



# The New 2018 Porsche 911 GT3

**Press Kit** 

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#### **Summary**

# A matter of choice: The new 2018 911 GT3

The 2018 Porsche 911 GT3 delivers track-bred performance, systematic lightweight construction and an unfiltered driving experience. In the new generation of the 911, the connection between everyday driving and the racetrack is even more intense. The centerpiece of the latest 911 GT3 is the new naturally aspirated 4.0 liter flat-six engine which produces 500 horsepower and 339 lb.-ft. of torque. This new, high-revving powerplant is based on the one now used in the 911 GT3 Cup race car. The redesigned chassis with rear-axle steering and systematic lightweight construction is specifically tuned to produce superior driving dynamics in conjunction with the naturally aspirated engine. An optional six-speed sports manual transmission is also available for the first time in addition to the standard Porsche PDK transmission.

#### **Engine**

The four-liter naturally aspirated engine produces 500 hp horsepower and 339 lb.-ft of torque. This represents an increase of 25 hp and 15 lb.-ft. in compared to the previous 911 GT3. Specifically optimized for higher engine speeds, the six-cylinder engine can reach up to 9,000 rpm and is well-suited for spirited driving.

#### **Performance**

The power-to-weight ratio of 6.4 pounds per horsepower approaches motorsport levels. The high-performing 911 can accelerate from zero to 60 miles per hour in 3.2 seconds with PDK. The manual version takes 3.8 seconds to reach 60. Its top track speed stands at 197 miles per hour with PDK, and 198 miles per hour with the manual transmission.

#### **Powertrain**

The standard seven-speed PDK transmission is optimized for use on the track. If preferred, a lighter, six-speed manual transmission is available. Both transmissions are combined with a locking rear differential.

#### Chassis

Optimized spring and damper tuning improves grip and handling. The Porsche Active Suspension Management (PASM) shock-absorber system delivers the perfect balance of ride comfort and sharp handling. The rear axle steering improves agility in corners, while also ensuring stability during high-speed lane changes.

# Design and Aerodynamics

The carbon fiber rear wing – a characteristic, iconic feature of Porsche GT sports cars – is situated 0.78 inches (20 millimeters) higher than on the previous model. Combined with the rear underbody diffusor, downforce is up 20 percent compared to the last 911 GT3. The front and rear fascia have been aerodynamically optimized and are constructed from lightweight polyurethane to reduce weight.

#### Interior

The GT sports steering wheel and Sports seats Plus with extended side bolsters deliver the true 911 GT3 driving experience. Full Bucket Seats with a carbon fiber reinforced backrest are optionally available.

#### Infotainment

The Porsche Track Precision app, included as standard, is accessible via a smartphone and provides drivers with detailed performance data about lap times, for example. The Porsche Communication Management system (PCM) can access the Internet via the Connect Plus module – also delivered as standard – and offers access to Porsche Connect services.

#### **Production**

The 911 GT3 is developed on the same track and manufactured on the same production line as the race cars.

#### **Pricing**

The 911 GT3 has an MSRP of \$143,600, not including the \$1,050 delivery, processing and handling fee. It will reach U.S. dealers in fall 2017.

#### A 911 for the road and the race track: The new Porsche 911 GT3

The 911 GT3 is pure Porsche. It bridges the gap between road and racetrack, truly reflecting the core of the brand: successful on the race track, and usable day to day. The new 911 GT3 strikes a balance like almost no other. This is all thanks to the completely new, six-cylinder naturally aspirated engine with 500 horsepower and a 9,000 rpm redline; the track-bred chassis; and systematic lightweight construction. Using a four-liter flat-six engine, the 911 GT3 generates its power using the same powerplant as the thoroughbred 911 GT3 Cup race car. Developed on the same test track and manufactured on the same production line as the race car, Porsche's motorsport technology has once again been incorporated into street-legal sports car. As a result, Porsche's most successful GT sports car delivers a highly emotional mix of high performance and unfiltered driving feel.

The majority of GT drivers also like to take their sports cars for a spin on closed courses, which is where the new 911 GT3 really comes into its own thanks to a power-to-weight ratio of 6.4 pounds per horsepower. With a seven-speed dual-clutch transmission (PDK) that has been specifically constructed, geared and tuned for the GT3 as standard, the two-seater weighs in at 3,153 pounds with a full tank of fuel and can accelerate from 0 to 60 miles per hour in 3.2 seconds. It reaches a top track speed of 197 miles per hour. For purists, Porsche also offers the 911 GT3 with a six- speed manual transmission as a no-cost option. This allows the high-performance 911 to sprint from 0 to 60 miles per hour in 3.8 seconds and reach a top track speed of 198 miles per hour.

