

Product News 15/2011

All information provided in this document is correct as at April 2011. Porsche reserves the right to alter the design, technical data, prices, equipment and final scope of delivery at any time prior to the market launch of the new 911 GT3 RS 4.0. 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 modifications compared to the 911 GT3 RS (MY B) and on the unique selling points of the new 911 GT3 RS 4.0. Detailed basic information is provided in Product News 14/2009 "The new 911 GT3 RS".

1. The new 911 GT3 RS 4.0

The new 911 GT3 RS 4.0 is the power- and performance-enhanced model variant of the 911 GT3 RS and the current

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top-of-the-range model in the 911 GT3 model range. With a power output of **368 kW (500 hp)** and a vehicle weight of **1,360 kg (DIN)**, it is also currently the Porsche series-production vehicle that offers the highest power and performance from a naturally aspirated engine. With more engine power, less vehicle weight as well as enhanced body and chassis elements, the new 911 GT3 RS 4.0 offers especially high agility and even better performance, particularly on race circuits.

The acceleration from 0 - 100 km/h (0 - 62 mph) has been improved from 4.0 s to 3.9 s compared with the 911 GT3 RS. However, the new 911 GT3 RS 4.0 demonstrates its true performance

potential especially when driven on race circuits such as the Nürburgring North Loop. Here, the new 911 GT3 RS 4.0 achieves a lap time of less than 7:30 minutes, and is therefore not just faster than the 911 GT3 RS (7:33 min), but is also in absolute pole position among its competitors.

Limited to a series of **600 vehicles**, the 911 GT3 RS 4.0 will be offered on a market-specific basis **as from July 2011 (POS)**. Like the 911 GT3 RS, the new 911 GT3 RS 4.0 also cannot be offered in China, Japan and Korea due to country-specific type approval regulations. Taiwan will receive the new 911 GT3 RS 4.0 without road approval by way of a special provision.



Fig. 1: The new 911 GT3 RS 4.0

The following main features increase the performance potential and attractiveness of the new 911 GT3 RS 4.0 compared with the 911 GT3 RS:

Drive power

- Power output increased by approx 11 % from 331 kW (450 hp) to 368 kW (500 hp) and torque increased from 430 Nm to 460 Nm
- Engine with displacement increased from 3.8 l to 4.0 l
- Intake manifold with larger intake pipe diameters
- Motor sports air cleaner with reduced intake resistance



Fig. 2: The new 911 GT3 RS 4.0

Agility and driving performance

- Reduction in vehicle weight (DIN unladen) from 1,370 kg (911 GT3 RS) to 1,360 kg, above all through use of carbon-fibre reinforced plastic (CFRP) for the luggage compartment lid and front wings
- Power-to-weight ratio improved by approx 10% from 3.0 kg/hp to 2.7 kg/hp
- Rear axle with additional springs (so-called “helper springs”) and additional ball-joint bearings
- Specific chassis tuning for springs and dampers (PASM)
- Front end with additional aerodynamic flics as well as a rear wing with changed attack angle and new side plates to increase the aerodynamic downforce

Visual design and standard equipment

- Consistently clear visual appearance, particularly in the motor sports-orientated standard colour Carrara White with central and side decorative strips and elements in the contrasting colour GT Silver Metallic
- Use of additional flics at the front for the first time in Porsche series-production vehicles
- Front body with integrated wheel arch extensions
- Lightweight exposed carbon-fibre bucket seats (USA: sports bucket seats) with “RS 4.0” logo on the headrests
- Interior with equipment elements in Red Alcantara (e.g. seat centres, door handles, door panel armrests, lid of the centre-console storage box, roof lining and segments on shift and handbrake lever)
- New GT3 SportDesign steering wheel with silver-coloured galvanised spoke trim

- Door entry guards made of exposed carbon fibre and featuring the “RS 4.0” logo
- Additional “RS 4.0” logos in the interior, e.g. on the revcounter in the instrument cluster
- Limited edition plaque on glove compartment lid

Personalisation range

- Selected offering based on 911 GT3 RS and 911 GT2 RS
- Leather/Alcantara interior in Black optionally available without extra charge for the 911 GT3 RS 4.0
- Additional option of leather/Alcantara interior in Black-Red (without extra charge), rear centre console with Alcantara in Black and storage compartment lid with Alcantara in Red

Overall vehicle

Like the 911 GT3 RS, the new 911 GT3 RS 4.0 also expresses its closeness to motor sport through a dynamic look with a body design consistently matched to the vehicle's performance. This is particularly noticeable in the low vehicle position, the large rear wing with unique wing supports, the specially designed front and rear ends as well as the central twin tailpipes, which are also made from high-grade titanium on the new 911 GT3 RS 4.0, as is the entire rear silencer assembly.

Characteristic features of the new 911 GT3 RS 4.0 and also differentiating elements in comparison with the 911 GT3 RS are above all the side **flics** at the front, which are used for the first time in Porsche series-production vehicles, as well as the front wings made of carbon fibre with integrated wheel arch extensions. A particularly distinctive visual feature of the new 911 GT3 RS 4.0 is its consistently puristic and clear exterior in Carrara White, including the wheels and rear wing, in combination with contrasting elements in GT Silver Metallic. The new 911 GT3 RS 4.0 is also optionally available in Black (solid).

Other defining style elements of the new 911 GT3 RS 4.0 include the central **decorative strip** in GT Silver Metallic with red border lines that runs

centrally over the whole vehicle, the similarly designed side strips as well as the large Porsche logo on the rear wing.

The drive is based on the high-revving naturally-aspirated engine of the 911 GT3 RS with dry-sump lubrication and separate engine oil tank. With an **increase in displacement** from 3.8 l to **4.0 l**, larger intake pipe diameters and a motor sports air cleaner, it was possible to increase the maximum power output of the new 911 GT3 RS 4.0 by 37 kW (50 hp) to **368 kW (500 hp)**. The specific power was also improved from 87 kW/l (118 hp/l) to **92 kW/l (125 hp/l)**.

The basis for this high-revving, power-efficient and high-performance engine with a high-load capacity is the original motor racing engine from the last Porsche **Le Mans-winning GT1**. As with all previously produced 911 GT3 and 911 GT3 RS generations with road approval, this engine was also further developed for the new 911 GT3 RS 4.0. It has been designed and tuned for individual use on race circuits.

The lightweight 6-speed manual transmission with single-mass flywheel and short ratios largely corresponds to that of the 911 GT3 RS. This means that for the new 911 GT3 RS 4.0 also, a conscious decision was made to forego

the maximum possible top speed and fully exploit the available performance potential. The top speed remains unchanged at 310 km/h (193 mph).

The chassis of the 911 GT3 RS was already highly advanced in terms of driving dynamics and the basic elements of this chassis were therefore adopted. The new 911 GT3 RS 4.0 also features a high-performance brake system, large track widths at the front and rear, a variable damping system (PASM), dynamic engine mounts and locally fitted ball joints at the front and rear. In order to match the enhanced performance and to further improve sporty handling, the springs and dampers on the new 911 GT3 RS 4.0 were retuned (including new additional springs on the rear axle) and the number of ball joint-type suspension mounts on the rear axle was increased further.

It was possible to reduce the vehicle weight of the new 911 GT3 RS 4.0 once more compared to the already lightweight 911 GT3 RS from 1,370 kg (DIN unladen) to **1,360 kg**. This is made possible above all through the use of lightweight carbon-fibre reinforced plastic (CFRP) for the luggage compartment lid and front wings. In order to realise a puristic and harmonious vehicle concept, these elements are painted in the body colour on the new 911 GT3 RS 4.0. In comparison



Fig. 3: The new 911 GT3 RS 4.0

with the direct competition, the new 911 GT3 RS 4.0 is by far the lightest vehicle with a weight of 1,360 kg. This results in high agility and driving dynamics and also permits an improvement in the relevant power-to-weight ratio from 3.0 kg/hp (911 GT3 RS) to **2.7 kg/hp**.

The aerodynamic design was also improved by additional **flics** at the front. In combination with a slightly steeper wing position of the rear wing and modified side plates, the overall downforce of the 911 GT3 RS 4.0 was increased once more and the aerodynamic balance ensured. The result is a further improvement in driving stability at high speed and an increase in the lateral acceleration potential.

The racing-orientated and attractive interior of the new 911 GT3 RS 4.0 with elements in Red Alcantara largely corresponds to the interior of the 911 GT2 RS. Compared with the 911 GT3 RS with Clubsport package, the new 911 GT3 RS 4.0 therefore features as standard an enhanced interior with lightweight bucket seats made of exposed carbon fibre, door entry guards made of exposed carbon fibre, a limited edition plaque on the glove compartment

lid as well as interior items in Red Alcantara. These items include in particular the seat centres, door handles, door panel armrests, lid of the centre-console storage box and roof lining, as well as segments on the shift lever and handbrake lever. New and unique features for the 911 GT3 RS 4.0 are the GT3 SportDesign steering wheel with silver-coloured galvanised spoke trim and the steering wheel rim in Black Alcantara with 12-o'clock marking as well as cross-seam stitching in Red.

