

# The chassis – lower, sportier and with optional rear-axle steering

Power and longitudinal acceleration were on the list of criteria. So too were higher cornering speed and maximum driving precision. When developing the GTS models, the designers focused on honing the sports tuning of the chassis components. They achieved this through the integration of a track width greater than that of the Carrera S, measuring 1,544 millimetres across the rear axle. The benefits of this greater track width are a low roll tendency and even better stability around corners.

The standard Porsche Active Suspension Management (PASM) system provides improved road grip and more precise steering behaviour in the GTS Cabriolets and the GTS Targa models. The GTS Coupés exclusively feature the PASM sports chassis, which lowers the body by a further ten millimetres (-20 mm total). Additional featured systems also improve the steering behaviour, precision and agility of the 911 GTS: Models with manual transmission, for example, feature Porsche Torque Vectoring (PTV) and a mechanical rear differential lock, while GTS models with PDK feature Porsche Torque Vectoring Plus (PTV+) and an electronically controlled rear differential lock. Both systems provide targeted braking interventions on the inside rear wheel when cornering and improve traction during rapid acceleration out of tight bends. Active PDCC anti-roll stabilisation, which is available as an option, has been modified in line with the higher power of the GTS models.

The GTS chassis boasts a high degree of stability, precise feedback and neutral steering behaviour. The GTS models also feature the 16 per cent larger brake pads from the 911 Turbo, together with front brake discs that are ten millimetres larger in diameter (350 x 34 millimetres). These are bolted to a new brake disc hub made from aluminium, which reduces the unsprung weight and contributes to improved dynamic responsiveness.

The brakes which feature optimised ventilation, provide first-rate deceleration values even under high thermal loads on the racetrack. And the callipers with red paint finish are a further component of the GTS identity, together with the black-finished 20-inch alloy wheels with distinctive centre locking wheel bolts. The centre lock wheels on the front and rear axle are half an inch wider than those on the 911 Carrera S, and measure nine inches on the front axle and twelve on the rear. This increases the tyre contact area and improves grip.

For the first time, rear-axle steering is also available for all GTS models as an option. This system steers the rear wheels in the opposite direction to the front wheels at speeds of up to around 50 km/h, which effectively shortens the wheelbase. This creates a smaller turning circle, significantly improves steering behaviour in corners and makes for nimble manoeuvring.

At speeds above 80 km/h, the system steers the rear wheels in the same direction as the front wheels. This effectively increases the wheelbase for improved vehicle stability when changing lanes quickly on the motorway, for example. The steering ratio on the front axle is also ten per cent more direct.

The combination of PASM and the dynamic engine mountings included in the Sport Chrono Package, in particular, provides a further improvement to driving dynamics. The electronically controlled engine mounts minimise vibrations from the drivetrain and reduces movements that can influence driving dynamics due to the overall mass of the drivetrain. As a result, it combines the advantages of rigid and flexible engine mountings: consequently, handling is noticeably more stable under load changes and through fast corners, without having to compromise on driving comfort on uneven road surfaces. All GTS models therefore combine high engine power and precise handling without compromise.

Porsche Stability Management (PSM), which provides automatic stabilisation control of the vehicle at its dynamic limits, permanently monitors the direction of travel, speed, yaw velocity and lateral acceleration. The system improves traction when accelerating on a range of different road surfaces. PSM Sport mode is a new addition to the standard Sport Chrono Package. This mode allows ambitious drivers to take their 911 even closer to its limits – on the race track or during winter training, for example. Compared with “PSM On”, this function enables larger yaw movements around the vertical axis and a higher degree of slip on the drive wheels.