The chassis of the new 911 GT3 benefits directly from the brand's vast motorsport experience and has been re-tuned for even better driving dynamics. In addition to new calibration of the adaptive dampers, the chassis also boasts superior handling characteristics, thanks predominantly to the active rear-axle steering. Depending on the speed, the rear wheels turn either opposite to the front wheels or in the same direction by an angle of up to 1.5 degrees, which improves agility and stability. Compared to the previous 911 GT3, the progression at which this takes place has been optimized. Other features that improve the car's driving dynamics include the dynamic engine mounts and the rear differential lock (Porsche Torque Vectoring, PTV/PTV+).

When it comes to its appearance, the 911 GT3 leaves little doubt as to its purpose. Lower ride height and the dominant carbon fiber rear wing emphasize the fact that the sports car's form is determined by aerodynamics. The lightweight front fascia and front spoiler have been designed to optimize air flow. At the rear, the lightweight rear fascia with exhaust air openings and a new underbody diffusor serve the same purpose.

# **Engine**

# High-revving racing engine produces 500 horsepower

The thoroughbred racing engine beats as the heart of the new 911 GT3. The main development goals for the high-revving engine were performance and durability for performance oriented driving. The naturally aspirated flat-six engine with four liters of displacement is based on the one powering the 911 RSR, as well as the 911 GT3 R and 911 GT3 Cup race cars. This is the most powerful and largest naturally aspi-rated direct-injection engine of any road-going flat-six that Porsche has ever constructed. It produces 500 horsepower and 339 lb.-ft. of torque. This represents an increase of 25 hp and 15 lb.-ft. compared to the previous 3.8 liter 911 GT3 model. Peak horsepower arrives at 8,250 rpm, while maximum torque is achieved at 6,000 rpm.

The engine is characterized by its high-revving concept: The crankshaft spins up to 9,000 times a minute, which is truly extraordinary, even for a sports car engine. High engine speeds enable greater power output. To ensure precise gas exchange even at high speeds, the Porsche engineers developed a "rigid valve drive". This means that the rocker arms are not supported on hydraulic balancing elements, but situated on axles. The correct valve clearance is set using replaceable shims in the factory, meaning no subsequent re-adjustment is required. The rigid valve drive and a adapted valve spring design further increase the robustness of the valve drive and also reduce friction losses.

As before, the variable intake and exhaust camshaft control continues to be operated by the Vario Cam system. The electronic engine management system uses the variable valve control to regulate the valve timing depending on the engine speeds and load conditions. This enables high running quality and, above all, high performance and torque delivery throughout the rev range.

Another characteristic of the power output is the high compression ratio of 13.3:1. The powertrain of the GT3 offers all the features typical of race engines. This includes dry-sump lubrication with a separate oil tank and seven suction stages, titanium connecting rods, and crankshaft that has been modified from the one found in the 2016 911 GT3 RS and 911 R with greater rigidity and larger main bearings. Further changes compared to the previous 4.0 liter engine include new piston rings, new cylinder heads and iron-coated cylinder liners. A new oil pump and central oil distribution ensures optimum oil supply to the

con-necting-rod bearings. Defoaming the oil using a centrifuge before the oil is fed into the separate oil tank is an innovation derived from motorsport.

Together with the standard Sport Exhaust system, the variable intake manifold is now equipped with two switchable resonance flaps (previous 911 GT3: one resonance flap) to ensure an efficient charge cycle. This results in highly consistent power and torque delivery across the entire rev range and a thrilling sound.

#### **Transmission**

#### **Dual-clutch transmission for best possible performance; manual transmission for the purists**

For the first time, Porsche offers two transmission variants for the 911 GT3. For those looking to enjoy the best possible performance, the standard seven-speed Porsche Doppelkupplung (PDK) is the perfect choice. Alternatively, the new 911 GT3 is also available with a six-speed manual transmission at no extra charge.

#### **New GT sports six-speed manual transmission**

A shorter shift lever, short throws, precise shift action and optimal gear ratios: For the purists among 911 GT3 drivers, Porsche has developed the new GT sports manual transmission with a dual-mass flywheel. The transmission ratios are precisely tuned to suit the power delivery of the engine and offer particularly sporty shifting characteristics. A rev-match function can be activated via the SPORT button on the center console. The manual transmission in the new 911 GT3 is largely the same as was developed and fitted to the coveted 911 R.