The individual options were selected on the basis of the 911 GT3 RS and adapted to match the puristic and performance-orientated character of the new 911 GT3 RS 4.0. The most important and most popular options of the 911 GT3 RS were taken into account in particular, e.g. in the area of technology and day-to-day usability, the options include the front axle lift system, ceramic brake system (PCCB), 90 l fuel tank, lithium-ion battery, dynamic cornering light and HomeLink®. In the area of communication also, the new 911 GT3 RS 4.0 is available with a comprehensive range of audio equipment to permit attractive personalisation options.

Model year

The new 911 GT3 RS 4.0 will be launched on a market-specific basis with left-hand and right-hand drive vehicles **as from 07/2011** (POS). In all offered markets, the vehicle will be available as **MY B (2011)**. The approval regulations valid in the USA and Canada with respect to OBD II with end of production in 12/2011 are a decisive factor for offering the vehicle as MY B (in the current Porsche model year C).

Note

Due to the country-specific approval regulations, the 911 GT3 RS 4.0 will be **type-approved and offered** worldwide as **MY B (2011)**. This applies to the technology, type approval incl. chassis number as well as other product-specific content. The 911 GT3 RS 4.0 will also be listed correspondingly in all sales and communication documents as MY B (2011).

However, the 911 GT3 RS 4.0 will actually be produced in Porsche production model year C (2012). In order to ensure that the resultant **internal Porsche processes** run smoothly, particularly with respect to the part systems (incl. production), the 911 GT3 RS 4.0 will be listed in these systems as MY C (2012).

2. The main highlights

2.1 Body

Front

The front end of the new 911 GT3 RS 4.0 is essentially the same as that of the 911 GT3 RS. It is characterised by the front light modules including standard Bi-Xenon headlights and LED daytime running and position lights, the large air intakes and the additional air outlet in front of the luggage compartment lid.

A particularly distinctive feature is the central, slightly protruding cooling air intake, which is finished in GT Silver Metallic on the new 911 GT3 RS 4.0. With its slight wedge shape, it enhances aerodynamic efficiency and supports the aerodynamic downforce on the front axle with the integrated cooling-air duct and air outlet in front of the luggage compartment lid. This effect is also supported by the highly contoured front spoiler made of black polyurethane (PUR) also familiar from the 911 GT3 RS.

Further characteristic features of the 911 GT3 RS models are the air intake and outlet grills with titanium-coloured paint finish as well as the flared outer cooling air intakes. On the new 911 GT3 RS 4.0, the size of the air intakes and the width of the vehicle are underlined further by a crescent-shaped decorative line in GT Silver Metallic around the side air intakes and front light modules.

The **flics** added to the sides of the front apron are new. Used for the first time on Porsche series-production vehicles with the new 911 GT3 RS 4.0, the basic function of these components has its origins in motor sports. They increase the downforce on the front



Fig. 4: Front view

axle and are painted in GT Silver Metallic on the new 911 GT3 RS 4.0.

A further characteristic differentiating feature of the new 911 GT3 RS 4.0 is the **decorative strip** in GT Silver Metallic with side border lines in Red that runs centrally over the whole vehicle. It is approx. 22 cm wide and runs over the whole vehicle from the Porsche Crest on the luggage compartment lid, ending in the area of the red model logo "RS 4.0" on the rear lid.



Fig. 5: Flic on the front apron

The **front wings** and **luggage compartment lid** made of **carbon fibre** are completely new elements for the 911 GT3 RS models. They reduce the vehicle weight, are originally from the 911 GT2 RS and are painted in the exterior colour on the new 911 GT3 RS 4.0. The wings made of carbon fibre are optionally available for the 911 GT2 RS, but are now standard on the new 911 GT3 RS. Thanks to their integrated wheel arch extensions, they create a closed contour with harmonious transitions compared with the attached wheel arch extensions of the 911 GT3 RS. The wheel arch extensions are formally supplemented towards the front by additional elements added to the sides of the front apron and modified direction indicator lights.

Like on the 911 GT3 RS, the wide wings increase the body width at the front by 26 mm compared with the 911 GT3. This guarantees adequate coverage of the wide wheels and tyres and takes into account the wide track with the front wheels located further to the outside.



Fig. 6: Side view

Side view

The new 911 GT3 RS 4.0 is instantly recognisable as belonging to the 911 model range by virtue of its classic silhouette. Like the 911 GT3 RS, the new 911 GT3 RS 4.0 is distinctive in its side view compared with the 911 Carrera by virtue of its 30 mm lower vehicle position, the 19-inch GT3 wheels with central locking, wide side skirts made of black polyurethane and the unique rear wing with wing supports made of forged aluminium.

Additional differentiating features of the new 911 GT3 RS 4.0 include **side decorative strips** and new **side plates** (side end plates on the rear wing). The colour design of individual elements is also characteristic for the new 911 GT3 RS 4.0. In addition to the wheels in the body colour (with the exterior colour Carrara White), including black central locking devices, these distinctive elements are primarily the components in **GT Silver Metallic**: exterior mirrors (including lower shell in Red), approx. 5 cm-wide decorative strips with red border lines including model logo "RS 4.0" as well as the side plates on the rear wing.

Rear view

The large fixed rear wing is a traditional part of the 911 GT3 RS models. In addition to its functional shape, the rear wing also provides the new 911 GT3 RS 4.0 with a powerful appearance in combination with the 44 mm-wider

body at the rear compared with the 911 GT3. The rear wing is painted in the body colour on the new 911 GT3 RS 4.0 and features a large **Porsche logo** in GT Silver Metallic familiar from motor sports (e.g. 911 GT3 RSR).



Fig. 7: Rear view

Other distinctive design features of the new 911 GT3 RS 4.0 include the high-quality wing supports in anodised **GT Silver Metallic** and the central **decorative strip** ending in the area of the model designation “**RS 4.0**” on the rear lid.

The high position of the rear wing, its size and its shape have their origins in motor sport and have been aerodynamically tuned. With a defined angle of attack, the rear wing therefore also provides a high downforce on the rear axle for the new 911 GT3 RS 4.0 as well. The filigree and extremely high-grade wing supports are still made from forged aluminium and their framework-like design is a trademark symbol of lightweight construction and stability.

The rear centre panel (behind the rear window) is also made of glass fibre-reinforced polyurethane on the new 911 GT3 RS 4.0. It reduces the weight by 1.3 kg and thus by over 50 % compared with the steel rear centre panel of the 911 GT3. Its contour has been lowered at the rear to improve the flow of air to the large, one-piece ram air box in the rear lid.

The rear lid is also still made of glass fibre-reinforced plastic (GFRP) and in addition to a high-level 3rd brake light also incorporates an integrated spoiler to improve the aerodynamics with defined air separation and downforce (Gurney effect). The rear apron is characterised by large side air outlets and an additional air outlet under the rear lid. These assist the thermal ventilation of the entire engine compartment and improve the aerodynamic air flow of the entire body (side air outlets).

The central twin tailpipes of the exhaust system of the new 911 GT3 RS 4.0 are an important distinguishing characteristic compared with the other models of the current 911 model range. They have large dimensions and are made of lightweight titanium like the rear silencer. Their central position in the rear end provides the rear of the vehicle with a muscular look. Adapted from



Fig. 8: Rear wing

the motor racing design of the 911 GT3 vehicles, this design feature provides a visual reference to the flow- and resistance-optimised sports exhaust system.

Other body equipment

In comparison with the 911 GT3 RS, lightweight polycarbonate is not just used for the rear window on the new 911 GT3 RS 4.0, but also for the **rear side windows**. This reduces the vehicle weight and is part of the weight reduction measures compared with the 911 GT3 RS.

Like the 911 GT3 RS, the new 911 GT3 RS 4.0 is also equipped as standard with a 67 l fuel tank to achieve a low vehicle weight and to enhance agility and driving performance. To increase the range of the new 911 GT3 RS 4.0, left-hand drive vehicles for RoW are also optionally available with a large fuel tank with a capacity of 90 l at no extra charge. The high-quality tank cap in aluminium look was also adopted as an attractive addition and a stylish highlight to underline the quality of the vehicle in every detail.

Colour range

The new 911 GT3 RS 4.0 is available as standard with the exterior colour **Carrara White** with central and side decorative strips. The following elements are in GT Silver Metallic: central and side decorative strips (with border lines in Red), exterior mirrors (with lower shell in Red), Porsche logo and side plates on the rear wing, wing supports, flics, air inlet frame and the decorative film around the side air intakes on the front apron.

The wheels, rear wing and roll cage are painted in the body colour. The wheel hub colours are Black and feature the “RS” logo in GT Silver Metallic. The model logo “RS 4.0” is in GT Silver Metallic on the doors and in Red on the rear lid.

The new 911 GT3 RS is optionally available in the special colour **Black**. The colour contrast items correspond to the standard equipment apart from the paint finish of the wheels in GT Silver Metallic. Both the rear wing and the roll cage are therefore in Black for this colour combination.

2.2 Interior

The interior of the new 911 GT3 RS 4.0 is based on the **911 GT3 RS** and therefore features as standard the following main equipment items:

- Clubsport package with roll cage, preparation for battery main switch, enclosed 6-point belt for the driver's side and fire extinguisher
- Lightweight door panels with opening loop
- 3-point automatic seat belts in Red
- Switch panel trim strip in exposed carbon



Fig. 9: Interior

The following items from the **911 GT2 RS** were adopted as standard for the new 911 GT3 RS 4.0:

- Interior with elements finished in Red Alcantara
- Lightweight bucket seats made of exposed carbon fibre and door panels with side pads
- Door entry guards made of exposed carbon fibre
- Limited edition plaque on the glove compartment lid

The following items are completely new for the **911 GT3 RS 4.0**:

- GT3 SportDesign steering wheel with silver-coloured galvanised spoke trim
- Various logos "RS 4.0" incl. door entry guards

A new feature for the 911 GT3 RS 4.0 is also the option familiar from the 911 GT2 RS of a **leather/Alcantara interior in Black-Red**. Both this option and the leather-Alcantara interior in Black that was already available as an option for the 911 GT3 RS will be offered **optionally** without extra charge for the 911 GT3 RS 4.0.

