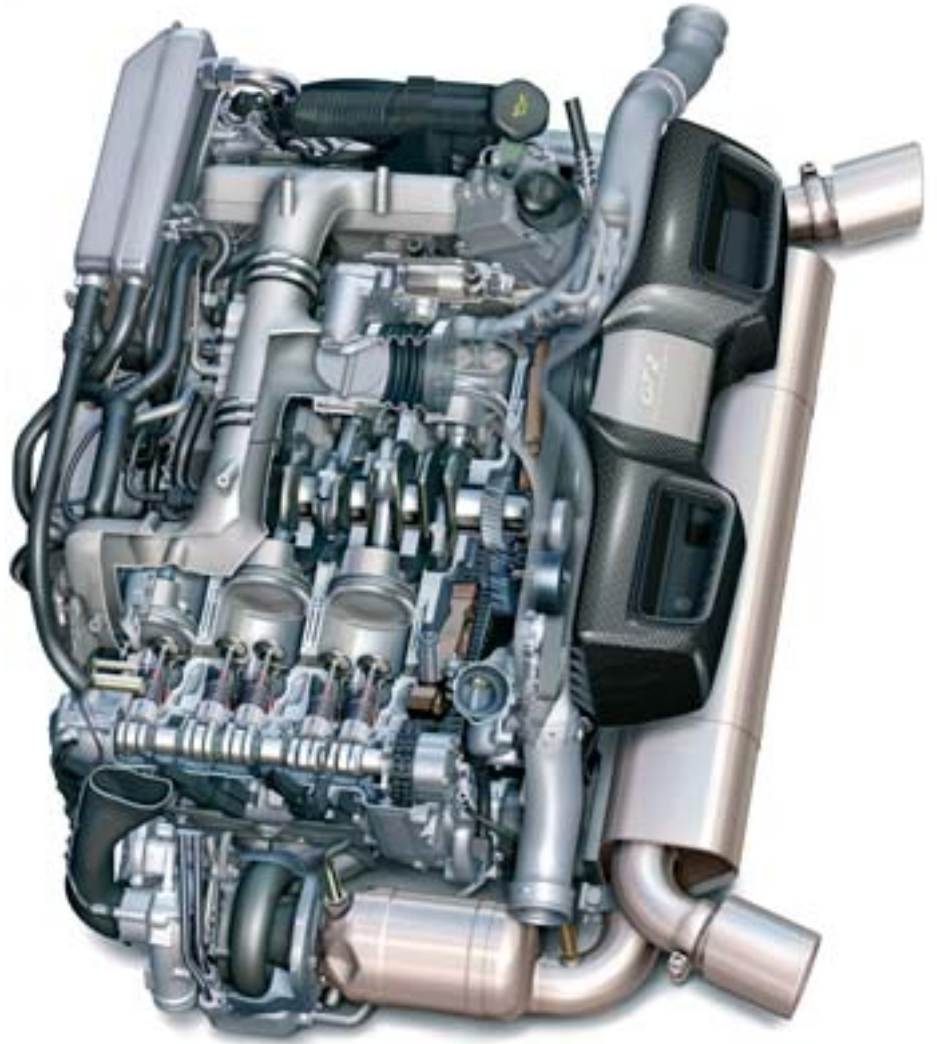
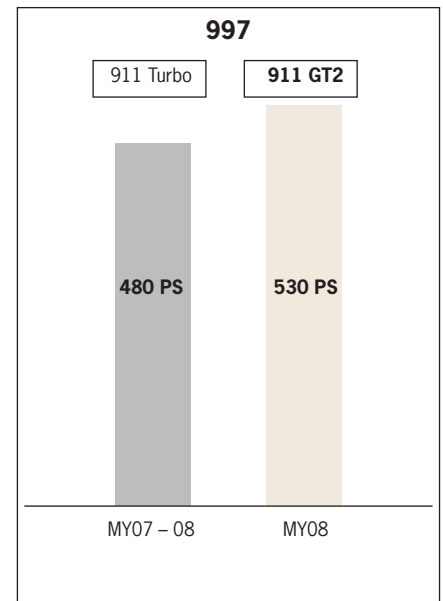
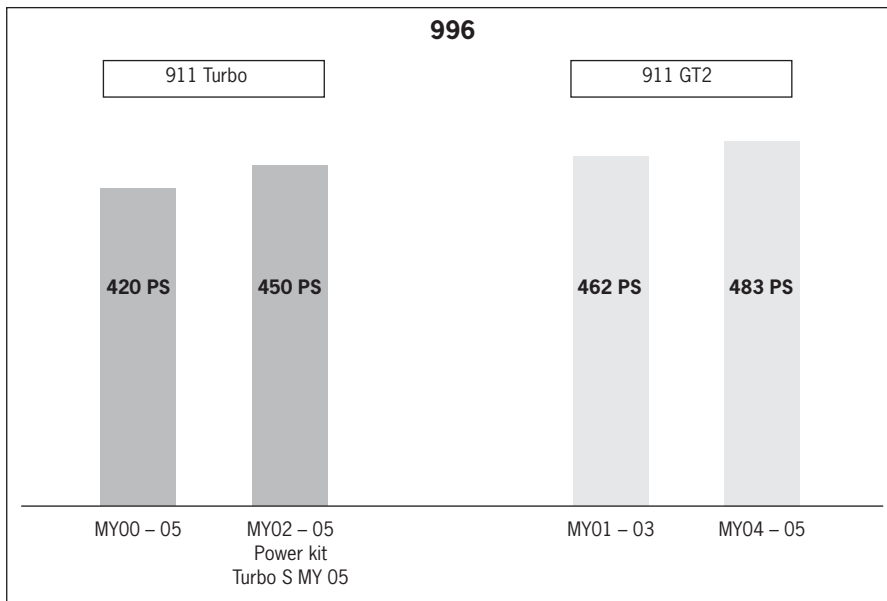


Fig. 9: Engine

Technical data (changes compared with the 911 Turbo are marked in **bold**)

	new 911 GT2 (997)	911 Turbo (997)	911 GT2 (996)	
	MY 08	MY 08	MY 04 – 05	MY 01 – 03
Max. power at	390 kW (530 bhp) 6,500 rpm	353 kW (480 bhp) 6,000 rpm	355 kW (483 bhp) at 5,700 rpm	340 kW (462 bhp) at 5,700 rpm
Max. torque at	680 Nm 2,200 – 4,500 rpm	620 Nm 1,950 – 5,000 rpm	640 Nm 3,500 – 4,500 rpm	620 Nm 3,500 – 4,500 rpm
with overboost (optional) at	–	680 Nm 2.100 – 4,000 rpm	–	–
Specific output	108.3 kW/l (147.2 bhp/l)	98.1 kW/l (133.3 bhp/l)	98.6 kW/l (134.2 bhp/l)	94.4 kW/l (128.3 bhp/l)
Specific torque	188.9 Nm/l	172.2 Nm/l	177.8 Nm/l	177.8 Nm/l
with overboost (optional)	–	188.9 Nm/l	–	–

Engine power (as compared to the 911 GT2 (996) and the corresponding 911 Turbo basic model)



Engine features shared with the 911 GT2 (996)

Like the previous model, the engine of the new 911 GT2 has the following basic features:

- 6-cylinder horizontally opposed biturbo engine, water-cooled
- Displacement 3.6 l
- forged pistons
- 4-valve technology with valve clearance compensation
- Camshaft control and valve lift adjustment with VarioCam Plus
- Dry-sump lubrication with external engine oil tank and 9 oil pumps
- Individual ignition coils with static high-voltage distribution system
- On-board diagnosis (OBD II)

Engine changes compared to 911 GT2 (996)

The following features have been developed or enhanced from the previous model (type 996) and correspond to those in the current 911 Turbo (997):

- Turbocharging with variable turbine geometry (VTG)

- Higher power output and torque values
- Enhanced VarioCam Plus
- Improved cooling performance including 2-level oil cooling (like in the current 911 Turbo)
- Improved charge-air cooling
- Exhaust system with single tailpipes integrated in the rear apron.
- Improved emission control and monitoring for the USA (LEV II and improved OBD II, with monitoring via CAN bus) and for Europe (EU4)

- Changes to the materials and components for reinforcement and weight reduction
 - Attractive engine compartment design
- For detailed information on the changes mentioned above, including those to the basic engine, please refer to the Product Information for the 911 Turbo (997).

Performance increase compared to the 911 Turbo (997)

The following features have been enhanced for the new 911 GT2 to

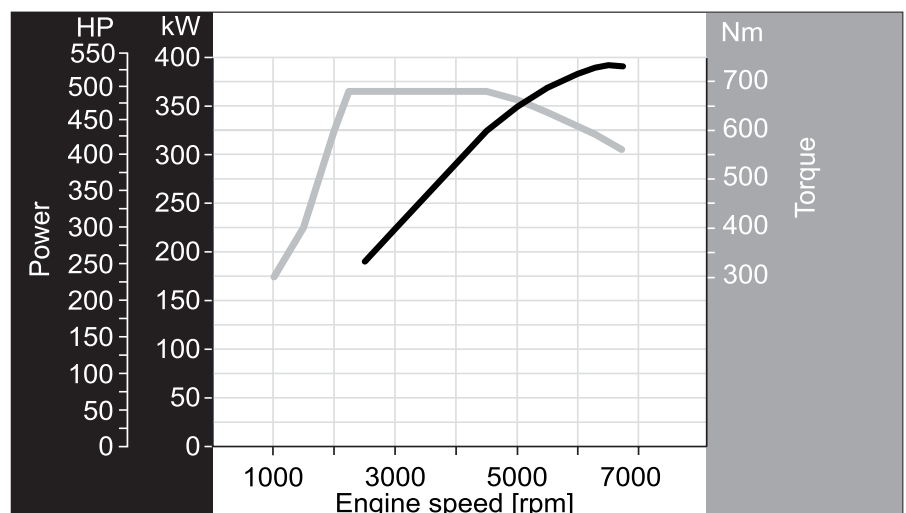


Fig. 10: Performance and torque curve

increase the performance from that of the current 911 Turbo:

- Modified turbocharger
- New expansion intake system
- New rear silencer and tailpipes of titanium

As well as having an increased performance, the new 911 GT2 meets all applicable sound and emission laws worldwide (still testing for Taiwan).

2.2 Turbocharging

In order to increase the performance compared to the 911 Turbo, the new 911 GT2 turbocharger has a larger compressor and a turbine optimised for flow. The enlarged compressor ensures that the maximum boost pressure for the new 911 GT2 is approximately 1.4 bar. This is an increase of 0.4 bar on the standard boost pressure of the 911 Turbo (1.0 bar), and an increase of 0.2 bar on the overboost optionally available for the 911 Turbo (max. boost pressure: 1.2 bar). The turbine housing has been modified to improve flow, and its flow resistance is lower than that of the 911 Turbo.

2.3 Air intake

Like the previous model, the engine of the new 911 GT2 has two ram air boxes to supply air. In the 911 GT2 (996), these openings were integrated in the vertical wing supports and guided the incoming air to the air cleaner via a shared air box integrated in the rear lid. In the new 911 GT2, this system has been enhanced and improved. The openings are now contained in separate air boxes that are integrated laterally into the wing supports. The openings now have a better position in the air flow and thereby increase their efficiency by

increased ram pressure. After the air boxes, the incoming air is guided through two separate intake ports and directly to the air cleaner. This reduces flow resistance.

Ram air technology supports the engine's air intake, especially at high speeds, by accumulating the air flowing around the vehicle. In the new 911 GT2 turbo engine, some strain is taken off the turbochargers by the slight increase in pressure in front of the compressors, and the exhaust gas backpressure and expulsion work of the pistons is reduced. As a result, the engine power is increased slightly. The new 911 GT2 has additional air inlets integrated into the rear lid underneath the rear wing to provide the engine with fresh air and thereby cool the engine compartment.

Air cleaner

The new 911 GT2 air cleaner is basically the same as that of the current 911 Turbo. The top of the air cleaner housing (supply air housing) of the new 911 GT2 is made from carbon fibre-reinforced plastic (CFRP) in attractive exposed carbon to reduce weight and make the engine compartment attractive. The weight advantage vis-à-vis the conventional plastic top of the air cleaner of the 911 Turbo is approximately 19%. The engine compartment is visually improved even more by an aluminium trim like that in the current 911 Turbo. There is a note on this trim referring to the variable turbine geometry; this note is based on the 911 Turbo. The model logo was adapted for the new 911 GT2.

The function of the air cleaner with reduced suction resistance compared to the previous model corresponds to that of the current 911 Turbo. This is achieved by a new air cleaner insert and twin-branch air intake from the air cleaner via two separate hot-film air flow sensors. The 911 GT2 (996) has a one-branch air intake with a single hot-film air flow sensor.



Fig. 11: Expansion intake system 911 GT2

2.4 Expansion intake system

The expansion intake system of the 911 GT2 is an enhancement of the existing resonance intake manifold for turbo engines. The unique and special feature is the operating principle, which has revolutionised existing processes.

At the first glance, the expansion intake system hardly seems to differ from existing intake manifolds. It has no unusual design features such as additional resonance flaps or other moveable components. Nevertheless, its unique operating principles are exceptional and open up new possibilities of use for existing systems.

Like a traditional intake manifold for 6-cylinder horizontally-opposed engines, the expansion intake system consists of a distributing pipe, two accumulators and six individual intake ports. The decisive and revolutionary approach consists of the geometric dimensions of the distributing pipe and the individual intake ports. Compared to a classical intake manifold, the distributing pipe of the expansion intake system is longer and has a smaller diameter, and the intake ports are shorter.

Existing intake manifolds, e.g. the resonance intake manifold, utilise the air vibrations in the intake system to fill the cylinders with as much fuel-air mixture as possible. The compression effect (compression of air) arising during the air vibrations is used for this purpose. The disadvantage of a resonance intake manifold, especially in turbo engines, is that the air is heated up when it is compressed. This means that the fuel-air mixture in the combustion chamber cannot be ignited with the best possible efficiency. For this reason, the current 911 Turbo uses a resonance intake manifold that is constructed so that, unlike naturally aspirated engines, this effect only occurs at higher rpm ranges. At maximum power at the highest rpm ranges, this effect is neutralised.

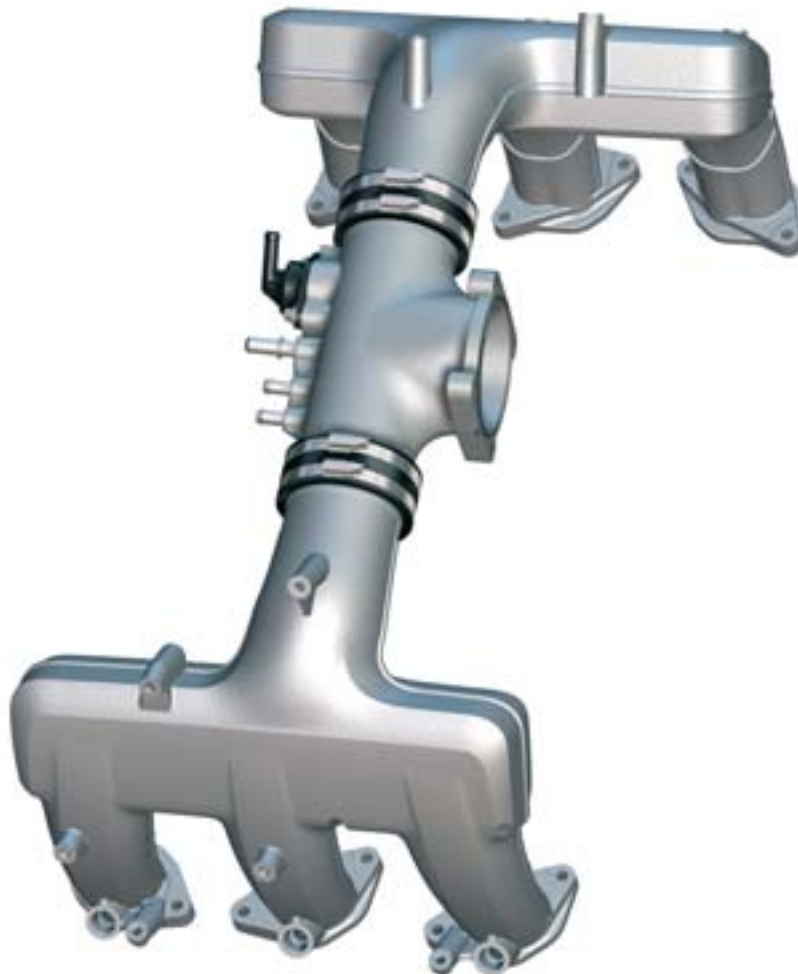


Fig. 12: Expansion intake system 911 GT2

		Expansion intake system	Resonance intake manifold
Distribution pipe	- Diameter	Small	Large
	- Length	Long	Short
Intake ports	- Length	Short	Long

The expansion intake system of the 911 GT2 turns the resonance charge effect around completely at higher engine speeds. The principle of expansion (expansion of air) is used instead of that of compression. During expansion, the air is cooled, and not heated like during compression. This effect results in a lower fuel-air mixture temperature in the combustion chamber, which means it can be ignited in a more efficient manner. As a result, the efficiency of the engine increases, thereby improving the engine power and reducing fuel consumption at high loads and engine speeds. The name

of the expansion intake system is derived from the physical effect of expansion.

The principle of the expansion intake system can only be applied in turbo engines. The cylinders are filled with slightly less air during the expansion phase than during the compression phase. This effect is compensated in the new 911 GT2 by a slightly increased boost pressure.

The increased boost pressure increases the temperature of the air downstream of the compressor. This effect may seem to be a disadvantage, but the raised temperature level means that a larger amount of heat is discharged by the charge-air cooler, which in turn means that the air temperature downstream of the charge-air coolers is only slightly higher than after conventional charging. This share of thermal energy is accommodated by using the expansion intake system which, through the expansion of the air in the subsequent intake system, causes noticeably lower temperatures of the fuel-air mixture in the cylinders at a practically equal air flow rate.

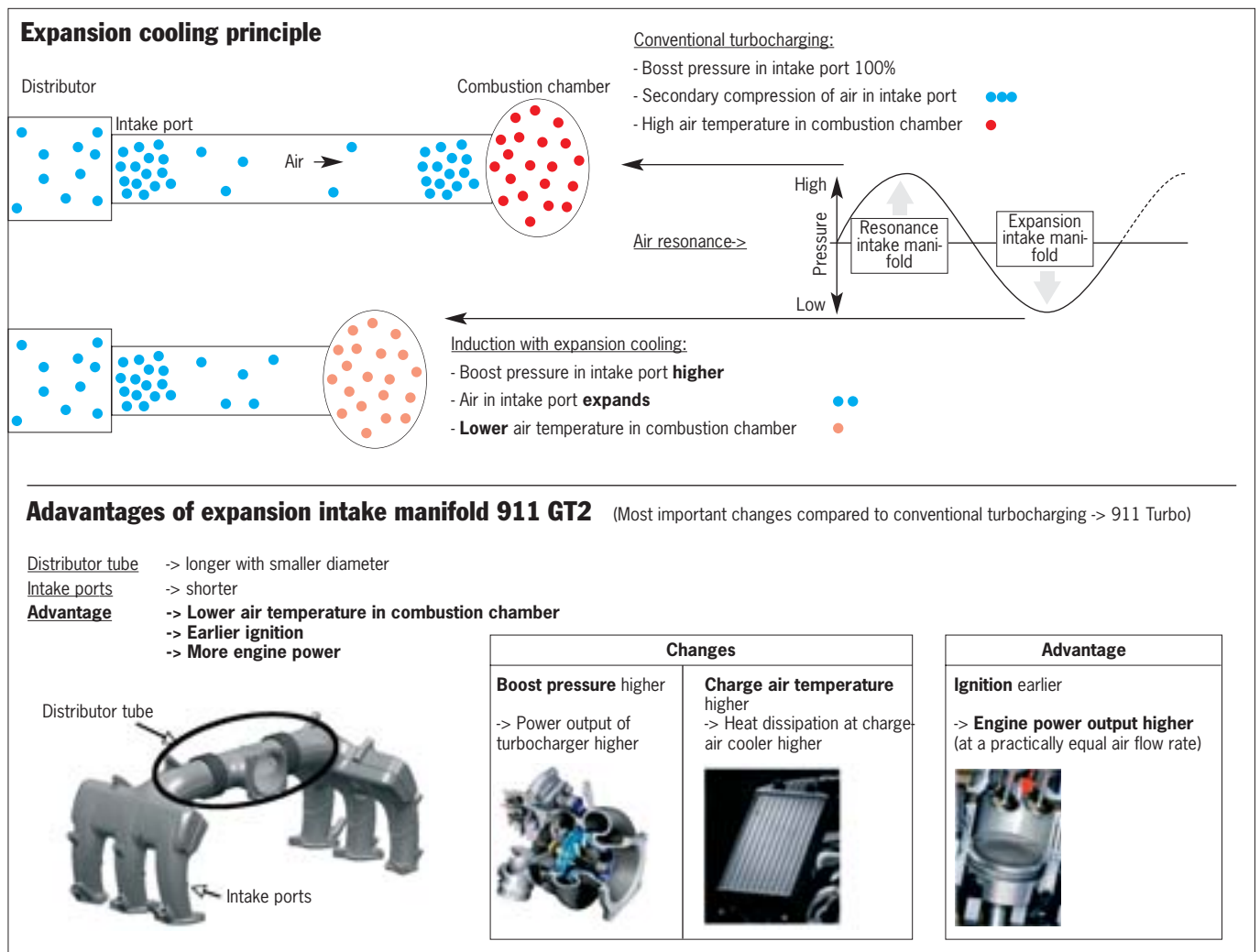


Fig. 13: Expansion intake system, operating diagram

As described above, these functional coherences, together with a perfectly efficient ignition, improve engine efficiency and result in a high engine output with low fuel consumption at high loads and engine speeds. At maximum power output, fuel consumption when using an expansion intake system is up to 15% lower than for turbocharging with a conventional intake manifold.

2.5 Exhaust system

The exhaust system of the new 911 GT2 is identical to that of the current 911 Turbo, apart from the rear silencer and tailpipes. The manifolds have a shape that is advantageous to flow, and have short pipes that are advantageous for the responsiveness of the turbocharger. The improved catalytic converter technology with one catalytic converter for each cylinder bank, and the improved secondary-air injection at cold start, improve the exhaust gas values from EU3, LEV and Gas Guzzler for the 911 GT2 (996) to EU4, LEV II* and no Gas Guzzler Tax* for the new 911 GT2 (*provisional values; confirmation expected during emissions classification for the USA at the end of 08/2007).



Fig. 14: Titanium rear silencer

2.6 Rear silencer

The new 911 GT2 is the first Porsche with road traffic approval that features a rear silencer and tailpipes made from titanium. The low weight and high temperature stability and material strength make titanium an impressive material. This measure not only reduces the entire vehicle weight of the new 911 GT2. The weight reduction on the rear axles has a positive effect on the weight distribution between the front and rear axles, and therefore on the vehicle balance. As a result, driving dynamics are further improved.

Existing exhaust systems in high-performance vehicles are usually made from stainless steel that is resistant to high temperatures. No other material is able to withstand the heavy strains. The more light-weight titanium could not be used until now for this temperature range. Now that a new titanium alloy has been developed especially for use in exhaust systems, it is possible to use this material for high temperature ranges. Titanium alloys are already used in aerospace designs. However, their limited plastic deformation and extremely high production costs have so far meant

that they were unsuitable for economic use in motor vehicles.

Thanks to titanium and the modification of the entire rear silencer, it was possible to reduce the weight of the entire exhaust system including tailpipes by approximately 30% (approximately 9 kg) compared to the current 911 Turbo. The weight advantage vis-à-vis the rear silencer is approximately 50%.

This weight reduction has also been assisted by modifications to the shape and interior design of the rear silencer. Taking into account the legally applicable sound emission limits, it was possible to make the system even smaller than that of the current 911 Turbo. The pipe diameter of the rear silencer was increased from 60 mm (911 Turbo) to 65 mm (911 GT2) in order to implement lower exhaust backpressure and therefore increase engine power.

2.7 Engine sound

The engine sound of a vehicle is mainly defined by the sound of the gas cycle and therefore by the intake manifold and the exhaust system. In a turbo engine, the intake sound is muffled by the compressor and the charge-air cooler, and the exhaust sound is muffled by the turbocharger. As a result, the sound development faces a special challenge.

The aim for the new 911 GT2 was to develop the highly dynamic sound typical for Porsche for both the interior and the exterior sound, while meeting all applicable sound emission laws worldwide. A main focal point was the implementation of a powerful sonorous

standstill sound that would acoustically underline the dynamic potential of this vehicle even at idling speed.

This objective was reached by developing the titanium rear silencer. The twin-branch exhaust system separately directs the exhaust flows from the two turbochargers and the catalytic converters downstream of them to the shared rear silencer. Perforated pipes then carry the two exhaust flows through pre-chambers and to a mixing chamber. When the two exhaust flows are combined, they result in the typical Porsche sound, which is uniquely dynamic and strident.

2.8 Engine management

Like the current 911 Turbo, the new 911 GT2 features the ME 7.8.1 engine management. This is based on the ME 7.8 of the 911 GT2 (996) and the enhancement of the current 911 generation.

The ME 7.8 has the following basic functions:

- Hot-film air flow sensor
- Static high-voltage ignition distribution with individual ignition coils for each cylinder
- Sequential fuel injection
- Idle-speed control via throttle valve
- Throttle valve control via electronic throttle

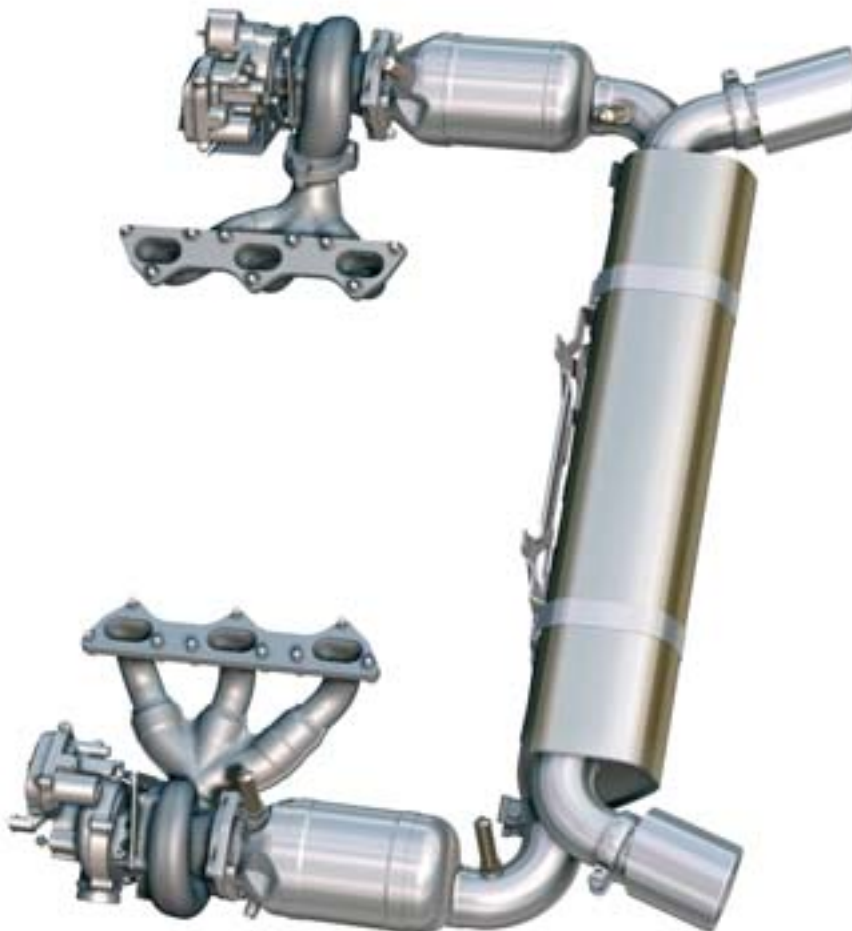


Fig. 15: Titanium rear silencer

- Stereo lambda control circuits with one lambda sensor upstream and one downstream of each catalytic converter
- VarioCam Plus control (continuous)
- Knock control with automatic fuel mix adjustment for fluctuating fuel quality

The ME 7.8.1 of the new 911 GT2, like that of the current 911 Turbo, has the following additional functions:

- Variable turbine geometry (VTG) control.
- Exhaust temperature control for protecting components of the variable turbine geometry using additional temperature sensors in the turbine housing
- On-board diagnosis via CAN bus
- Continuous lambda control circuits

The Launch Assistant (see chapter “Control systems”) acceleration function is used specifically for the new 911 GT2, and is ensured by existing input and output control factors of the ME 7.8.1. The main factors used are the input values for load signal and clutch pedal switch, and the output values for injection and ignition timing.