In contrast to the 911 GT3 with PDK, the model with manual transmission uses a mechanically-controlled rear-differential lock (PTV) with locking values of 30/37 percent (traction/overrun). Compared to the previous locking values of 22/27 percent used on the 911 R, the higher locking values allow further improvement in driving stability and traction. Another advantage: The combination of manual transmission and mechanically-controlled differential lock weighs around 33 pounds less than the PDK variant. This reduces the curb weight to 3,116 pounds, improving the power-to-weight ratio to 6.3 pounds per horsepower. The high-performance 911 accelerates from zero to 60 miles per hour in just 3.8 seconds.

# **PDK** designed for optimal performance

The PDK is part of Porsche motorsport history. In 1986 and 1987, the Porsche 962 won the 24 Hours of Le Mans using a dual-clutch transmission. Today, the Porsche Doppelkupplung sets the standard for pro-duction sports cars. With millisecond gear changes and no interruption in traction, it ensures optimum acceleration figures and improved efficiency.

The PDK is specifically tuned for the new 911 GT3. All seven gears are performance-oriented, with the top track speed being reached in seventh gear. The special electronic transmission control ensures spontaneous and quick upshifts and downshifts. In PDK SPORT mode, downshifts are more aggressive, while the upshift points move to higher rev speeds under acceleration.

With their precise pressure point, the gearshift paddles offer precise haptic feedback, even when wearing driving gloves. Like all current 911 and 718 models, the shift direction of the gear selector is the same as in a racing car: Pull back to shift up. Push forward to shift down.

#### Paddle Neutral: The PDK clutch release function in the 911 GT3

The driving dynamics of a sports car driven to achieve optimal performance are also influenced by the clutch. This is why the PDK offers the "Paddle Neutral" function. If the driver pulls back on both gearshift paddles at the same time, the clutches of the PDK release, and the power delivery from the engine to the wheels is interrupted. As soon as the driver lets go of the paddles again, the clutch re-engages at lightning-fast speed if PSM is deactivated. If PSM is activated, the clutch re-engages quickly, but less aggressively.

Essentially, there are two advantages to this: If the car is understeering in wet conditions, for example, the driver can neutralize the handling by pulling back on the paddles, delivering extra grip to the front wheels on the front axle. Using "Paddle Neutral" means that the vehicle rear can be deliberately destabilized when cornering dynamically in a similar way to using a traditional clutch-kick on a manual transmission

"Paddle Neutral" can also be used for acceleration from a standstill. As with a vehicle with a manual transmission, the driver alone can determine the preferred acceleration characteristics using the clutch and gas pedal without any intervention from electronic powertrain and stability control systems.

To ensure the best possible traction, the PDK in the 911 GT3 is combined with the Porsche Torque Vectoring Plus (PTV Plus), which incorporates an electronically-controlled rear differential lock with fully-variable torque distribution. The system brakes the inside rear wheel in a targeted manner to improve the vehicle's steering behavior and driving stability.

# **PSM** specially tuned for GT sports cars

PTV Plus complements Porsche Stability Management (PSM), which optimizes the handling and behavior of the car through various interventions including selective wheel braking. As on the previous model, the stability system is tuned for spirited driving in the new 911 GT3. The PSM can be deactivated in two stages using the ESC OFF and ESC+TC OFF functions.

In the first deactivation stage, "ESC OFF", the potential driving dynamics on race tracks are increased by deactivating the stability control ESC. This allows the driver to deliberately destabilize the rear end of the 911 GT3 in corners. The longitudinal dynamics control functions tuned for sporty driving are retained in this driving mode. In the second deactivation stage, "ESC+TC OFF", all driving dynamics control systems are deactivated. This gives the driver full control of the vehicle according to his or her preferred racing style.

# **Chassis**

#### Track-bred chassis with rear axle steering

GT sports cars from Porsche have their own brand-specific spread of driving dynamics. They are at home both on race tracks like the Nürburgring, delivering agility when the chassis is put to the test and offering confidence-inspiring stability at high speeds. The chassis of the new 911 GT3 has been built and tuned according to this motorsport philosophy. Compared to the previous model, the responsiveness of the spring/damper combination has been optimized further. Weight-saving helper springs on the rear axle ensure that the main springs remain under load even after rapid and complete deflection – for example, after driving over a crest at high speed. Together with the standard rear axle steering as standard, the PASM adjustable damper system and the dynamic engine mounts, the re-developed motorsport chassis delivers further performance improvements and 911 GT – specific responsiveness. Furthermore, adjust-ments can be made to toe, camber and caster as well as sway bars and ride height to suit his or her specific preferences.