The basic interior of the new 911 GT3 RS 4.0 is Black with visual highlight elements in **Red Alcantara**. Like in the 911 GT2 RS, the following elements are finished in Red Alcantara: seat centres, door handles, armrests of door panels, lid of centre-console storage box, roof lining and segments on the shift and handbrake levers.

In the case of the optional **leather interiors** in Black with Red or Black Alcantara, the leather items in Black largely correspond to the leather interior offered for the 911 GT3 RS. For example, the switch panel, A and B pillar trims as well as the door and side trim panels are finished in leather. The Alcantara items correspond to those of the basic interior and are finished in

Red or Black, depending on the equipment version.

The **lightweight bucket seats** made of exposed carbon fibre (option for the 911 GT3 RS) are fitted as standard in the new 911 GT3 RS 4.0. In contrast to the 911 GT3 RS, the seat covers in combination with the Clubsport package are not made of flame-retardant fabric but of Black leather and feature seat centres with Red or Black Alcantara, depending on the equipment version. An attractive distinguishing feature of the new 911 GT3 RS 4.0 is the logo "RS 4.0" embroidered in Red in the seat headrests.



Fig. 10: Logo on headrest

Both sports bucket seats with foldable backrest and adaptive sports seats are optionally available without extra charge for the 911 GT3 RS 4.0. These seats also feature the logo "RS 4.0" embroidered in Red in the headrests as well as seat centres in Red or Black Alcantara, depending on the equipment version.

The **lightweight door panels** with armrests without storage boxes and an opening loop made of Red belt strap fabric were already fitted in the 911 GT3 RS. For the new 911 GT3 RS 4.0, the door panels have door handles mounted at an angle and shock-absorbing impact elements (so-called "door pads") as standard equipment. Together with the lightweight bucket seats, these pads provide impact protection in the event of a side collision.

In combination with the optionally available sports bucket seats and adaptive sports seats, the protective function in the event of a side impact is realised via the thorax airbags laterally integrated into the side bolsters of the seats instead of by the door pads. With these seat combinations, the door handles of the lightweight door panels are fitted horizontally.

A new feature is the high-quality **GT3 SportDesign steering wheel** with silver-coloured galvanised spoke trim. The steering wheel design is based on the SportDesign steering wheel optionally available for the sports cars for MY C. In the new 911 GT3 RS 4.0, the



Fig. 11: GT3 SportDesign steering wheel

steering wheel rim is completely finished in Black Alcantara, the 12-o'clock marking is in Red Alcantara and the cross-seam stitching is in Red. Like on all 911 GT3 models, the airbag module is covered with Black leather. Compared with the 3-spoke steering wheel of the 911 GT3 RS, this steering wheel has a more attractive look and also offers improved grip and ergonomic characteristics thanks to full covering of the steering wheel rim, particularly in the grip area on the side steering wheel spokes.

In addition to the steering wheel rim, the gear and handbrake lever grips in Alcantara also offer a consistent material concept with visual enhancement of the interior and improved functionality and feel.

As a further enhancement, the new 911 GT3 RS 4.0 features **door entry**

guards made of exposed carbon fibre with the logo "RS 4.0". This logo can also be found on the **revcounter** of the instrument cluster, on the rear carpeting and on the **trim strip** in the **switch panel** above the glove compartment.

As in the 911 GT3 RS, the trim strip is finished in exposed carbon fibre and comprises one piece instead of three pieces due to omission of the cupholder. The cupholder with three-piece trim strip in exposed carbon **with the logo "RS 4.0"** is also optionally available without extra charge.

The glove compartment lid of the new 911 GT3 RS 4.0 features a high-quality **limited edition plaque** in Black. In addition to the embossed and polished model designation, the series limitation to 600 vehicles and the specific vehicle number are shown on this plaque.



Fig. 12: Limited edition plaque

Model improvements

Like all Porsche sports cars for MY C, the new 911 GT3 RS 4.0 will also have a new symbol and an additional display in the instrument cluster as a result of a legal requirement to standardise the malfunction warning for vehicle stability control systems.

In combination with this change, the new 911 GT3 RS 4.0 will also have changed button labelling in the front centre console for system-specific deactivation of the vehicle stability system.

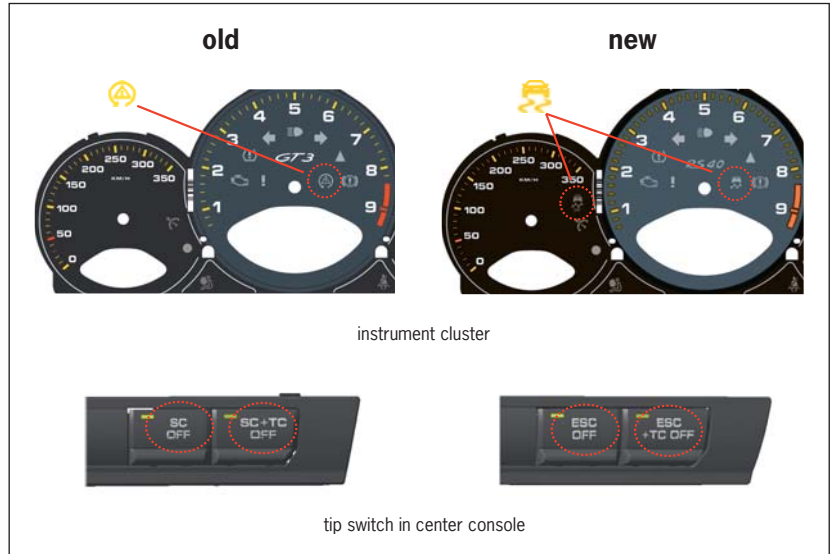


Fig. 13: Symbols on instrument cluster and button labelling

2.3 Performance

The new 911 GT3 RS 4.0 is currently the highest-power and highest-performance Porsche series-production vehicle with a naturally aspirated engine. Based on the 911 GT3 RS, the engine power was increased, the chassis modified, the vehicle weight reduced and the aerodynamics improved. The new

911 GT3 RS 4.0 therefore achieves especially high agility and further-improved performance, particularly on race circuits.



Fig. 14: The new 911 GT3 RS 4.0

Drive

The lightweight and high-revving engine of the new 911 GT3 RS 4.0 is based on the proven basic components of the current 911 GT3 RS. However, it has its origins in the engine used for the successful **GT1 racing car**, the last Porsche Le Mans winner. This engine has been further developed over several 911 GT3 generations and offers the maximum configuration for a Porsche 911 performance vehicle with naturally aspirated engine and road approval in the new 911 GT3 RS 4.0.

The most important features of the new 4.0 l engine are:

- Dry-sump lubrication with external engine oil tank
- Forged pistons and titanium connecting rod
- VarioCam camshaft control for intake and outlet valves
- High-revving-resistant and small bucket tappets
- Variable intake manifold with two tuning flaps
- Sports exhaust system made of titanium with low exhaust backpressure

The new 911 GT3 RS 4.0 achieves its **increase in power** compared with the 911 GT3 RS from 331 kW (450 hp) to **368 kW (500 hp)** by means of an increase in displacement from 3.8 l to 4.0 l, a modified intake manifold as well as a completely newly developed air cleaner system with a housing made of exposed carbon fibre.

The basis for the power increase is the increased displacement. This type of power increase does not just mean a higher maximum power and maximum torque values, but also increases the entire power and torque level over the complete engine speed range. Compared with the 911 GT3 RS, the result is therefore a clearly perceptible improvement in the power and acceleration potential at every engine speed.

