

Product Highlights: Porsche 911 Turbo – Benchmark for the past 45 years

27/03/2021 The Porsche 911 Turbo has been the quintessential high-performance sports car with everyday usability for the past 45 years. The next generation 911 Turbo Coupé and Cabriolet are even more powerful, faster and even more individual. Their launch follows the introduction of the new 911 Turbo S variants in 2020.

Engine

Powering the next generation 911 Turbo is a 3,745cc six-cylinder boxer engine featuring two symmetrical VTG (variable turbine geometry) turbochargers with electrically controlled bypass valves. The turbochargers are now larger in size and use exhaust manifolds derived from the 911 GT2 RS, which improve responsiveness and efficiency with their optimised flow ratios.

For the first time, the direct injection fuel delivery is provided by piezo-electric injectors.

Air management for the engine and twin intercoolers has been reversed in the new 911 Turbo. The redesigned charge air cooling system now feeds incoming cold air to the intercoolers via the 911 Turbo's tailgate grille. Aspirated engine air is now fed by the side air-intakes in the rear wings.

Together, these main changes enhance this landmark engine's free-revving nature. They further improve its responsiveness, performance, and torque characteristics.

Maximum power output has increased to 427 kW (+30 kW) / 580 PS* (horsepower) (+40 PS*). Peak torque has increased to 750 Nm (+40 Nm), giving instant and effortless acceleration.

In a first for the 911 Turbo, a factory-fitted sports exhaust system is now optionally available. It accentuates the unmistakeable sound of this famous twin-turbo flat six-cylinder engine, adding to the driving experience.

Performance

Both variants of the new 911 Turbo now boast 0-100 km/h times under three seconds, thanks in part to the overboost function no longer having a time limit. With launch control, the Coupé completes the sprint in 2.8 seconds and the Cabriolet in 2.9 seconds, 0.2 seconds faster than the previous-generation 911 Turbo.

Top speed is 320 km/h.

The acceleration, power output and torque of the new 911 Turbo match those of the previous generation 911 Turbo S (type 991.2).

Transmission

An eight-speed PDK (Porsche Doppelkupplung) twin-clutch gearbox is used with a Turbo-specific set-up.

Drive is delivered to all four wheels.

A map-controlled multi-plate clutch and Porsche Traction Management (PTM) work alongside the Porsche Torque Vectoring Plus (PTV Plus) system, which controls drive to each wheel. The 911 Turbo uses an electronically regulated rear differential with fully variable torque distribution and a mechanical locking gear.

Enhanced chassis

The new 911 Turbo has a wider chassis and body.

Steering precision has been enhanced with a wider front track (+42 millimetres) and new 20-inch 255/35 tyres. These changes also allow the front wheels to receive more power from the Porsche Traction Management system.

At the rear, the track width has increased by 10-millimetres. And 315/30 tyres are fitted to 21-inch wheels.

Rear-axle steering enhances performance and everyday usability. At low speeds, the system steers the rear wheels in the opposite direction to the front wheels, virtually shortening the wheelbase for better maneuverability. At sporty driving speeds, the system subtly steers the rear wheels in the same direction as the front wheels to maximise stability.

The braking system has been revamped. It now uses 408 mm grey cast iron brake discs at the front (28 mm larger). They are now 36 mm thick (+2 mm). The rear brake discs have a diameter of 380 mm and a 30 mm thickness.

Six-piston aluminium fixed monobloc brake calipers are fitted at the front (red in colour). Four-piston calipers are fitted at the rear.

Two different chassis variants

The standard PASM (Porsche Active Suspension Management) chassis offers a greater spread between sportiness and comfort.

The significantly firmer, electrically controlled 10 mm-lower sports suspension (available as a factory-fitted option) takes even greater advantage of the new 911 Turbo's agility. Its set-up is aimed at enhancing the car's dynamics and provides even more stability in high-speed driving, such as when the vehicle is used on race circuits.

The optional PDCC (Porsche Dynamic Chassis Control) hydraulic active anti-roll stabilisation, and PCCB ceramic brake system with ten-piston fixed callipers at the front, refine the new model's driving dynamics yet further.

Body and active aerodynamics

At the front: the body has been widened 45 millimetres (to 1,840 mm) at the front wheels to

accommodate the new chassis. The new bonnet's swage line underlines the new car's sporty character and blends perfectly with the 911 Turbo's unmistakable flyline, making it instantly recognisable.

LED headlights with PDLS Plus (Porsche Dynamic Lighting System Plus) illuminate the road. They're fitted as standard equipment.