The active rear-axle steering has long been a guarantee of excellent driving dynamics in high-performance 911 models. In the new 911 GT3, the steering angle of the rear wheels varies by up to 1.5 degrees in each direction via electromechanical actuators, depending on the speed. Below 31 miles per hour, the system steers the rear wheels counter to the steering direction of the front wheels. This means greater agility and more immediate steering behavior, as well as a tighter turning circle. Above 50 miles per hour, the system steers the rear wheels in the same direction as the front wheels. This increases stability, for example during a lane change. Between 31 and 50 miles per hour, the rear wheels turn in the same or opposite direction of the front wheels, depending on the situation.

# PASM with two modes optimized for the road

The Porsche Active Suspension Management (PASM) variable shock-absorber system has also been specially tuned to the 911 GT3. There is a choice of two maps. Normal mode already offers high driving dynamics in changing road conditions and on uneven roads. With Sport mode, the driving dynamic potential of the new 911 GT3 is increased even further, particularly on even roads. Reducing the body

movements to a minimum allows particularly precise and specific handling. The new 911 GT3 adopts the dynamic engine mounts from the predecessor model. They hold the engine more tightly to the body when cornering, thus eliminating unwanted effects of the engine mass on handling

A new generation of UHP tires (Ultra High Performance) also help contribute to the higher cornering speeds of the new GT3. The 911 GT3 rolls off the production line on 245/35 ZR 20 tires at the front and 305/30 ZR 20 tires at the rear. The forged center-lock alloy wheels are colored in silver as standard.

Measuring 9 x 20 inches in the front and 12 x 20 inches in the rear, they are also available in Satin Aluminum Finish, Satin Platinum and Satin Black. The center-lock system offers increased performance due to a reduced rotating mass. The standard Tire Pressure Monitoring System (TPMS) does not just issue a warning in the event of gradual or sudden pressure loss. Like on the previous 911 GT3, 911 GT3 RS and Cayman GT4, it also has a race circuit mode, which takes into account the lower air pressure of cold tires at the start of the track session.

# Improved usability: Pneumatic lift for the front axle

Like on the previous model, the new 911 GT3 can be ordered with an optional pneumatic front axle lift system, which increases everyday usability by allowing the front of the car to be lifted by approximately 1.18 inches (30 millimeters). This is possible at speeds of up to around 37 miles per hour, and prevents damage to the body caused by an uneven road surface.

The track-bred standard brake system includes aluminum Monobloc fixed calipers with six pistons at the front and four at the rear. These grip compound brake discs measuring 15 inches (380 millimeters) in diameter which are equipped with aluminum brake hubs. The Porsche Ceramic Composite Brake (PCCB) system is available as an option. With large brake rotors measuring 16.1 inches (410 mm) in diameter at the front and 15.4 inches (390 mm) at the rear, the PCCB delivers even greater braking performance

and resistance to wear. It also weighs around 50 percent less than the standard brake system, reducing unsprung weight.

**Bodywork** 

**Lighter with improved aerodynamics** 

Aerodynamics and weight are the two factors that dominate the development of the 911 GT3 body. The

front and rear ends have been optimized to this end. Both are made of lightweight polyurethane with

hollow glass spheres and carbon fiber elements in order to reduce weight. The new rear lid, rear wing,

and wing supports consist of carbon fiber.

Large air intakes, typical of the 911 GT3, dominate the front view. Along with the new lateral air blades,

these large intakes to the left and right improve the cooling air supply. Larger radiators compared to the

previous model are housed behind these intakes. At the same time, the typical GT3 air outlet in front of

the luggage compartment lid improves air flow to the central radiator and increases downforce on the

front axle. The air intake grilles on the cooling air intakes have titanium - colored coating. The wide front

spoiler lip generates additional downforce at the front axle.

The new 911 GT3 comes with Bi-Xenon headlights as standard, including a headlight cleaning system.

LED headlights in black are available as an option. The LED direction indicators, daytime running lights

and position lights have a sleeker design on the new 911 GT3, which adds additional sharpness to the

contours. Overall, the front of the new 911 GT3 looks more muscular and sporty.

**GT** characteristic feature: Carbon rear wing

At the rear of the 911 GT3, there is no mistaking that this is where power is transferred to the road. The

most striking feature is the fixed rear wing with black side blades. This is positioned around 20 millime-

tres higher than on the previous model, providing improved downward pressure on the rear axle. The

rear lid, wing and wing supports are made from carbon and painted in the exterior color. The central

ventila-tion slot of the rear lid is positioned higher and is larger than the predecessor model, which

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further im-proves heat dissipation. The two black ram-air scoops on the rear lid ensure optimal air supply to the engine thanks to their dynamic pressure function. They are made from glass-fiber reinforced plastic (GFRP).