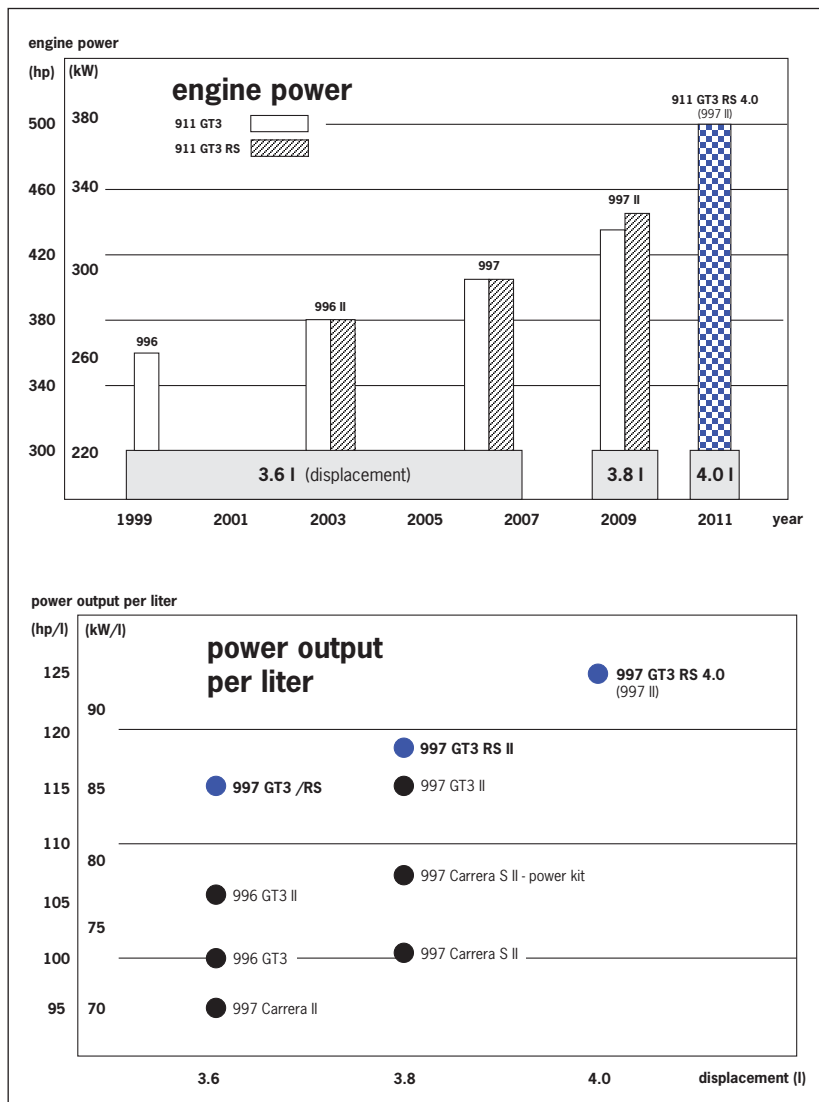


Fig. 15: Development of engine power and power output per litre

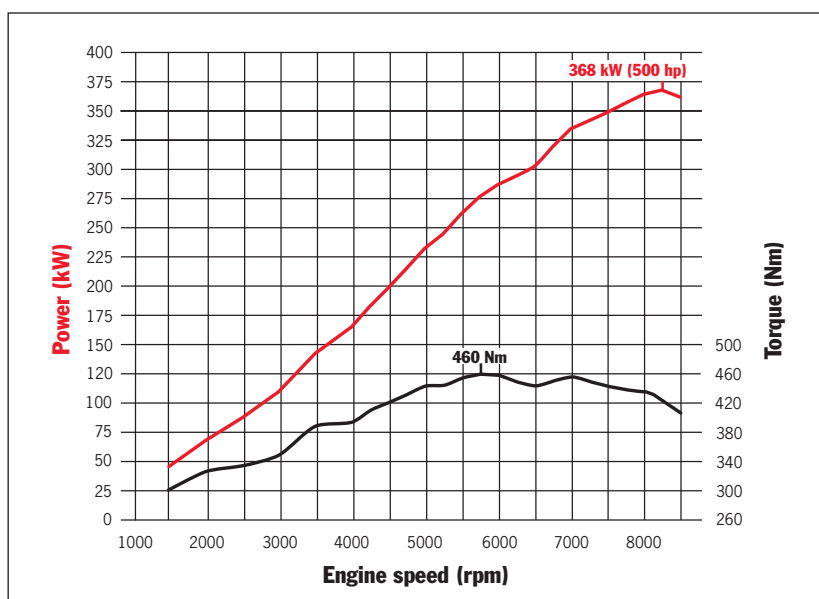


Fig. 16: Power and torque curve

The **increase in displacement to 4.0 l** is realised with an unchanged piston diameter (102.7 mm) by increasing the piston stroke from 76.4 mm to 80.4 mm. This is achieved by modifications to the forged connecting rod made of titanium and a new forged crankshaft.

The **intake manifold** of the new 911 GT3 RS 4.0 features larger-diameter intake pipes compared with the 911 GT3 RS. With an unchanged conical intake pipe geometry, the inner diameter was increased and is now 53 mm at the transition to the cylinder head instead of 48 mm. It was also possible to lower the weight of the intake manifold system by approx. 0.8 kg by reducing the manifold wall thickness.

The **motor sports air cleaner** of the new 911 GT3 RS 4.0 is a completely new development. It reduces the intake resistance by more than 10 % and has already been used successfully in the 911 GT3 R Hybrid racing car since October 2010. The reduction in intake resistance is achieved by making the dual-flow intake openings significantly larger, improving the air outflow characteristics and by using 2 motor sports-based filter cartridges.

Compared with the filter system of the 911 GT3 RS with two plate filters, the new 911 GT3 RS 4.0 now features two round, slightly conical filter cartridges. This filter system is derived from motor sports and is typical of Porsche GT racing cars. It is characterised by a large filter area and thin filter paper with low flow resistances.

A further feature of the filter cartridges used is a supporting metal mesh around the filter paper. It was possible to completely compensate for the additional weight caused by the modified filter cartridges in the new 911 GT3 RS 4.0 through the use of an air cleaner housing made completely of exposed carbon fibre. The engine compartment design is complemented by the stainless-steel air cleaner badge familiar



Fig. 17: Motor sports air cleaner

from the 911 GT3 RS with the logo changed correspondingly to "RS 4.0".

Thanks to its power-defining high-speed concept with a maximum engine speed of 8,500 rpm (like the 911 GT3 RS) as well as the various power-enhancing measures, the **power efficiency** of the new 911 GT3 RS 4.0 places it in the absolute leading group of compara-

ble competitors. Its specific power of **92 kW/l (125 hp/l)** puts it right at the front among all naturally aspirated engines ever built for vehicles with road approval. To achieve this, the engine not only has high mechanical speed resistance, but also possesses outstanding thermodynamic characteristics with an efficient gas cycle and low flow resistances.

Overview

Changes compared with the 911 GT3 RS are marked in bold		New 911 GT3 RS 4.0	911 GT3 RS	Improvement
Displacement	cm ³	3,996	3,797	
Max. power	kW (hp)	368 (500)	331 (450)	11 %
	at rpm	8,250	7,900	
Max. torque	Nm	460	430	7 %
	at rpm	5,750	6,750	
Max. engine speed	rpm	8,500	8,500	
Unladen weight (DIN)	kg	1,360	1,370	- 10 kg
Power output per litre	kW/l	92	87	6 %
	hp/l	125	118	
Power-to-weight ratio	kg/kW	3.7	4.1	10 %
	kg/hp	2.7	3.0	

Like the 911 GT3 RS, the new 911 GT3 RS 4.0 also features as standard a **SPORT button** in the front centre console. When this button is pressed, torque is increased by up to 35 Nm in the mid rev range, as in the 911 GT3 RS. The maximum torque of the new 911 GT3 RS 4.0 of 460 Nm at 5,750 rpm remains unchanged. The increase in torque is achieved through an additional reduction of the exhaust backpressure in the sports exhaust system and the associated improvement of the gas cycle.

The **6-speed manual transmission** with single-mass flywheel was largely adopted from the 911 GT3 RS. In order to protect the transmission against the higher loads resulting from the increased torque and power, the **pressure plate** on the new 911 GT3 RS 4.0 was reinforced. This transmission design means that the new 911 GT3 RS 4.0 also has a lightweight manual transmission with short ratios and short shifting travels. The short ratios offer high acceleration potential, use the whole rpm range and allow a top speed of 310 km/h (193 mph). With this transmission setup, enhanced performance is achieved over the whole rpm and speed range also for the new 911 GT3 RS 4.0 and a conscious decision was made to forego a higher top speed.

Chassis

The basic design of the chassis used on the 911 GT3 RS 4.0 largely corresponds to that of the 911 GT3 RS. The main features of the chassis therefore include:

- McPherson strut suspension at front and multi-link suspension at rear
- Divided wishbones on the rear axle
- Actively adjustable dampers (PASM)
- Sportily tuned vehicle stability control system (PSM) with unique 2-stage switching strategy for complete deactivation

- Large brake system with aluminium brake hubs on the front and rear axles (option: ceramic brake system PCCB)
- 19-inch GT3 wheels with central locking, wide tyres and Tyre Pressure Monitoring
- Wide track at the front and rear axles
- Dynamic engine mountings

In order to enhance performance, the following modifications were made to the chassis of the new 911 GT3 RS:

- Multi-link suspension at the rear axle with additional ball-joint mounts
- Modified chassis tuning
- Redesigned springs on the front and rear axles (weight reduction)
- Rear axle with additional springs ("helper springs")

Compared with conventional rubber-bonded metal mounts, **ball-joint** suspension mounts permit more precise wheel control and more sensitive damper response. This enables more direct steering behaviour and enhanced performance potential. On the 911 GT3 RS, several suspension mounts on the front and rear axles were already realised as ball joints. To further enhance performance, the new 911 GT3 RS 4.0 features additional ball joint-type mounts on the multi-link rear axle.

These are located on the inside of the lower wishbone and on the inside of the tie rod. The highest forces occur at these locations during cornering and these forces can now be transmitted directly to the vehicle without elastic deformation. This significantly improves the feeling for the driver at the rear axle. A further ball joint is located between the wheel carrier and spring

strut. This measure ensures that the vertical movements at the rear axle are damped more sensitively and more quickly.