2.9 Oil Supply

Tried and tested dry-sump lubrication with a separate engine oil tank is used to supply the new 911 GT2 with oil. This classic technology is used for especially high-performing engines, such as the current 911 GT2 and 911 Turbo models, and ensures sufficient oil supply even at extreme and continuous longitudinal and lateral acceleration. The amount of oil in the entire oil cycle is approximately 11 litres, as in the 911 Turbo.

Like the 911 GT2 (996) and the current 911 Turbo, the new 911 GT2 has nine oil pumps (eight oil extraction pumps and one pressure pump). There are two oil extraction pumps for the turbochargers, four oil extraction pumps in the cylinder heads (two per cylinder head), and two extraction pumps and one pressure pump in the crankcase.

3 Transmission

3.1 Transmission

Like the previous model, the new 911 GT2 is only available with a 6-speed manual transmission. The transmission has already been used in the 911 GT2 (996), and in the 911 GT3 CUP (996) and 911 GT3 RSR (996) racecars. In its basic form, it is also used in the 911 GT3, the 911 GT3 RS and the 911 GT3 CUP (997) racecar.



Fig. 16: Transmission

The ratios and gear wheel sets for gears 1 - 6 have been adjusted in the new 911 GT2 to adapt them to the torque curve and improve acceleration capability. All gear wheel sets have been widened to ensure component strength when the engine power, increased from that of the 911 GT2 (996), is transferred to the road via the wider rear wheels. The same as for the previous model, durability is increased by the steel synchroniser rings for the 2nd to 5th gears in the new 911 GT2.

The new 911 GT2 also features the current 911 generation selector housing, for high shift dynamics and short shift throws. Together with the low ratio on the transmission input lever already used in the 911 GT2 (996), the entire shift ratio of the new 911 GT2 is approximately 22% lower than that of the 911 GT2 (996) and the current 911 Turbo. In addition, the shift cables and stop on the selector housing and the transmission input have been modified and made stiffer in order to improve shift precision. The spring and slot forces in the transmission have also been modified to improve the bounce of the gearbox.

Key features:

- Control cable shifting with direct actuation through low shift lever ratio
- Pressure-fed oil spray lubrication supplied by oil pump
- Transmission oil cooling through transmission oil/water heat exchanger to ensure durability even under extreme strain
- Steel synchroniser rings for 2nd to 5th gears for more exact gear changes even under very high strain
- Adjustable gear ratios thanks to gear wheels that are slotted into the transmission shaft rather than moulded on (only for use on race circuits)
- Dual-mass flywheel
- Clutch control without servo support

3.2 Rear differential lock

Just like the 911 GT2 (996), the new 911 GT2 also features a mechanical rear differential lock with asymmetrical action as standard. The locking values are 28% for traction and 40% for overrun. These values have been changed slightly from the previous model (40% for traction, 60% for overrun), and adapted to the specific handling of the new 911 GT2 with improved driving dynamics.

The asymmetric locking values are tuned and designed for the specific construction and driving characteristics, e.g. weight distribution, traction requirements, engine drag torque, driving stability including load change and suitability for cornering.

High locking values result in good driving dynamics with stable load alteration behaviour, but increase understeering in traction. Low locking values enable more neutral handling for increased driving dynamics. The precondition for reducing the locking values is an improved basic stability of the chassis and its connection to the body. This is achieved in the new 911 GT2 especially through its modified front axle with modified control points for the wishbones and special tuning for suspension, dampers and anti-roll bars.

The differential lock gear wheels of the new 911 GT2 are under more strain because of the increased engine power, and have been reinforced as compared to the previous model.

4 Chassis

For the first time, a chassis with actively adjustable shock absorbers is used in a 911 GT2 as standard. The Porsche Active Suspension Management (PASM) system familiar from the current 911 generation was specially tailored to the requirements of the new 911 GT2. The characteristic performance features, such as extremely sporty driving with superior handling even on race circuits, and high driving safety, were taken into account.

Key features:

- Vehicle lowered by approximately 25 mm (compared to the 911 Carrera), lower centre of gravity
- Adjustable damper system Porsche Active Suspension Management (PASM)
- Adjustable anti-roll bars at front (4) and rear (3), adjustable height and toe for adjusting to individual handling requirements on race circuit

- Axle geometry adjustment range for use with race tyres and the resulting requirements (e.g. camber settings) on race circuit
- Front wheel carrier with newly positioned control points for tie rods and wishbones, to stabilise handling particularly at high speeds
- Improved wheel guides (particularly rear axle)
- Aluminium rear cross member
- Variable steering ratio (same as current 911 generation)
- Porsche Ceramic Composite Brake (PCCB) with large brake discs on the front axle and improved disc technology.
- 19-inch wheels
- Sports tyres
- Tyre Pressure Monitoring System (TPM)

4.1 Front axle

The new 911 GT2 is based on the Mc-Pherson front axle concept of the current 911 GT3. It has been adapted to the increased performance potential through stiffer suspension/dampers/anti-roll bars. The wheel carriers have also been enhanced especially for the new 911 GT2 to improve driving dynamics and stability.

The Porsche Active Suspension Management (PASM) with unique damper struts was not used on the 911 GT2 (996), but is used on the new model. It has exterior coils and a height-adjustable spring carrier, which enables the vehicle to be lowered and the individual wheel loads to be adjusted if necessary. This was the same for the 911 GT2 (996). The traction and pressure stage of the single-tube gas-filled shock absorbers has a sporty tuning similar to that of the 911 GT3. The cylindrical coil springs with



Fig.17: Front axle

linear characteristic are arranged axially to the shock absorber struts (as in the 911 GT3). Their geometric arrangement and spring carrier are based on standard racing coil springs, so that adjusted chassis tuning can be used during motorsport events on closed-off tracks at relatively low effort.

For precise damper bearing and therefore low interference with the axle kinematics during spring deflection, the support bearings are fitted with a uniball joint, like on the 911 GT2 (996).

For the first time, the 911 GT2 has a toe that can be fine-tuned. This is done through adjustment plates on the bottom wishbone, and results in high steering precision and a stable straight run.

Like the previous models and those in the current 911 GT3 models, the shock absorbers of the swivel bearings in the new 911 GT2 are fastened with a double clip. The control points for the tie rods were adapted to reduce the impact of the lowered vehicle height, which is approximately 25 mm lower than that of the 911 Carrera, on the overall geometry of the axle.

The new 911 GT2 has a 4-level tube-type anti-roll bar on the front axle (911 GT2/996: 5-level) with more rigid tuning than the current 911 Turbo. The adjustment is done via the various bolting points of the anti-roll bar on the pushrod between the anti-roll bar and the wheel carrier. The adjustment changes the lever arm of the anti-roll bar and thereby adjusts the effective stiffness of the anti-roll bar. Anti-roll bar adjustment makes it possible to individually fine-tune the chassis if necessary. The anti-roll bar suspension gear was redesigned to reduce the steering influence of the anti-roll bar.

The front axle wheel carrier was redeveloped for the new 911 GT2 in order to improve driving stability. The new position of the control points for wishbones and the corresponding kinematic changes in spring deflection made it possible to improve the steering and cornering behaviour. The advantages are high straight run and track stability, particularly at high speeds, and neutral cornering behaviour.

4.2 Rear axle

The new 911 GT2 rear axle is an enhanced version of existing 911 GT2 (996) multi-link suspension LSA (light, stable, agile). Its basic design is the same as that of the current 911 GT3. As on the front axle, the rear axle has been modified for increased performance potential through stiffer suspension/damper/anti-roll bar tuning. The tube-type anti-roll bar can now be adjusted in three stages, like in the current 911 GT3 and unlike in the 911 GT2 (996), which is

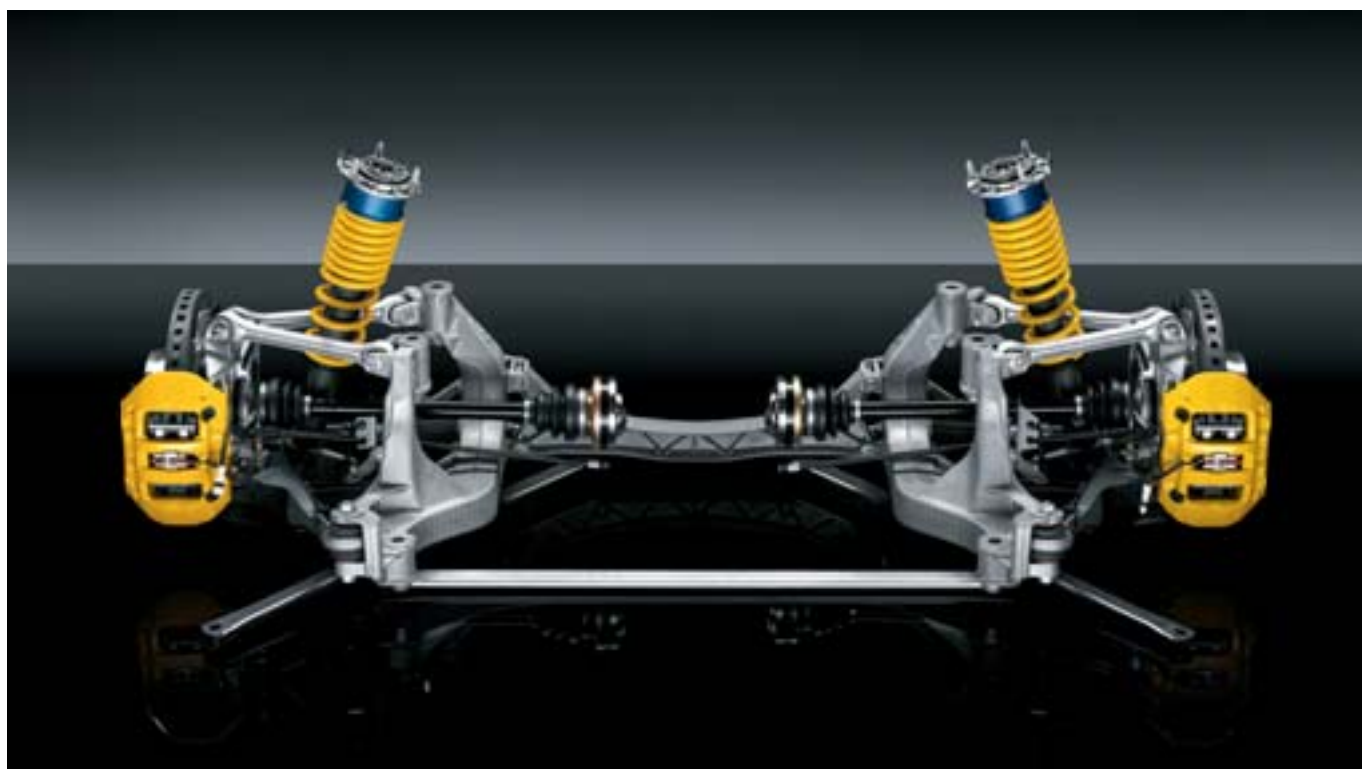


Fig. 18: Rear axle

adjusted in four stages. In addition, individual chassis fine tuning is now possible for both the front and rear axles if required.

The rear axle was also modified in several ways to meet the specific requirements of the 911 GT2 for motorsports purposes. As in previous models, the rubber bearings have been replaced by metal liners, which are also used in the 911 Turbo. This was done in order to stiffen the connection of the trailing links to the body and fit in with the overall vehicle character. As a result, steering precision and driving dynamics are improved. The wishbone and wheel carriers were adopted from the current 911 Turbo.

As on the front axle, the shock absorber struts with PASM on the rear axle also feature an additional exterior coil and a height-adjustable spring carrier. The traction and pressure stage of the single-tube gas-filled shock absorbers has a sportier tuning than on the 911 Turbo. The coil springs are cylindrical, arranged axially to the shock absorber strut axle and have progressive setup options. The

upper spring carrier is made of aluminium and mounted on stiff bearings. The support bearings are the same as those in the current 911 GT3 models and feature a ball joint to support the suspension strut.

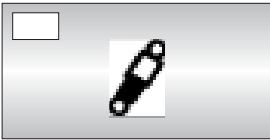
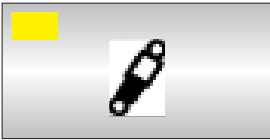
Like the previous models and the current 911 GT3 models, the new 911 GT2 features an aluminium rear cross member that reduces the weight and supports a balanced weight distribution between the front and rear axle. At comparable load limits, the aluminium version requires slightly more space than the steel rear cross member. As the 911 GT2 is only available with manual transmission, there is sufficient space for the aluminium version without affecting ground clearance. In the 911 Turbo, this space was required for the optional Tiptronic S transmission.

4.3 Porsche Active Suspension Management (PASM)

The PASM adjustable damper system familiar from the current 911 generation now features special tuning to meet the increased driving dynamics requirements of the new 911 GT2.

Like the current 911 models, the new 911 GT2 has two characteristic maps. These have special tuning and programme contents in the new 911 GT2 (like in the 911 GT3 models):

PASM combines two chassis variants, both in the new 911 GT2 and in other models. However, unlike in the 911 Carrera/Turbo models, the system is not used to increase the level of comfort. Instead, it offers the sportiness and agility already known from the previous 911 GT2 model without neglecting everyday comfort. This tuning already provides the new 911 GT2 with high driving dynamics on public roads and on wet race circuits.

Programme		new 911 GT2 (997)	911 Carrera/Turbo models (997)
Normal mode	PASM button not pressed 	<u>Sporty and stiff</u> Tuning for driving on wet public roads or race circuits	<u>Sporty and comfortable</u> Tuning for more comfort
Sport mode	PASM button pressed* 	<u>Racing-oriented and stiff</u> Tuning for especially high driving dynamics and reduced body movements, particularly for race circuits with dry roads	<u>Sporty and stiff</u> Tuning for increased driving dynamics.

* including "PASM Sport" in the instrument cluster display



Fig. 19: PASM damper, operating diagram

As the body movements are reduced to a minimum in Sport mode thanks to PASM, handling becomes particularly precise and targeted. This increases the driving dynamics potential of the new 911 GT2 even further, particularly on dry roads. PASM corresponds to existing features and gearshift strategies of the current 911 Carrera/Turbo models regarding the design and operating principles.

4.4 Vehicle height

The vehicle height of the new 911 GT2 is 25 mm lower than that of the 911 Carrera.

The vehicle level is approximately 5 mm higher than that of the 911 GT3 models, mainly because of the larger wheel circumference and corresponding tyre diameter on the rear axle and the resulting space requirements of the rear wheel housings. The new 911 GT2 has the same 19-inch wheel size, but has broader tyres on the rear axle (325 mm instead of 305 mm as on the 911 GT3 and 911 GT3 RS). At equal tyre cross-section of 30% (tyre designation

325/30 -> relationship between tyre height and tyre width = 30%), this results in raising the tyre edges and thereby increasing the tyre diameter by approximately 12 mm.

When calculated from the centre of the tyre to the road (half the diameter increase), this automatically results in raising the vehicle level on the rear axle by approximately 6 mm. When calculated from the centre of the tyre to the body, this results in additionally raising the vehicle position due to the additional space requirements of the larger wheels in the wheel housing when taking into account unchanged spring travel.

The vehicle position was also raised slightly on the front axle to compensate for this measure. This ensures not only the aerodynamic balance, but also a sufficient approach angle on the front axle. In total, this results in a vehicle height of 1,285 mm, which is 25 mm lower than that of the current 911 Carrera.

4.5 Steering

The steering of the new 911 GT2 corresponds to that of the current 911 generation.

Differences to the 911 GT2 (996):

- Variable steering ratio
- Additional height adjustment for the steering wheel
- Electrical steering wheel lock
- Longer tie rods

The advantages of a variable steering ratio are increased agility, particularly on bendy roads, and driving stability at very high speeds. This is made possible by the adoption of the existing steering ratio for the centre position at small steering

Overview of vehicle heights			
	Vehicle height	Difference	Comments
911 Carrera	1,310 mm		without PASM
911 Turbo	1,300 mm	-10 mm	with PASM (as standard)
911 GT2	1,285 mm	-25 mm	with PASM (as standard)
911 GT3 /GT3 RS	1,280 mm	-30 mm	with PASM (as standard)

wheel movements. Particularly at high speeds, the vehicle remains calm and does not react in a jittery manner should a driver inadvertently oversteer on bad roads, for example.

The steering ratio becomes increasingly direct at steering wheel angles above approximately 30°, and the steering wheel revolutions from lock to lock are reduced from 2.98 (for 911 GT2 (996)) to 2.62. The variable steering ratio results in increased agility on bendy roads, particularly in tight corners.

Handling when turning corners in city traffic is also improved. Steering reacts far more spontaneously. Parking also becomes easier, as the wheels turn more strongly as the steering wheel angle increases. In spite of the larger wheels,

the turning circle is 10.9 m, which is a similar level to that of the 911 GT2

(996), where it is 10.6 m.

The manual height adjustment for the steering wheel is another improvement. In addition to axial adjustment by 40 mm, the steering wheel height can now be adjusted by 40 mm in the new 911 GT2. This is the same as for the current 911 generation. Thanks to this feature, it is possible to further personalise the ideal seat and steering wheel position as well as the view of the instruments.

Like the current 911 generation, the new 911 GT2 has an electrical steering wheel lock instead of a mechanical one. It is a component of the networked engine immobiliser system and provides particularly high protection from theft.

4.6 Brake system

Like the previous model, the new 911 GT2 is fitted with the Porsche Ceramic Composite Brake (PCCB) as standard.

Differences to the 911 GT2 (996) MY 2005:

- Larger brake discs on the front axle
- Aluminium brake disc chambers on the front axle

The brake-disc diameter on the front axle has been increased from 350 mm to 380 mm in order to further increase braking performance on the new 911 GT2, in the same manner as on the current 911 GT3 and 911 Turbo models (PCCB optional). These dimensions correspond to those of the Carrera GT (front and rear), and to those of the 911 GT3 Cup (997) front axle.

Overview of the brake system (changes compared with the previous model are shown in bold)	new 911 GT2 (997) MY 2008	911 GT2 (996)	
		MY 2005*	MY 01 – MY 04
Disc technology	Enhanced ceramic	Enhanced ceramic	Ceramic
Front axle			
Brake callipers	6-piston monobloc fixed callipers	6-piston monobloc fixed callipers	6-piston monobloc fixed callipers
Brake disc chamber	Aluminium	Stainless steel	Stainless steel
Disc diameter (mm)	380	350	350
Disc thickness (mm)	34	34	34
Pad area per pad (cm ²)	112	112	112
Rear axle			
Brake callipers	4-piston monobloc fixed callipers	4-piston monobloc fixed callipers	4-piston monobloc fixed callipers
Brake disc chamber	Stainless steel	Stainless steel	Stainless steel
Disc diameter (mm)	350	350	350
Disc thickness (mm)	28	28	28
Pad area per pad (cm ²)	62	62	62
Brake booster	Tandem 9-inch	Single 10-inch	Single 10-inch

*last year of production

Like the current 911 GT3 models, the new 911 GT2 also features an aluminium brake disc chamber on the front axle. Aluminium replaced steel for the first time in the new 911 GT3 Cup (997) in March 2005. The new 911 GT2 adopts this technology to further reduce the unsprung masses. Aluminium brake disc chambers weigh approximately 50% less than steel ones. Together with the light ceramic brake discs, this has reduced the unsprung masses for the entire vehicle by approximately 1.8 kg.

The enhanced Porsche Ceramic Composite Brake (PCCB) system on the new 911 GT2 has the following advantages over brake systems with grey cast iron discs:

- Quicker responsiveness
- Very high fading stability through constant friction values

- High safety reserves at high loads
- Mass approximately 50% lower than that of grey cast iron discs of the same type
- Brake discs that are resistant to corrosion

The previous model, 911 GT2 (996), was already fitted with enhanced disc technology in its last model year, 2005. The most important changes to the disc technology used for the 911 GT2 (996) up to model year 2004 are: the shape of the interior cooling channels increases the ventilation effect, brake cooling and rigidity of shape, and the material mixture is more resistant to corrosion. These characteristics have increased the performance and lifespan of the brake discs.

4.7 Wheels/tyres

The new 911 GT2 is fitted with 19-inch light alloy wheels and sports tyres as standard. In order to improve driving dynamics, steering behaviour and lateral stability, the wheels and tyres are larger than those of the 911 GT2 (996). The tyres on the rear axle are also wider in order to improve traction, and therefore acceleration and braking potential. In addition, 5-mm wheel spacers are used on the rear axle in order to utilise the largest-possible lateral acceleration and anti-rolling stability. (Note: In Japan, wheel spacers are not used because of applicable approval requirements for wheel covers).

The new wheel size, combined with the sports tyres specially tuned for the vehicle, including larger wheel contact

Technical data (changes compared with the 911 GT2 (996) are marked in bold)		new 911 GT2 (997)	911 GT2 (996)		911 Turbo (997)
Wheels/tyres		MY 08	MY 04 - 05	MY 01 - 03	MY 08
Designation		19-inch GT2 wheel	18-inch GT3 wheel	18-inch Turbo Look II wheel	19-inch Turbo wheel
Front axle	Wheels	8.5J x 19	8.5J x 18	8.5J x 18	8.5J x 19
	Rim offset	53 mm	40 mm	40 mm	56 mm
	Tyres	235/ 35 ZR 19	235/40 ZR 18	235/40 ZR 18	235/35 ZR 19
Rear axle	Wheels	12J x 19	12J x 18	12J x 18	11J x 19
	Rim offset	51 mm	45 mm	45 mm	51 mm
	Wheel spacers	5 mm (not in Japan)			
	Tyres	325/30 ZR 19	315/30 ZR 18	315/30 ZR 18	305/30 ZR 19
Tyres		Sports tyres	Standard tyres	Standard tyres	Standard tyres
Wheel hub cover		GT2 logo	GT2 logo	Monochrome Porsche Crest	Monochrome Porsche Crest
Track width					
Front axle		1,515 mm	1,495 mm	1,495 mm	1,490 mm
Rear axle		1,550 mm	1,520 mm	1,520 mm	1,548 mm



Fig. 20: 911 GT2 wheel

surface, has the following advantages:

- Very high lateral acceleration at high cornering speeds
- Exact handling and steering behaviour
- Optimum acceleration and braking potential

The 911 GT3 RS (996) was the first vehicle equipped with sports tyres as standard. Like the current 911 GT3 models, the new 911 GT2 will be equipped as standard with a new generation of tyres, which was

developed to be suitable for the entire chassis and vehicle development. It has a very high performance potential with high traction, lateral acceleration and short stopping distances, particularly on dry roads.

(Note: There is increased danger of aquaplaning on wet roads due to reduced tread depth)

Run-flat systems

Like the 911 GT2 (996) and the current 911 generation, the new 911 GT2 will be equipped as standard with a tyre repair kit containing a tyre sealing compound and a tyre pressure compressor with integrated tyre pressure monitor. Like the current 911 GT3 models, the new 911 GT2 also features two guide bolts that protect the ceramic brake discs (PCCB) during wheel changes. The elements of the tyre repair kit are located in a storage bowl in the bottom section of the luggage compartment floor, along with the vehicle tool kit.

In Saudi Arabia, Qatar, Guatemala and the Virgin Islands, a spare wheel is usually required by law. A newly developed 19-inch high-pressure spare wheel (4J x 19 115/70 R19) will be available in these countries in addition to the tyre repair kit.

Tyre Pressure Monitoring System (TPM)

Like the current 911 Turbo models, the new 911 GT2 will be equipped worldwide as standard with the well-known Tyre Pressure Monitoring System (TPM) with permanent air pressure monitoring for each tyre.

Not only does the Tyre Pressure Monitoring System provide additional protection from possible tyre damage; it makes it possible to monitor the correct air pressure as well. This makes it possible to avoid creeping loss of pressure in individual tyres, and thereby prevents irregular tyre wear and increased fuel consumption.

5 Control Systems

5.1 Porsche Stability Management (PSM)

For the new 911 GT2, the vehicle stability system Porsche Stability Management (PSM) will be available as standard for the first time in the GT models of the 911 line. This system was specially tuned for the new 911 GT2, and now enables the deactivation of individual function components. In turn, this means that even extremely sporty drivers are offered a sufficient number of variations for personal dynamic requirements. Thus, the new 911 GT2 avails itself of a control system that provides a significant increase in active safety and takes full advantage of the dynamic potential.

Basics

Since its introduction in 1998, Porsche Stability Management (PSM) comprises the following: longitudinal dynamics control Traction Control (TC) with ABD (automatic brake differential), ASR (anti-slip regulation) and MSR (engine drag torque control) systems, and ABS (anti-lock braking system) and the Stability Control (SC) lateral dynamics control. Stability Control is the lateral dynamics control function for stabilising the vehicle. It does this by wheel-selective braking when the vehicle oversteers or understeers, and through specific intervention in the engine control (throttle valve) to reduce load change reactions.

For detailed basic information on PSM, please refer to the Product Information releases for the Carrera 4 (1996) or the 911 Turbo. The anti-slip regulation integrated in PSM has been tuned specifically for the new 911 GT2 and results in more dynamic and faster adjusting behaviour. This improves

acceleration, e.g. when the wheels are spinning on loose surfaces or wet roads. This happens because the throttle valve remains open for as long as possible during the adjusting behaviour (unlike existing tuning), and because the power is reduced by reducing the ignition angle and fuel injection instead of closing the throttle valve. This adjusting strategy means that hardly any boost pressure is lost, improving acceleration.

The brake system of the new 911 GT2 has been designed for sporty use with high dynamic and performance requirements. It achieves a highly sensitive brake system control with an exact pressure point and finely dosable brake intervention. The new 911 GT2 achieves quick responsiveness of the brake system and high brake performance through its ceramic brake system PCCB, which it features as standard.

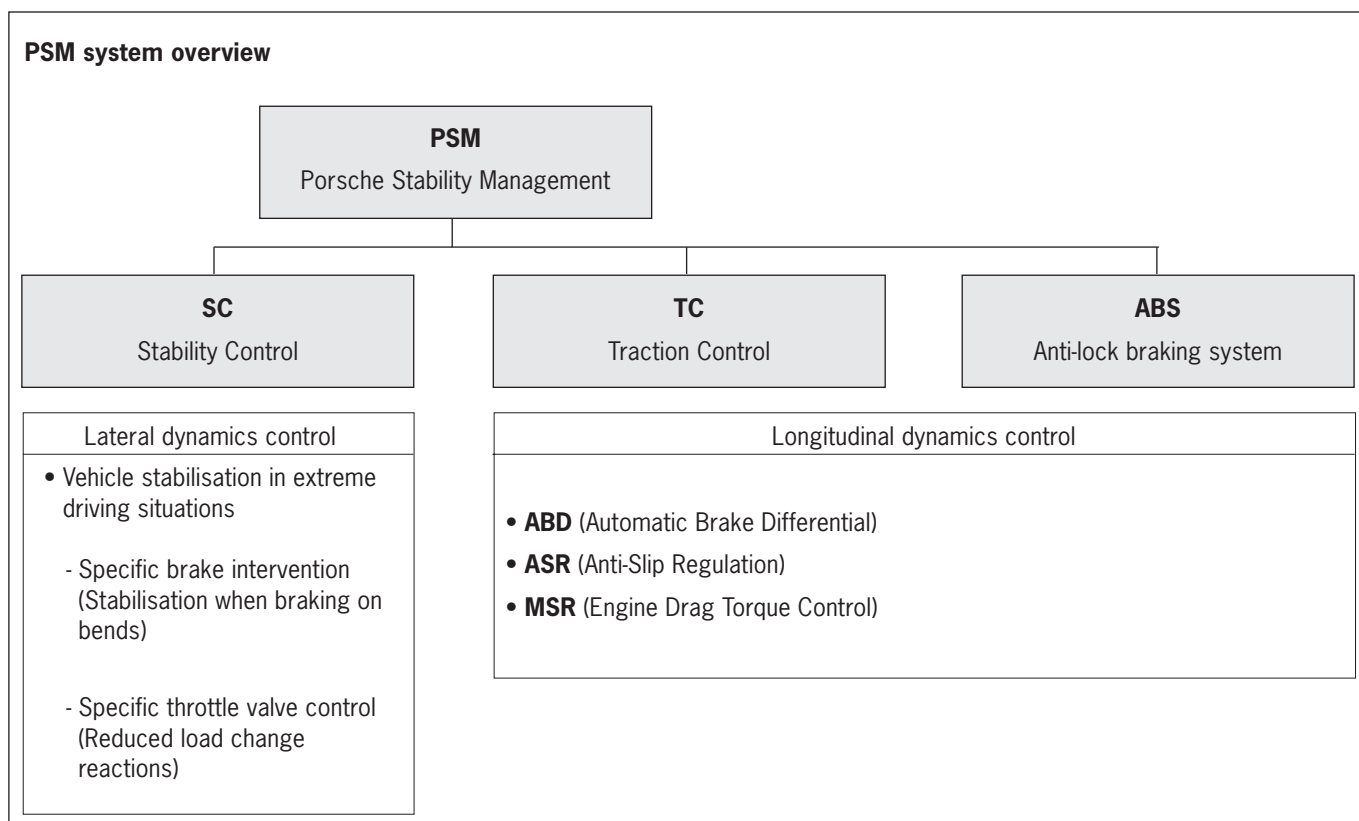




Fig. 21: SC OFF and SC+TC OFF buttons in the control panel/centre console

Enhancement


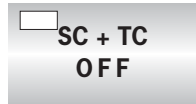

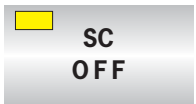
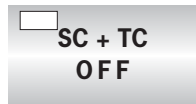

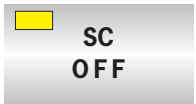
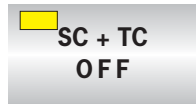
A new function and shift strategy for deactivating PSM has been developed for the new 911 GT2, particularly for sporty use on race circuits. This is based on the longitudinal dynamics control Traction Control (TC) used in the Carrera GT and 911 GT3 (997) models, and is an enhancement that integrates the Stability Control (SC) lateral dynamics control and its deactivation for motorsports-oriented dynamics.