The redeveloped engine underbody paneling with enlarged surface area and four additional fins ensures additional downforce. The underbody paneling made of stamped aluminum sheet metal is shaped to rise toward the rear. It acts as a diffusor and ensures downforce. The four fins positioned on this diffusor pan-el channel the air flow under the rear, further accelerating the air flow and amplifying the diffusor effect. This technology also originates from motorsport. Overall, the new 911 GT3 generates around 340 pounds (155 kilograms) of downforce at top track speed – this is around 20 percent more than the previous 911 GT3.

Like before, the 911 GT3 uses the Carrera 4 body, which is 1.7 inches (44 millimeters) wider at the rear wheel arches than the 911 Carrera. A lower ride height compared to the 911 Carrera further emphasizes the width of the car. The central black twin tailpipes of the Sports exhaust system lower the visual focus point. The tinted LED taillights have a very flush and three dimensional design, further accentuating the width of the car.

#### <u>Interior</u>

# Front row seat for exceptional driving dynamics

The interior of the new high-performance sports car is tailored ergonomics and functionality throughout. This is evident as soon as the driver takes hold of the GT sports steering wheel. With a diameter of 14.1 inches (360 millimeters) it originates from the 918 Spyder, and its height and length can be manually adjusted by up to 1.5 inches (40 millimeters) axially and vertically. Together with the black steering wheel spokes, the steering wheel rim made of black Alcantara is not just a visual highlight, but also ensures perfect grip. The optional 12 o'clock marking in red means the driver can easily determine the steering angle and the position of the wheels. The shift paddles on the steering wheel have very short throws and exceptionally precise pressure points.

As standard, the new 911 GT3 is equipped with Sports Seats Plus with high seat bolsters for good lateral support and mechanical fore/aft adjustment. The seat height and backrests are adjusted electrically. The seat covers are finished in black leather with a seat center in black Alcantara. The headrests bear the stitched "GT3" logo in platinum grey. As on all GT models, the rear seats are omitted to reduce weight.

Porsche offers two additional seat options for the 911 GT3. The adaptive Sports seats Plus boast electrical adjustment of all seat functions (18-way). The second option is Full Bucket seats made from light carbon fiber-reinforced plastic in carbon-weave finish. The new seat covers have GT3 stripes and an embossed Porsche crest in the headrests. The Full Bucket seats have an integrated Thorax airbag, approximately two inches (50 millimeters) of electric height adjustment and manual fore/aft adjustment for the driver and passenger side.

#### **Porsche Track Precision app as standard**

As with the current 911 models, the 911 GT3 has the new Porsche Communication Management (PCM) including Online Navigation, mobile phone preparation and Porsche Connect Plus including Porsche Car Connect as standard. The Porsche Track Precision app is also included. The app enables 911 GT3 drivers to display, record and analyze detailed driving data on their smartphone. Lap times can automatically be stopped and compared on a smartphone using a precise 10-Hz GPS signal in the PCM or by manually using the operating lever of the optional Chrono Package. For even higher accuracy, a lap trigger is available through the Porsche Tequipment accessories program. This can be positioned next to the start/finish line to automatically time lap times and send the data to the PCM and smartphone app.

The app graphically displays the driving dynamics on the smartphone during track use and, in addition to sector and lap times, also shows deviations compared to a set reference la. Graphical analysis of the driving data and a video analysis help the driver to improve driving performance. Recordings, lap profiles and driver profiles can be managed and shared directly via a smartphone.

#### **Optional Chrono Package with performance display**

In addition to the analog and digital stopwatch in the dashboard, the optional Chrono Package also offers a performance display to show, store, and evaluate recorded lap times in the PCM. This provides the driver with information about the time and distance of the current lap, as well as the previous lap time and the times achieved so far. The fastest lap and the remaining fuel range are also displayed. Any lap routes can be recorded and reference laps can also be set.

#### **Connected PCM with Connect Plus module**

The standard Connect Plus module has an LTE telephone module with SIM card reader for maximum convenience and optimised voice quality, as well as wireless Internet access. This means Wi-Fi – enabled devices such as laptops, tablets and smartphones can be connected to the Internet in the vehicle – all at the same time if required. The Connect Plus module also offers numerous Porsche Connect services.

The standard Sound Package Plus delivers outstanding sound: eight loudspeakers and 150- watt performance. The Bose Surround Sound system, specially designed to suit the interior acoustics of 911 models, is available as an option. The audio system delivers a total output of 555 watts and has twelve

fully-active loudspeakers and amplifier channels, including a patented, built-in 100-watt high-performance subwoofer. The fully-active system design allows each individual loudspeaker to be optimally adjusted to the vehicle interior.