Thanks to the improved aerodynamics with additional flics at the front, a changed angle of attack for the rear wing as well as modified side plates on the rear wing, the aerodynamic downforce of the new 911 GT3 RS 4.0 has been increased once more in comparison with the 911 GT3 RS. These changes result in different handling and this in turn required modification of the **running-gear setup**. Using the same dampers and anti-roll bars as well as springs with comparable spring rates, the chassis settings of the new 911 GT3 RS 4.0 were adapted to the changed boundary conditions.

The weight of the **chassis springs** has been reduced on the front and rear axles compared with the 911 GT3 RS. This was made possible by a modified spring design with a smaller number of turns and by the additional use of a **helper spring** on each damper strut on the rear axle. As with the 911 GT2 RS, this additional spring derived from motor racing applications permits installation of a shorter and thus lighter main spring with a practically identical rebound travel.

The **vehicle stability control system** PSM with the 2-stage switching strategy for complete deactivation (ESC OFF and ESC+TC OFF) was adapted to the higher engine power and the new running-gear setup. As the result of all the setup and tuning measures, the especially sporty handling of the 911 GT3 RS was refined and the overall performance potential further enhanced.

2.4 Personalisation

The attractive personalisation range for the new 911 GT3 RS 4.0 is based on selected options of the 911 GT3 RS and the compact range of options for the 911 GT2 RS. This means that important and popular options such as the front axle lift system, ceramic brake system (PCCB), 90-litre fuel tank (for RoW left-hand drive models), lithium-ion battery, dynamic cornering light and HomeLink® are also available for the new 911 GT3 RS 4.0.

Attractive interior and audio options are also available, e.g. leather/Alcantara interior in Black, cruise control, Sound Package Plus, PCM with navigation system, telephone module and universal audio interface. The range also includes further options such as additional leather, Alcantara and carbon interiors.

New options compared with the 911 GT3 RS are the leather/Alcantara interior in Black-Red (without extra charge), the storage box lid finished in Alcantara

with Porsche logo in Red as well as the rear centre console in Black. The range now also officially includes the 3-point seat belts in Black and the worldwide availability of the fire extinguisher in combination with adaptive sports seats. Changes were made for the painted wheels option, which was changed to GT Silver Metallic (instead of rim silver), and for the leather/Alcantara interior in Black, which is optionally available without extra charge for the 911 GT3 RS 4.0.

3. Dates

Lifting of press restrictions	28.04.2011
1st trade fair presentation	<ul style="list-style-type: none"> • IAA (Frankfurt) 13/14.09.2011 (press days) 15./16.09.2011 (trade visitor days) 17.-25.09.2011 (public days)
Presentation to the press	<ul style="list-style-type: none"> • Individual events still being decided
Availability	<ul style="list-style-type: none"> • Worldwide except Japan, China and Korea (Taiwan: available through special provision without road approval) • Worldwide as MY B (2011)
Start of production (SOP)	<ul style="list-style-type: none"> • 06/2011
Market launch (POS)	<ul style="list-style-type: none"> • Market-specific from 07/2011
End of production (EOP)	<ul style="list-style-type: none"> • 12/2011 worldwide

4. Product description

4.1 “RS 4.0 package”

The main differences in relation to the 911 GT3 RS based on the EU model are:

911 GT3 RS 4.0 package
Overall vehicle
<ul style="list-style-type: none">• Limited to 600 vehicles• Unladen weight (DIN) 1,360 kg (911 GT3 RS: 1,370 kg)
Drive
<ul style="list-style-type: none">• Displacement increase from 3.8 to 4.0 litres (piston stroke 80.4 mm instead of 76.4 mm)• Power increase from 331 kW (450 hp) to 368 kW (500 PS)• Torque increase from 430 Nm to 460 Nm• Intake manifold with larger intake pipe diameters• Motor sports air cleaner with a housing made of exposed carbon fibre and badge with “RS 4.0” logo• Transmission with reinforced pressure plate (for higher loads due to increased power)
Chassis
<ul style="list-style-type: none">• Rear axle with additional springs (helper springs) and additional ball-joint mounts• New chassis tuning incl. PASM
Exterior
<ul style="list-style-type: none">• Luggage carbon lid made of carbon fibre painted in body colour• Front wings made of carbon fibre with integrated wheel arch extensions and painted in body colour• Front apron with additional side flics• Rear wing with changed wing position and new side plates• Rear side windows made of polycarbonate• Rear lid and doors with “RS 4.0” logo• RS 4.0 colour range with central and side decorative strips as well as additional elements in GT Silver Metallic
<u>Differences for USA</u>
<ul style="list-style-type: none">• Rear window and rear side windows made of glass
Interior
<ul style="list-style-type: none">• Lightweight bucket seats made of exposed carbon fibre with leather/Alcantara covers and “RS 4.0” logo on the headrests in Red• Side pads on the lightweight door panels• GT3 SportDesign steering wheel with 12-o'clock marking and cross-seam stitching in Red• GT3 shift lever with shift pattern in Red• Black interior with elements in Red Alcantara: seat centres, door handles, door panel armrests, lid of centre-console storage box, roof lining and segments on the shift and handbrake levers• Door entry guards made of exposed carbon fibre with “RS 4.0” logo• Switch panel trim strip in exposed carbon with “RS 4.0” logo above the glove compartment lid• Limited edition plaque on the glove compartment lid• Instrument cluster with “RS 4.0” logo on the rev-counter• Rear carpeting with “RS 4.0” logo
<u>Differences for USA</u>
<ul style="list-style-type: none">• Sports bucket seats with folding backrest and thorax airbag as well as lightweight door panels without side pads
Options
<ul style="list-style-type: none">• Selected offering based on 911 GT3 RS and 911 GT2 RS

4.2 General overview

The following pages describe the most important details of the new 911 GT3 RS 4.0. The product description is based on the EU model and shows the changes compared with the 911 GT3 RS. Subject to changes in offering, technical data and availability until start of production.

The new 911 GT3 RS 4.0	Changes compared with the 911 GT3 RS are marked in bold
Availability	<ul style="list-style-type: none"> • 2-seater sports coupé • Worldwide except Japan, China and Korea (Taiwan: available through special provision without road approval)
1. Engine	<ul style="list-style-type: none"> • Water-cooled flat-six naturally-aspirated engine with 4.0 l displacement • Maximum power 368 kW (500 hp) @ 8,250 rpm • Maximum torque 460 Nm @ 5,750 1/min • Specific power 92 kW/l (125 hp/l) • Power-to-weight ratio 3.7 kg/kW (2.7 kg/hp) • Maximum engine speed 8,500 rpm • Forged pistons and titanium connecting rod • Dry-sump lubrication with external engine oil tank • VarioCam with camshaft control for intake and outlet valves • RS intake manifold with two tuning flaps and larger intake pipe diameters • Motor sports air cleaner (dual-flow) with a housing made of exposed carbon fibre incl. badge with "RS 4.0" logo • Electronic engine management (Motronic ME 7.8.2) • Sequential fuel injection (multipoint) • Sports exhaust system with rear silencer and central twin tailpipes in titanium • Emissions standards EU 5 in Europe and LEV II/LEV in USA
2. Transmission	<ul style="list-style-type: none"> • 6-speed manual transmission with reinforced pressure plate, short ratios, short shift travels, single-mass flywheel and cable shifting • Transmission oil cooling via oil-water heat exchanger and oil spray lubrication • Steel synchroniser rings, 3rd to 5th gear
3. Drive	<ul style="list-style-type: none"> • Rear wheel drive • Mechanical rear differential lock with asymmetric action (28 % traction, 40 % overrun)
4. Chassis	<ul style="list-style-type: none"> • McPherson front axle with spring tuning RS 4.0, supporting mounts with ball joints and widening of track by 12 mm (compared with 911 GT3) • Multi-link rear axle with spring tuning RS 4.0 and additional springs (helper springs), rigidly mounted axle carrier, partially with ball joints and additional ball joints on wishbones, tie rod and spring strut mounts as well as widening of track by 30 mm (compared with 911 GT3) • Divided wishbone on rear axle (for improved camber setting) • Lowering (by approximately 30 mm compared with the 911 Carrera – 997 II) with adapted front and rear axle kinematics • Adjustable chassis for race track use (height, camber, track) • Anti-roll bars with adapted diameter, adjustable for race circuit use • Vehicle stability system Porsche Stability Management (PSM) with sporty RS tuning and 2-stage switching function for complete deactivation (ESC OFF and ESC+TC OFF) • Variable damping system Porsche Active Suspension Management (PASM) with sporty tuning RS 4.0 • Dynamic engine mountings • Variable steering ratio