In the new 911 GT2, the PSM is not deactivated using a PSM OFF button, as in other Porsche models, but in 2 stages using an SC OFF and an additional SC+TC OFF button. As for the familiar PSM OFF button, these buttons are located in the front centre console.

The SC OFF button deactivates the lateral dynamics control and hence the wheel-selective braking and targeted throttle valve control when over- or understeering, or during load changes. The SC+TC OFF button also deactivates the longitudinal dynamics control for spinning or locking drive wheels with ABD (automatic brake differential), ASR (anti-slip regulation) and MSR (engine drag torque control) systems. Note: Pressing the SC+TC OFF button automatically activates the SC OFF function, so that all systems are deactivated.

Another feature concerns the reactivation of the deactivated stabilisation systems. In the case of the familiar PSM OFF function, the lateral dynamics control (Stability Control) is automatically reactivated when braking in the ABS control range in order to stabilise the vehicle. In the new 911 GT2, the lateral dynamics control (Stability Control) is not reactivated during braking, even in the ABS control range, when either SC OFF or SC+TC OFF has been selected. This function and shift strategy is an enhancement of PSM and enables personal racing-oriented dynamics for an extreme and personal performance on the race circuit.

The ABS (Anti-lock Braking System) function remains active in all function levels and switch settings, as it does not affect racing performance.

PSM function overview		911 GT2 (997)	911 Turbo (997)
Basic setting		(PSM ON)  	(PSM ON) 
Lateral dynamics control	Stability Control (SC)	active	active
Longitudinal dynamics control	Traction Control (TC)	active	active
	ABS	active	active
Switch-off level 1		SC OFF  	PSM OFF 
Lateral dynamics control	Stability Control (SC)	deactivated	deactivated
Longitudinal dynamics control	Traction Control (TC)	active	deactivated
	ABS	active	active
Reactivation	Stability Control (SC) Traction Control (TC)	No reactivation of SC and TC during braking	Standard or Sport mode ¹⁾ off: SC ²⁾ reactivated during braking when ABS control threshold is exceeded on at least one front wheel Sport mode ¹⁾ on: SC ²⁾ reactivated during braking when ABS control threshold is exceeded on both front wheels
Switch-off level 2		SC+TC OFF  	not available
Lateral dynamics control	Stability Control (SC)	deactivated	
Longitudinal dynamics control	Traction Control (TC)	deactivated	
	ABS	active	
Reactivation	Stability Control (SC) Traction Control (TC)	No reactivation of SC and TC during braking	

1) In combination with Sport button from Chrono Turbo package option

2) SC with targeted throttle valve control for reducing load change reactions -> feature also included in TC function MSR PSM function overview

Area of operation/analogy		Area of operation	Enhancement/analogy
Basic setting	(PSM ON)	Public roads	PSM, introduced for GT standard production sports cars with the new 911 GT2
Switch-off level 1	SC OFF	Race circuit for drivers with sporty ambitions and racing drivers on wet roads	Function like that of Carrera GT and 911 GT3 (997) in basic setting (TC ON)
Switch-off level 2	SC+TC OFF	Race circuit for high performance and racing drivers on dry roads	Function like that of Carrera GT and 911 GT3 (997) with traction control off (TC OFF)

The following sections describe the customer benefits of the individual switch settings.

Basic setting (PSM ON)

Noticeable increase in active safety. Traction Control (TC) for longitudinal dynamics, with ABD (automatic brake differential), ASR (anti-slip regulation) and MSR (engine drag torque control) systems and ABS (Anti-lock Braking System). Stability Control (SC) for lateral dynamics, particularly through wheel-selective braking when over- or understeering.

SC OFF

Increases dynamics on race circuits by deactivating Stability Control. This enables the vehicle to be steered around corners with the required drift using targeted steering movements and/or accelerator pedal control. Sportily tuned Traction Control remains active and has high traction through ABD and active safety through ASR and MSR.

SC+TC OFF

Complete deactivation of dynamic control systems. This enables personalised racing-oriented handling, e.g. fast and controlled cornering with defined drift through targeted destabilising of vehicle in front of corners by short sharp braking.

5.2 Launch Assistant

The new 911 GT2 is the first standard production Porsche vehicle with manual transmission with an assist system for maximum acceleration from 0 km/h. The Launch Assistant, as it is known for the new 911 GT2, is easy to use and enables the best possible move-off performance that can be repeated easily.

Function

The Launch Assistant is activated by depressing the accelerator pedal completely when the clutch pedal is depressed and the vehicle is stationary. The engine speed increases and is limited to approximately 5,000 rpm. The boost pressure displayed in the instrument cluster rises to approximately 0.9 bar after a short time. Once these preconditions have been fulfilled, the vehicle moves off at maximum acceleration through the fastest-possible release of the clutch.

The acceleration process itself is mainly automatically controlled for optimum traction through intervention by the engine management. The clutch remains closed. This reduces the load and avoids high clutch wear during the pulling-away process, which always applies a high load.

Function description

The Launch Assistant functions are embedded in the software of the engine control equipment (Motronic) and the anti-slip regulation (PSM). Control and adjustment are performed via the CAN bus.

When preparing for start by completely depressing the accelerator pedal, and when the throttle valve is opened completely, the engine speed is limited to approximately 5,000 rpm by disabling individual fuel injections. After the accelerated start, control is performed by comparing the actual torque map (determined from Motronic data and wheel rev speed in PSM control unit) to the target torque map, which is stored in the PSM unit and was determined by experiment. Differences between the actual and target maps result in control signals to the engine management. The engine uses these to vary the injection moment and disable or enable fuel injections for specific cylinders, resulting in the largest-possible transferable torque for optimum traction and acceleration.

In case of irregular wheel slip, anti-slip regulation supports the control system by using the electronic braking differential for wheel-specific braking. This ensures the best possible wheel traction.

As a result, the control units responsible for the fastest possible accelerated start are controlled in the best possible manner.

Combination with the PSM, SC OFF* and SC+TC OFF* control systems

(*for a description of these functions, see PSM in the chapter "Control systems")

For maximum and reproducible accelerated start, PSM should be activated (buttons SC OFF and/or SC+TC OFF not pressed), or lateral dynamics control (SC) be deactivated via the SC OFF button. With these switch settings, the engine control unit (Motronic) is active for maximum pull-away engine speeds of approximately 5,000 rpm, and

anti-slip regulation with Traction Control (TC) is active for optimum longitudinal dynamics and traction.

Anti-slip regulation is completely deactivated when the SC+TC OFF button is pressed. With this switch setting, Stability Control and Traction Control, which is responsible for optimum traction, are both deactivated. This also deactivates the functions responsible for a simple and reproducible acceleration process: ABD (Automatic Brake Differential) and ASR (anti-slip regulation), and hence wheel-selective braking (ABD) and additional varying of ignition times and fuel injection modulation.

Even though pressing the SC+TC OFF button deactivates all assist systems for optimum acceleration, a professional driver can control the acceleration process by sensitively controlling the acceleration and clutch pedals.

Summary

For maximum acceleration from 0 km/h:

- PSM activated (buttons SC OFF and/or SC+TC OFF not pressed) or SC OFF button pressed
- Clutch pedal completely depressed
- Accelerator pedal completely depressed (-> engine speed approximately 5,000 rpm)

- Boost pressure displayed in the instrument cluster rises to approximately 0.9 bar after a short time
- Quickly release clutch pedal completely
- Continue depressing accelerator pedal completely
- Change gear when shift indicator lights up in instrument cluster.

The Launch Assistant of the new 911 GT2 provides maximum acceleration from 0 km/h and is easy to use. It also enables reproduction of short acceleration times and maximum acceleration at reduced load on components (clutch).

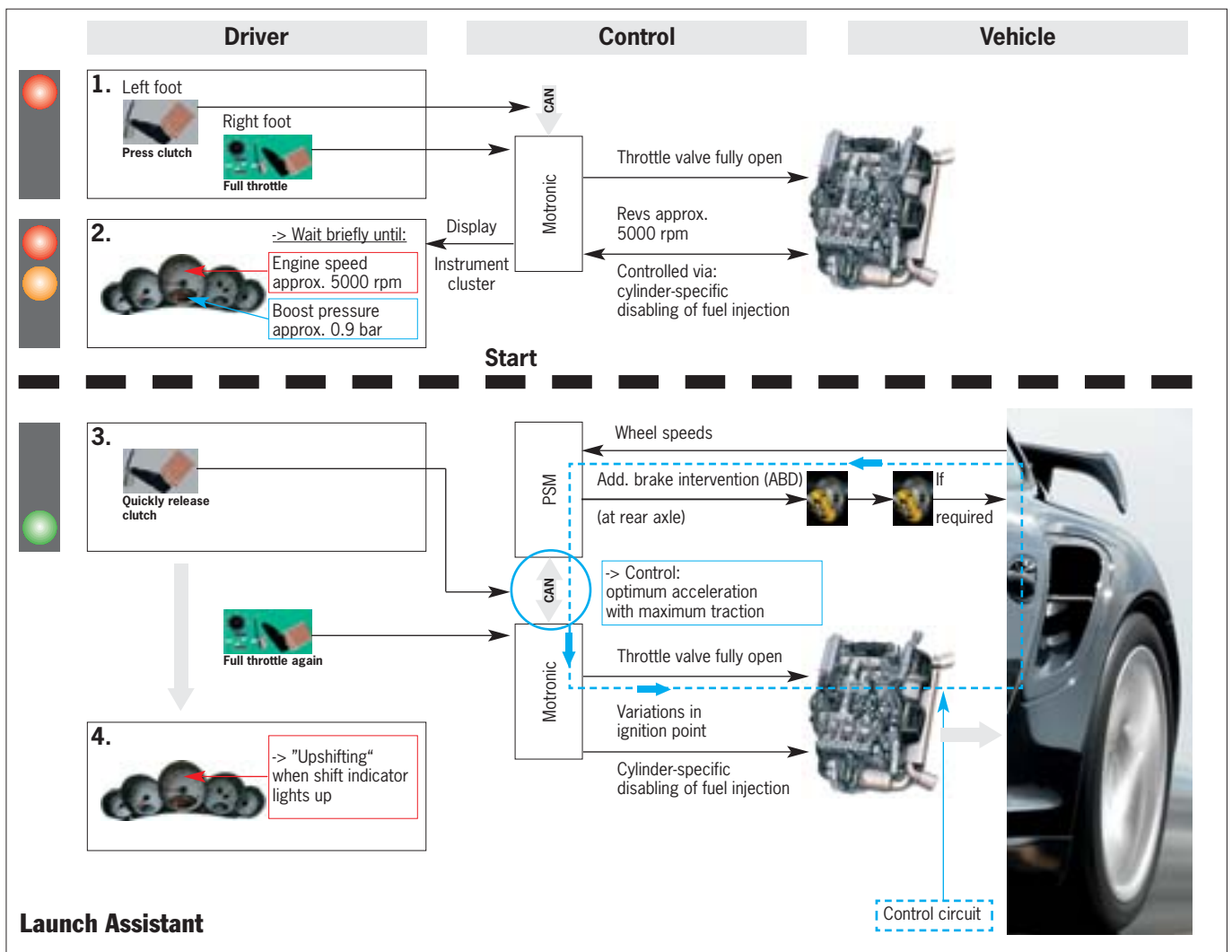


Fig. 22: Launch Assistant function processes

6 Body

The broad body of the new 911 GT2 is based mainly on the current 911 Turbo. The most noticeable changes to the 911 GT2 are the modified headlights, the strip-shaped LED direction indicator lights at the front, and the tailpipes integrated in the rear apron.

It is differentiated from the current 911 Turbo and from its previous models by unique elements, such as the front apron, the rear apron with puristic tailpipes, the individual sill covers, and a rear lid with large rear wing and integrated ram air boxes.

All sporty vehicles require a low weight for high performance. This applies particularly to the 911 GT models. The body of the new rear wheel drive 911 GT2 meets this requirement through the use of aluminium, plastic, and glass and carbon fibre-reinforced plastic.

As in the previous model, the new 911 GT2 bodyshell is based on the current 911 Turbo. In combination with rear wheel drive, the deletion of the front axle drive linkage provides extra space, which can be used for a large fuel tank. The fuel tank was modified for the new 911 GT2, and now has a 90-l refill volume (911 GT2/996: 89 l).

6.1 Bodyshell

Like the current 911 GT3 models, the new 911 GT2 also features additional welded sleeves for engine bearings on the rear cross member. This leads to a more regular distribution of the load forces transferred to the body from engine and transmission via the engine bearings. Springs and dampers are tighter than on the 911 Turbo, making these forces stronger in the new 911 GT2.

Based on the body measures mentioned above, and like in the current 911 Carrera models, torsional rigidity was increased by 8% and flexional resistance by 40% compared to the values of the previous model for the new 911 GT2.

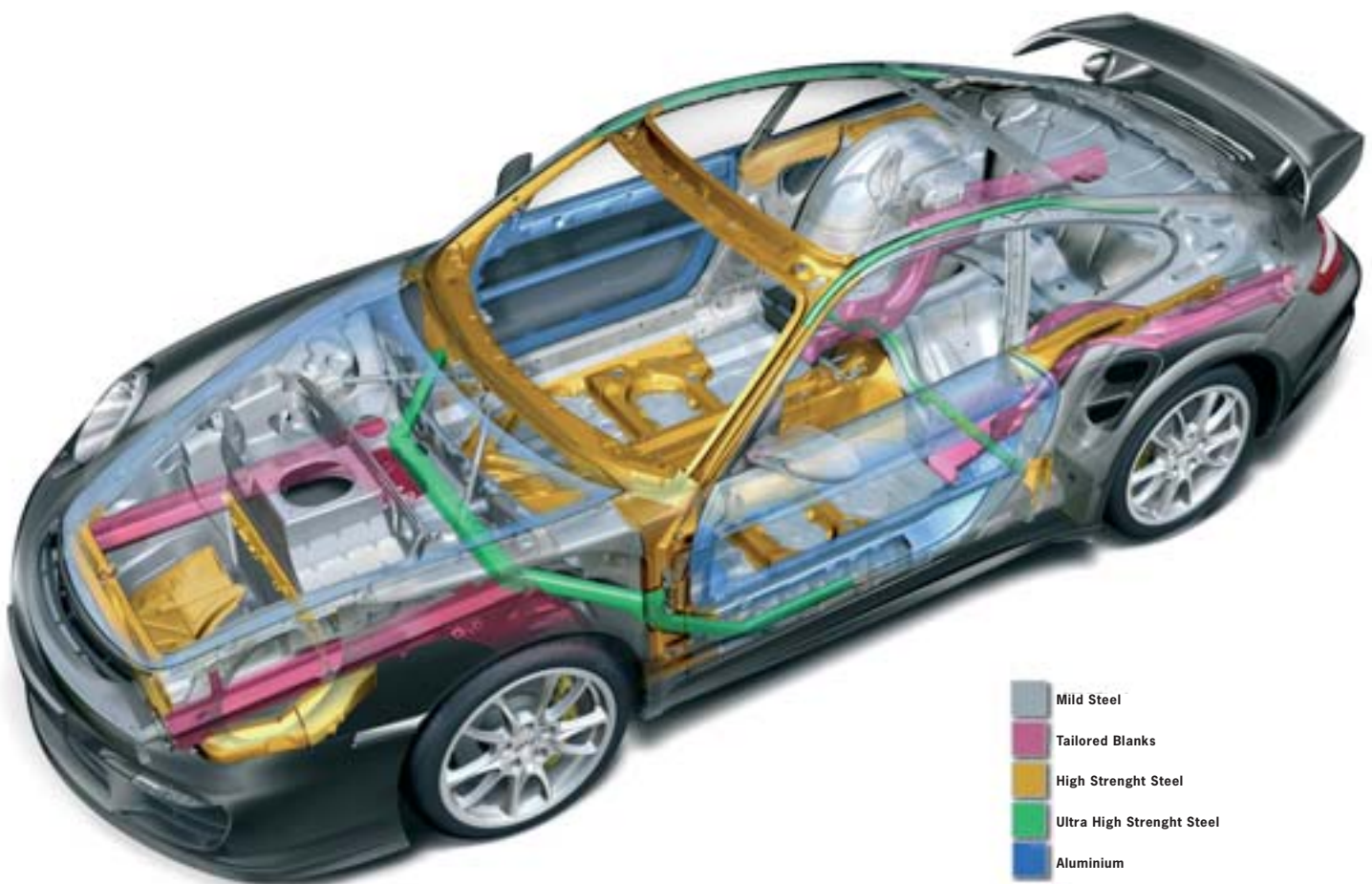


Fig. 23: Bodyshell

6.2 Doors and lids

Unlike in the previous model, the luggage compartment lid and doors are made of aluminium for the lowest possible vehicle weight. Like in the current 911 Turbo and 911 GT3 models, the luggage compartment lid is approximately 6 kg lighter and the doors are each approximately 7 kg lighter when made of aluminium instead of sheet steel.

6.3 Front apron

The new 911 GT2 front apron with integrated LED direction indicator lights has been newly developed while incorporating characteristic design features of the current 911 Turbo. As well as the striking styling, obvious differentiation and aerodynamic and thermodynamic optimisation, the following features differ from the current 911 Turbo:

- Enlarged air openings for increased cooling requirements
- Additional exhaust openings ahead of the luggage compartment lid (like the 911 GT2/996 and 911 GT3 models/997)
- Air ducts with improved flow
- Modified lattice structure on the air openings
- New black front spoiler lip (unpainted)
- Newly positioned strip-shaped direction indicators
- No fog lights

The engine power of the new 911 GT2 is higher than that of the current 911 Turbo, requires more engine cooling, and hence makes more demands on the front radiator. These requirements are met by larger air intake openings for the water cooler in the front of the new 911 GT2, and by an additional exhaust air opening in front of the luggage compartment lid (already featured on the 911 GT2 (996)). The two lateral water coolers require an efficient air supply to ensure a high engine and cooling performance. In order to ensure the required air flow rate while considering the space and flow conditions, the fog lights featured in the 911 Turbo could not be used for the new 911 GT2. Without this measure, it would not be possible to supply sufficient air to the lateral water coolers.

As in the 911 GT2 (996), the additional air outlet in front of the luggage compartment lid improves the radiator through-flow and cooling performance. It also improves the aerodynamic downforce on the front axle.

The new 911 GT2, like the current 911 Turbo generation, features the strip-shaped LED direction indicator lights. However, their position was raised on the new 911 GT2 because of the lower vehicle level and the legally required minimum height. In absolute terms, they are still on the same height as on the 911 Turbo.

The exhaust air from the radiators laterally integrated in the front apron is guided through specially developed wheel housings and used to cool the brakes. Like in the current 911 GT3 models and the 911 GT2 (996), and to reduce the vehicle weight, the new 911 GT2 does not feature the fan fitted to the left-hand vehicle cooler in the 911 Carrera models.

The new front spoiler lip is black and unpainted. As the vehicle level is approximately 25 mm lower than that of the 911 Carrera, the lower edge of the front spoiler lip is close to the road surface for aerodynamic reasons in the 911 GT2 (996) and the new 911 GT2. This exposed position means that damage to the front spoiler lip cannot always be prevented, e.g. when driving up steep ramps or on rough roads. For



Fig. 24: Front apron

these reasons, the front spoiler lip of the 911 GT2 (996), the current 911 GT3 models and the new 911 GT2 is classified as a wearing part. The front spoiler lip is unpainted to keep wearing part costs and replacement of the front spoiler lip as low as possible. It is black because the material used is polypropylene (PP).

6.4 Rear apron

The rear apron was developed especially for the new 911 GT2. Like in the current 911 Turbo generation, and unlike in the previous models, the tailpipes have been integrated into the rear apron. The two exterior tailpipes of the new 911 GT2 are round so that they correspond to the puristic vehicle design.

Other characteristic features include the lateral vent openings for the charge-air coolers, which are gill-like in the new 911 GT2. The lateral vent openings in the rear area for the engine and charge-air coolers are also gill-shaped. The bottom section of the new rear apron is painted Black and fitted with an integrated and striking lip to finish off the design and emphasise the horizontal lines of the broad rear of the vehicle.



Fig. 25: Rear apron



Fig. 26: Rear wing

6.5 Side skirts

The new 911 GT2 has unique side skirts on the lower edge of the sides. Like on the current 911 Turbo and 911 Carrera 4 models, they have the typical Black colour. They are designed both to protect the sides stone impacts and for visual differentiation while harmonically integrating with the broad rear side panels.

6.6 Rear lid with rear wing

The new unique fixed rear wing is one of the most striking design features of the new 911 GT2. Its position, size and shape are an important factor in realising

the aerodynamic downforce on the rear axle. The wing contours have been completely redesigned for the new 911 GT2, and an integrated spoiler lip has been added in the rear area. This design is based on the rear wing of the 911 GT2 (996) with characteristic sideplates. The position is ideal for the chassis tuning and therefore supports balanced handling at high speed ranges.

Like the previous model, the engine of the new 911 GT2 has ram air boxes to supply combustion air. The ram air boxes were repositioned to take better advantage of the ram air effect. In the 911 GT2 (996), they were integrated vertically in the wing supports. In the new 911 GT2, they are externally and laterally integrated in the wing supports for better flow (for a function description of the ram air box, see the section on air intake in the chapter "Engine").

A consistent enhancement of the material concept has enabled the weight of the rear lid and wing body modules to be reduced by approximately 36% (4.5 kg) in the new 911 GT2. In the 911 GT2 (996), the rear lid and wings were made of glass fibre-reinforced plastic (GFRP). The new 911 GT2 also has a rear lid made of GFRP. The rear wing, however,

is made of an efficient material mixture: glass fibre-reinforced plastic (GFRP) and carbon fibre-reinforced plastic (CFRP) in sandwich construction.

It consists of a glass fibre-reinforced plastic (GFRP) core, which is coated in stabilising and strengthening carbon fibre-reinforced plastic (CFRP) (this structure is similar to that of the new sports bucket seats, see the section on the interior in the chapter “Body”). Thanks to this design principle, the component weighs little and is very strong.

Fuel tank volume (refill volume) overview Values in litres	new 911 GT2 (1997)	911 GT2 (1996)
Europe Row - LHD	90	89
Europe Row - RHD	66	64
USA	67	63

(LHD = left-hand drive; RHD = right-hand drive)

6.7 Fuel tank

The fuel tank of the new 911 GT2 is similar to that in the current GT3 models. The 911 GT2 (1996) fuel tank was modified to increase the effective refill volume from 89 l to 90 l. As in the 911 GT2 (1996), the fuel tank itself is a combination of the fuel tank top used in the 911 Carrera 4 models and the fuel tank bottom used in the 911 Carrera models.

6.8 Luggage compartment

The new 911 GT2 luggage compartment is the same as that of the current 911 Turbo and 911 GT3 models. The luggage compartment capacity is 105 l, a similar capacity to that of the 911 GT2 (1996), which is 110 l. The slight reduction of approximately 5 l results from changes to the shape of the luggage compartment, increased crash requirements and additional strengthening elements in the luggage compartment floor.

Like the current 911 generation, the new 911 GT2 features the familiar emergency release for the luggage compartment lid (trunk entrapment) for NAFTA countries.



Fig. 27: Luggage compartment



Fig. 28: Interior

6.9 Interior

The interior of the new 911 GT2 is similar to that of the current 911 GT3, with a Black leather interior, is based on the current 911 generation and adopts some stylistic features from the Carrera GT. Its two-seat concept, which means it has no rear seats and therefore a reduced weight, clearly shows that the new 911 GT2 is a motorsport-oriented Porsche model.

The new 911 GT2 displays the following modifications compared to its predecessor:

- Exterior design
- New steering wheel and gear lever generation
- Additional height adjustment for the steering wheel
- New separate side airbag system (door panel: head airbag; seats: thorax airbag)
- Pedals moved forward
- Front centre console as standard (911 GT2/996: optional)

The additional steering wheel height adjustment and the pedals moved forward by 10 - 15 mm have improved the adjustment possibilities for the seat and steering wheel position and provide more space for tall people.

The new 911 GT2 has the following equipment to differentiate it from the current basic 911 models and to illustrate its sporty character:

- Extensive Alcantara package (standard)
- Steering wheel rim of the standard GT2 3-spoke steering wheel
 - Gear lever grip
 - Handbrake lever grip
 - Seat centres in all available seat versions (except Clubsport package)
 - Door handles
 - Door panels
 - Lids of door storage boxes
 - Lid of storage compartment in the centre console
 - Roofliner (standard for all 911 Coupé models)

The Alcantara material concept is already used in the 911 GT3 RS (996) and the current 911 GT3 models. This concept is not only a visual upgrade of the interior with motorsports associations, but also increases the functionality by improving the grip, especially of dynamic control elements, e.g. steering wheel, gear lever and handbrake lever.

The steering of the new 911 GT2 corresponds to that of the current 911 GT3. The steering wheel rim is upholstered in Alcantara and features a slightly thicker upholstery than that of the 911 Turbo 3-spoke sports steering wheel due to the thickness of the Alcantara. Together with the steering wheel spoke trims painted Volcano Grey, this is a unique differentiation. The 3-spoke sports steering wheel in smooth-finish leather (I 460) and the 3-spoke multifunction steering wheel in smooth-finish leather (I 431) familiar from the current 911 generation are available as an option.

The standard Black leather interior can be replaced by Dark Grey natural leather, and other personalisation features can be ordered, e.g. Carbon finish.

Additional Interior equipment:

- Unique new sports bucket seats (for the first time in the 911 GT2)
- Instrument cluster with yellow pointers and increment markings (like Carrera GT and 911 GT3 models), shift indicator and GT2 logo on rev-counter
- Door entry guards and carpeted rear wall* with GT2 logo
(*not in conjunction with the optional Bose® Surround Sound System)

Sports bucket seat (standard)

As a world first, the new 911 GT2 features a newly developed sports bucket seat. The new 911 GT2 features this seat on the driver's side and passenger's side as standard in all country variants. Its specific design principle and the combination of its exceptional product characteristics as a sports bucket seat are outstanding.

The new sports bucket seat is a light racing bucket seat with folding backrest, integrated thorax airbag and manual fore/aft adjustment. The seat shell is



Fig. 29: Sports bucket seat

made from glass and carbon fibre-reinforced plastic (GFRP/CFRP). The surface of the seat shell is made of exposed carbon. The seat is always upholstered in leather, and in the new 911 GT2 it features a centre strip in Alcantara.

Design highlights of the new sports bucket seat

- Low weight
- High lateral support
- Racing bucket seat with backrest tilting function
- Racing bucket seat with integrated thorax airbag

The seat shell core is made from glass fibre-reinforced plastic (GFRP) and the outer shell is made from carbon fibre-reinforced plastic (CFRP). Thanks to this design principle, the component weighs little and is very resistant while still being economic. This highly developed technology is emphasised visually by the outer shell being made of exposed carbon. The weight advantage vis-à-vis adaptive sports seats is approximately 9 kg/seat.

Focal points while developing the new sports bucket seat were high lateral support and seat ergonomics and a foldable backrest. High lateral guides are characteristic of racing bucket seats and essential for very sporty driving, particularly on race circuits. The highly dedicated development work resulted in a sports bucket seat whose lateral support potential and seat ergonomics, with wide backrests and seat cushions, are comparable to the familiar lightweight bucket seat of the Carrera GT and the GT3 RS.

The foldable backrest is an outstanding element of the new sports bucket seat. It noticeably increases day-to-day usability and improves accessibility to the rear storage area. The folding function for the backrest is activated using a leather loop located laterally in the shoulder area of the backrest. This design principle provides high ergonomics and functionality as well as very lightweight construction.

