



911 Carrera



More than 40 years in the making.

A moment's acceleration to understand why.

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A single line on a sheet of paper.

The start of a new evolution.

This time, however, the line is more refined. More essential. More precise.

Every millimetre is perfectly judged. No excess. No experiment. No doubt.

The image that appears is more focused than ever:

The sixth generation of Porsche 911.

Between the lines, there are many facets.

Power. Presence. Practicality.

The driving experience is immediate, direct, intense and inspirational.

In this respect, nothing has changed. It remains as revolutionary as ever.





From strength to strength.

The 911 model range.

The Porsche 911 was originally unveiled in 1963. In that moment, a story began which continues its fascination to this day.

The secret of its success is the harmonious integration of pure engineering and design. Every aspect has been carefully considered to bring you absolute clarity and control.

Nothing is superfluous, nothing is short term, and nothing is open to compromise. Its character is the product of pure race experience – and more than 14,000 victories for the 911 alone.

This extraordinary racing pedigree would never have been possible without the total interaction of man and machine. A remarkable relationship that is equally compelling beyond the racing circuit.

So while the 911 is designed for everyday road use, it will never be an everyday sportscar. To the skilled and responsible driver, it is a unique precision instrument with many possibilities to explore.

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Moving when stationary.

Designing the 911.



In the new 911, the underlying characteristics are expressed with purity and precision.

Lean muscularity combines with clarity of line and an accuracy in every contour. Even when stationary, the new 911 is like a sprinter waiting in the blocks.

The diagonal transition between tail and body conveys poise and natural urgency. The theme continues through the curving mid-section to the distinctive front-end design.

Bow-type door handles and doublearm mirrors accentuate the athleticism of the stylish exterior.

The headlight units are oval and compact in design. The indicators, side lights and fog-lights are housed in a separate module on the front apron moulding.



The resulting appearance is highly distinctive, yet still unmistakably Porsche.

The deeper significance of the car's elegant design is confirmed by its aerodynamic performance. The drag coefficient, for example, is just 0.28 on the 911 Carrera and 0.29 on the 911 Carrera S.

The high-quality interior is typically 911, using clarity, precision and stylish ergonomics to fulfil the purpose of driving. The cockpit geometry has been carefully conceived to create a spacious environment for even the taller driver. The standard front seats provide maximum comfort and support.

In every respect, the Porsche 911 is a precision driving instrument. From its powerful engineering and elegant design to its superlative driver control.

Evolving perfection.

Engineering the 911.



More than 40 years ago,
Dr. Ferdinand Porsche conceived a
new ideal in sportscar design.
A car with power and natural
agility as well as genuine practicality. From that concept, a vehicle emerged that would become
one of the most famous ever
created. A legend now in its sixth
generation. The Porsche 911.

Over the past four decades, the 911 shape has come to symbolise the ultimate sportscar. Its distinctive lines serve one purpose only: optimum aerodynamics. The result is a reduction in both drag and lift, ensuring greater all-round stability.

The advanced suspension system

– McPherson struts at the front,
LSA multi-link at the rear – converts
drive from the engine into precision handling on the road. The body
of the car is specifically designed
to offer exceptional levels of torsional and flexural strength.

In spite of these modifications, the car is now significantly lighter in a number of key areas. The most important of these include the chassis, wheels, exhaust and seats. The luggage compartment lid is made from aluminium.

When it comes to power, the 911 is available with a choice of two engine variants.

The 911 Carrera unit develops 325 bhp and 370 Nm of torque. The 911 Carrera S has a maximum output of 355 bhp and 400 Nm. Both 911 engines are equipped with Porsche VarioCam Plus. This patented technology combines variable valve timing and two-stage lift on each of the inlet camshafts. Principal benefits include added performance and lower fuel consumption.

Drive is transmitted through a high-precision six-speed manual gearbox with short-throw, high-performance linkage. All 911 models are also available with the optional five-speed Tiptronic S.

The rear-wheel drive models come with Porsche Stability Management (PSM) as standard. The all-wheel drive variants have a specially enhanced version with additional functionality. In either case, PSM provides effective assistance in critical road scenarios. It is also set to respond later than before, enabling optimum involvement and manoeuvrability, particularly in

conjunction with the optional Sport Chrono Package Plus.

The Sport Chrono Package Plus offers synchronised enhancement for engine, chassis and optional Tiptronic S. As the name suggests, it is another means of exploring the capability of the car.

Another performance option on all 911 models is the latest evolution of the Porsche Ceramic Composite Brake (PCCB; see page 88).





The optional Tyre Pressure Monitoring (TPM) provides early warning of any loss of pressure in any of the four tyres.

Steering is enhanced by the variable steering ratio, which offers exceptional sensitivity and precision. For optimum comfort, the steering wheel can be adjusted for height and reach.

A multifunction steering wheel – also available as an option – offers direct access to the main audio controls as well as navigation and telephone functions (if fitted).

The standard front seats combine excellent comfort and safety. Optional alternatives include adaptive sports seats with electrically adjustable side bolsters. This ingenious design offers generous comfort on long-distance journeys as well as precision support on the racetrack or winding country roads.

To improve occupant protection, all 911 models have six individual airbags: two-stage front airbags for driver and front passenger, one head airbag in each of the door panels, and one thorax airbag in the side of each front seat backrest.