The new 911 GT3 RS 4.0	Changes compared with the 911 GT3 RS are marked in bold
4. Chassis Continued	<p><u>Standard brake system</u></p> <ul style="list-style-type: none"> • 6-piston aluminium monobloc fixed callipers at front and 4-piston aluminium monobloc fixed callipers at rear • Steel composite brake discs with brake hubs made of aluminium at front and rear, brake disc diameter 380/350 mm (front/rear), internally vented and cross-drilled • Brake callipers painted Red • Integrated air ducts for brake cooling on the front axle and cooling air ducts on the rear axle <p><u>Ceramic brake system PCCB (option)</u></p> <ul style="list-style-type: none"> • 6-piston aluminium monobloc fixed callipers at front and 4-piston aluminium monobloc fixed callipers at rear • Ceramic composite brake discs with brake hubs made of aluminium at front and rear, brake disc diameter 380/350 mm (front/rear), internally vented and cross-drilled • Brake callipers painted Yellow <p><u>Wheels/tyres</u></p> <ul style="list-style-type: none"> • 19-inch GT3 alloy wheels with central locking front: 9J x 19 (RO 47) with sports tyres 245/35 ZR 19 rear: 12J x 19 (RO 48) with sports tyres 325/30 ZR 19 • Central bolts with wheel hub cover with "RS" logo • Tyre sealing compound, electric compressor and additional air pressure tester • Tyre Pressure Monitoring (TPM)
5. Body	<ul style="list-style-type: none"> • 2-seater sports coupé with wide body at front and rear, 26 mm wider overall at front and 44 mm wider overall at rear compared with 911 GT3 • Luggage compartment lid and front wings (with integrated wheel arch extensions) made of carbon fibre finished in body colour • Front apron with side-mounted flics as well as wheel arch covers and modified direction indicator lights (for adaptation to wheel arch extensions), RS front spoiler lip, air intake grill and additional air outlet in front of luggage compartment lid • Wide side skirts • Bodysell made of hot-dip galvanised steel sheet, weight-reduced (without preparation for roof transport system and reinforcement for belt fastening at rear seat assembly) • One-piece roof edge strips (without preparation for roof transport system) • Omission of insulation (heavy-duty film and insulating mats) • RS rear centre panel (between rear window and rear lid) in plastic • RS rear apron with side air outlet openings and additional air outlet under the rear lid • Rear lid made of plastic with large, one-piece ram air box • Fixed RS rear wing made of carbon fibre finished in body colour with changed wing position, wing supports made of forged aluminium in anodised GT Silver and new side plates • Aluminium doors with bow-type handles • Rear window and rear side windows made of polycarbonate • Exterior mirrors as for 911 Carrera (997 II) • Fuel tank 67 l (refill volume) for left-hand drive vehicles worldwide - standard (right-hand drive 66 l. Optional 90 l fuel tank without extra charge for LHD vehicles in RoW) • Tank cap in Aluminium Look • Reduced PVC underbody protection • Rear lid logo "RS 4.0" in Red <p><u>Differences for USA</u></p> <ul style="list-style-type: none"> • Emergency luggage compartment release (Trunk Entrapment) • Rear apron with bumper horns in body colour • Rear window and rear side windows made of thin glass

The new 911 GT3 RS 4.0	Changes compared with the 911 GT3 RS are marked in bold
6. Interior	<ul style="list-style-type: none"> • Clubsport package - standard <ul style="list-style-type: none"> - Bolted-on roll cage at rear - Preparation for battery main switch - Provided: 6-point belt for driver's side in Red and fire extinguisher with holder • Lightweight sports bucket seats made of exposed carbon fibre. Seat covering with leather in Black and seat centre with Alcantara in Red, headrests with embroidered logo "RS 4.0" in Red, manual fore-and-aft adjustment, without rear seats • Lightweight door panels without storage box. With opening loop in Red, side pads and angled handle • GT3 SportDesign steering wheel with silver-coloured galvanised spoke trim, steering wheel rim covered with Alcantara in Black incl. 12-o'clock marking and cross-seam stitching in Red, airbag module covered with Black leather, manual height and reach adjustment • Interior with leatherette/Alcantara in Black/Red • Interior elements in Red Alcantara: • seat centres, door handles, armrests of door panels, lid of centre-console storage box, roof lining and segments on the shift and handbrake levers. • Shift lever with shift pattern in Red • 3-point automatic seat belts at front in Red with seat-belt height adjustment, seat-belt pretensioner and seat-belt tension limiter • Full-size airbags for driver and passenger • Porsche Side Impact Protection System (POSIP), comprising side impact protection in doors, head airbags integrated into door panels for driver and passenger and side pads in the door panels • Door entry guards made of exposed carbon fibre with logo "RS 4.0" • Rear carpeting with logo "RS 4.0" • Switch panel trim strip finished in exposed carbon with logo "RS 4.0" above glove compartment • Deletion of cupholder (available as an option without extra charge) • Limited edition plaque on the glove compartment lid • Instrument cluster with yellow pointers and increment markings. Revcounter with titanium-coloured dial, "RS 4.0" logo and upshift indicator • Reduced scope of interior and comfort features (e.g. sound insulation) • Automatic air conditioning with active carbon filter • Various interior parts in Volcano Grey <p>Differences for USA</p> <ul style="list-style-type: none"> • Clubsport package not available • Sports bucket seats incl. thorax airbag and seat centres covered with Alcantara in Red • Passenger seat occupancy detection (Advanced airbag: USA, Canada and Mexico) • Lightweight door panels, without side pads and with horizontal handle
7. Electrics	<ul style="list-style-type: none"> • Bi-Xenon main headlights, including dynamic headlight levelling and headlight washer system • Front light modules with LED daytime running and position lights • Tail lights and third brake light in LED technology • Heated windscreen washer jets • Power windows with door seal protection function • Electrically adjustable and heated exterior mirrors • Anti-theft protection incl. alarm system with interior surveillance • Lightweight vehicle battery (60 Ah) • CDR-30 audio system with 2 x 25 Watt amplifier and 4 loudspeakers

The new 911 GT3 RS 4.0	Changes compared with the 911 GT3 RS are marked in bold																							
7. Electrics Continued	<p>Differences for USA</p> <ul style="list-style-type: none"> • Front end with side marker lights in yellow including reflectors • Tail lights with red flashing direction indicator lights <p>Model improvements (sports cars from MY C)</p> <ul style="list-style-type: none"> • Instrument cluster with two indicator lights for PSM with symbol as “Skidding vehicle” <p>Additionally for 911 GT3 RS 4.0:</p> <ul style="list-style-type: none"> • Buttons in centre console with designation “ESC OFF” and “ESC+TC OFF” (911 GT3 RS: “SC OFF” and “SC+TC OFF”) 																							
8. Colour range	<p>Exterior</p> <ul style="list-style-type: none"> • Communication colour Carrara White <table border="1" data-bbox="451 752 1433 931"> <thead> <tr> <th></th> <th>Exterior colour</th> <th>Contrast colour¹⁾</th> <th>Wheels</th> <th>Cage</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>Carrara White</td> <td>GT Silver Metallic</td> <td>Carrara White</td> <td>Carrara White</td> </tr> <tr> <td>Special colour (option)</td> <td>Black (solid)</td> <td>GT Silver Metallic</td> <td>GT Silver Metallic</td> <td>Black</td> </tr> </tbody> </table> <p>¹⁾ Central decorative strip (with border lines in Red), side decorative strips, exterior mirrors (with lower shell in Red), central air inlet frame and decorative line around side air intake as well as side flics in front apron, Porsche logo and side plates on the rear wing as well as wing supports</p> <p>Interior</p> <table border="1" data-bbox="451 1137 1433 1267"> <tbody> <tr> <td>Standard</td> <td>Leatherette/Alcantara Black-Red ³⁾</td> </tr> <tr> <td rowspan="2">Option²⁾</td> <td>Leather/Alcantara Black-Red ^{3),4)}</td> </tr> <tr> <td>Leather/Alcantara Black</td> </tr> </tbody> </table> <p>²⁾ Optional without extra charge</p> <p>³⁾ Items in Red Alcantara: seat centres, door handles, armrests of door panels, lid of centre-console storage box, roof lining, 12-o'clock marking on steering wheel rim as well as segments on shift and handbrake lever</p> <p>⁴⁾ Leather in Black: As for 911 GT3 RS leather interior option, e.g. upper part of dashboard, trim on A, B and C pillars as well as door and side trim panels</p>					Exterior colour	Contrast colour ¹⁾	Wheels	Cage	Standard	Carrara White	GT Silver Metallic	Carrara White	Carrara White	Special colour (option)	Black (solid)	GT Silver Metallic	GT Silver Metallic	Black	Standard	Leatherette/Alcantara Black-Red ³⁾	Option ²⁾	Leather/Alcantara Black-Red ^{3),4)}	Leather/Alcantara Black
	Exterior colour	Contrast colour ¹⁾	Wheels	Cage																				
Standard	Carrara White	GT Silver Metallic	Carrara White	Carrara White																				
Special colour (option)	Black (solid)	GT Silver Metallic	GT Silver Metallic	Black																				
Standard	Leatherette/Alcantara Black-Red ³⁾																							
Option ²⁾	Leather/Alcantara Black-Red ^{3),4)}																							
	Leather/Alcantara Black																							
9. Options	<p>Selected offering based on 911 GT3 RS and 911 GT2 RS with the following main changes and additions compared with 911 GT3 RS 4.0:</p> <p><u>New options</u></p> <ul style="list-style-type: none"> • Code - Leather/Alcantara interior in Black-Red (optional without extra charge) • CLW - Storage compartment lid in Alcantara with Porsche logo, Red • CLM - Rear centre console in Alcantara (Black) <p><u>Changed options</u></p> <ul style="list-style-type: none"> • Code - Leather/Alcantara interior in Black (optional without extra charge) • I 347 - Wheels painted in GT Silver Metallic (was Rim Silver) • I 555 - 3-point seat belts Black (was unpublished I-No.) • I 509 - Fire extinguisher in combination with adaptive sports seats (was country-specific offering) 																							