The rotation points of the foldable backrests are located in the upper pelvic area of the side bolsters. This is a unique construction characteristic of the new sports bucket seat. This position makes it possible to combine two opposing functions for the first time, namely high



Fig. 30: Sports bucket seat

lateral support throughout the whole seat area, and a foldable backrest.

In conventional sports seats with foldable backrests, the backrest rotation points are located in the rear area of the seat cushion. The backrest can only be folded if the side bolsters in this area and in the seat cushion are cut out. This means that the lateral support in the pelvic area, which is a characteristic of racing bucket seats, is impossible.

The backrest rotation points of the new sports bucket seat have been moved forward to the area of the side bolsters, and this results in a new geometric situation. The racing bucket seat characteristics with high lateral support, even in the pelvic area, are ensured despite the foldable backrest.

In addition, a thorax airbag is integrated laterally in the backrest of the new sports bucket seat. It is the same version and size as the thorax airbags used in the current 911 model range. It is part of the Porsche Side Impact Protection System (POSIP) and provides additional side impact protection for the first time in racing bucket seats. The integrated thorax airbag allows a racing bucket seat to be offered in the USA for the first time and meet current safety requirements.

Now that the sports bucket seat is used in the new 911 GT2, it will probably be optionally available for other 911 models as well as for the Boxster and the Cayman from November 2007.

Adaptive sports seats (optional)

The adaptive sports seats familiar from the current 911 models will also be available as an individual option in the new 911 GT2. As well as electrical adjustment with a memory function for all seat features, these seats offer lumbar support on the driver and passenger side and 4-way lateral support adjustment. The central strips are in Alcantara to fit in with the rest of the interior in the new 911 GT2.

Seat occupancy detection (USA/Canada/Mexico only)

Like all 911, Boxster and Cayenne vehicles for the USA, Canada and Mexico from model year 2006, the new 911 GT2 will be equipped as standard with a seat occupancy detection using a weight sensor on the passenger side.

This technology is also called “Advanced Airbag” and prevents the passenger airbag (front airbag) from deploying if the weight on the seat is lower than a preset limit. The seat occupancy detection is required to deactivate the passenger airbag when Reboard child seats are fitted and infants (< 1 year) are in the vehicle. The passenger airbag is deployed in case of a front impact if the weight on the passenger seat is above approximately 27 kg.

Sports seat



Clearance for tilting function

Sports bucket seat



No clearance for tilting function



Backrest pivot point

6.10 Clubsport package (not for USA)

A Clubsport package is optionally available at no extra cost for the new 911 GT2, as it was for previous models. Based on the current 911 GT3 models, the Clubsport package has the following features:

- Bolted rear roll-over frame
- Preparation for battery main switch
- 6-point seatbelt for driver (included)
- Fire extinguisher and bracket (included)

Note: In combination with the Clubsport package, the sports bucket seats are upholstered in flame-resistant fabric.

The following parts are available from the Porsche Motorsports department for use at motorsports events with FIA-GT regulations: the battery main switch and lateral bars for the roof and A-pillars (to complete the safety cage).



Fig. 31: Clubsport package

Note: The new 911 GT2 is fitted as standard with the reinforcing plates required for bolting the roll-over frame to the floor plate to make retrofitting of the entire roll-over frame easier, even without the Clubsport package.

7 Aerodynamics

Like in all Porsche models, exclusive design is not inconsistent with excellent aerodynamic vehicle properties in the new 911 GT2. The following aerodynamic challenges arose when developing the new 911 GT2:



Fig. 32: Aerodynamics

- High cooling air requirements for engine and brakes resulted in large air intakes in the rear area, which interfere with good drag coefficients
- The drag coefficient is further increased in comparison to “spoilerless” vehicles by measures for stabilising the vehicle at high speeds and resulting downforce on the front and rear of the vehicle caused by aerodynamic aids such as front spoiler and unique large rear wings
- Broad wheel/tyre combinations maximise traction but increase the vehicle's frontal area (A) and hence the drag ($cd \times A$)

Thanks to elaborate wind tunnel tuning and using lessons learned from motorsports, it was possible to achieve a drag coefficient of 0.32 for the new 911 GT2, despite high cooling requirements and downforce on the front and rear of the vehicle (911 GT2/996: $cd = 0.34$). This positions the new 911 GT2 at the top of its vehicle class.

The design of the front end, wheel housings, rear lid and wings, rear end and underbody were essential to achieving this success. The new front apron with separate spoiler lip, and the upper exhaust air guidance for the central radiator familiar from the 911 GT2 (996), reduce the air flow under the vehicle noticeably. The ideally positioned cooling air openings guide the air emerging behind the lateral radiators directly to the brake system. The aerodynamic measures at the front and rear were matched to each other in order to guarantee optimally balanced front and rear axles.

Lowering the vehicle height by approximately 25 mm compared to the current 911 Carrera lowers the centre of gravity and improves the aerodynamic characteristics. This measure reduces the vehicle's frontal area, which plays a part in the drag index, and the air flow that gets underneath the vehicle and creates unwanted lift forces.

As in the current 911 GT3 and 911 Turbo models, the underbody of the new 911 GT2 has large-scale panelling for good aerodynamics. The main elements correspond to the underbody panelling of the current 911 GT3 models, including the additional brake cooling on the rear axle.

Less obvious details - such as small integrated spoilers in the front end, and the underbody panelled with plastic parts - also meet aerodynamic requirements in the new 911 GT2. As well as meeting aerodynamic requirements, the underbody panelling has vent openings to cool components that are heavily heated. In addition, guide blades ensure that the brakes receive cooling air and make high load capacities possible even under extreme operating conditions.

8 Safety

All basic functions relevant to safety in the new 911 GT2 essentially correspond to those of the current 911 Turbo. For details, please refer to the relevant Marketing Concept and/or Product Information release.

8.1 Active safety

The new 911 GT2, like previous models, has a good basis for active safety thanks to high acceleration and deceleration values, the Porsche Ceramic Composite Brake (PCCB) as standard, and firmer basic chassis tuning.

Porsche Active Suspension Management (PASM) and Porsche Stability Management (PSM), which is introduced to the 911 GT models in the new 911 GT2, are additional components supporting active safety and further increase the safety standard of the 911 GT2.

8.2 Passive safety

The new 911 GT2 meets all laws and approval requirements for passive safety that are presently valid in the markets where it will be offered.

The bodyshell structure was largely adopted from the current 911 Turbo. In the front of the vehicle, energy is absorbed by straight longitudinal

members with a cross-section designed for optimum energy absorption. They support the transferred forces in the steel bulkhead cross member and hence reduce footwell intrusion in case of a crash. The fuel tank is located behind the deformation zone and is additionally protected by the front axle carrier. The fuel lines are located outside the deformation zone.

As well as safety features in the bodyshell, the new 911 GT2 (like the current 911 Turbo) features six airbags and energy-absorbing door panels and reinforcement. The airbag system comprises two-stage full-size airbags for driver and front passenger, thorax airbags laterally integrated in the seats for protection of the upper body in case of side impact, and head airbags located in the top section of the door panel.

The new sports bucket seat is a special feature. A real racing bucket seat with additional lateral support in the pelvic area, it now features a thorax airbag and a foldable backrest for the first time.

9 Electrics

The electric features of the new 911 GT2 are based on those of the current 911 generation. For basic information, please refer to the Product Information releases for the 911 Carrera or the 911 Turbo.

The following are key changes to the 911 GT2 (996) and features adopted from the current 911 generation:

- New headlight and tail light design
- Front direction indicator light in LED technology (like 911 Turbo)
- New instrument cluster
- New switches and control units in centre console
- Additional stopwatch in the switch panel (with Sport Chrono Package Plus option)
- Electronic ignition lock and new ignition key (generation 997)
- Seat occupancy detection (USA, Canada and Mexico)
- Enhanced interior and foot-well lighting
- Control units networked via CAN bus
- Audio and control data networked via MOST bus

9.1 Lighting

The front and tail lights of the new 911 GT2 are mostly based on the current 911 Turbo. This includes Bi-Xenon headlights as standard (like 911 GT2/996) and new high-performance LED direction indicators in the rear. Thanks to the removal of the fog lights used for the 911 Turbo, the lateral air ducts in the rear could be enlarged in the new 911 GT2, ensuring the increased supply of cooling air required for engine cooling.

Bi-Xenon headlights

Just like the 911 GT2 (996), the new 911 GT2 also features Bi-Xenon headlights with headlight cleaning system as standard. Like in the current 911 GT3 models (Bi-Xenon optional) and the Carrera GT, and to reduce the vehicle weight, the new 911 GT2 does not feature dynamic headlight levelling. Firm chassis tuning and short spring travel make this possible. The resulting low body movements (e.g. when accelerating) mean that prescribed tolerance levels for changes of the headlight cones (particularly upward movements) are met without headlight levelling.

Interior lighting

Just like the current 911 generation, the new 911 GT2 features white LEDs instead of yellow ones for instruments and controls. The instruments are easier to read, particularly in twilight, thanks to noticeably improved luminance. White lighting also lends the interior a high-quality look.

9.2 Battery

Like the current 911 Turbo models, the new 911 GT2 will be equipped as standard with a battery with a capacity of 70 Ah to ensure sufficient supply voltage. Like in the 911 Turbo models, the new 911 GT2 will be equipped with an 80 Ah battery in cold countries, e.g. Canada, Russia, Finland, Sweden and Iceland, or in combination with the optional Vehicle Tracking System. A 95 Ah battery capacity is required if the Vehicle Tracking System is used in cold countries.



Fig. 33: Instrument cluster

9.3 Instruments

The instruments of the new 911 GT2, like the current 911 GT3 models, have been specifically differentiated towards the 911 Carrera models. The instruments of the new 911 GT2 are based on those of the Carrera GT, and have the following characteristic differentiation features:

- Yellow pointers
- Yellow increment markings
- Rev-counter emphasised by titanium-painted background

The “GT2” logo in the rev-counter of the instrument cluster is a new feature. For the first time, the new 911 GT2 features the model logo in the rev-counter, as familiar from the 911 Turbo and 911 GT3.

Just like the current 911 GT3 models, the new 911 GT2 features a shift indicator in the instrument cluster for the first time. Shortly before the maximum engine speed of 6,750 rpm is reached, an upward-facing arrow lights up in the rev-counter. During sporty acceleration using the entire rev range, the illuminated arrow requests the driver to shift to the next higher gear. The time at which the arrow lights up depends on the gear and is designed to enable the best possible acceleration.

10 Audio and communication

For the first time, the new 911 GT2 features the Porsche Communication Management (PCM) information system as standard worldwide. It has a 5.8-inch colour screen with two-tuner frequency diversity, familiar from the current 911

GT3 models, with a total output of 2 x 25, and four loudspeakers. This combination provides very good display and operating comfort while ensuring low vehicle weight. The new 911 GT2 can optionally be retrofitted with the familiar Sound Package Plus (I 490), the BOSE(r) Surround Sound

System (I 680), and various modules for the PCM, such as navigation, telephone and logbook, in order to meet higher requirements. For detailed basic information on the familiar audio and information components, please refer to the Product Information release for the current 911 generation.

Changes compared with the 911 GT2 (996) are marked in bold .	new 911 GT2 (997)	911 GT2 (996 – MY'05)
Designation	Porsche Communication Management (PCM)	Porsche CDR-23 radio
Offering	Standard	Optional at no extra cost ¹⁾
Tuner	Two-tuner frequency diversity	Two-tuner frequency diversity
Loudspeakers	4	4
Switch panel	2 x 1.9-cm high-range speakers	2 x 10.0-cm mid-range speakers 2 x 1.9-cm high-range speakers
Doors	2 x 16.5-cm low-range speakers	–
Rear, lateral	–	–
Audio electronics	2 x 25 Watt power amplifiers	2 x 25 Watt power amplifiers

1) Basic equipment: without radio, speakers and amplifier



Fig. 34: Porsche Communication Management (PCM)



Fig. 35: BOSE® Surround Sound System

Loudspeakers

Just like the current 911 GT3 models, the new 911 GT2 also features four loudspeakers as standard. In the 911 GT2 (996), these were located in the switch panel. In the new 911 GT2, the loudspeakers are located in the switch panel and the doors to improve spatial sound projection.

The switch panel is equipped with a 1.9-cm high-range loudspeaker on the left and right, and each door features one 16.5-cm low-range loudspeaker. The new standard high-quality loudspeakers already provide very good sound performance and high, maximally clear playback volume.

10.1 Antenna systems

Just like the previous model, the new 911 GT2 is equipped as standard with a high-performance window antenna, standard PCM and the antenna diversity familiar from the current 911 Carrera

generation. The antennas are located in the windscreen and improve VHF reception in case of interferences. An external AM-antenna is optionally available at no extra cost to improve medium wave reception. This is located on the rear area of the roof.

10.2 Sound Package Plus (optional)

The Sound Package Plus option is available for the first time for the 911 GT2. Its features correspond to the standard equipment of the current 911 Carrera generation and the optional offer for the 911 GT3. Nine loudspeakers and an external linear amplifier create an exceptional sound experience with sufficient reserves. This is achieved

Sound Package Plus overview	
Designation	Sound Package Plus
Loudspeakers	9
Switch panel	2 x 1.9-cm high-range speakers 1 x 7.0-cm mid-range speaker (centre speaker)
Doors	2 x 10.0-cm mid-range speakers 2 x 20.0-cm low-range speakers
Rear, lateral	2 x 10.0-cm mid-range speakers
Audio electronics	4 x 25 Watt linear amplifiers in PCM Additional external linear amplifier (in luggage compartment) with: 2 x 55 Watt (for low-range speakers in the doors) 1 x 25 Watt (for mid-range speakers in switch panel) -> 235 Watt total output

Designation	BOSE® Surround Sound System
Loudspeakers	13 (including centre fill as additional loudspeaker in centre of switch panel)
Switch panel	2 x 2.5-cm Neodym high-range speakers 1 x 7.0-cm mid-range speaker (centre fill)
Doors	2 x 8.0-cm Neodym mid-range speakers 2 x 20.0-cm Nd(r) low-range speakers
Rear, lateral	2 x 2.5-cm Neodym high-range speakers 2 x 8.0-cm Neodym mid-range speakers
Rear compartment	Active subwoofer with 2 x 13.0-cm low-range loudspeakers
Audio electronics	7-channel MOST® digital system with: 5 x 25 Watt external amplifiers 2 x 100 Watt external TSM switched end stages -> 325 Watt total output
Noise compensation	AudioPilot® with dynamic loudness function for noticeably improved adjustment
Surround Sound	BOSE® Centerpoint® and SurroundStage® signal processing

through large high-quality loudspeakers. The Sound Package Plus has been adapted to the specific interior acoustics of the new 911 GT2. Like for the current 911 GT3, analogue filter levels in the external amplifier create spatially balanced sound even at very high volumes.

10.3 BOSE® Surround Sound System (optional)

The BOSE(r) Surround Sound System is available for the first time in the new 911 GT2 in order to meet very high expectations of the audio system. Scope and content correspond to that of the current 911 generation.

10.4 Navigation module (optional)

A navigation module is optionally available for the new 911 GT2, as it was for previous models. It was only available in combination with PCM for the 911 GT2 (996). For the new 911 GT2, it is available separately as an individual module for standard PCM, as it is for the current 911 generation.

The navigation module for the new 911 GT2 (I 672) comprises the familiar navigation features as well as enhanced navigation features, including an automatic route tracing and subsequent backtracing navigation function, as well as navigation in non-digitally mapped areas, using compass and GPS. These features are the same as those offered by the current 911 generation in model year 2008.

10.5 Telephone module for PCM (optional)

A telephone module for PCM is optionally available for the new 911 GT2, as it was for previous models. The system is familiar from the current 911 generation, and features a hands-free facility with improved communication quality and a hands-free microphone on the steering column. The tri-band telephone covers the GSM 900, 1800 and 1900 networks and is therefore also available in the USA.

10.6 PCM handset for telephone module (optional)

A PCM handset for the telephone module is optionally available for the new 911 GT2, as it was for the 911 GT2 (996).

10.7 Chrono Package Plus (optional)

The optional Chrono Package Plus is a new feature for the 911 GT2. It is based on the corresponding option for the current Boxster and 911 Carrera generation.

The new 911 GT2 is already equipped with sports features, such as sporty engine and chassis tuning, as standard. In the 911 Carrera and the Boxster models, these features are activated via the Sport button in the centre console. For this reason, the Chrono Package Plus for the new 911 GT2 features only the following:

- Analogue stopwatch in switch panel
- Digital stopwatch in instrument cluster
- Performance indicator in the PCM
- Personal memory

11 Equipment

11.1 Standard equipment (EU model)

The following overview contains the standard equipment of the new 911 GT2.

Engine:
6-cylinder horizontally-opposed biturbo engine, 3.6 l displacement, maximum output 390 kW (530 bhp)
Engine technology:
- Aluminium engine block and cylinder head
- Water cooling
- Four-valve technology
- Forged pistons and connecting rods
- 2 turbochargers with variable turbine geometry, 2 charge-air coolers
- Camshaft control and valve lift control with VarioCam Plus
- Hydraulic valve clearance compensation
- Dry-sump lubrication with external engine oil tank
- Electronic engine management (Motronic ME7.8.1)
- Electronic accelerator pedal
- Hot-film air flow sensor
- Sequential fuel injection (multipoint)
- Cylinder-specific knock control
- Two 3-way catalytic converters
- Stereo lambda control circuits
- Individual ignition coils, static high-voltage distribution system
- Expansion intake system
- Rear silencer and tailpipes made of titanium
- On-board diagnosis for monitoring the emission control system
Transmission:
6-speed manual transmission with dual-mass flywheel and transmission oil cooling
Rear-wheel drive
Locking differential with asymmetrical action (28% traction, 40% overrun)
Launch Assistant
Chassis:
8.5 J x 19 GT2 alloy wheels with 235/35 R0 19 sports tyres at front, 12 J x 19 GT2 alloy wheels with 325/30 R0 19 sports tyres at rear,
Wheel hub covers with GT2 logo
Anti-theft protection for wheels
Tyre Pressure Monitoring System (TPM)
Tyre sealing compound with electric compressor
Power steering with variable steering ratio
McPherson strut suspension, anti-roll bar at front
LSA multi-link rear axle, anti-roll bar at rear

Vehicle stability system PSM (Porsche Stability Management) with sports tuning, including ABS, ASR, ABD and MSR
Variable Damping System PASM (Porsche Active Suspension Management) with sports tuning and 25 mm more lowering compared to the 911 Carrera
Adjustable chassis for race track use (height, track, camber, anti-roll bars)
Brake system:
Porsche Ceramic Composite Brake (PCCB) with 6-piston fixed monobloc brake callipers at front and 4-piston fixed monobloc brake callipers at rear, brake discs internally vented and cross-drilled
Brake discs diameter 380 mm at front, 350 mm at rear
ABS 8.0 (integrated in PSM)
Brake pad wear indicator on each brake pad
Brake callipers painted yellow
Body:
Two-seater Coupé with wide body
Sheet steel hot-dip galvanised on both sides
Underbody panelling
Front end with air inlets, front lights, direction indicator lights, spoiler lip and additional exhaust air vent in front of the luggage compartment lid
Rear side sections with air inlets for charge-air cooling
Rear end with specific air outlets for charge-air cooling and raised integrated tailpipes
Rear lid with fixed rear wing and wing supports with integrated air congestion accumulators
Black GT2 logo on the rear lid
Sill covers with wheel spoilers in front of rear wheels
Aluminium luggage compartment lid
Aluminium doors
Bow-tupe door handles
Door stops with 3 stop positions
Front side windows with hydrophobic coating
Electrics:
Power windows with one-touch operation and short-stroke lowering
Front wiper system with 2 wiping speeds, adjustable intermittent wipe and heated washer jets
Electrically adjustable heated exterior mirrors (double-arm), aspherical on driver's side
Heated rear window
Porsche Communication Management (PCM): information system consisting of 5.8-inch colour display with twelve buttons, double tuner with antenna diversity, integrated CD audio player with MP3 play function, on-board computer with extended functions and parallel display of basic information on the instrument cluster
Audio system 2x 25 Watt and 4 loudspeakers
Uniform lighting concept for the entire interior with variable dimming in white
Interior orientation lighting
Foot-well lighting
Central locking system with remote control including luggage compartment lid release
Electric unlocking of the luggage compartment and engine lids
Weight-optimised battery
Lighting system:
Bi-Xenon headlights with headlight cleaning system
Separate auxiliary lights in front end with LED direction indicator lights

Rear fog light on driver's side
High-level third brake light in LED technology
Automatic coming home light
Instruments:
Cluster of five dial-type instruments integrated into cockpit
Instrument cluster with yellow pointers and increment markings and multi-function display in dot-matrix technology
Central rev counter with titanium-coloured background, GT2 logo and shift indicator
Analogue displays for revs, speed and oil pressure, oil temperature, coolant temperature and fuel level
Continuous digital display of total mileage, trip mileage, time, outside temperature and speed
On-board computer with boost pressure gauge
Passive safety:
Full-size airbags for driver and passenger
Porsche Side Impact Protection System (POSIP), comprising side impact protection in the doors, thorax airbags integrated in the side sections of the front seats and head airbags for driver and front passenger integrated in the door panels
3-point automatic front seat belts, with buckle on seat
Seat-belt height adjustment, seat-belt pretensioners and force limiters at front
Preparation for retrofitting the ISOFIX child seat anchoring system on passenger seat and switch-off function for passenger airbag
Engine immobiliser, safe lock system, alarm system with radar interior surveillance
Deformation zones at front and rear with integrated alloy bumpers
Air conditioning:
Climate control with integrated active carbon filter
Green-tinted heat-insulating glass
Interior equipment:
Sports bucket seats made from glass and carbon fibre-reinforced plastic (GFRP/CFRP), exposed carbon surface with leather covering and seat centre section in Alcantara, folding backrest with integrated thorax airbag, manual fore/aft adjustment, without rear seat system
Leather interior with following items in Alcantara: Gear lever, handbrake lever, door handles, exterior mirrors, lids of door storage boxes and lid of centre console storage bin
3-spoke GT3 steering wheel with lightly upholstered steering wheel rim in Alcantara and upholstered airbag module, spoke trim painted in Volcano Grey, with manual reach and height adjustment.
Plastic components in Black soft-touch paint, gearshift pattern trim and gear lever panel trim painted in Volcano Grey
Alcantara roofliner
Lockable, large glove box with CD storage box
Storage boxes in the doors
Three storage compartments in the centre console
Cup holder located above the glove box (integrated in the switch panel behind the decorative trim)
Illuminated vanity mirrors in both sun visors (driver and passenger side), door sill covers, rear carpet and rev counter with GT2 logo
Colours:
Solid colours – exterior: Black, Guards Red, Carrara White, Speed Yellow
Metallic colours – exterior: Basalt Black Metallic, Arctic Silver Metallic, Midnight Blue Metallic, Macadamia Metallic, Meteor Grey Metallic
Interior colour: Black

11.2 V-numbers

V-numbers are options (I-numbers) that are allocated as standard to various models depending on the respective national markets.

<ul style="list-style-type: none"> • <u>PCNA (V02/V36)</u> <ul style="list-style-type: none"> - Windscreen with grey top-tint - HomeLink (garage door opener) - Cruise control • <u>PLA (V34), PLA (V35), PLA (V37), PME (V32)</u> <ul style="list-style-type: none"> - Windscreen with grey top-tint - Cruise control • <u>PJ (V08/V18)</u> <ul style="list-style-type: none"> - Windscreen with grey top-tint • <u>PCA (V23)</u> <ul style="list-style-type: none"> - Windscreen with grey top-tint - Cruise control • <u>PCN (V33)</u> <ul style="list-style-type: none"> - Windscreen with grey top-tint - Sport Chrono Turbo Package - Floor mats <p>Vehicle Tracking System preparation (I-no. 674)</p> <p>This option is also allocated as standard in the following countries: PCGB, PIT, POF, PIB, PRU</p>	<p>I-no. 567) I-no. 607, PME: I-no. 608) I-no. 454)</p> <p>I-no. 567) I-no. 454)</p> <p>I-no. 567)</p> <p>I-no. 567) I-no. 454)</p> <p>I-no. 567) I-no. 640) I-no. 810)</p>
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11.3 Individual options

The following overview contains the individual options for the new 911 GT2.

0 = Optional equipment W = available without extra charge		Offering	Availability (at SOP = 10/07)
Exterior			
Code	Special colours The special colours are a selection of previously developed colours, some of which were components of the old colour range. Colour range: GT Silver Metallic, Atlas Grey Metallic, Ruby Red Metallic, Malachite Green Metallic Minimum lead time: 2 months	0	at SOP
498	Without model designation	W	
635	ParkAssist (rear) Parking assistant with four distance sensors integrated discreetly at rear of car	0	at SOP
567	Windscreen with grey top-tint Heavy tint on upper portion of windscreen	0	at SOP
P12	Automatically dimming interior/exterior mirrors with integrated rain sensor Rain sensor with 4-step sensitivity control for automatic wipe frequency	0	at SOP
446	Wheel hub cover With coloured Porsche Crest	0	at SOP
XAJ	Side skirts, painted Standard side skirts painted in exterior colour (left/right)	0	at SOP
XD9	Painted wheel spokes Partially painted in exterior colour, including wheel hub cover (order no. 446) with coloured Porsche Crest	0	02/2008
CRX	Wheel centre painted in different exterior colour Partially painted in different exterior colour, including wheel hub cover (order no. 446) with coloured Porsche Crest	0	at SOP
CNW	Exterior mirror housing in Aluminium Look, matt. Painted in Aluminium Look matt: exterior mirror (housing shell)	0	at SOP
CGA	Painted headlight cleaning system cover Painted in exterior colour: headlight cleaning system cover	0	at SOP
XXF	Red tail lights Lenses designed entirely in red.	0	at SOP
CMX	Decorative side strip with logo Decorative side strips with GT2 logo in Guards Red, Speed Yellow, Black, Aluminium Look, Carrara White, Orange, Green, Dark Blue or Maritime Blue	0	at SOP
CUC	Painted model designation Painted in exterior colour: model designation at rear	0	at SOP
Interior			
003	Clubsport package Bolted-on roll cage in rear, preparation for main battery switch Included: 6-point red seatbelt for driver's side and fire extinguisher with holder Offer only in connection with standard sports bucket seats for driver's and passenger's side Note: Front cage bars for FIA motorsports events are available via the Porsche Motorsport department	W	at SOP
608	HomeLink® (garage door opener) Freely programmable remote control integrated in the vehicle for up to three garage doors and gates, lighting systems or alarm systems Compatible with nearly all garage door and gate systems	0	at SOP

0 = Optional equipment W = available without extra charge		Offering	Availability (at SOP = 10/07)
Interieur			
454	Cruise control Automatic cruise control	0	at SOP
674	Vehicle Tracking System preparation Pre-wiring and increased battery capacity plus inclination sensor for alarm system, required for retrofitting the Vehicle Tracking System, available as part of the Porsche Tequipment programme. Note: For more information on the Vehicle Tracking System, please refer to the Tequipment catalogue	0	at SOP
P01	Adaptive sports seats Sport seats with electrical adjustment for all seat features including 4-way lateral support adjustment and lumbar support on driver and passenger side Electrical adjustment of all seat functions, including memory function Note: Seat centre strips in Alcantara, as for standard seats	W	at SOP
342	Heated seats Left and right, 2-stage	0	at SOP
509	Fire extinguisher Compact DIN EN3 powder extinguisher, contains 1 kg extinguishing agent. Located in front below the driver's seat Note: Not in combination with standard sports bucket seats	0	at SOP
810	Floor mats In Black with Nubuk surround and stitched Porsche logo in front (2-piece set)	0	at SOP
XFG	Guards Red instrument dials With GT2 logo	0	02/2008
CDP	Painted instrument surround Painted in exterior colour: instrument surround	0	at SOP
XSA	Sports seat backrests painted Painted in exterior colour: sports seat backrest shell, seat controls trim, fitting trim Note: Available only in standard and special colours	0	at SOP
XSH X SX X SY	Seat belts Silver Grey Guards Red Speed Yellow For driver's and passenger seat	0	at SOP
XME	Rear section of centre console painted Painted in exterior colour: rear centre console including ashtray cover, rear centre console storage box With smooth leather finish in interior colour: handbrake lever trim	0	at SOP
CME	Rear centre console painted in different exterior colour Painted in different exterior colour: rear centre console including ashtray cover, rear centre console storage box With smooth leather finish in interior colour: handbrake lever trim	0	at SOP
XXZ	Footrests in Sports look Newly designed footrest installed as standard in footwell on the driver's side, adjusted to the look of the standard pedals, made from robust material with stainless steel frame (matt brushed)	0	at SOP
CDG	Painted switch panel interior package Painted in exterior colour: side vents, centre vent including switch trim With smooth leather finish in interior colour and partly with decorative seams: defroster trim, side vent slats, centre vent slats Note: Combination with painted (order no. CDM) or leather (order no. CVP) switch panel trim strip and leather defroster vents (order no. CNB) is recommended	0	at SOP