At the rear: the body is now 20 mm wider, giving it an exact width of 1.90 metres. The continuous light bar with LED tail lights combine with the new louvred rear lid grille with silver trim strips to complete the new look at the rear of the car.

Enhanced adaptive aerodynamic features include electronically controlled cooling flaps at the front, a larger active front spoiler that can be extended lower than the previous model, and a significantly larger variable rear spoiler.

The 911 Turbo Cabriolet is fitted with an integral electrically powered wind deflector to minimise air turbulence when driving with the roof down. Cabriolet owners can choose from four different convertible roof colours: black, blue, red or brown.

Premium interior

The new 911 Turbo uses the Porsche Advanced Cockpit and Direct Touch Control.

Operating the new 10.9 inch centre screen of the PCM (Porsche Communication Management) system is quick and distraction-free thanks to its new architecture.

The list of high-quality standard equipment inclusions is extensive. They include 14-way sports seats, the Sport Chrono package, a GT sports steering wheel with shift paddles, multifunction and mode switches, seat heating (front), Lane Change Assist, Comfort Access, ParkAssist (front and rear) including Surround View, electrically-folding exterior mirrors including courtesy lighting and digital radio as well as a powerful BOSE® Surround Sound System.

Sport package

The optional Sport package will be available for the 911 Turbo from early 2021 and features the 911 Turbo SportDesign package as well as additional features in Black and in Carbon. It also includes the Exclusive Design tail lights. For the Coupé, the package includes a lightweight carbon roof.

By the numbers

- 427 kW / 580 PS* (horsepower)

- 750 Nm
- 3,745cc flat 6-cylinder engine with VTG twin-turbochargers
- 8-speed Porsche Doppelkupplung (PDK) with all-wheel drive
- Top speed 320 km/h
- 0-100km/h in 2.8 seconds (Coupé); 2.9 seconds (Cabriolet)
- Maximum power has increased 30 kW / 40 PS* (horsepower)
- Peak torque has increased 40 Nm
- 0-100 km/h now 0.2 seconds quicker
- Front track width is now 42 mm wider (1,583 mm)
- The bodywork now 45 mm wider above the front axle (1,840 mm)
- Rear track width is now 10 mm wider (1,600 mm)
- The bodywork now 20 mm wider above the rear axle (1,900 mm)
- Larger front brake discs (+28 mm diameter, +2 mm thicker)

In summary: The new 911 Turbo is the quintessential high-performance sports car that's comfortable and suitable for everyday use.

*PS (Pferde Stärke, German for horsepower) is the standard unit used in the European Union to measure the power output of a motor in 'metric horsepower'

Driving comfort and dynamics

- Porsche Active Aerodynamics (PAA)
- Porsche Active Suspension Management (PASM)
- Porsche Ceramic Composite Brake (PCCB) – optionally available
- Porsche Communication Management (PCM)
- Porsche Connect Plus
- Porsche Dynamic Chassis Control (PDCC) – optionally available
- Porsche Dynamic Light System Plus (PDLS Plus)
- Porsche Stability Management (PSM)

- Porsche Torque Vectoring Plus (PTV Plus)
- Porsche Traction Management (PTM)
- Porsche WET Mode
- Sport Chrono package incl. mode switch

Additional standard specifications for Australia

- Electrically folding mirrors incl. courtesy lighting
- ParkAssist (front and rear) including Surround View
- Power Steering Plus
- Lane Change Assist
- Comfort Access
- Steering wheel heating
- Digital Radio
- Tyre sealant and electric air compressor
- Front seat heating as a no-cost option

Warranty and Service Pricing

- Three year warranty
- Service pricing varies from state to state due to different labour rates. For an indication of service pricing please visit the website of your local Porsche Centre.

(Full review here.)

"The steering, as ever, is a highlight. Firm at speed, responsive, and direct, Porsche continues to deliver power steering that is the gold standard by which all others should be judged. There's no doubt, even with the privilege we have to test all and sundry on road and track that the Porsche 911 Turbo is fast – brutally so. It's one of the fastest cars we've ever settled into. It's effortless sure, but that doesn't detract from how outrageously fast it is when you unleash its capability on a racetrack."

- Trent Nikolic, CarAdvice.com.au (Full review here.)

"The 2021 Porsche 911 Turbo is a phenomenal feat of engineering – a car that may be somewhat challenging for novice drivers, but one that will reward those who take the time to master it. As well as delivering impeccable driver involvement, it can also be treated like a punching bag, pummelled over and over on the racetrack without protest or any performance degradation. The new Porsche 911 Turbo is a tremendously capable and profoundly engaging supercar. There's no real downside to the vehicle."

- Feann Torr, Carsales.com.au (Full review here.)

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