5. V-numbers

V-numbers										
(as for 911 GT3 RS)	USA V02	CAN V36	PLA V34	PLA V35 /V96	PLA V37	PME V32	PME V26	PCA V23	PRU V38	PHK V17
454 Cruise control	x	x	x	x	x	x		x		
810 Floor mats	w	w							x	x
607 /608 HomeLink®	x		x	x	x					
619 Mobile phone preparation	w	w				x				
674 Vehicle Tracking System preparation							x		x	
870 Universal audio interface ¹⁾	w	w	x	x	x	x				
567 Windscreen with grey top tint	x	x	x	x	x	x		x		x

¹⁾ In combination with CDR-30 audio system




x = V-number with fixed assignment
w = optional




6. Technical data




Data relates to the EU-specification model, left-hand drive, Germany, unless otherwise specified




Bold text Denotes points where the new 911 GT3 RS 4.0 (MY B) deviates from the 911 GT3 RS (MY B)




N/A Not available. No figures available at time of going to press




		911 GT3 RS 4.0	911 GT3 RS	911 GT3
				
1. Engine				
Number of cylinders / type		B6	B6	B6
Valves / cylinder		4	4	4
Effective displacement	cm ³ / cu. in	3,996 / 243.7	3,797 / 231.6	3,797 / 231.6
Bore x stroke	mm in	102.7 x 80.4 4.04 x 3.17	102.7 x 76.4 4.04 x 3.0	102.7 x 76.4 4.04 x 3.0
Max. power (EEC)	kW / PS / hp	368 / 500 / 500	331 / 450 / 450	320 / 435 / 435
	at engine speed	rpm	8,250	7,900
			7,900	7,600
Max. torque	Nm / ftlb.	460 / 339	430 / 317	430 / 317
	at engine speed	rpm	5,750	6,750
			6,750	6,250
Power output per litre	kW/l hp/l	92.1 125.1	87.2 118.5	84.3 114.6
Power-to-weight ratio	kg/kW kg/hp	3.70 2.72	4.14 3.04	4.36 3.21
Compression ratio		12.6:1	12.2:1	12.0:1
Engine cooling (cylinder head)		Cross flow	Cross flow	Cross flow
Valve control		VarioCam (intake and outlet valves)	VarioCam (intake and outlet valves)	VarioCam (intake and outlet valves)
Engine control / mixture formation		Digital engine electronics ME 7.8.2	Digital engine electronics ME 7.8.2	Digital engine electronics ME 7.8.2
Fuel type		RON 98 unleaded	RON 98 unleaded	RON 98 unleaded
Generator	kW	2.1	2.1	2.1
Starter	kW	2.2	2.2	2.2
Battery capacity	Ah	60	60	60
Idle speed	rpm	720 ±40	720 ±40	720 ±40
Max. engine speed	rpm	8,500	8,500	8,500

		911 GT3 RS 4.0	911 GT3 RS	911 GT3
				
2. Power transmission				
Manual transmission	1 st gear	3.82	3.82	3.82
Transmission ratio	2 nd gear	2.26	2.26	2.26
	3 rd gear	1.64	1.64	1.64
	4 th gear	1.29	1.29	1.29
	5 th gear	1.06	1.06	1.06
	6 th gear	0.88	0.88	0.92
Reverse gear		2.86	2.86	2.86
Final drive ratio RA		3.89	3.89	3.44
Clutch diameter	mm / in	240 / 9.45	240 / 9.45	240 / 9.45
3. Chassis				
Front axle		PASM chassis. Spring strut axle (Porsche optimised McPherson design), wheels suspended individually on forged wishbones with trailing links and spring struts, divided wishbones (camber adjustment), supporting mounts at front with ball joints. One cylindrical spring per wheel with linear characteristic and internal single-tube gas-filled shock absorber with double clamping to the wheel carrier	PASM chassis. Spring strut axle (Porsche optimised McPherson design), wheels suspended individually on forged wishbones with trailing links and spring struts, divided wishbones (camber adjustment), supporting mounts at front with ball joints. One cylindrical spring per wheel with linear characteristic and internal single-tube gas-filled shock absorber with double clamping to the wheel carrier	PASM chassis. Spring strut axle (Porsche optimised McPherson design), wheels suspended individually on forged wishbones with trailing links and spring struts, divided wishbones (camber adjustment), supporting mounts at front with ball joints. One cylindrical spring per wheel with linear characteristic and internal single-tube gas-filled shock absorber with double clamping to the wheel carrier
Toe-in		0 (±1')	0 (±2')	0 (±2')
Camber		-1°40' (±3')	-1°35' (±5')	-1°30' (±5')




		911 GT3 RS 4.0	911 GT3 RS	911 GT3
				
Rear axle		<p>PASM chassis. Multi-link axle, wheels individually guided by 5 control arms, divided wishbones (camber adjustment). Tie rods and lower wishbones completely and lower spring strut mounts with ball joints. One barrel spring per wheel with progressive characteristic and additional spring. Coaxial, internal, double-acting hydraulic single-tube gas-filled shock absorbers</p>	<p>PASM chassis. Multi-link axle, wheels individually guided by 5 control arms, divided wishbones (camber adjustment). Tie rods and lower wishbones partially with ball joints. One barrel spring per wheel with progressive characteristic. Coaxial, internal, double-acting hydraulic single-tube gas-filled shock absorbers</p>	<p>PASM chassis. Multi-link axle, wheels individually guided by 5 control arms, divided wishbones (camber adjustment). One barrel spring per wheel with progressive characteristic. Coaxial, internal, double-acting hydraulic single-tube gas-filled shock absorbers</p>
Toe-in		+15' (±1')	+13' (±2')	+13' (±2')
Camber		-1° 50' (±5')	-1°45' (±5')	-1°30' (±5')
Steering				
Steering ratio		17.1:1 (centre position) up to 13.8:1 (variable)	17.1:1 (centre position) up to 13.8:1 (variable)	17.1:1 (centre position) up to 13.8:1 (variable)
Steering wheel revolutions from lock to lock		2.62	2.62	2.62
Steering wheel diameter	mm / in	370 / 14.57	370 / 14.57	370 / 14.57
Standard brake system		Foot-operated, hydro-mechanical ratio, dual-circuit brake system, brake booster, axle distribution	Foot-operated, hydro-mechanical ratio, dual-circuit brake system, brake booster, axle distribution	Foot-operated, hydro-mechanical ratio, dual-circuit brake system, brake booster, axle distribution
Brake booster		9-inch tandem booster	9-inch tandem booster	9-inch tandem booster
ABS		Bosch ABS 8.0	Bosch ABS 8.0	Bosch ABS 8.0
Front axle				
Brake callipers		6-piston aluminium monobloc	6-piston aluminium monobloc	6-piston aluminium monobloc
Brake discs		Composite brake discs with grey cast-iron brake discs and aluminium brake hubs, internally vented and cross-drilled	Composite brake with grey cast-iron brake discs and aluminium brake hubs, internally vented and cross-drilled	Composite brake discs with grey cast-iron brake discs and aluminium brake hubs, internally vented and cross-drilled
Diameter	mm / in	380 / 14.96	380 / 14.96	380 / 14.96
Thickness	mm / in	34 / 1.34	34 / 1.34	34 / 1.34

		911 GT3 RS 4.0	911 GT3 RS	911 GT3
				
Rear axle Brake callipers		4-piston aluminium monobloc	4-piston aluminium monobloc	4-piston aluminium monobloc
Brake discs		Composite brake discs with grey cast-iron brake discs and aluminium brake hubs, internally vented and cross-drilled	Composite brake with grey cast-iron brake discs and aluminium brake hubs, internally vented and cross-drilled	Composite brake discs with grey cast-iron brake discs and aluminium brake hubs, 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
Ceramic brake system (PCCB)		Option	Option	Option
Front axle Brake callipers		6-piston aluminium monobloc	6-piston aluminium monobloc	6-piston aluminium monobloc
Brake discs		Composite brake discs with grey cast-iron brake discs and aluminium brake hubs, internally vented and cross-drilled	Composite brake with grey cast-iron brake discs and aluminium brake hubs, internally vented and cross-drilled	Composite brake discs with grey cast-iron brake discs and aluminium brake hubs, internally vented and cross-drilled
Diameter	mm / in	380 / 14.96	380 / 14.96	380 / 14.96
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		Composite brake discs with grey cast-iron brake discs and aluminium brake hubs, internally vented and cross-drilled	Composite brake with grey cast-iron brake discs and aluminium brake hubs, internally vented and cross-drilled	Composite brake discs with grey cast-iron brake discs and aluminium brake hubs, 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
Vehicle stability system		Porsche Stability Management (PSM) with ESC OFF and ESC+TC OFF	Porsche Stability Management (PSM) with SC OFF and SC+TC OFF	Porsche Stability Management (PSM) with SC OFF and SC+TC OFF