0 = Optional equipment W = available without extra charge		Offering	Availability (at SOP = 10/07)
Interior			
CUF	Painted PCM package Painted in exterior colour: PCM trim, climate control panel trim, lower switch strip trim, lower storage box trim	0	at SOP
CET	Painted door opener trim Painted in exterior colour: door opener trim Note: Combination with painted B-pillar belt emission trim (order no. CDR) is recommended.	0	at SOP
CMC	Painted door opener Painted in exterior colour: door opener	0	at SOP
CDM	Painted switch panel trim Painted in exterior colour: switch panel trim including cupholder trim (5-part)	0	at SOP
CDN	Painted air vent slats Painted in exterior colour: side vent slats, centre vent slats With smooth leather finish in interior colour and with decorative seams: side vents, centre vent including switch trim	0	at SOP
CER	PCM handset painted Painted in exterior colour: Upper part of PCM handset With smooth leather finish in interior colour: lower part of PCM handset including console (3-part)	0	at SOP
CDJ	Painted gear lever trim Painted in exterior colour: gear lever trim	0	at SOP
CDR	Painted B-pillar belt outlet trim Painted in exterior colour: B-pillar belt outlet trim (left/right)	0	at SOP
Black painted interior (high gloss)			
CMG	Black switch panel interior package painted Painted in Black: side vents, centre vent including switch trim With smooth leather finish in interior colour and partly with decorative seams: defroster trim, side vent slats, centre vent slats Note: Combination with painted Black finish (order no. CMM) or leather (order no. CVP) switch panel trim strip and leather defroster vents (order no. CNB) is recommended	0	at SOP
CMF	PCM package painted Black Painted in Black: PCM trim, climate control panel trim, lower switch strip trim, lower storage box trim	0	at SOP
CMK	Black finish door opener trim Painted in Black: Door opener trim Note: combination with painted Black finish B-pillar belt outlet trim (order no. CMR) is recommended.	0	at SOP
CDC	Black finish door opener Painted in Black: door opener	0	at SOP
CMP	Black painted finish instrument surround Painted in Black: instrument surround	0	at SOP
CMM	Black painted finish switch panel trim Painted in Black: switch panel trim including cupholder trim (5-part)	0	at SOP
CMN	Black painted finish air vent slats Painted in Black: side vent slats, centre vent slats With smooth leather finish in interior colour and partly with decorative seams: side vents, centre vent including switch trim	0	at SOP
CML	Black painted finish PCM handset Painted in Black: Upper part of PCM handset With smooth leather finish in interior colour: Lower part of PCM handset including console (3-part)	0	at SOP

0 = Optional equipment W = available without extra charge		Offering	Availability (at SOP = 10/07)
Black painted interior (high gloss)			
CMJ	Black painted finish gear lever trim Painted in Black: gear lever trim	0	at SOP
CMD	Rear centre console in Black, painted Painted in Black: rear centre console including ashtray cover, rear centre console storage box With smooth leather finish in interior colour: handbrake lever trim	0	at SOP
CMR	Black B-pillar belt outlet trim, painted Painted in Black: B-pillar belt outlet trim (left/right)	0	at SOP
Leather and natural leather interior			
998	Leather interior in natural leather Natural Dark Grey. Protectively dyed leather, which retains its natural features. Scope same as leather interior with plastic components painted in Black soft-touch paint. Note: Seat centre strips in Alcantara, as for standard seats	0	at SOP
460	3-spoke sports steering wheel smooth-finish leather With smooth leather finish in interior colour: steering wheel rim and airbag module	W	at SOP
XPA	3-spoke sports steering wheel smooth-finish leather, padded With smooth leather finish in interior colour: padded steering wheel rim (with cross-seam stitching), airbag module, steering wheel hub cover	W	at SOP
431	3-spoke multi-function steering wheel in smooth-finish leather Slightly enlarged steering wheel rim with rounded contour and triangular airbag module With smooth leather finish in interior colour: steering wheel rim (with cross-seam stitching) and airbag module	W	at SOP
CPA	3-spoke multi-function steering wheel in leather, padded Padded steering wheel rim (with cross-seam stitching)	0	at SOP
CDW	Y-shaped 3-spoke multi-function steering wheel trim in leather With smooth leather finish in interior colour: Y-shaped steering wheel trim	0	at SOP
EAA	Switch panel leather package With smooth leather finish in interior colour: side air vents, side air vent vanes, centre vent including switch trim, centre vent vanes, switch panel loudspeaker cover (centre), defroster trim, switch panel trim including cupholder trim	0	at SOP
XTV	Door trim leather With smooth leather finish in interior colour: Door opener trim	0	at SOP
XNG	Instrument surround leather With smooth leather finish in interior colour: instrument surround	0	at SOP
XNS	Steering column casing leather With smooth leather finish in interior colour: steering column casing (3-part). Painted in interior colour: hands-free microphone cover	0	at SOP
XSC	Porsche Crest on headrests Embossed on the headrests of the front seats * In conjunction with standard sports bucket seats, Available as of 02/2008 at the earliest	0	at SOP*
XEA	Passive handset leather With smooth leather finish in interior colour: PCM handset, including console (3-part)	0	at SOP
XMZ	Rear centre console leather With smooth leather finish in interior colour: rear centre console including ashtray cover, rear centre console storage box, handbrake lever trim	0	at SOP
XMA	Leather roofliner In smooth-finish leather in interior colour	0	at SOP
XMP	Sun visors leather With smooth-finish leather in interior colour (left/right), including cover of vanity mirror	0	at SOP

0 = Optional equipment W = available without extra charge		Offering	Availability (at SOP = 10/07)
Leather and natural leather interior			
CVV	Sun visors leather, 2 colour As well as leather sun visors, colour options for the mirror and front sides may be specified in the order	0	at SOP
XZD	Interior light cover leather With smooth leather finish in interior colour and with partially decorative seams: Interior light cover	0	at SOP
XTG	Inner sill trim leather With smooth leather finish in interior colour and partly with decorative seams: inner sill trim	0	at SOP
DAA	A-pillar interior package, leather With smooth leather finish in interior colour and with decorative seams: switch panel sealing trim, ignition lock surround, mirror triangle (not mirror switch and base plate)	0	at SOP
DAB	B-pillar interior package, leather With smooth leather finish in interior colour: B-pillar belt outlet trim (left/right), B-pillar cover for belt height adjustment (left/right), B pillar clothes hook (left/right), seat backrest clothes hook	0	at SOP
CUR	PCM package, leather With smooth leather finish in interior colour: PCM trim, climate control panel trim, lower switch strip trim, lower storage box trim	0	at SOP
CVT	Leather loudspeaker covers, doors and rear With smooth leather finish in interior colour and with decorative seams: Rear loudspeaker covers, door panel trim, mid-range speaker covers, subwoofer covers Painted in interior colour: loudspeaker grid Black plastic finish: seat memory trim (driver's side)	0	at SOP
CNA	Leather defroster vent With smooth leather finish in interior colour and with decorative seams: defroster vent, switch panel loudspeaker cover (centre)	0	at SOP
CNB	Leather defroster vents With smooth leather finish in interior colour: defroster vents frames Painted in interior colour, soft-touch paint: defroster vent slates	0	at SOP
CVW	Leather interior mirror With smooth leather finish in interior colour: interior mirror frame, interior mirror housing, interior mirror base	0	at SOP
CVP	Leather switch panel trim With smooth leather finish in interior colour: switch panel trim including cupholder trim (5-part)	0	at SOP
CDZ	Leather gear lever trim With smooth leather finish in interior colour and with decorative seams: gear lever trim	0	at SOP
CPT	Lid of storage compartment with Porsche Crest With smooth leather finish in interior colour and partly with decorative seams: Lid of storage compartment, centre console, with Porsche Crest	0	at SOP
CUV	Lid of storage compartment with logo With smooth leather finish in interior colour and partly with decorative seams: lid of storage compartment with GT2 logo	0	at SOP
CVY	Clothes hook on seat backrest, leather With smooth leather finish in interior colour: clothes hook on seat backrest Note: B-pillar interior package (order no. DAB) included	0	at SOP
CDT	Leather belt locks With smooth leather finish in interior colour: belt locks (front)	0	at SOP

0 = Optional equipment W = available without extra charge		Offering	Availability (at SOP = 10/07)
Leather and natural leather interior			
CDU	Leather B-pillar belt emission trim With smooth leather finish in interior colour: B-pillar belt emission trim (left/right) Note: B-pillar interior package (order no. DAB) included	0	at SOP
CVZ	Leather BOSE® subwoofer outputs With smooth-finish leather in interior colour	0	at SOP
CUJ	Leather fusebox cover With smooth leather finish in interior colour and with decorative seams: fusebox cover	0	at SOP
CJX	Floor mats with leather trim 2-piece set. Black carpet. With black leather trim and double stitching. Front inlay made from leather in colour of trim with embossed Porsche logo and decorative stitching	0	at SOP
CFX	Individual floor mats with leather trim Additional scope for floor mats with leather trim: choice of colour for leather trim and decorative stitching	0	at SOP
CPU	Leather key pouch With smooth leather finish in interior colour, with embossed Porsche Crest and decorative stitching	0	at SOP
Interior Alcantara			
CLE	Alcantara switch panel trim With black Alcantara finish: switch panel trim including cupholder trim (5-part)	0	at SOP
CLG	Lid of storage compartment in Alcantara with Porsche logo Finished in black Alcantara (standard) with decorative seams: lid of storage compartment, centre console, in Alcantara with Porsche logo	0	at SOP
Interior carbon			
EZA	Interior package carbon Trimmed with carbon: switch panel trim including cupholder trim, gear lever (partial), upper part of handbrake lever With Alcantara finish: gear lever including gearshift pattern trim in Volcano Grey with raised white gearshift pattern, handbrake lever including inlay in Volcano Grey with raised white GT2 logo	0	02/2008
EZB	Door trim carbon Trimmed with carbon: inlay in defroster trim, side vents, centre vent, door opener trim With smooth leather finish in interior colour: side air vent vanes, centre vent vanes including switch trim, switch panel loudspeaker cover (centre), defroster trim (partially)	0	02/2008
453	3-spoke multifunction steering wheel carbon Slightly enlarged steering wheel rim with rounded contour, triangular airbag module and carbon inlays	0	at SOP
XMJ	Rear centre console carbon Trimmed with carbon: rear centre console including ashtray cover, rear centre console storage box With smooth leather finish in interior colour: handbrake lever trim	0	at SOP
CED	Passive handset carbon Trimmed with carbon: upper part of PCM handset With smooth leather finish in interior colour: lower part of PCM handset including console (3-part)	0	at SOP
CJJ	Carbon B-pillar belt outlet trim Trimmed with carbon: B-pillar belt outlet trim (left/right)	0	at SOP

0 = Optional equipment W = available without extra charge		Offering	Availability (at SOP = 10/07)
Interior carbon			
X69	Door entry guards, carbon With GT2 logo	0	02/2008
CXD	Door entry guards, carbon, illuminated Carbon entry guards (left/right) with white, illuminated GT2 logo	0	at SOP
CXE	Individual door entry guards, carbon, illuminated Carbon entry guards (left/right) with white, illuminated, personalised logo Note: When ordering, please provide your Porsche partner with a template for your personalised logo	0	at SOP
Audio and communication			
672	Navigation module for PCM GPS navigation module with separate DVD drive in luggage compartment and navigation DVD for virtually all of Europe including dynamic route guidance, automatic route tracing and subsequent backtracing navigation. Also facilitates navigation in areas not digitally mapped using compass and GPS.	0	at SOP
666	PCM telephone module Tri-band telephone for GSM 900, 1800 and 1900 networks, for small SIM card, basic phone functions can be activated via control stalks on steering column and simultaneously displayed in the instrument cluster, includes hands-free facility, SMS functions and emergency call button. Note: Increased retrofitting effort	0	at SOP
668	PCM handset for telephone module	0	at SOP
641	Electronic logbook for PCM Allows the automatic recording of current mileage, distance covered, date and time as well as the starting point and destination for each trip. Includes PC software for later analysis of the data. The software meets the requirements of the German tax authorities for documenting automatic logbook recording	0	at SOP
640	Sport Chrono Package Plus Comprising analogue stopwatch on switch panel, digital stopwatch function in the instrument cluster, performance display in the PCM as well as individual memory for light, windscreen wiper, climate and door lock settings	0	at SOP
490	Sound Package Plus, including CD storage box Analogue sound system including CD storage box in glove box with 9 loudspeakers and 235 Watt total output Switch panel: Two 1.9 cm high-range speakers One 7.0 cm mid-range speaker (centre speaker) Doors: Two 20.0 cm low-range speakers two 10.0 cm mid-range speakers Rear, lateral: two 10.0 cm mid-range speakers	W	at SOP

0 = Optional equipment W = available without extra charge		Offering	Availability (at SOP = 10/07)
Audio and communication			
680	<p>BOSE® Surround Sound System Digital Surround Sound System for optimised, faithful sound with 13 loudspeakers and a 7-channel digital amplifier integrated in a digital MOST bus Surround Sound through Centerpoint™ signal processing technology as well as permanent optimisation of tone and volume through microphone for Noise Compression Technology (AudioPilot™) 325 W total output: 2 BOSE® TSM switched end stages of 100 W each, linear amplifier with 5x25 W nominal output</p> <p>Switch panel: Two 2.5 cm Neodym high-range speakers One 7.0 cm mid-range speaker (centre speaker)</p> <p>Doors: Two 8.0 cm Neodym mid-range speakers Two 20.0 cm Nd(r) subwoofers*</p> <p>Rear, lateral: Two 2.5 cm Neodym high-range speakers Two 8.0 cm Neodym mid-range speakers</p> <p>Rear, back Two 13.0 cm woofers (active subwoofer in 14 litre bass reflex housing)</p> <p>Note: No retrofitting possible * Neodym woofer with BOSE® patented technology for extra flat construction</p>	0	at SOP
461	<p>External AM-antenna For improved medium wave reception</p>	W	at SOP
Factory collection			
900	911 GT2 factory collection	0	at SOP

12 Colour range

12.1 Exterior colours

When configuring the new 911 GT2, customers have a choice of 4 solid and

5 metallic colours, along with 4 optional special colours. Colours to sample are only offered passively* if customers expressly ask for them (*not on offer in the official marketing material).

Solid colours – exterior



Black



Guards Red

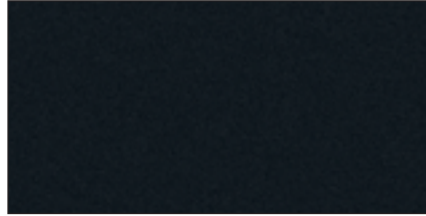


Carrara White

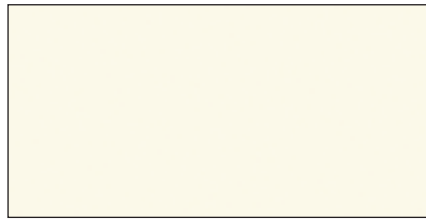


Speed Yellow

Metallic colours - exterior



Basalt Black Metallic



Arctic Silver Metallic



Midnight Blue Metallic



Macadamia Metallic*

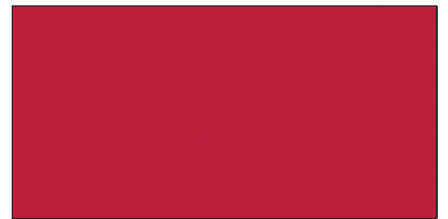


Meteor Grey Metallic

Special colours - exterior



GT Silver Metallic*



Ruby Red Metallic*



Atlas Grey Metallic*



Malachite Green Metallic*

12.2 Interior colours

Just like the 911 GT2 (996), the new 911 GT2 also features a Black leather interior as standard. Customers have the option of ordering the interior in Dark Grey natural leather. In both the basic and natural leather interiors, the following elements are always covered with Black Alcantara in the new 911 GT2:

- Steering wheel rim
- Door handles
- Shift lever
- Door panels
- Handbrake lever grip
- Lids of door storage boxes
- Centre strip on seats (all seat types)
- Lid of storage compartment in the centre console
- Roofliner

Standard interior colour

Leather/Alcantara



Black

Natural leather/Alcantara interior

(optional)



Natural Dark Grey ¹⁾

1) Not in combination with the optional Clubsport package available at no extra charge.

Note: in combination with the optional Clubsport package (1 003), the seats are upholstered entirely in flame-resistant fabric in black.

12.3 Display colours

The following display colours will be used for the new 911 GTS for PR purposes:

General display colours (e.g. vehicle catalogue)

- Exterior: Basalt Black Metallic
- Interior: Black

Display model at the Frankfurt Motor Show (Frankfurt am Main 11-23.09.2007)

- Exterior: Guards Red
- Interior: Natural Dark Grey

Colours for market launch

- No launch colours are intended for the new 911 GT2.

13 Cost of ownership

The cost of ownership for the new 911 GT2 is at a similar level to that of the 911 GT2 (996). In comparison to the competition, the displacement design of the new 911 GT2 offers advantages in fuel costs, and noticeable tax advantages in Germany. The maintenance costs and insurance level are also more advantageous than those of most of the competition. For a list of the cost of ownership, see the overview tables (chapter 4.13.3) in the appendix.

13.1 Maintenance intervals

The maintenance intervals of the new 911 GT2 are in the main similar to those of the current 911 GT3 models:

Changes compared with the 911 GT2 (996) are marked in **bold**.

		new 911 GT2 (997)	911 GT3 /GT3 RS (997)	911 Turbo (997)	911 GT2 (996)
Minor maintenance	A - markets	20,000 km or every 2 years	20,000 km or every 2 years	30,000 km or every 2 years	20,000 km or every 2 years (all markets)
Minor maintenance	B - markets	20,000 km or every 2 years	20,000 km or every 2 years	–	
Minor maintenance 1	B - markets	–	–	20,000 km or after 1 year	
Minor maintenance 2	B - markets	–	–	40,000 km or every 2 years	
Minor maintenance	C - markets	20,000 km or every 2 years	20,000 km or every 2 years	30,000 km or every 2 years	
Major maintenance	A - markets	40,000 km or every 4 years	40,000 km or every 4 years	60,000 km or every 4 years	40,000 km or every 4 years (all markets)
	B - markets	40,000 km or every 4 years	40,000 km or every 4 years	60,000 km or every 3 years	
	C - markets	40,000 km or every 4 years	40,000 km or every 4 years	60,000 km or every 4 years	
Spark plugs	A - markets	20,000 km or every 2 years	40,000 km or every 4 years	60,000 km or every 4 years	40,000 km (all markets)
	B - markets	20,000 km or every 2 years	40,000 km or every 4 years	40,000 km or every 4 years	
	C - markets	20,000 km or every 2 years	20,000 km or every 2 years	20,000 km or every 4 years	
Engine oil	A - markets	20,000 km or every 2 years	20,000 km or every 2 years	30,000 km or every 2 years	20,000 km or every 2 years (all markets)
	B - markets	20,000 km or after 1 year	20,000 km or after 1 year	20,000 km or after 1 year	
	C - markets	10,000 km or after 1 year	10,000 km or after 1 year	10,000 km or after 1 year	
Oil filter	A - markets	20,000 km or every 2 years	20,000 km or every 2 years	30,000 km or every 2 years	40,000 km or every 4 years (all markets)
	B - markets	20,000 km or after 1 year	20,000 km or after 1 year	20,000 km or after 1 year	
	C - markets	10,000 km or after 1 year	10,000 km or after 1 year	10,000 km or after 1 year	

13.2 Insurance class

Like the 911 GT2 (996), the new 911 GT2 has been designed to minimise the number of damaged parts in the event of minor accidents.

The new 911 GT2 has a better 3rd party liability insurance classification than previous models. Pending final confirmation by the rating commission 09/2007, the new 911 GT2 will probably

be rated in the same insurance classes for comprehensive and 3rd party insurance as the 911 GT2 (996) and the current 911 GT3 models.

Insurance classification overview (changes compared to the 911 GT2 (996) are marked in **bold**)

		new 911 GT2 (997)	911 GT3 /GT3 RS (997)	911 GT2 (996)
3rd party liability	KH	17	17	18
Fully comprehensive	VK	34	34	34
3rd parts, fire+theft	TK	32	32	32

13.3 Cost of ownership

Status: May 2007

	Porsche		Ferrari F 430	Ferrari F 599 GTB	
	911 GT2 (997)	911 GT2 (996)			
Displacement	3,600	3,600	4,308	5,999	
kW (bhp)	390 (530)	355 (482)	360 (490)	456 (620)	
Cylinders	6	6	8	12	
Maintenance interval (km)	20,000	20,000	20,000	20.000	
Ø-maintenance costs per year	583 €	415 €	800 €	1,000 €	
Ø-road tax per year	243 €	243 €	297 €	405 €	
Emission classification	EU4	EU4	EU4	EU4	
Ø-fuel costs per year	2,295 €	2,369 €	3,195 €	3,718 €	
EU fuel consumption (l/100 km)	12.5	12.9	18.3	21.3	
Tank capacity (l)	90	89	95	105	
Range (km)	720	690	519	493	
Fuel	SuperPlus	SuperPlus	SuperPlus	SuperPlus	
Ø-insurance costs per year	5,865 €	5,898 €	4,794 €	6,270 €	
Insurance (liability/full/partial)	17/34/32	18/34/32	k.E.	k.E.	
Ø-total costs per year	8,987	8,925	9,086	11,394	
Difference from 911 GT2 (997)	0	-62	99	2,407	
Ranking in overall comparison	2	-	3	7	

Ø annual costs, based on 4 years/60,000 km

Depreciation (after 3 years):					
Price new	159,100 €	159,100 €	129,000 €	178,202 €	
Depreciation (per year in €)	20,683 €	20,842 €	15,770 €	n.b.	
Depreciation (per year in %)	13.0%	13.1%	12.2%	n.b.	

All values exclusive of VAT

Additional costs for USA (one-off payment):					
Destination Charge	\$860	\$860	\$1,500	\$620	
Gas Guzzler Tax	\$0	\$1,300	\$3,000	\$4,500	

Sources used for total cost comparison: Allianz, ADAC, PET, PIWIS, Technical Data

N.k. = Not known (no data available)

N.c. = Not classified: Calculation basis for vehicles not classified for insurance purposes (premium exotic vehicles) - Liability: Highest classification 25 (at 100%)




– Fully comprehensive: 3% of net vehicle value (net sale price for new vehicles)

	Lamborghini Gallardo SE	Lamborghini Gallardo Superleggera	Mercedes-Benz SL 65 AMG	Dodge Viper SRT-10	Lamborghini Murcielago LP 640	Mercedes SLR 722
	4,961	4,961	5,980	8,285	6,496	5,439
	382 (520)	390 (530)	450 (612)	372 (506)	471 (640)	478 (650)
	10	10	12	10	12	8
	12,000	12,000	20,000	12,000	12,000	n.b.
	800 €	1,000 €	666 €	660 €	1,500 €	700 €
	338 €	337 €	405 €	560 €	438 €	371 €
	EU4	EU4	EU4	EU4	EU4	EU4
	3,122 €	3,122 €	2,773 €	3,683 €	3,911 €	2,531 €
	17.0	17.0	15.1	21.2	21.3	14.5
	90	90	80	68	100	97
	529	529	530	322	469	669
	Super	SuperPlus	SuperPlus	Super	SuperPlus	Super
	5,898 €	5,654 €	5,898 €	3,748 €	7,374 €	12,924 €
	18/34/32	k.E.	18/34/31	k.E.	k.E.	k.E.
	10,157	10,112	9,741	8,652	13,223	16,527
	1,170	1,126	755	-335	4,237	7,540
	6	5	4	1	8	9

	141,500 €	157,650 €	178,300 €	94,118 €	215,000 €	400,000 €
	21,508 €	n.b.	30,177 €	16,471 €	n.b.	n.b.
	15.2%	n.b.	16.9%	17.5%	n.b.	n.b.




	\$1,300	n.b.	\$775	\$850	n.b.	\$2,750
	\$3,700	n.b.	\$2,600	\$3,000	n.b.	\$3,000




14 Technical data




Data relate to the EU-specification model unless otherwise specified	new 911 GT2 (997)	911 Turbo (997)	911 GT2 (996)
Bold entries denote points where the new 911 GT2 deviates from the 911 GT2 (996)			
() Figures in brackets Tiptronic S, unless otherwise specified			
1. Engine			
No. of cylinders	6	6	6
Valves per cylinder	4	4	4
Effective displacement cm ² /cu. in	3,600/219.7	3,600/219.7	3,600/219.7
Bore x stroke mm in	100 x 76.4 3.94 x 3.01	100 x 76.4 3.94 x 3.01	100 x 76.4 3.94 x 3.01
Max. output kW/PS/hp (EEC) at engine speed rpm	390/530/530 6,500	353/480/480 6,000	355/483/477 5,700
Max. torque Nm/lb ft at engine speed rpm	680/505 2,200 – 4,500	620/460 1,950 – 5,000	640/472 3,500 – 4,500
Max. torque with overboost Nm/lb ft at engine speed rpm	not available	680/505 2,100 - 4,000	not available
Compression ratio	9.0:1	9.0:1	9.4:1
Volumetric efficiency kW/l hp/l	108.3 147.2	98.0 133.3	98.6 134.1
Engine cooling (cylinder head)	Cross flow	Cross flow	Cross flow
Engine control	Digital engine electronics ME 7.8.1	Digital engine electronics ME 7.8.1	Digital engine electronics ME 7.8
Fuel/air mixture preparation	Sequential multipoint fuel injection	Sequential multipoint fuel injection	Sequential multipoint fuel injection
Fuel type (RON 95 can be used but will reduce performance)	Super RON 98	Super RON 98	Super RON 98
Ignition	Ignition with digital mapping, cylinder-specific knock control, static high-voltage ignition system with individual ignition coils	Ignition with digital mapping, cylinder-specific knock control, static high-voltage ignition system with individual ignition coils	Ignition with digital mapping, cylinder-specific knock control, static high-voltage ignition system with individual ignition coils
Valve control	VarioCam Plus	VarioCam Plus	VarioCam Plus
Turbocharging	2 turbo chargers with variable turbine geometry (VTG) , boost pressure control	2 turbo chargers with variable turbine geometry (VTG) , boost pressure control	2 turbochargers with integrated wastegate, boost pressure control
Charge-air cooling	2 separate charge-air coolers in the rear quarter panels of the body	2 separate charge-air coolers in the rear quarter panels of the body	2 separate charge-air coolers in the rear quarter panels of the body
Exhaust system	Integrated catalytic converter and rear silencer system. Rear silencer and tail-pipes made of titanium	Integrated catalytic converter and rear silencer system	Integrated catalytic converter and rear silencer system
Generator kW	2,1	2,1	1,68
Starter kW	1,7	1,7	1,7
Battery capacity Ah	70	70	60
Idle speed rpm	740	740	740
Max. engine speed rpm	6.750	6.750	6.750

Data relate to the EU-specification model unless otherwise specified			new 911 GT2 (997)	911 Turbo (997)	911 GT2 (996)
Bold entries denote points where the new 911 GT2 deviates from the 911 GT2 (996)					
() Figures in brackets Tiptronic S, unless otherwise specified					
2. Transmission					
All-wheel drive			not available	Porsche Traction Management (PTM) with map-controlled multiple-disc clutch	not available
Manual transmission	1st gear	3.15	3.82	3.82	
Transmission ratio	2nd gear	1.89	2.14	2.05	
	3rd gear	1.4	1.48	1.41	
	4th gear	1.09	1.18	1.12	
	5th gear	0.89	0.97	0.92	
	6th gear	0.73	0.79	0.75	
	Reverse gear	2.86	2.67	2.86	
Final drive ratio, rear axle			3.44	3.44	3.44
Final drive ratio, front axle			–	3.33 (3.33)	–
Clutch diameter	mm/in	240/9.45	240/9.45	240/9.45	
Tiptronic S	1st gear		3.59		
Transmission ratio	2nd gear		2.19		
	3rd gear	not available	1.41	not available	
	4th gear		1.00		
	5th gear		0.83		
	Reverse gear		3.67 (3.17)		
3. Chassis					
Front axle			analogue to the 911 GT2 (996) augmented with PASM with Normal and Sport mode: additional electrically operated, hydraulic bypass valve for continuous adjustment of damper force	analogue to the 911 GT2 (996), augmented with PASM with Normal and Sport mode: additional electrically operated, hydraulic bypass valve for continuous adjustment of damper force	Spring strut axle, wheels suspended individually on wishbones with trailing links and suspension struts (McPherson design, optimised by Porsche), one coil spring per wheel with internal double-acting hydraulic twin-tube gas-filled damper
Toe-in		min	6' ±2'	5' ±5'	8' ±2'
Camber	RoW USA	degree/min	-1°30' ±5' -1°30' ±5'	-40' ±15' -40' ±15'	-1° ±5' -1° ±5'
Rear axle			analogue to the 911 GT2 (996) augmented with PASM with Normal and Sport mode: additional electrically operated, hydraulic bypass valve for continuous adjustment of damper force	analogue to the 911 GT2 (996), augmented with PASM with Normal and Sport mode: additional electrically operated, hydraulic bypass valve for continuous adjustment of damper force	Multilink LSA system, wheels suspended individually on five steering arms, one coil spring per wheel with coaxial internal, double-acting hydraulic single-tube gas-filled damper
Toe-in		min	13' ±2'	10' ±5'	13' ±2'
Camber		degree/min	-1°30' ±5'	-1°40' ±15'	-1°50' ±5'

Data relate to the EU-specification model unless otherwise specified			new 911 GT2 (997)	911 Turbo (997)	911 GT2 (996)
Bold entries denote points where the new 911 GT2 deviates from the 911 GT2 (996)					
() Figures in brackets Tiptronic S, unless otherwise specified					
Steering	Steering ratio		17.1:1... 13.8:1	17.1:1... 13.8:1	16:09:01
	Steering wheel revolutions from lock to lock		2.62	2.62	2.98
	Steering wheel diameter	mm/in	370 (14.57)	370 (14.57)	375/14.76
Brakes			2-circuit brake system with hydraulic-mechanical control	2-circuit brake system with hydraulic-mechanical control	2-circuit brake system with hydraulic-mechanical control
	Brake booster		Tandem brake booster (9-inch)	Tandem brake booster (9-inch)	Single brake booster (10-inch)
	ABS		Bosch ABS 8.0 (integrated in PSM)	Bosch ABS 8.0 (integrated in PSM)	Bosch ABS 5.7
	Vehicle stability system		PSM 8.0 incl. ABS, ABD, ASR, MSR, TC OFF and SC+TC OFF separate and entirely disengagable	PSM 8.0 incl. ABS, ABD, ASR, MSR	not available
Steel brake system			not available	Standard 6-piston aluminium monobloc. Internally vented and cross-drilled	not available
Front axle	Brake callipers			350/13.78	
	Brake discs			34/1.34	
		Diameter mm/in			
		Thickness mm/in			
Rear axle	Brake callipers		not available	4-piston aluminium monobloc	not available
	Brake discs			Internally vented and cross-drilled	
		Diameter mm/in		350/13.78	
		Thickness mm/in		28/1.10	
Ceramic brake system (PCCB)			Standard Ceramic brake discs reinforced with carbon fibre	Option Ceramic brake discs reinforced with carbon fibre	Standard Ceramic brake discs reinforced with carbon fibre
Front axle	Brake callipers		6-piston aluminium monobloc	6-piston aluminium monobloc	6-piston aluminium monobloc
	Brake discs		discs internally vented and cross-drilled, aluminium brake disc chamber	discs internally vented and cross-drilled, stainless steel brake disc chamber	discs internally vented and cross-drilled, stainless steel brake disc chamber
		Diameter mm/in	380/14.96	380/14.96	350/13.78
		Thickness mm/in	34/1.34	34/1.34	34/1.34
Rear axle	Brake callipers		4-piston aluminium monobloc	4-piston aluminium monobloc	4-piston aluminium monobloc
	Brake discs		Internally vented and cross-drilled	Internally vented and cross-drilled	Internally vented and cross-drilled
		Diameter mm/in	350/13.78	350/13.78	350/13.78
		Thickness mm/in	28/1.10	28/1.10	28/1.10
4. Wheels/tyres					
	Wheel design		Cast aluminium, GT2 Design	Forged aluminium, two-tone look	Cast aluminium, GT2 Design
Standard	Wheels	front rear	8.5J x 19 ET 53 12 J x 19 RO 51	8.5J x 19 RO 56 11 J x 19 RO 51	8.5 J x 18 RO 40 12 J x 18 RO 45
	Tyres	front rear	235/ 35 ZR19 325/30 ZR19	235/35 ZR19 305/30 ZR19	235/40 ZR18 315/30 ZR18

Data relate to the EU-specification model unless otherwise specified			neuer 911 GT2 (997)	911 Turbo (997)	911 GT2 (996)
Bold entries denote points where the new 911 GT2 deviates from the 911 GT2 (996)					
() Figures in brackets Tiptronic S, unless otherwise specified					
Winter wheels 18" Wheels			not available	Not in conjunction with PCCB 8 J x 18 RO 57 11 J x 18 RO 51	8 J x 18 RO 50 10 J x 18 RO 47
	front				
	rear				
Tyres	front			235/40 R18 295/35 R18	225/40 R18 265/35 R18
	rear				
Winter wheels 19" Wheels	front		8 J x 19 RO 57 11 J x 19 RO 51	8.5 J x 19 RO 56 11 J x 19 RO 51	not available
	rear				
Tyres	front		235/35 R19 295/30 R19	235/35 R19 295/30 R19	
	rear				
Air pressure, 18" - summer			not available	not available	
front	partially loaded	bar/psi			2.2/32.3
	fully loaded				-
rear	partially loaded				2.7/39.7
	fully loaded				-
Air pressure, 19" - summer					not available
front	partially loaded	bar/psi	2.0/29.01	2.3/33.36 2.5/36.26	
	fully loaded				
rear	partially loaded		2.3/33.36	2.7/39.16 3.0/43.51	
	fully loaded				
5. Weights					
Weight empty (DIN)	kg		1,440	1,585 (1,620)	1,420
	lbs		3,175	3,494 (3,571)	3,131
Weight empty in acc. with EU (DIN + 75 kg driver)	kg		1,515	1,660 (1,695)	1,495
	lbs		3,340	3,660 (3,737)	3,295
Permissible gross weight	kg		1,750	1,950 (1,980)	1,730
	lbs		3,858	4,299 (4,365)	3,814
Max. payload	kg		310	365 (360)	310
	lbs		683	805 (794)	683
Maximum permissible roof load with original Porsche roof transport system	kg		75	75	50
	lbs		165	165	110
Permissible axle load - front/rear	kg		675/1,105	825/1,250	700/1,080
	lbs		1,488/2,436	1,819/2,756	1,543/2,831
Weight distribution - front/rear	Manual transmission %		37/63	39/61	37/63
	Tiptronic S %		not available	39/61	not available
Power-to-weight ratio	kg/kW		3.69	4.5 (4.6)	4
	kg/PS		2.72	3.3 (3.4)	2.94
6. Performance					
Top speed	km/h		329	310 (310)	319
	mph		204	192.6 (192.6)	198.2
Acceleration 0-100 km/h	s		3.7	3.9 (3.7)	4.0
Acceleration 0-160 km/h	s		7.4	8.4 (7.8)	8.3
Acceleration 0-200 km/h	s		11.2	12.5 (12.2)	12.5
Acceleration 0-1,000 m	s		20.7	21.5 (21.1)	21.5

Data relate to the EU-specification model unless otherwise specified			new 911 GT2 (997)	911 Turbo (997)	911 GT2 (996)
Bold entries denote points where the new 911 GT2 deviates from the 911 GT2 (996)					
() Figures in brackets Tiptronic S, unless otherwise specified					
Acceleration 1/4 mile	s		Figures expected by end 06/2007	11.8 (11.6)	–
Flexibility 80-120 km/h in penultimate gear	s		4.1	3.8 (3.5)	4.6
7. Fuel consumption/emissions					
Manufacturer's data based on version of 80/1268/EEC valid at time of printing					
Urban	l/100km		18.8²⁾	18.8 (19.8)	18,9
Extra-urban			8.9²⁾	9.5 (9.6)	9,3
combined			12.5²⁾	12.8 (13.6)	12,9
CO ₂ emissions combined	g/km		298²⁾	307 (326)	309
US fuel consumption combined	mpg		Figures expected by end 06/2007	23.9 (23.4)	21
8. Exterior dimensions					
Length	RoW USA	mm/in	4,469/175.95 4,494/176.93	4,450/175.20 4,477 176.26	4,450/175.20 –
Width	without exterior mirrors with exterior mirrors	mm/in	1,852/72.91 1,937/76.26	1,852/72.91 1,937/76.26	1,830/72.05 1,937/76.26
Height	Standard chassis PASM	mm/in	– 1,285/50.59	– 1,300/51.18	1,275/50.20 –
Wheelbase		mm/in	2,350/92.52	2,350/92.52	2,355/92.72
Track, front		18" 19"	– 1,515/59.65	– 1,490/58.66	1,495/58.86 –
Track, rear		18" 19"	– 1,550/61.02	– 1,548/60.94	1,520/59.84 –
Drag coefficient		cd	0.32	0.31	0.34
Frontal area A		m ²	2.048	2.04	1.96
Drag		c _d x m ₂	0.66	0.63	0.67
Turning circle		m/ft	10.9/35.76	10.9/35.76	10.6/34.8
Approach angle with/without spoiler lip	RoW USA	Degrees	5.5/7.7 5.5/7.7	7.9/10.4 7.9/10.4	6.0 6.0
Departure angle	RoW USA	Degrees	12.1 12.1	12.7 12.7	13.0 13.0
Ramp breakover angle	RoW USA	Degrees	11.9 11.9	12.8 12.8	10.5 10.5
Ground clearance*	RoW USA	mm/in	98/3.86 98/3.86	110/4.33 110/4.33	70/2.76 70/2.76
*Lower body measurement point for determining ground clearance			new brake air deflector on the front wishbone	new brake air deflector on the front wishbone	Brake air deflector 911 GT2 (996) on the front wishbone





Data relate to the EU-specification model unless otherwise specified Bold entries denote points where the new 911 GT2 deviates from the 911 GT2 (996) () Figures in brackets Tiptronic S, unless otherwise specified	new 911 GT2 (997)	911 Turbo (997)	911 GT2 (996)
			
9. Interior dimensions			
Interior length ¹⁾ Driver's side mm	1,692	1,692	1,680
Passenger's side	1,570	1,570	1,570
Shoulder room, front (W3) mm	1,308	1,308	1,313
Elbow room, front (W10) mm	1,355	1,355	1,356
Effective headroom, front (H61) mm	974 (without sliding roof)	974 (without sunroof) 966 (with sliding roof)	975 (without sliding roof)
Luggage compartment capacity			
- front RoW l/imp/US gal	105/23.1/27.7	105/23.1/27.7	110/24.2/29.1
USA l/imp/US gal	105/23.1/27.7	95/20.9/25.1	110/24.2/29.1
- rear (911 Turbo: with rear seat backrests folded down) l/imp/US gal	205/45.1/54.2	190/41.8/50.2	200/44.0/52.8
Tank capacity RoW - LHD l/imp/US gal	90/19.8/23.9	67/14.7/17.7	89/19.6/23.5
RoW - RHD	66/14.5/17.4	66/14.5/17.4	63/13.9/16.6
USA	67/14.7/17.7	67/14.7/17.7	
Reserve	12/2.6/3.17	12/2.6/3.17	12/2.6/3.17

1) Driver's side: from pressed clutch pedal to hip point of rear seat. **Passenger's side: from heel point in front of firewall to hip point of rear seat**

2) The technical specifications are provisional, unofficial values available at the time of going to press.






15 Key Competitors

15.1 External vehicle comparison

	Porsche new 911 GT2 (997)	Ferrari F 430	Ferrari 599 GTB	Lamborghini Gallardo SE
				
1. Concept				
Body form	Coupé	Coupé	Coupé	Coupé
Engine position/drive	Rear/rear	Mid/rear	Front/mid-engine/rear	Mid/all-wheel drive
Seats/doors	2/2	2/2	2/2	2/2
2. Engine				
Engine type/valves	<p>Horizontally opposed Otto engine, 24 valves, two overhead camshafts per cylinder bank</p> <p>Continuous intake camshaft control with VarioCam Plus valve lift adjustment, variable intake manifold, sequential fuel injection (multipoint)</p> <p>Aluminium cylinder head and engine block, forged pistons and connecting rod, Rear silencer and tailpipes made of titanium</p>	<p>Otto V-engine. Cylinder angle 90°, 32 valves, two overhead camshafts per cylinder bank</p> <p>Continuous intake and exhaust camshaft control, twin-branch adjustable resonance intake manifold</p> <p>Aluminium cylinder head and engine block, aluminium pistons, cylinder liners with Nikasil coating</p>	<p>Otto V-engine, cylinder angle 65°, 48 valves, four overhead camshafts per cylinder bank</p> <p>Camshafts with hydraulic control devices, 330 mm non-variable intake ducts</p> <p>Aluminium cylinder head and engine block, aluminium pistons, steel connecting rod, forged crankshaft, cylinder liners with Nikasil coating</p>	<p>Otto V-engine, longitudinally mounted, four overhead camshafts, 40 valves</p> <p>Chain drive, continuously adjustable intake and exhaust camshaft</p> <p>Aluminium cylinder head and engine block</p>
Charging	2 turbochargers with variable turbine geometry (VTG)	–	–	–
Cylinders/displacement in cm ³	B6/3,600	V8/4,308	V12/5,999	V10/4,961
Bore x stroke mm	100 x 76.4	92 x 81	92x75.2	82.5 x 92.8
Engine output in kW/bhp at engine rpm	390/530 @ 6,500	360/490 @ 8,500	456/620 @ 7,600	382/520 @ 8,000
Max. torque in Nm at engine rpm	680 @ 2,200 - 4,500	465 @ 5,250	608 @ 5,800	510 @ 4,500
Max. engine speed in rpm	6,750	8,500	8,400	8,000
Compression ratio	9.0:1	11.3:1	11.2:1	11.1:1
Fuel type	Super RON 98	Premium RON 95	Premium RON 95	Premium RON 98
Volumetric efficiency in kW/l (bhp/l)	108.3 (147.2)	83.6 (113.7)	76.0 (103.3)	77.0 (105.0)
Specific torque in Nm/l	188.9	107.9	101.3	102.8

All values in brackets refer to automatic transmissions, unless otherwise specified

The unique selling points of the new 911 GT2 are shown in **bold**

Lamborghini Gallardo Superleggera	MB SL 65 AMG	Dodge Viper SRT-10	Lamborghini Murcielago LP 640	MB SLR 722
				
Coupé	Roadster	Roadster	Coupé	Coupé
Mid/all-wheel drive	Front/rear	Front/mid-engine/rear	Mid/All-wheel drive	Front/mid-engine/rear
2/2	2/2	2/2	2/2	2/2
Otto V-engine, longitudinally mounted, each pair of overhead camshafts with variable control, 40 valves Chain drive, continuously adjustable intake and exhaust camshaft Aluminium cylinder head and engine block	Otto V-engine, 36 valves, longitudinally mounted, two overhead camshafts	Otto V-engine, cylinder angle 90°, 20 valves, two underlying camshafts variable valve control Aluminium engine block, die-cast magnesium cylinder heads	Otto V-engine, cylinder angle 60°, 48 valves, two overhead camshafts per cylinder bank variable valve control (intake/outlet) Intake system with variable geometry	Otto V-engine, 24 valves, 4 camshafts Aluminium engine housing, forged pistons
–	2 turbochargers, water-charge-air cooling	–	–	Compressor
V10/4,961	V12/5,980	V10/8,285	V12/6,496	V8/5,439
82.5 x 92.8	82.6 x 93.0	102.4 x 100.6	88.0 x 89.0	97.0 x 92.0
390/530 @8,000	450/612 @ 4,800	372/506 @ 5,600	471/640 @ 8,000	478/650 @ 6,500
510 @4,250	1,000 @ 2,000-4,000	711 @ 4,000	660 @ 6,000	820 @ 4,000
8,000	5,950	6.000	8.200	N/A
11.0:1	9.0:1	9,6:1	11,0:1	8,8:1
Super RON 98	Super RON 98	Premium RON 95	Super RON 98	Super RON 98
78.6 (106.8)	75.3 (102.3)	44.9 (61)	72.5 (98.5)	80.6 (109.5)
102.8	167.2	85.8	101.6	138.2

	Porsche new 911 GT2 (997)	Ferrari F 430	Ferrari 599 GTB	Lamborghini Gallardo SE
Power-to-weight ratio in acc. with DIN (kg/bhp)	3.69 (2.72)	4.0 (3.0)	3.7 (2.7)	4.2 (3.1)
Ignition/engine control	Map-controlled ignition, cylinder-specific knock control, individual ignition coils, static high-voltage ignition system, platinum spark plugs ME 7.8.1 Digital engine electronics	Individual ignition coils, knock control ME 7 Motronic	Individual ignition coils, knock control ME 7 Motronic	Spark plugs with internal ignition coil, electronics with static voltage ignition system Lamborghini L.I.E
Engine lubrication	Dry-sump lubrication with external engine oil tank with 9 oil pumps	Dry-sump lubrication with 4 oil pumps	Integrated sump lubrication	Dry-sump lubrication with 2 oil pumps
Emission classification	EU4	EU4	EU4	EU4
CO ² emissions in g/km	298	420	490	400
Fuel consumption (average) in accordance with 80/1268/EEC in l/100km	12.5	18.3	21.3	17.0
Acceleration 0-100 km/h in s	3.7	4.0	3.7	4.0
Acceleration 0-200 km/h in s	11.2	12.5	11.0	13.6
Top speed in km/h	329	315	330	315
3. Transmission				
All-wheel drive	not available	not available	not available	Viscous multiple-disc clutch, permanent all-wheel drive
Manual transmission	6-speed with additional transmission oil cooling, steel synchroniser rings and adjustable gear ratios	6-speed	Sequential 6-speed transmission	6-speed
Automatic transmission	not available	Optional: F1 transmission (automatic mode)	Optional: F1 transmission (automatic mode)	Optional: E-GEAR transmission

Note: The comparison with the competition relates to the EU model for Germany. Information on competitor vehicles has been obtained from brochures, press reports, dealerships and branches. (Status: May 2007). Accuracy cannot be guaranteed.

N/A =not available

Lamborghini Gallardo Superleggera	MB SL 65 AMG	Dodge Viper SRT-10	Lamborghini Murcielago LP 640	MB SLR 722
3.4 (2.5)	4.5 (3.3)	4.3 (3.2)	3.7 (2.7)	3.6 (2.7)
Spark plugs with internal ignition coil, electronics with static voltage ignition system Lamborghini L.I.E	Map-controlled ignition	electronic direct ignition, platinum spark plugs	Electronic throttle engine management	Dual ignition
Dry-sump lubrication	Pressure-fed lubrication	Pressure-fed lubrication	Dry-sump lubrication with 3 oil pumps (2 oil intake pumps, 1 oil pump)	Dry-sump lubrication with 7 oil pumps (5-level oil intake pump, 2-level oil pressure pump)
EU4	EU4	EU4	EU4	EU4
400	362	489	495	348
17.0	15.1	21,2	21,3	14,5
3.8	4.2	3,9	3,4	3,6
12.8	12.9	14,2	11,1	10,2
315	250	314	340	337
Permanent all-wheel drive with viscous clutch, variable torque distribution (basic distribution front: 30%, rear: 70%)	not available	not available	Standard, permanent, independent control circuit with viscous clutch, variable force distribution	not available
Optional, without extra cost: 6-speed	not available	6-speed manual transmission	Sequential 6-speed gearbox	not available
Standard: E-GEAR transmission with shift paddles	AMG Speedshift with 5-speed automatic transmission and steering-wheel shifting via shift paddles	not available	Optional: E-GEAR transmission with acceleration programme	5-speed automatic transmission (AMG Speedshift) including 3 manual driving programmes

	Porsche new 911 GT2 (997)	Ferrari F 430	Ferrari 599 GTB	Lamborghini Gallardo SE
4. Chassis				
Front axle	Spring strut axle, wheels suspended individually on forged wishbone with trailing links and spring struts, (McPherson type, Porsche optimised).	Double wishbone with forged aluminium parts	Double wishbone with forged aluminium parts	Double wishbone
Rear axle	Multi-link suspension LSA system, wheels suspended individually on 5 control arms	Double A-frames with forged aluminium parts	Double wishbone with forged aluminium parts	Double wishbone
Spring/damper/ anti-roll bars	<p>PASM chassis with sports tuning and approx. 25 mm more lowering when compared with the 911 Carrera; chassis adjustable for race track use (height, toe, camber, anti-roll bars)</p> <p>Front axle: coil spring with linear characteristic and internal single-tube gas-filled dampers</p> <p>Rear axle: coil spring with linear characteristic and double-acting, hydraulic gas-filled, single-tube dampers</p>	<p>Adaptive damper system</p> <p>Front axle: coil spring with internal adaptive damper</p> <p>Rear axle: coil spring with internal adaptive damper</p>	<p>Semi-active shock-absorber adjustment with 4 sensors via steering wheel switch, electromagnetically induced viscosity changing of shock absorber system (SCM)</p> <p>Front axle: one cylindrical coil spring with linear characteristic per wheel and internal single-tube gas-filled dampers</p> <p>Rear axle: one coil spring with linear characteristic per wheel and double-acting, hydraulic gas-filled, single-tube dampers</p>	<p>Active damper system: anti-dive, anti-squat, anti-roll bar, lateral stabiliser</p> <p>Front axle: coil spring with internal adaptive damper</p> <p>Rear axle: coil spring with internal adaptive damper</p>
Steering	Rack-and-pinion power steering with variable steering ratio	Rack-and-pinion power steering	Rack-and-pinion power steering	Rack-and-pinion power steering
Turning circle (in m)	10.9	10.8	left: 11.6 right: 13.6	11.5
Driving dynamics control/traction control systems	<p>PSM (Porsche Stability Management) including ABS, ABD, ASR and MSR, 2-level lateral and longitudinal dynamics control, capable of being fully deactivated (SC OFF und SC+TC OFF)</p> <p>Standard: mechanical rear differential lock and launch assistant</p>	<p>CST (stability and traction control: Race, Ice, Low Grip, Sport, CST Off*) - selectable via „Manettino“ (*can be fully deactivated)</p> <p>Standard: E-diff at RA, to be operated as packages in conjunction with shifting times and damper hardness via „Manettino“</p> <p>Optional: Launch control</p>	<p>CST (stability and traction control: Race, Ice, Low Grip, Sport, CST Off*) - selectable via „Manettino“ (*system can be fully deactivated)</p> <p>Standard: Launch control</p>	<p>ESP, ASR and ABD</p> <p>Standard: Thrust Mode acceleration aid</p>

Lamborghini Gallardo Superleggera	MB SL 65 AMG	Dodge Viper SRT-10	Lamborghini Murcielago LP 640	MB SLR 722
Double wishbone	4-link axle	Double wishbone	Double wishbone, front axle with height adjustment (50 mm)	Double wishbone (made from forged aluminium)
Double wishbone	Multi-link suspension	Double wishbone	Double wishbone	Double wishbone (made from forged aluminium)
Active damper system: anti-dive, anti-squat, anti-roll bar, lateral stabiliser	Active Body Control (ABC), 2 damper maps „Sport“ and „Comfort“, anti-roll bars front and rear; AMG sports chassis	Trailing links with link connections made from high-performance aluminium	Variable damping system with „antidive“ and „antisquat“ functions	
Front axle: coil spring with internal adaptive damper	Front axle: hydraulically controlled actuating cylinders, passive gas- filled shock absorbers and coil springs	Front axle: Coil springs with gas-filled shock absorbers and anti-roll bars	Front axle: Coil spring, coaxial arrangement, electronically controlled shock absorbers	Front axle: Coil springs, gas-filled shock absorbers, pitch torque support, anti-roll bars
Rear axle: coil spring with internal adaptive damper	Rear axle: hydraulically controlled actuating cylinders, passive gas- filled shock absorbers and coil springs	Rear axle: Coil springs with gas-filled shock absorbers and anti-roll bars	Rear axle: Two coil springs per wheel, coaxial arrangement, electronically controlled shock absorber	Rear axle: Coil springs, gas-filled shock absorbers, pitch torque support
Rack-and-pinion power steering	Parameter-servo steering with safety steering column	Rack-and-pinion steering with servo support	Rack-and-pinion power steering	Rack-and-pinion steering with servo support
11.5	11.04	12.34	12.55	12.2
ESP, ASR and ABD	ESP, ASR	ABS	Traction control (TCS)	ASR and ESP
Standard: Thrust Mode acceleration aid	Standard: asymmetrical multi-level rear differential lock	Standard: Viscous lock differential with anti-slip		

	Porsche new 911 GT2 (997)	Ferrari F 430	Ferrari 599 GTB	Lamborghini Gallardo SE
Steel brake system	not available	Standard 4-piston fixed callipers Internally vented and perforated brake discs front: 330 x 32 mm rear: 330 x 32 mm ABS, EBD (electronic brake-force distribution)	Standard front: 6-piston fixed callipers rear: 6-piston fixed callipers Internally vented brake discs front: 355 x 32 mm rear: 330 x 28 mm ABS, Electronic Brake-force Distribution	Standard front: 8-piston brake callipers rear: 4-piston brake callipers Internally vented and perforated brake discs front: 365 x 34 mm rear: 355 x 32 mm ABS, Electronic Brake-force Distribution
Ceramic brake system	Standard: Porsche Ceramic Composite Brake (PCCB) front: 6-piston monobloc fixed callipers rear: 4-piston monobloc fixed callipers Internally vented and perforated brake discs front: 380 x 34 mm rear: 350 x 28 mm ABS, brake pad wear indicator on each wheel	Option: Ceramic Composite Brake Discs (CCM) front: 6-piston fixed callipers rear: 4-piston fixed callipers Internally vented and perforated brake discs front: 360 x 34 mm rear: 350 x 34 mm ABS, EBD (electronic brake-force distribution)	Option: Ferrari Brembo Carbon Ceramic front: 6-piston fixed callipers rear: 6-piston fixed callipers Internally vented and perforated brake discs front: 398 x 36 mm rear: 360 x 32 mm ABS, Electronic Brake-force Distribution	not available ABS, Electronic Brake-force Distribution
Wheel dimension (front/rear)	8.5 J x 19 RO 53 12 J x 19 RO 51	7.5 J x 19 10 J x 19	8 J x 19 RO 30 11 J x 20 RO 33	8.5 J x 19 11 J x 19
Tyre size (front/rear)	235/35 ZR 19 325/30 ZR 19	225/35 ZR 19 285/35 ZR 19	245/40 R 19 305/35 R 20	235/35 ZR 19 295/30 ZR 19
Wheel design	Aluminium	Aluminium	Aluminium	Aluminium, titanium-colours
Tyres	Standard: sports tyres	Standard: standard tyres optional sports tyres	Standard tyres optional sports tyres	Standard: sports tyres optional standard tyres (no extra charge)
Tyre pressure monitoring (TPM)	Standard	Optional	Standard	not available

Lamborghini Gallardo Superleggera	MB SL 65 AMG	Dodge Viper SRT-10	Lamborghini Murcielago LP 640	MB SLR 722
Standard front: 8-piston fixed callipers rear: 4-piston fixed callipers Internally vented brake discs front: 365 x 34 mm rear: 355 x 32 mm ABS, Electronic Brake- force Distribution	Standard front: 6-piston brake system rear: N/A internally vented, front perforated Compound brake discs front: 390 x 36 mm rear: 360 x 26 mm ABS, high-performance composite brake system combined with electro-hydraulic high pressure brake with SBC (Sensotronic Brake Control), BAS (Brake Assist System), brake pad wear indicator, start-up assistant, DISTRONIC distance control device	Standard Electro-hydraulic brake system front: 4-piston fixed callipers rear: 4-piston fixed callipers Internally vented brake discs front: 355 x 32 mm rear: 355 x 32 mm ABS	Standard front: 8-piston fixed callipers rear: 4-piston fixed callipers Internally vented and perforated brake discs front: 380 x 34 mm rear: 355 x 32 mm ABS with electronic brake management (DRP)	
Optional: carbon- ceramic brake front: 6-piston fixed callipers rear: 6-piston fixed callipers Internally vented and perforated brake discs front: 375 mm ABS, Electronic Brake- force Distribution	not available	not available	Optional: Carbon- ceramic brake front: 6-piston fixed callipers rear: 6-piston fixed callipers Internally vented and perforated brake discs front: 380 x 36 mm rear: 350 x 34 mm	Standard. Carbon- ceramic brake discs 8-piston front brake system 4-piston rear brake system Internally vented and perforated brake discs front: 390 mm rear: 370 mm ABS Electro-hydraulic high pressure brake SBC (Sensoric Brake Control), BAS (Brake assist)
8.5 J x 19 11 J x 19	8.5 J x 19 R0 30 9.5 J x 19 R0 31	10 J x 18 13 J x 19	8.5 J x 18 13 J x 18	9 J x 19 11.5 J x 19
235/35 ZR19 295/30 ZR 19	255/35 R 19 285/30 R 19	275/35 ZR 18 345/30 ZR 19	245/35 R18 335/30 R18	255/35 ZR 19 295/30 ZR 19
Aluminium	Forged aluminium, multi-part	Forged aluminium	Aluminium	Forged aluminium
Standard: sports tyres optional standard tyres (no extra charge)	Standard: standard tyres	Standard: Standard tyres	Standard: Sports tyres optional standard tyres (no extra charge)	Standard tyres
not available	Standard	Standard	not available	Standard