		911 GT3 RS 4.0	911 GT3 RS	911 GT3		
						
4. Wheels and tyres						
Standard Wheels	front	9.0 J x 19 RO 47 12 J x 19 RO 48	9.0 J x 19 RO 47 12 J x 19 RO 48	8.5 J x 19 RO 53 12 J x 19 RO 63		
	rear					
Tyres	front	245/35 ZR19 (sports tyres) 325/30 ZR19 (sports tyres)	245/35 ZR19 (sports tyres) 325/30 ZR19 (sports tyres)	235/35 ZR19 (sports tyres) 305/30 ZR19 (sports tyres)		
	rear					
Winter wheels Wheels	front	8.5 J x 19 RO 56 11 J x 19 RO 51	8.5 J x 19 RO 56 11 J x 19 RO 51	8.5 J x 19 RO 53 11 J x 19 RO 67		
	rear					
Tyres	front	235/35 R19 295/30 R19	235/35 R19 295/30 R19	235/35 R19 295/30 R19		
	rear					
Air pressure, summer wheels	front	1.9 / 27.56 2.3 / 33.36	1.9 / 27.56 2.3 / 33.36	1.9 / 27.56 2.2 / 31.91		
	rear					
5. Weights						
Unladen weight (DIN)	kg	1,360	1,370	1,395		
	lbs				2,998	3,020
Unladen weight acc. to EC (DIN + 75 kg driver)	kg	1,435	1,445	1,470		
	lbs				3,164	3,186
Permissible gross weight	kg	1,680	1,680	1,680		
	lbs				3,704	3,704
Maximum payload	kg	320	310	285		
	lbs				705	683
Maximum permissible roof load with original Porsche roof transport system	kg lbs	Not available with roof transport system	Not available with roof transport system	Not available with roof transport system		
Permissible axle load – front/rear	kg	650 / 1,055 1,433 / 2,326	650 / 1,055 1,433 / 2,326	650 / 1,055 1,433 / 2,326		
	lbs					
Weight distribution – front/rear	%	38 / 62	38 / 62	38 / 62		
6. Performance						
Top speed	km/h	310	310	312		
	mph				193	193
Acceleration 0-96 km/h (0-60 mph)	s	3.8	3.9	4.0		
	0-100 km/h				3.9	4.1
	0-160 km/h				7.9	8.1
	0-200 km/h				11.9	12.2
Flexibility (80-120 km/h) in 5 th gear	s	4.8	5.3	5.8		

			911 GT3 RS 4.0	911 GT3 RS	911 GT3
					
7. Fuel consumption/Emissions					
Urban ¹⁾	l/100 km		20.4	19.4	19.2
Extra urban ¹⁾			9.9	9.6	9.0
Combined ¹⁾			13.8	13.2	12.6
CO ₂ emissions (combined) ¹⁾	g/km		326	309	298
US fuel consumption combined	mpg		N/A	20.3	21.0
Emissions standard	EU / USA		EU5 / LEV II/LEV	EU5 / LEV II/LEV	EU5 / LEV II/LEV
8. Exterior dimensions					
Length	RoW USA	mm / in	4,460 / 175.59 4,491 / 176.81	4,460 / 175.59 4,491 / 176.81	4,460 / 175.59 4,491 / 176.81
Width		mm / in			
			1,852 / 72.91	1,852 / 72.91	1,808 / 71.18
			1,952 / 76.85	1,952 / 76.85	1,952 / 76.85
Height (for DIN unladen)		mm / in	1,280 / 50.39	1,280 / 50.39	1,280 / 50.39
Wheelbase		mm / in	2,355 / 92.72	2,355 / 92.72	2,355 / 92.72
Track width	front rear	mm / in	1,509 / 59.41 1,554 / 61.18	1,509 / 59.41 1,554 / 61.18	1,497 / 58.94 1,524 / 60.00
Drag coefficient		c _d	0.34	0.33	0.32
Frontal area A		m ²	2.071	2.071	2.013
Drag		c _d x m ²	0.704	0.683	0.644
Turning circle		m / ft	10.9 / 35.8	10.9 / 35.8	10.9 / 35.8
Approach angle (with spoiler lip)		degrees	5.6	5.6	5.6
Departure angle		degrees	11.1	11.1	11.1
Ramp breakover angle		degrees	10.3	10.3	10.3
Ground clearance (Lower body measurement point for determining the ground clearance)		mm	93 (3.66) (underbody panelling at front)	93 (3.66) (underbody panelling at front)	93 (3.66) (underbody panelling at front)

¹⁾ The data was determined using the measuring method Euro 5 (715/2007/EC and 692/2008/EC) in the NEDC (New European Driving Cycle). This information does not refer to an individual vehicle and does not form part of the product offering. The information serves solely to permit comparison of the different vehicle types. Further up-to-date information on individual vehicles is available from your Porsche Centre/dealer. Fuel consumption determined based on the standard equipment. Optional equipment can influence fuel consumption and performance.

		911 GT3 RS 4.0	911 GT3 RS	911 GT3
				
9. Interior dimensions				
Interior length ²⁾	mm			
Driver's side		1,097	1,097	1,097
Passenger's side		974	974	974
Shoulder room, front	mm	1,308	1,308	1,308
Elbow room, front	mm	1,355	1,355	1,355
Effective headroom, front	mm	974	974	974
Luggage compartment volume	l / imp. gal / US gal			
front		105 / 23.1 / 27.7	105 / 23.1 / 27.7	105 / 23.1 / 27.7
rear		205 / 45.1 / 54.2	205 / 45.1 / 54.2	205 / 45.1 / 54.2
Tank capacity	l / imp. gal / US gal			
Left-hand drive (LHD)		67 / 14.7 / 17.7	67 / 14.7 / 17.7	67 / 14.7 / 17.7
Right-hand drive (RHD)		66 / 14.5 / 17.4	66 / 14.5 / 17.4	66 / 14.5 / 17.4
USA		67 / 14.7 / 17.7	67 / 14.7 / 17.7	67 / 14.7 / 17.7
Option RoW LHD		90 / 19.8 / 23.9 (without extra charge)	90 / 19.8 / 23.9 (without extra charge)	90 / 19.8 / 23.9 (without extra charge)

²⁾ Driver's side: Contact point of fully depressed clutch pedal to rear lower H point of the front seat
Passenger's side: Heel point to lower rear H point of the front seat

7. Competitor comparison

The new 911 GT3 RS 4.0 features distinctive unique selling points as well as outstanding agility and high performance potential. With the sum of its features, the new 911 GT3 RS 4.0 also impressively conveys the principle of **Porsche Intelligent Performance** in its competitive environment.

Weight and drive

Thanks to the consistent realisation of a compact vehicle concept and use of lightweight materials such as aluminium, polycarbonate and carbon fibre, the new 911 GT3 RS 4.0 has the lowest vehicle weight among its competitors with a weight of just **1,360 kg** (DIN). This does not just permit high agility, but also supports the outstanding performance potential, particularly for race track driving.

Part of the lightweight and compact vehicle concept is the efficient, motor racing-orientated high-performance engine of the new 911 GT3 RS 4.0. The unique engine concept among the competitor vehicles with a **flat-six engine** does not just offer a low system weight but also provides the benefit of a low vehicle centre of gravity. Its location at the rear of the vehicle in combination with rear wheel drive is not usual in the vehicle's competitive environment. The advantage of this constellation is high traction potential and also especially

high performance potential in combination with a low system weight.

A further highlight of the 911 GT3 RS 4.0 engine is its high power efficiency as a characteristic expression of its motor racing-orientated design and tuning. With a **specific power of 92 kW/l (125 hp/l)**, the new 911 GT3 RS 4.0 occupies an absolute leading position among its competitors.

Lap times

The new 911 GT3 RS 4.0 demonstrates its strengths and outstanding performance potential on race circuits in particular. With a lap time of **under 7:30 min** on the **Nürburgring North Loop**, the new 911 GT3 RS 4.0

achieves the absolute fastest time compared with the direct competition with higher engine power.

This is achieved through the efficient combination of all performance-orientated vehicle components. Alongside a compact vehicle concept with the lowest vehicle weight in the competitive comparison and a powerful drive system, this includes above all outstanding aerodynamics with pronounced downforce, a precisely tuned chassis and outstanding braking performance.

Thanks to its outstanding technical data and performance-orientated characteristics, the new 911 GT3 RS 4.0 impresses not just through exceptional performance and top figures but also by virtue of the emotional aspects created by its high driving dynamics.

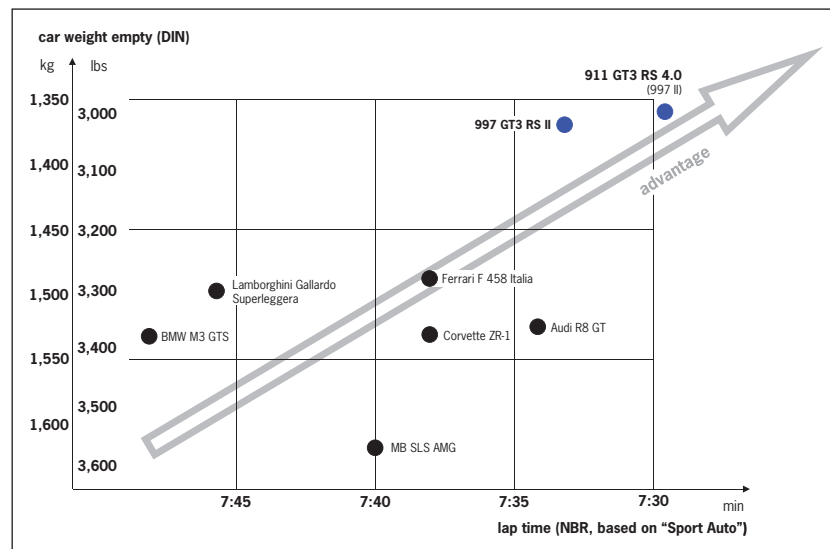


Fig. 18: Lap times and vehicle weight