	Porsche new 911 GT2 (997)	Ferrari F 430	Ferrari 599 GTB	Lamborghini Gallardo SE
5. Exterior				
Rear wing	Fixed rear wing and wing supports with horizontally integrated ram air box	not available	not available	not available
Exterior colours	4 solid colours, 5 metallic colours Optional: 4 special colours	16 metallic/solid colours Optional: choice of special paints and colours (except for red and yellow)	16 metallic/solid colours Optional: 4 brake calliper colours	6 metallic colours Standard: two colours, basic colour black
Exterior mirrors	Heated, electrically adjustable, aspherical on driver's side, double-arm design	Heated and electrically adjustable	Electrically adjustable, retractable and heated exterior mirrors including courtesy lights	Optional: heated
Roof system	Coupé	Coupé	Coupé	Coupé
Glazing/sun protection	Heat-insulating glass all around Optional: windscreen with grey top-tint, Front side windows with hydrophobic coating	Heat-insulating glass all around	Heat-insulating glass all around	not available
Parking assistant	Optional: ParkAssist with audible distance warning for rear	Optional: parking sensors front and rear	Optional: parking sensor with visual and acoustic indications for front and rear	Standard: rear camera
Key system	Vehicle key with integrated remote control	Vehicle key with integrated remote control	Vehicle key with integrated remote control	Vehicle key with remote control

Lamborghini Gallardo Superleggera	MB SL 65 AMG	Dodge Viper SRT-10	Lamborghini Murcielago LP 640	MB SLR 722
Optional: carbon fibre rear wing	not available	not available	optional, 2-level automatically extendable, level 1 from 130km/h, level 2 from 220 km/h	Automatically extendable rear wing from 120 km/h
4 metallic colours	Standard: metallic paint 8 metallic colours, optional: 3 individual colours	8 exterior from 2008	5 metallic colours	1 fixed exterior colour, crystal Antimony grey
Optional: heated	Heated, electrically adjustable, painted in exterior colour, aspherical, optional retraction function, parking position programmable on passenger's side	electrically adjustable	Heated, electrically adjustable and retractable	electrically adjustable
Coupé	Electro-hydraulic retractable hard top painted in exterior colour with remote control Optional: panorama retractable glass roof with roller blind	Roadster with fabric hood including double-bubble roof for greater headroom and covering, heated rear window	Coupé	Coupé
not available	Heat-insulating glass all around	not available	Heat-insulating glass	Heat-insulating glass
Optional: rear camera	Standard: Parktronic (with visual and acoustic signals for front and rear)	not available	Optional	not available
Vehicle key with integrated remote control	Locking system with wireless infrared remote control and visual closing signal Option: Keyless-Go	Vehicle key with integrated remote control and electronic engine immobiliser		Locking system with wireless infrared remote control and visual closing signal

	Porsche new 911 GT2 (997)	Ferrari F 430	Ferrari 599 GTB	Lamborghini Gallardo SE
6. Interior				
Interior colours	Standard: Black	Standard: 12 leather colours and 8 carpet colours	Standard: 12 leather colours, 8 colours of foot mats, 2 rev counter colours	Standard: 6 dual-colour leather interiors (black/exterior colour)
Material concept	Leather interior with some items in Alcantara: steering wheel rim, gear lever and handbrake, exterior mirrors, lids of door storage boxes and centre console, roofliner, seat centre section Optional: e.g. natural leather interior, other leather packages, various carbon items and packages, coloured seat belts	Leather interior: seats, door trims, switch panel, centre console rear, steering wheel, handbrake lever, carbon or aluminium centre console and switch panel elements Optional: "Daytona" seat design (Alcantara and leather), additional leather items and colour options, roll-over bars, 4-point belts, fire extinguisher, carbon kit for interior and cockpit	Leather interior, carbon, aluminium Carbon steering wheel with LED, other decorative trims in carbon Optional: Alcantara and leather, additional leather items and colour options, roll-over bars, 4-point belts, fire extinguisher, carbon kit for interior and cockpit	Standard: Seats and front in smooth or partially perforated leather
Seats	Sports bucket seats. Light racing bucket seats in exposed carbon with folding backrest and integrated thorax airbag and manual fore/aft adjustment. Leather/Alcantara cover Optional, without extra cost: adaptive sports seats	Manually adjustable sports seats Optional: electrically adjustable Optional: manually adjustable bucket seats in CFRP, in leather	Sports seats (Recaro) with retractable backrest; electrically adjustable upholstery on sides of seat surface and backrest Optional: memory, heated seats, lumbar supports	Manual seats with electrically adjustable backrest Optional: electrical seats or sports seats
Heated seats/steering wheel	Optional: seat heating for adaptive sport seats (optional)	Optional: heated seats	Optional: heated seats	Optional: heated seats
7. Heating and air conditioning				
Air conditioning	Climate control with integrated active carbon filter	Electronically controlled air conditioner	Climate control temperature regulation separate for right/left	2-zone climate control
8. Electrics, audio & communication				
Standard lights	Bi-Xenon headlights with headlight cleaning system Additional LED lights in front end High-level third brake light in LED technology	Bi-Xenon headlights with headlight cleaning system	Bi-Xenon headlights with headlight cleaning system and twilight sensor, LED rear lights	Bi-Xenon headlights

Lamborghini Gallardo Superleggera	MB SL 65 AMG	Dodge Viper SRT-10	Lamborghini Murcielago LP 640	MB SLR 722
Standard: Black (only colour available)	Standard: 5 Interior colours, 3 Interior trim colours, Optional: individual colours	Standard: Black	Standard: Black	Standard: dual-coloured interior concept
Steering wheel with suede cover, carbon tray replaces door panels, carbon transmission tunnel, door loops instead of handles Alcantara: switch panel elements, box, roof liner	Leather interior (seat, steering wheel, centre console, handbrake lever boot, armrest, door handles, combination box, door panels), decorative trims in aluminium, wood; carbon Velvet floor mats Optional: Nappa leather, Alcantara roofliner	Sport seat with leather and Alcantara, leather steering wheel and selector lever Optional: various trims for instrument carrier and centre console	Leather interior: seats, door trims, switch panel, centre console, steering wheel, aluminium gearshift lever Optional: Seat and door panels on driver's side in perforated leather; Carbon package (switches, gear lever console, handbrake)	Leather and Alcantara interior (steering wheel, seat, centre console, handbrake lever, roof lining, combination box, door panels), carbon parts on centre console, doors, foot well, rear wheel housings Leather (Nappa leather and suede)
Single-piece sport bucket seats with CFRP shell and Alcantara, manually adjustable, without side airbag	Standard: multi-contour seat left/right with lumbar supports and memory, heated seats Optional: ventilated comfort seats	Sport seat with leather and Alcantara	Sport seats with lumbar supports	Carbon bucket sport seat, single piece, electrically adjustable to four positions (lengthways, inclined); Manufactured to size
not available	Heated seats as standard	not available	not available	not available
2-zone climate control	Climate control with dust filter, residual engine heat utilisation	Standard	Climate control	2-zone climate control including active carbon filter, dust filter, residual engine heat
Bi-Xenon headlights	Bi-Xenon headlights, incl. headlight cleaning system, cornering light, dynamic headlight levelling system, LED rear lights, headlamp activation Optional: adaptive cornering light	Xenon headlights including headlight cleaning system	Bi-Xenon headlights	Bi-Xenon headlights with headlight cleaning system, LED indicator lights, automatic headlamp activation

	Porsche new 911 GT2 (997)	Ferrari F 430	Ferrari 599 GTB	Lamborghini Gallardo SE
Anti-theft protection	Standard: alarm system with interior surveillance, engine immobiliser, safe lock system Option: Vehicle Tracking System	Alarm system and engine immobiliser	Alarm system with tow-away protection, engine immobiliser	Engine immobiliser standard Optional: anti-theft system
Rain sensor	Optional	not available	Standard	not available
Multi-function steering wheel	Optional	Standard: Manettino & start button	Standard: Manettino & start button	not available
Audio/radio	Standard: PCM with integrated radio and CD audio disc drive, MP3, 5.8" display; 4 loudspeakers, 2 x 25 Watt	Standard: HiFi system radio/CD, MP3-compatible	Standard: radio with CD/MP3 player and voice control, integrated Bluetooth, multi-function colour display Optional: iPod connection	Standard: Lamborghini sound system with CD player
Sound systems	Optional, without extra cost: Sound Package Plus with 9 loudspeakers and 235 Watt output Optional: BOSE® Surround sound system with 13 loudspeakers and 325 Watt output	Optional: HiFi sound system with subwoofer, 325 Watt output	Optional: BOSE® surround sound system, 11 high-performance loudspeakers	
CD autochanger	not available	Optional: 6-disc	Optional: 6-disc in luggage compartment	Optional
Navigation system	Optional: GPS navigation module for PCM with separate DVD drive	Optional: navigation system	Optional: navigation system	Optional: navigation system
Telephone	Optional: telephone module for PCM and passive receiver	Optional: Bluetooth transmission technology	Bluetooth-telephone connection	Optional: hands-free facility
Electronic logbook	Optional	not available	not available	not available
Performance indicator	Optional: Sport Chrono Package Plus with analogue stopwatch, performance indicator in PCM and individual memory	not available	Standard: display in instrument cluster including information on lap times	not available
9. Safety				
Airbag for driver/passenger	Standard	Standard	Standard	Standard
Side airbags	Separate head/thorax airbags in side bolsters of seat backrests and door panels	not available	Front side airbags (without separate head/thorax airbag)	Front side airbags (without separate head/thorax airbag)

Lamborghini Gallardo Superleggera	MB SL 65 AMG	Dodge Viper SRT-10	Lamborghini Murcielago LP 640	MB SLR 722
Engine immobiliser standard Optional: anti-theft system	Alarm system with tow-away protection, electronic engine immobiliser (EWS), with remote control	Alarm system	Alarm system	Alarm system with tow-away protection and interior surveillance
not available	Standard	not available	not available	Standard
not available	Standard: shift paddles	not available	not available	Standard with shifting paddles
Standard: Lamborghini sound system with cassette and CD player Multi-media display	Standard: COMAND with integrated radio, 6.5-inch colour display (16:9) and CD/DVD-drive Optional: TV tuner, voice control	Standard: CD radio	DVD car radio with 6.5" widescreen monitor, MP3-compatible	Radio with CD player
	Standard: BOSE® surround sound system with 8 high-performance loudspeakers	Standard: 6 loudspeakers, subwoofer, 310 Watt amplifiers	Standard: Amplifier/output stage, subwoofer with 300 Watt output, mid-range speakers/tweeters	Standard: BOSE® surround sound system with 7 high-performance loudspeakers
Optional	Standard, MP3 compatible	not available	not available	Standard: 6-disc
Optional: DVD navigation system	Optional: navigation system with extra-large memory capacity 6.5" colour display	Optional: Navigation system	Optional: Navigation system	Standard
Optional: hands-free facility	Option: mobile telephone in armrest, includes hands-free facility Standard: telephone preparation incl. antenna and GSM wiring according	not available	not available	Standard: Mobile telephone in armrest, includes hands-free facility
not available	not available	not available	not available	not available
not available	Standard: AMG instrument surround with race timer	not available	not available	Standard: Race timer
Standard	Standard	Standard	Standard	Standard
Front side airbags (without separate head/thorax airbag)	Separate head/thorax and side airbags	not available	not available	Separate head/thorax and knee airbags

	Porsche new 911 GT2 (997)	Ferrari F 430	Ferrari 599 GTB	Lamborghini Gallardo SE
Side impact protection	Standard	Standard	Standard	Standard
Force limiter	Standard	Standard	Standard	Standard
Belt tensioniser	Standard	Standard	Standard	Standard
Roll-over frame, multi-point belts	Optional (at no extra cost) Clubsport package: rear roll-over frame, seats in flame-resistant fabric, 6-point belt driver's side, fire extinguisher, preparation for battery main switch	Option: roll-over bar, 4-point belts	Option: roll-over bar, 4-point belts	Option: preparation for roll-over bars for retrofitting, 4-point belts
10. Dimensions and weights				
Wheelbase in mm	2,350	2,600	2,750	2,560
Exterior dimensions (L x W x H) in mm	4,469 x 1,852 x 1,285	4,512 x 1,923 x 1,214	4,665 x 1,962 x 1,336	4,300 x 1,900 x 1,165
Weight (DIN, empty) in kg	1,440	1,450	1,690	1,485
Weight (EU, empty) in kg	1,515	1,525	1,765	1,560
Permissible gross weight in kg	1,750	1,720	N/A	1,800
Max. payload in kg	310	270	N/A	315
Weight distribution f/r in %	Manual transmission 37/63	Manual transmission 43/57	47/53	Manual transmission 42/58
Aerodynamics (cd x A)	0.32 x 2.048 = 0.66	> 0.37	0.34	0.37
Tank capacity (reserve) in l	90 (12)	95	105	90
Range in km	720	0	493	420
Luggage compartment capacity in l	front: 105 rear: 205	250 (incl. luggage compartment and storage space behind seats)	320	110
Max. permissible roof load in kg	75 (with original Porsche roof transport system)	none	none	none
Transport	See luggage compartment capacity	See luggage compartment capacity	Leather luggage set	
11. Warranty services and prices				
Warranty period	2 years, unlimited mileage (USA: 4 years or 50,000 miles)	3 years, guaranteed with unlimited mileage	3 years, guaranteed with unlimited mileage	2 years
Guarantee against rust penetration	3 years (USA: 4 years)	none, as aluminium body	none, as aluminium body	none, as aluminium body
Paintwork guarantee	3 years (USA: 4 years)	none	none	2 years
Cost of Ownership (D)	€ 8,987.00	€ 9,086.00	€ 11,394.00	€ 10,157.00
RRP incl. 19% VAT (D)	€ 189,496.00	€ 153,510.00	€ 212,060.00	€ 168,385.00

Note: The comparison with the competition relates to the EU model for Germany. Information on competitor vehicles has been obtained from brochures, press reports, dealerships and branches. (Status: May 2007). Accuracy cannot be guaranteed. N/A =not available

Lamborghini Gallardo Superleggera	MB SL 65 AMG	Dodge Viper SRT-10	Lamborghini Murcielago LP 640	MB SLR 722
Standard	Standard	N/A	N/A	N/A
Standard	Standard	Standard	Standard	Standard
Standard	Standard	Standard	N/A	Standard
Option: preparation for roll-over bars for retrofitting, 4-point belts	not available	not available	not available	not available
2,560	2,560	2,510	2,665	2,700
4,300 x 1,900 x 1,165	4,540 x 1,827 x 1,298	4,458 x 1,910 x 1,209	4,610 x 2,058 x 1,135	4,656 x 1,908 x 1,251
1,422	2,045	1,600	1,735	1,649
1,497	2,120	1,675	1,810	1,724
N/A	2,385	1,756	2,000	1,940
N/A	340	156	265	291
N/A	N/A	48/52	41/59	50/50
0.37	0.30	0.43	0.35 x 2.04 = 0.71	0.29 x 2.032 = 0.589
90	80 (10)	68	100	97 (10)
420	529	320	469	669
110	235 when hood is open 317 when hood is closed	240	130	272
none	50	none	none	none
	As accessory: transport nets (luggage compartment), lashing belts and box Standard: luggage box with goods strap in luggage compartment, luggage compartment tray	See luggage compartment capacity	See luggage compartment capacity	See luggage compartment capacity
2 years	2 years	2 years, unlimited mileage	2 years with total mileage of 100,000 km	2 years
none, as aluminium body	30 years	N/A	none	30 years
N/A	2 years	N/A	N/A	2 years
€ 10,112.00	€ 9,741.00	€ 8.652,00	€ 13.223,00	€ 16.527,00
€ 187,604.00	€ 212,177.00	€ 112.000,00	€ 255.850,00	€ 476.000,00

15.2 Main product advantages of the 911 GT2

Note: the comparison with the competition relates to EU-specification models for the German market in each case. Information on competitor vehicles has been obtained from brochures, press reports, dealerships and branches. Accuracy cannot be guaranteed.

15.2.1 Main product advantages of the Porsche 911 GT2 compared to the Ferrari F 430



Fig. 1: Ferrari F 430

Criterion	Advantages compared with Ferrari F 430
Engine/ performance	<ul style="list-style-type: none"> • VTG turbo engine with an variable intake manifold for increased torque (even at low engine speeds) and top-end performance in combination with low displacement for minimised fuel consumption and improved emission values (CO₂) • 6-cylinder horizontally opposed layout for a low centre of gravity • Rear silencer and tailpipes of light-weight titanium • Higher power output and torque values (+ 40 bhp; + 215 Nm) • Noticeably better torque is available over a broader rev range • Higher specific performance and higher specific torque (147 bhp/l comp. to F 430: 114 bhp/l; 189 Nm/l comp. to F 430: 108 Nm/l) • Better power-to-weight ratio (2.7 kg/bhp comp. to F 430: 3.0 kg/bhp) • Dry-sump lubrication with 9 oil pumps (F 430: 4 oil pumps) • Better acceleration from 0-100 km/h (3.7 s comp. to F 430 - 4.0 s) • Higher top speed (329 km/h comp. to F 430: 315 km/h) • Lower fuel consumption and lower emission values (CO₂) (12.5 l/100 km comp. to F 430: 18.3 l/100 km; CO₂: 298 g/km comp. to F 430: 420 g/km)
Transmission	<ul style="list-style-type: none"> • Supplementary transmission oil cooling • Steel synchroniser rings 2nd – 5th gear • Adjustable gear ratios
Chassis	<ul style="list-style-type: none"> • Adjustable chassis for race track use (height, track, camber, anti-roll bars) • Variable steering ratio • Launch Assistant – standard (F 430: Launch Control optional) • PCCBC ceramic brake system- standard (F 430: optional) • Standard brake system with large brake disc diameter on the front and rear axles, 6-piston aluminium monobloc brake callipers on the front axle for improved braking (F 430: 4-piston fixed callipers) • Larger brake disc diameter comp. to F 430 ceramic brake (380 mm comp. to F 430: 350 mm)

	<ul style="list-style-type: none"> • Wider wheels and tyres for better traction • Sports tyres for better on-road performance - standard (F 430: optional) • Tyre Pressure Monitoring System (TPM) - standard (F 430: optional)
Exterior	<ul style="list-style-type: none"> • Rear wing and ram air box combine design and function • Front side windows with hydrophobic coating
Interior	<ul style="list-style-type: none"> • Hinged sports bucket seats with high lateral support and integrated thorax airbag (F 430: without side airbag) • Adaptive sports seats at no extra charge • Large storage space behind seats • Extensive use of high-quality and functional Alcantara
Electrical system, audio and communication	<ul style="list-style-type: none"> • Additional LED lights in front end • High-level third brake light in LED technology • Optional rain sensor (F 430: not available) • Interior surveillance - standard • Sound Package Plus with 9 loudspeakers and 235 watt total output optional at no extra cost (F 430: sound system optional at extra cost). • Electronic logbook optional (F 430: not available) • Sport Chrono Package Plus with an analogue stopwatch and driving data analysis in PCM optional (F 430: not available) • Enhanced anti-theft safety thanks to Vehicle Tracking System (F 430: not available)
Safety	<ul style="list-style-type: none"> • Head airbags in the upper section of the door panel - standard (F 430: not available) • Thorax airbags in seat side bolsters - standard (F 430: not available) • Clubsport package with roll-over frame and 6-point seatbelt for driver optional at no extra cost (F 430: roll-over bar and 4-point seatbelt optional at extra cost)
Entire vehicle	<ul style="list-style-type: none"> • More agile cornering thanks to shorter wheelbase (2,350 mm comp. to F 430: 2,600 mm) • Low drag for high top speeds and low fuel consumption (cd = 0.32 F 430: cd > 0.37) • Better visibility, especially behind the vehicle • Larger luggage compartment capacity (total 310 l comp. to F 430: 250 l) • Higher payload (310 kg comp. to F 430: 270 kg) • Greater range (720 km comp. to F 430: 519 km) • Lower cost of ownership (€8,987 comp. to F 430: €9,086)

15.2.2 Main product advantages of the Porsche 911 GT2 compared to the Ferrari 599 GTB



Fig. 2: Ferrari 599 GTB

Criterion	Advantages compared with Ferrari 599 GTB
<p>Engine/performance</p>	<ul style="list-style-type: none"> • VTG turbo engine with a variable intake manifold for increased torque (even at low engine speeds) and top-end performance in combination with low displacement for minimised fuel consumption and improved emission values (CO₂) • Rear engine for high agility and good traction (599 GTB: front/mid engine) • 6-cylinder horizontally opposed layout for a low centre of gravity • Rear silencer and tailpipes of light-weight titanium • Higher torque (+72 Nm) • Better torque is available over a broader rev range • Higher specific performance and higher specific torque (147 bhp/l comp. to 599 GTB: 103 bhp/l; 189 Nm/l comp. to 599 GTB: 101 Nm/l) • Dry-sump lubrication with 9 oil pumps (599 GTB: integrated dry-sump lubrication) • Significantly lower fuel consumption and lower emission values (CO₂) (12.5 l/100 km comp. to 599 GTB: 21.3 l/100 km; CO₂: 298 g/km comp. to 599 GTB: 490 g/km)
<p>Transmission</p>	<ul style="list-style-type: none"> • Supplementary transmission oil cooling • Steel synchroniser rings 2nd - 5th gear • Adjustable gear ratios
<p>Chassis</p>	<ul style="list-style-type: none"> • Adjustable chassis for race track use (height, track, camber, anti-roll bars) • Variable steering ratio • Smaller turning circle (10.9 m comp. to 599 GTB: left 11.6 m and right 13.6 m) • Ceramic brake system (PCCB) - standard (599 GTB: optional) • Standard brake system with larger brake disc diameter on the front and rear axles (front 380 mm and rear 350 mm comp. to 599 GTB: front 355 mm and rear 330 mm) • Wider wheels and tyres on front and rear axles for better steering behaviour, higher lateral acceleration and traction • Sports tyres for better performance - standard (599 GTB: optional)

Exterior	<ul style="list-style-type: none"> • Rear wings and ram air box combine design and function • Front side windows with hydrophobic coating
Interior	<ul style="list-style-type: none"> • Hinged sports bucket seats with unbroken high lateral support and integrated thorax airbag (599 GTB: adaptive sports seats without thorax airbag)
Electrical system, audio and communication	<ul style="list-style-type: none"> • Additional LED lights in front end • Interior surveillance – standard • Sound Package Plus with 9 loudspeakers and 235 watt total output optional at no extra cost (599 GTB: CD radio – standard) • BOSE® Surround Sound System with 13 loudspeakers optional (599 GTB: BOSE® Surround Sound System with 11 loudspeakers optional) • Electronic logbook optional (599 GTB: not available) • Sport Chrono Package Plus with an analogue stopwatch and driving data analysis in PCM optional (599 GTB: instrument cluster with lap time display) • Enhanced anti-theft safety thanks to Vehicle Tracking System (599 GTB: not available)
Safety	<ul style="list-style-type: none"> • Separate head and thorax airbags (599 GTB: single lateral airbag) • Clubsport package with roll-over frame and 6-point seatbelt for driver optional at no extra cost (599 GTB: roll-over bar and 4-point seatbelt optional at extra cost)
Entire vehicle	<ul style="list-style-type: none"> • More agile cornering thanks to shorter wheelbase (2,350 mm comp. to 599 GTB: 2,750 mm) • Compact dimensions for high day-to-day usability (vehicle length: 4,469 mm comp. to 599 GTB: 4,665 mm) • Lower vehicle weight for good acceleration and high agility combined with low fuel consumption and low emissions (1,440 kg comp. to 599 GTB: 1,690 kg) • Low drag for high top speeds and low fuel consumption (cd 0.32 comp. to 599 GTB: cd 0.34) • Greater range (720 km comp. to 599 GTB: 493 km) • Significantly lower purchase price (RRP €189,496 comp. to 599 GTB: €212,060) • Significantly lower cost of ownership incl. insurance class (€8,987 comp. to GTB 599: €11,394)

15.2.3 Main product advantages of the Porsche 911 GT2 compared to the Lamborghini Gallardo SE



Fig. 3: Lamborghini Gallardo SE

Criterion	Advantages compared with Lamborghini Gallardo SE
<p>Engine/performance</p>	<ul style="list-style-type: none"> • VTG turbo engine with a variable intake manifold for increased torque (even at low engine speeds) and top-end performance in combination with low displacement for minimised fuel consumption and improved emission values (CO₂) • 6-cylinder horizontally opposed layout for a low centre of gravity • Rear silencer and tailpipes of light-weight titanium • Higher power output and torque values (+ 10 bhp; + 170 Nm) • Noticeably better torque is available over a broader rev range • Higher specific performance and higher specific torque (147 bhp/l comp. to Gallardo SE: 105 bhp/l; 189 Nm/l comp. to Gallardo SE: 103 Nm/l) • Better power-to-weight ratio (2.7 kg/bhp comp. to Gallardo SE: 3.1 kg/bhp) • Dry-sump lubrication with 9 oil pumps (Gallardo SE: 2 oil pumps) • Better acceleration from 0-100 km/h (3.7 s comp. to Gallardo SE: 4.0 s) • Higher top speed (329 km/h comp. to Gallardo SE: 315 km/h) • Lower fuel consumption and lower emission values (CO₂) (12.5 l/100 km comp. to Gallardo SE: 17.0 l/100 km; CO₂: 298 g/km comp. to Gallardo SE: 400 g/km)
<p>Transmission</p>	<ul style="list-style-type: none"> • Supplementary transmission oil cooling • Steel synchroniser rings 2nd – 5th gear • Adjustable gear ratios • Rear-wheel drive for lower vehicle weight (1,440 kg) and high on-road dynamics (Gallardo SE: 1,485 kg with all-wheel drive)
<p>Chassis</p>	<ul style="list-style-type: none"> • Adjustable chassis for race track use (height, track, camber, anti-roll bars) • Variable steering ratio • Smaller turning circle (10.9 m comp. to Gallardo SE: 11.5 m) • Ceramic brake system (PCCB) - standard (Gallardo SE: not available) • Standard brake system with larger brake disc diameter on the front axle (front 380 mm comp. to Gallardo SE: 365 mm)

	<ul style="list-style-type: none"> • Wider wheels and tyres on rear axle for better traction (12Jx19 with 325/30 ZR 19 comp. to Gallardo SE: 11Jx19 with 295/30 ZR 19) • Tyre Pressure Monitoring System (TPM) – standard (Gallardo SE: not available)
Exterior	<ul style="list-style-type: none"> • Rear wings and ram air box combine design and function • Front side windows with hydrophobic coating • Greater number of solid and special colours for personalisation options
Interior	<ul style="list-style-type: none"> • Hinged sports bucket seats with high lateral support and integrated thorax airbag (Gallardo SE: not available) • Adaptive sports seats at no extra charge (Gallardo SE: optional sports seats) • Large storage space behind seats • Extensive use of high-quality and functional Alcantara
Electrical system, audio and communication	<ul style="list-style-type: none"> • Additional LED lights in front end • High-level third brake light in LED technology • Interior surveillance – standard (Gallardo SE: optional anti-theft system) • Sound Package Plus with 9 loudspeakers and 235 watt total output optional at no extra cost (Gallardo SE: Lamborghini sound system as standard. No further audio features) • BOSE® Surround Sound System optional • Electronic logbook optional (Gallardo SE: not available) • Sport Chrono Package Plus with an analogue stopwatch and driving data analysis in PCM optional (Gallardo SE: not available) • Enhanced anti-theft safety thanks to Vehicle Tracking System (Gallardo SE: not available) • Multi-function steering wheel optional (Gallardo SE: not available)
Safety	<ul style="list-style-type: none"> • Separate head and thorax airbags (Gallardo SE: single lateral airbag) • Clubsport package with roll-over frame and 6-point seatbelt for driver optional at no extra cost (Gallardo SE: roll-over cage for retrofitting and 4-point seatbelt optional at extra cost)
Entire vehicle	<ul style="list-style-type: none"> • More agile cornering thanks to shorter wheelbase (2,350 mm comp. to Gallardo SE: 2,560 mm) • Low drag for high top speeds and low fuel consumption (cd 0.32 comp. to Gallardo SE: 0.37) • Better visibility, especially behind the vehicle • Larger luggage compartment capacity (total 310 l comp. to Gallardo SE: 110 l) • Greater range (720 km comp. to Gallardo SE: 420 km) • Significantly lower cost of ownership incl. insurance class (€8,987 comp. to Gallardo SE: €10,157)

15.2.4 Main product advantages of the Porsche 911 GT2 compared to the Lamborghini Gallardo Superleggera (SL)



Fig. 4: Lamborghini Gallardo Superleggera

Criterion	Advantages compared with Lamborghini Gallardo Superleggera (SL)
Engine/performance	<ul style="list-style-type: none"> • VTG turbo engine with a variable intake manifold for increased torque (even at low engine speeds) and top-end performance in combination with low displacement for minimised fuel consumption and improved emission values (CO₂) • 6-cylinder horizontally opposed layout for a low centre of gravity • Rear silencer and tailpipes of light-weight titanium • Higher torque (+170 Nm) • Noticeably better torque is available over a broader rev range • Higher specific performance and higher specific torque (147 bhp/l comp. to Gallardo SL: 107 bhp/l; 189 Nm/l comp. to Gallardo SL: 103 Nm/l) • Dry-sump lubrication with 9 oil pumps • Better acceleration from 0-100 km/h (3.7 s comp. to Gallardo SL: 3.8 s) • Higher top speed (329 km/h comp. to Gallardo SL: 315 km/h) • Lower fuel consumption and lower emission values (CO₂) (12.5 l/100 km comp. to Gallardo SL: 17.0 l/100 km; CO₂: 298 g/km comp. to Gallardo SL: 400 g/km)
Transmission	<ul style="list-style-type: none"> • Supplementary transmission oil cooling • Steel synchroniser rings 2nd – 5th gear • Adjustable gear ratios
Chassis	<ul style="list-style-type: none"> • Adjustable chassis for race track use (height, track, camber, anti-roll bars) • Variable steering ratio • Smaller turning circle (10.9 m comp. to Gallardo SL: 11.5 m) • Ceramic brake system (PCCB) - standard (Gallardo SL: optional) • Standard brake system with larger brake disc diameter on the front axle (front 380 mm comp. to Gallardo SL: 365 mm) • Wider wheels and tyres on rear axle for better traction (12Jx19 with 325/30 ZR 19 comp. to Gallardo SL: 11Jx19 with 295/30 ZR 19) • Tyre Pressure Monitoring System (TPM) – standard (Gallardo SL: not available)

Exterior	<ul style="list-style-type: none"> • Rear wings and ram air box combine design and function - standard (Gallardo SL: optional rear wings of CFC carbon fibre) • Front side windows with hydrophobic coating • Greater number of solid and special colours for personalisation options
Interior	<ul style="list-style-type: none"> • Hinged sports bucket seats with high lateral support and integrated thorax airbag (Gallardo SL: one-piece sports bucket seats without thorax airbag) • Adaptive sports seats at no extra charge (Gallardo SL: not available) • Large storage space behind seats • Extensive use of high-quality and functional Alcantara (Gallardo SL: low use of Alcantara)
Electrical system, audio and communication	<ul style="list-style-type: none"> • Additional LED lights in front end • High-level third brake light in LED technology • Interior surveillance – standard (Gallardo SL: optional anti-theft system) • Sound Package Plus with 9 loudspeakers and 235 watt total output optional at no extra cost (Gallardo SL: Lamborghini sound system as standard. No further audio features) • BOSE® Surround Sound System optional • Electronic logbook optional (Gallardo SL: not available) • Sport Chrono Package Plus with an analogue stopwatch and driving data analysis in PCM optional (Gallardo SL: not available) • Enhanced anti-theft safety thanks to Vehicle Tracking System (Gallardo SL: not available) • Multi-function steering wheel optional (Gallardo SL: not available)
Safety	<ul style="list-style-type: none"> • Separate head and thorax airbags (Gallardo SL: single lateral airbag) • Clubsport package with roll-over frame and 6-point seatbelt for driver optional at no extra cost (Gallardo SL: roll-over cage for retrofitting and 4-point seatbelt optional at extra cost)
Entire vehicle	<ul style="list-style-type: none"> • More agile cornering thanks to shorter wheelbase (2,350 mm comp. to Gallardo SL: 2,560 mm) • Low drag for high top speeds and low fuel consumption (cd 0.32 comp. to Gallardo SL: 0,37) • Better visibility, especially behind the vehicle • Larger luggage compartment capacity (total 310 l comp. to Gallardo SL: 110 l) • Greater range (720 km comp. to Gallardo SL: 420 km) • Significantly lower cost of ownership incl. insurance class (€8,987 comp. to Gallardo SL: €10,112)

15.2.5 Main product advantages of the Porsche 911 GT2 compared with the Mercedes-Benz ML 65 AMG



Fig. 5: Mercedes-Benz SL 65 AMG

Criterion	Advantages compared with Mercedes-Benz SL 65 AMG
<p>Engine/performance</p>	<ul style="list-style-type: none"> • VTG turbo engine with a variable intake manifold for increased torque (even at low engine speeds) and top-end performance in combination with low displacement for minimised fuel consumption and improved emission values (CO₂) • Rear engine for high agility and good traction (SL 65 AMG: front engine) • 6-cylinder horizontally opposed layout for a low centre of gravity • Four-valve technology for high engine output (SL 65 AMG: three-valve technology) • VarioCam Plus for high torque and output figures in combination with low fuel consumption and emission values • Rear silencer and tailpipes of light-weight titanium • Higher specific performance and higher specific torque (147 bhp/l comp. to SL 65 AMG: 102 bhp/l; 189 Nm/l comp. to SL 65 AMG: 167 Nm/l) • Better power-to-weight ratio (2.7 kg/bhp comp. to SL 65 AMG: 3.3 kg/bhp) • Dry-sump lubrication with p oil pumps (SL 65 AMG: pressure-fed lubrication) • Launch Assistant - standard (SL 65 AMG: not available) • Better acceleration from 0-100 km/h (3.7 s comp. to SL 65 AMG: 4.2 s) • Higher top speed (329 km/h comp. to SL 65 AMG: 250 km/h limited) • Lower fuel consumption and lower emission values (CO₂) (12.5 l/100 km comp. to SL 65 AMG: 15.1 l/100 km; CO₂: 298 g/km comp. to SL 65 AMG: 362 g/km)
<p>Transmission</p>	<ul style="list-style-type: none"> • 6-speed manual transmission for active, driver-controlled gear changes and short individual ratios for dynamic power supply after each change (SL 65 AMG: 5-speed automatic transmission) • Supplementary transmission oil cooling • Steel synchroniser rings 2nd – 5th gear • Adjustable gear ratios
<p>Chassis</p>	<ul style="list-style-type: none"> • Adjustable chassis for race track use (height, track, camber, anti-roll bars) • Variable steering ratio • Smaller turning circle (10.9 m comp. to SL 65 AMG: 11.04 m)

	<ul style="list-style-type: none"> • Ceramic brake system (PCCB) – standard (SL 65 AMG: not available) • Wider wheels and tyres on front and rear axles for better steering behaviour, higher lateral acceleration and traction • Sports tyres for better on-road performance – standard (SL 65 AMG: optional)
Exterior	<ul style="list-style-type: none"> • Coupé with a fixed roof for reduced weight and a low centre of gravity, ensuring minimised roll along with agile handling on curves (SL 65 AMG: Roadster with retractable hard top) • Rear wings and ram air box combine design and function • Front side windows with hydrophobic coating • Greater number of exterior colours for personalisation options
Interior	<ul style="list-style-type: none"> • Light sports bucket seats with hinged backrest and high lateral support (SL 65 AMG: multi-contour seat) • Adaptive sports seats at no extra charge (SL 65 AMG: optional comfort seats) • Large storage space behind seats • Extensive use of high-quality and functional Alcantara
Electrical system, audio and communication	<ul style="list-style-type: none"> • Additional LED lights in front end • Electronic logbook optional (SL 65 AMG: not available) • Sport Chrono Package Plus with an analogue stopwatch and driving data analysis in PCM optional (SL 65 AMG: instrument cluster with lap time display) • Enhanced anti-theft safety thanks to Vehicle Tracking System (SL 65 AMG: not available)
Safety	<ul style="list-style-type: none"> • Clubsport package with roll-over frame and 6-point seatbelt for driver optional at no extra cost (SL 65 AMG: not available)
Entire vehicle	<ul style="list-style-type: none"> • More agile cornering thanks to shorter wheelbase (2,350 mm comp. to SL 65 AMG: 2,560 mm) • Compact dimensions for high day-to-day usability (vehicle length: 4,469 mm comp. to SL 65 AMG: 4,540 mm) • Significantly lower vehicle weight for good acceleration and high agility combined with low fuel consumption and low emissions (1,440 kg comp. to SL 65 AMG: 2,045 kg) • Larger luggage compartment capacity (total 310 l comp. to SL 65 AMG: 235 l when hood is open) • Larger 90 l tank (SL 65 AMG: 80 l) • Greater range (720 km comp. to SL 65 AMG: 529 km) • Lower purchase price (RRP €189,496 comp. to SL 65 AMG: €212,177) • Lower cost of ownership incl. insurance class (€8,987 comp. to SL 65 AMG: €9,741)

15.2.6 Main product advantages of the Porsche 911 GT2 compared to the Lamborghini Murcielago LP 640



FIG. 7: Lamborghini Murcielago LP 640

Criterion	Advantages compared with Lamborghini Murcielago LP 640
<p>Engine/performance</p>	<ul style="list-style-type: none"> • VTG turbo engine with a variable intake manifold for increased torque (even at low engine speeds) and top-end performance in combination with low displacement for minimised fuel consumption and improved emission values (CO₂) • 6-cylinder horizontally opposed layout for a low centre of gravity • Rear silencer and tailpipes of light-weight titanium • Better torque (+ 20 Nm) is available over a broader rev range • Higher specific performance and higher specific torque (147 bhp/l comp. to Murcielago: 99 bhp/l; 189 Nm/l comp. to Murcielago: 102 Nm/l) • Dry-sump lubrication with 9 oil pumps (Murcielago: 3 oil pumps) • Launch Assistant - standard (Murcielago: not available) • Significantly lower fuel consumption and lower emission values (CO₂) (12.5 l/100 km comp. to Murcielago: 21.3 l/100 km; CO₂: 298 g/km comp. to Murcielago: 495 g/km)
<p>Transmission</p>	<ul style="list-style-type: none"> • Supplementary transmission oil cooling • Steel synchroniser rings 2nd – 5th gear • Adjustable gear ratios • Rear-wheel drive for lower vehicle weight (1,440 kg) and high on-road dynamics (Murcielago: 1,735 kg with all-wheel drive) • Rear differential lock optional for good driving dynamics (Murcielago: not available)
<p>Chassis</p>	<ul style="list-style-type: none"> • Adjustable chassis for race track use (height, track, camber, anti-roll bars) • Good driving safety thanks to PSM vehicle stability system (Murcielago: traction control) • Variable steering ratio • Smaller turning circle (10.9 m comp. to Murcielago: 12.6 m) • Ceramic brake system (PCCB) – standard (Murcielago: optional) • 19-inch wheels for good driving dynamics (Murcielago: 18-inch) • Tyre Pressure Monitoring System (TPM) - standard (Murcielago: not available)

Exterior	<ul style="list-style-type: none"> • Fixed rear wings and ram air box combine design and function – standard (Murcielago: optional extendable rear wings) • Front side windows with hydrophobic coating • Greater number of solid and special colours for personalisation options
Interior	<ul style="list-style-type: none"> • Hinged sports bucket seats with high lateral support and integrated thorax airbag (Murcielago: hinged sports seats without thorax airbag) • Adaptive sports seats at no extra charge (Murcielago: not available) • Multi-function steering wheel optional (Murcielago: not available) • Large storage space behind seats • Extensive use of high-quality and functional Alcantara
Electrical system, audio and communication	<ul style="list-style-type: none"> • Additional LED lights in front end • High-level third brake light in LED technology • Optional rain sensor (Murcielago: not available) • Alarm system with interior surveillance (Murcielago: alarm system) • Electronic logbook optional (Murcielago: not available) • Sport Chrono Package Plus with an analogue stopwatch and driving data analysis in PCM optional (Murcielago: not available) • Telephone optional (Murcielago: not available) • Enhanced anti-theft safety thanks to Vehicle Tracking System (Murcielago: not available)
Safety	<ul style="list-style-type: none"> • Separate head and thorax airbags (Murcielago: lateral airbag not available) • Clubsport package with roll-over frame and 6-point seatbelt for driver optional at no extra cost (Murcielago: not available)
Entire vehicle	<ul style="list-style-type: none"> • More agile cornering thanks to shorter wheelbase (2,350 mm comp. to Murcielago: 2,665 mm) • Compact dimensions for high day-to-day usability (vehicle length: 4,469 mm comp. to Murcielago: 4,610 mm) • Significantly lower vehicle weight for good acceleration and high agility combined with low fuel consumption and low emissions (1,440 kg comp. to Murcielago: 1,735 kg) • Low drag for high top speeds and low fuel consumption (cd 0.32 comp. to Murcielago: cd 0.35) • Better visibility, especially behind the vehicle • Larger luggage compartment capacity (total 310 l comp. to Murcielago: 130 l) • Higher payload (310 kg comp. to Murcielago: 265 kg) • Greater range (720 km comp. to Murcielago: 469 km) • Significantly lower purchase price (RRP €189,496 comp. to Murcielago: €255,850) • Significantly lower cost of ownership incl. insurance class (€8,987 comp. to Murcielago: €13,223)

15.2.7 Main product advantages of the Porsche 911 GT2 compared to the Mercedes-Benz SLR 722



Fig. 8: Mercedes-Benz SLR 722

Criterion	Advantages compared with Mercedes-Benz SLR 722
Engine/performance	<ul style="list-style-type: none"> • VTG turbo engine with a variable intake manifold for increased torque (even at low engine speeds) and top-end performance in combination with low displacement for minimised fuel consumption and improved emission values (CO₂) • Rear engine for high agility and good traction (SLR 722: front/mid engine) • 6-cylinder horizontally opposed layout for a low centre of gravity • Four-valve technology for high engine output (SLR 722: 3-valve technology) • VarioCam Plus for high torque and output figures in combination with low fuel consumption and emission values • Rear silencer and tailpipes of light-weight titanium • Higher specific performance and higher specific torque (147 bhp/l comp. to SLR 722: 110 bhp/l; 189 Nm/l comp. to SLR 722: 138 Nm/l) • Dry-sump lubrication with 9 oil pumps (SLR 722: 7 oil pumps) • Lower fuel consumption and lower emission values (CO₂) (12.5 l/100 km comp. to SLR 722: 14.5 l/100 km; CO₂: 298 g/km comp. to SLR 722: 348 g/km)
Transmission	<ul style="list-style-type: none"> • 6-speed manual transmission for active, driver-controlled gear changes and short individual ratios for dynamic power supply after each change (SLR 722: 5-speed automatic transmission) • Supplementary transmission oil cooling • Steel synchroniser rings 2nd – 5th gear • Adjustable gear ratios • Rear differential lock optional for good driving dynamics (SLR 722: not available)
Chassis	<ul style="list-style-type: none"> • Adjustable chassis for race track use (height, track, camber, anti-roll bars) • Variable steering ratio • Small turning circle (10.9 m comp. to SLR 722: 12.2 m) • Wide wheels and tyres on rear axle for good traction and lateral support (12Jx19 with 325/30 ZR 19 comp. to SLR 722: 11.5Jx19 with tyres 295/30 ZR 19) • Sports tyres for better performance (SLR 722: not available)

Exterior	<ul style="list-style-type: none"> • Ram air box combines design and function – standard (SLR 722: not available) • Front side windows with hydrophobic coating • Significantly larger number of solid, metallic and special colours for personalisation options • ParkAssist parking aid optional (SLR 722: not available)
Interior	<ul style="list-style-type: none"> • Hinged sports bucket seats for easy object storage behind seats (SLR 722: one-piece bucket seats) • Large storage space behind seats
Electrical system, audio and communication	<ul style="list-style-type: none"> • Electronic logbook optional (SLR 722: not available) • Sport Chrono Package Plus with an analogue stopwatch and driving data analysis in PCM optional (SLR 722: not available) • BOSE® Surround Sound System with 13 loudspeakers optional (SLR 722: BOSE® sound system with 7 loudspeakers as standard) • Enhanced anti-theft safety thanks to Vehicle Tracking System (SLR 722: not available)
Safety	<ul style="list-style-type: none"> • Clubsport package with roll-over frame and 6-point seatbelt for driver optional at no extra cost (SLR 722: not available)
Entire vehicle	<ul style="list-style-type: none"> • More agile cornering thanks to shorter wheelbase (2,350 mm comp. to SLR 722: 2,700 mm) • Compact dimensions for high day-to-day usability (vehicle length: 4,469 mm comp. to SLR 722: 4,656 mm) • Significantly lower vehicle weight for good acceleration and high agility combined with low fuel consumption and low emissions (1,440 kg comp. to SLR 722: 1,649 kg) • Larger luggage compartment capacity (total 310 l comp. to SLR 722: 272 l) • Higher payload (310 kg comp. to SLR 722: 291 kg) • Greater range (720 km comp. to SLR 722: 669 km) • Significantly lower purchase price (RRP €189,496 comp. to SLR 722: €476,000) • Significantly lower cost of ownership incl. insurance class (€8,987 comp. to SLR 722: €16,527)

15.2.8 Main product advantages of the Porsche 911 GT2 compared to the Dodge Viper SRT-10



Fig. 6: Dodge Viper SRT-10

Criterion	Advantages compared with Dodge Viper SRT-10
<p>Engine/performance</p>	<ul style="list-style-type: none"> • VTG turbo engine with a variable intake manifold for increased torque (even at low engine speeds) and top-end performance in combination with low displacement for minimised fuel consumption and improved emission values (CO₂) • Rear engine for high agility and good traction (Viper SRT-10: front/mid-engine) • 6-cylinder horizontally opposed layout for a low centre of gravity • Four-valve technology for high engine output (Viper SRT-10: two-valve technology) • VarioCam Plus for high torque and output figures in combination with low fuel consumption and emission values • Rear silencer and tailpipes of light-weight titanium • Higher engine output power (+24 bhp) • Higher specific performance and higher specific torque (147 bhp/l comp. to Viper SRT-10: 61 bhp/l; 189 Nm/l comp. to Viper SRT-10: 86 Nm/l) • Better power-to-weight ratio (2.7 kg/bhp comp. to Viper SRT-10: 3.2 kg/bhp) • Dry-sump lubrication with p oil pumps (Viper SRT-10: pressure-fed lubrication) • Launch Assistant - standard (Viper SRT-10: not available) • Better acceleration from 0-100 km/h (3.7 s comp. to Viper SRT-10: 3.9 s) • Higher top speed (329 km/h comp. to Viper SRT-10: 314 km/h) • Significantly lower fuel consumption and lower emission values (CO₂) (12.5 l/100 km comp. to Viper SRT-10: 21.2 l/100 km; CO₂: 298 g/km comp. to Viper SRT-10: 489 g/km)
<p>Transmission</p>	<ul style="list-style-type: none"> • Supplementary transmission oil cooling • Steel synchroniser rings 2nd – 5th gear • Adjustable gear ratios
<p>Chassis</p>	<ul style="list-style-type: none"> • PASM variable damping system (Viper SRT-10: not available) • PSM driving dynamics control system, disengagable in 2 stages (Viper SRT-10: not available) • Adjustable chassis for race track use (height, track, camber, anti-roll bars)

	<ul style="list-style-type: none"> • Variable steering ratio • Smaller turning circle (10.9 m comp. to Viper SRT-10: 12.3 m) • Ceramic brake system (PCCB) – standard (Viper SRT-10: not available) • Standard brake system with 6-piston monobloc fixed calliper and 380 mm brake disc diameter on the front axle for good braking performance (Viper SRT-10: front axle with 4-piston fixed callipers and 355 mm brake discs) • 19-inch wheels on front axle for large wheel contact surface, with good lateral force potential and steering potential (Viper SRT-10: 18-inch wheels) • Sports tyres for better performance (Viper SRT-10: not available) • Tyre Pressure Monitoring System (TPM) - standard (Viper SRT-10: not available)
Exterior	<ul style="list-style-type: none"> • Coupé with a fixed roof for reduced weight and a low centre of gravity, ensuring minimised roll along with agile handling on curves (Viper SRT-10: Roadster with soft top) • Rear wings and ram air box combine design and function • Front side windows with hydrophobic coating • Greater number of exterior colours for personalisation options • Heated exterior mirrors • ParkAssist parking aid optional (Viper SRT-10: not available)
Interior	<ul style="list-style-type: none"> • Hinged sports bucket seats with high lateral support and integrated thorax airbag (Viper SRT-10: sports seats without lateral airbag) • Adaptive sports seats at no extra charge (Viper SRT-10: not available) • Large storage space behind seats • Extensive use of high-quality and functional Alcantara
Electrical system, audio and communication	<ul style="list-style-type: none"> • Bi-Xenon headlights incl. headlight cleaning system – standard (Viper SRT-10: xenon headlights – standard) • Additional LED lights in front end • High-level third brake light in LED technology • Optional rain sensor (Viper SRT-10: not available) • Alarm system with interior surveillance (Viper SRT-10: alarm system) • Sound Package Plus with 9 loudspeakers and 235 watt total output optional at no extra cost and BOSE® Surround Sound System optional with 13 loudspeakers and 325 watts total output (Viper SRT-10: 6 loudspeakers with 310 total output - standard No further audio features) • Telephone optional (Viper SRT-10: not available) • Electronic logbook optional (Viper SRT-10: not available) • Sport Chrono Package Plus with an analogue stopwatch and driving data analysis in PCM optional (Viper SRT-10: not available) • Enhanced anti-theft safety thanks to Vehicle Tracking System (Viper SRT-10: not available) • Multi-function steering wheel optional (Viper SRT-10: not available)

Safety

- Porsche Stability Management PSM incl. ABD,ASR and MSR as well as ABS (Viper SRT-10: ABS)
- Separate head and thorax airbags (Viper SRT-10: lateral airbag not available)
- Clubsport package with roll-over frame and 6-point seatbelt for driver optional at no extra cost (Viper SRT-10: not available)

Entire vehicle

- More agile cornering thanks to shorter wheelbase (2,350 mm comp. to Viper SRT-10: 2,510 mm)
- Compact dimensions for high day-to-day usability (vehicle length: 4,469 mm comp. to Viper SRT-10: 4,558 mm)
- Lower vehicle weight for good acceleration and high agility combined with low fuel consumption and low emissions (1,440 kg comp. to Viper SRT-10: 1,600 kg)
- Low drag for high top speeds and low fuel consumption (cd 0.32 comp. to Viper SRT-10: 0.43)
- Larger luggage compartment capacity (total 310 l comp. to Viper SRT-10: 240 l)
- Significantly higher payload (310 kg comp. to Viper SRT-10: 156 kg)
- Large 90 l tank (Viper SRT-10: 68 l)
- Greater range (720 km comp. to Viper SRT-10: 320 km)

15.3 USP Overview

The following comparison was created on the basis of the previously presented product features, the official sales documents and the information provided by Porsche development. It incorporates all available knowledge and has been supplemented with a subjective evaluation. Accuracy cannot be guaranteed. The overview is intended to provide ideas for use in customer discussions.

Features	new 911 GT2	Direct competitors							Super sports car	Customer benefits
		Ferrari F 430	Ferrari 599 GTB	Lamborghini Gallardo SE	Lamborghini Gallardo Superleggera	Mercedes-Benz SL 65 AMG	Dodge Viper SRT-10	Lamborghini Murcielago LP 640	Mercedes-Benz SLR 722	
Engine										
Design, number of cylinders	B6	V8	V12	V10	V10	V12	V10	V12	V8	Low vibration, low vehicle centre of gravity and low weight yielding high driving dynamics
Displacement	+	0	-	0	0	-	-	-	-	Small displacement for low fuel consumption and low emission values (CO ₂)
Turbocharged (VTG), variable intake manifold	+	0	0	0	0	+	0	0	+	Efficient turbocharging for high torque, high maximum output and low fuel consumption
Specific output (kW/l)	+	0	0	0	0	0	-	0	0	A high specific output denotes the efficiency of an engine in regard to high output and low fuel consumption
Dry-sump lubrication	+	+	0	+	+	0	0	+	+	Dry-sump lubrication with 9 oil pumps to ensure a safe oil supply even at high lateral and longitudinal acceleration
Titanium rear silencer	+	0	0	0	0	0	0	0	0	Low weight for good driving dynamics
Fuel consumption	+	-	-	-	-	0	-	-	0	Low fuel consumption leading to low operating costs
Emissions (CO ₂)	+	-	-	-	-	0	-	-	0	Low environmental impact
Transmission										
Supplementary transmission oil cooling	+	0	0	0	0	0	0	0	0	Ensures component strength even at maximum loads on the transmission
Steel synchroniser rings	+	0	0	0	0	0	0	0	0	Ensures component strength even at maximum shift loads on the transmission
Adjustable gear ratios	+	0	0	0	0	0	0	0	0	Allows selection of personalised gear ratios for participation in motorsports events

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Chassis										
Vehicle stability system (PSM)	+	+	+	0	0	0	-	-	0	High active safety with sporty tuning and a two-stage complete switch-off function for personalised driving performance (SC + TC OFF)
Vehicle height, camber, track and anti-roll bars adjustable	+	0	0	0	0	0	0	0	0	Custom chassis setup for participation in motorsports events
Wide wheel/tyre combinations with sports tyres	+	0	0	+	+	-	0	+	0	High lateral and longitudinal acceleration potential with highly responsive steering behaviour and handling
Short wheelbase	+	-	-	0	0	0	0	-	-	Agile handling and cornering
Variable steering ratio	+	0	0	0	0	+	0	0	0	Good handling and high agility
Turning circle	+	+	-	0	0	+	0	0	0	High day-to-day usability
Brake system										
Multi-piston fixed calliper brake system and large brake discs as standard	+	-	0	+	+	+	-	+	+	High braking potential and high driving safety
Ceramic brake system (PCCB) as standard	+	0	0	-	0	-	-	0	+	Good, constant brake performance even under the toughest conditions (fading stability). Low unsprung masses provide high driving stability
Exterior										
Rear lid with rear wing	+	0	0	0	+	0	0	+	+	Combination of design and aerodynamics to optimise the driving stability and safety particularly at high speeds
Ram air box	+	0	0	0	0	0	0	0	0	Additional engine output available at high speeds
Aerodynamics	+	-	0	-	-	+	-	0	+	Low drag for high top speeds and low fuel consumption
Exterior colour range	+	+	+	-	-	0	0	-	-	Large range of personalisation options thanks to additional solid/metallic and special colours
Interior										
Sports bucket seats	+	0	0	0	0	0	0	0	0	Lightweight racing bucket seats with folding backrest and thorax airbag for high lateral stability, safety and day-to-day usability

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Interieur										
Clubsport package	+	+	0	0	0	0	0	0	0	High passive safety; required for participation in motorsports events subject to statutory approval
Sport Chrono Package Plus	+	0	+	0	0	+	0	0	+	Provides option of recording lap times incl. individual evaluation of driving data in PCM
Vehicle Tracking System	+	0	0	0	0	0	0	0	0	Enhanced anti-theft safety (preparation optional, offered via Tequipment)
Entire vehicle										
Performance/driving dynamics (race circuit)	+	0	0	0	0	-	-	+	0	Efficient tuning of all performance-related components: engine, transmission, chassis, aerodynamics and weight for high performance
Acceleration (0-100 km/h)	+	0	+	0	0	-	0	+	+	High acceleration capability
Top speed	+	0	+	0	0	-	0	+	+	High top speed
Vehicle weight	+	+	0	+	+	-	0	0	0	Low vehicle weight for agile handling, good driving dynamics and low fuel consumption
Power-to-weight ratio (kg/bhp)	+	0	+	-	+	-	0	+	+	High acceleration potential
Compact vehicle dimensions	+	+	0	+	+	+	+	0	0	High agility and good handling
Range	+	0	0	-	-	0	-	-	0	High range thanks to low fuel consumption and large fuel tank
Cost of ownership										
Total cost of ownership	+	+	-	0	0	0	+	-	-	Low repair and operating costs incl. 3rd party liability and insurance classification, vehicle tax and fuel consumption costs

Publisher's data

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Note:

All information provided in this document is correct as at July 2007. Porsche reserves the right to alter design, technical data, prices, equipment and final scope of supply at any time prior to the market launch of the new 911 GT2.

The basis for the descriptions is the EU model. Note that details and product features may vary from one national market to another up to the market launch and throughout the service life of the vehicle.

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Dr. Ing. h.c. F. Porsche
Aktiengesellschaft
Global Training (VN3)
Porschestr. 15-19
71634 Ludwigsburg

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