Other standard items include
Porsche Communication Management (PCM) – which features a
5.8-inch colour display, CD radio
and on-board computer – and the
Sound Package Plus.

Combined, these features represent a whole new level of driver involvement and technical capability.

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Follow your instincts. CE Fange Precisely.

The 911 represents a powerful bond between driver and driving machine. It is a bond defined by precision, control and immediate response.

Now that bond is closer than ever in the sixth generation of 911.

Eight distinct models, two engine variants, one important choice to make.

The 911 Carrera.

The 911 Carrera S.

The new 911 Carrera 4.

The new 911 Carrera 4S.

The 911 Carrera Cabriolet.

The 911 Carrera S Cabriolet.

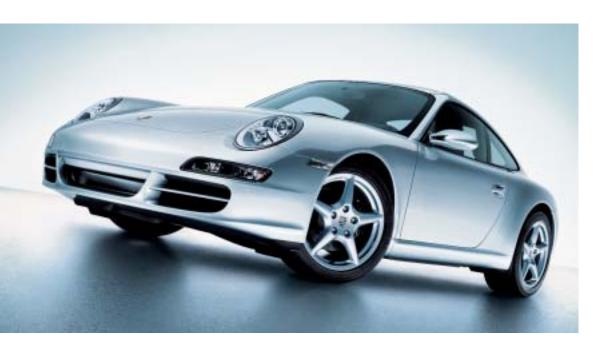
The new 911 Carrera 4 Cabriolet.

The new 911 Carrera 4S Cabriolet.



The best ideas stand the test of time.

The 911 Carrera.



Pure power, no excess – the key to every sporting achievement, and the essence of the 911 Carrera. In this latest evolution, the 3.6-litre flat-six engine develops 239 kW (325 bhp) at 6,800 rpm. Maximum torque of 370 Nm is available from 4,250 rpm. Positioned low in

the body, behind the rear axle, the flat-six unit plays a crucial role in the car's traction, handling and dynamics. The result: 0 to 100 km/h (62 mph) in 5.0 seconds and a top speed of 285 km/h (177 mph).

This powerful capability is always readily available. Every input is met with a precision response and the distinctive 911 sound.

Standard equipment includes
18-inch alloy wheels with black
anodised four-piston brakes.
The monobloc fixed calipers are
made from lightweight aluminium
and come with cross-drilled, vented
discs. The resulting brake performance is fast and effective with
excellent resilience and durability.

Optional extras for the 911 Carrera include Porsche Active Suspension Management (PASM). This adaptive damping system offers comfort and agility on 10-mm lowered suspension. For added performance, the optional sports suspension combines a 20-mm reduction in ride height with a mechanical rear differential lock.

As you will discover, the
911 Carrera is uniquely uncompromising in every respect.
With its immediacy of response and precision engineering, every manoeuvre becomes a memorable and exhilarating driving experience.



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Power, precision and the potential for more.

The 911 Carrera S.



Every great athlete has hidden potential. In the 911 Carrera S, we've tapped those reserves with a powerful flat-six engine. The 911 is therefore available with a choice of two engine variants, each having its own unique character.

Instantly recognisable by its twin dual-tube exhausts, the 911 Carrera S has a 3.8-litre flatsix engine developing 261 kW (355 bhp). Maximum torque of 400 Nm is available from 4,600 rpm. Nought to 100 km/h (62 mph) requires just 4.8 seconds. Top speed is 293 km/h (182 mph).

As part of our general weightsaving strategy, the air intake system is constructed entirely from lightweight plastics. The two-stage resonance volume in the air-filter housing creates a broad acoustic spectrum ranging from deep reverberation to a more aggressive high-rev note.

The chassis on the 911 Carrera S features Porsche Active Suspension Management (PASM) and rides 10 mm lower than the standard 911 Carrera. PASM is an active damping system which automatically adapts to changing road conditions and individual driving style. With a choice of two damper modes – 'Normal' and 'Sport' – PASM offers added agility without compromising on safety or comfort.

Power is applied through a set of 19-inch wheels running flush with the exterior shell. The larger engine is more than contained by the equally uprated braking system. The four-piston aluminium calipers have a distinctive red paint finish and come with larger cross-drilled and vented discs.

Handling and agility can be further enhanced with the sports suspension package. Running a further 10 mm lower than PASM, this no-cost option includes a mechanically locking rear differential offering greater traction on variable-grip surfaces.

Bi-Xenon lighting is standard fitment, as is the stylishly revised interior. Features unique to the 911 Carrera S include a three-spoke sports steering wheel, aluminium-coloured instrument dials and Aluminium Look dashboard trim.

At the rear of the car, the engine cover logo is augmented by Porsche 'S'. One of the most evocative designations in the history of the marque, it provides the perfect finishing touch.





The ultimate test of driving dynamics: pure driving pleasure.

The new 911 Carrera 4 models.

The Porsche 911 is a unique phenomenon. No other rear-engined, rear-wheel drive car has scored so many race victories over so many years. So, why change a winning formula and introduce all-wheel drive? There are two reasons: for us, there's the enjoyment of the engineering challenge; for you, there are the benefits in terms of handling and safety.

The resulting system in the new 911 Carrera 4 models offers a significant improvement in driving dynamics. It also retains the original agility of the standard rear-wheel drive car.

The system works by distributing drive to each of the wheels in precisely the proportions required at any time. One scenario where this is particularly important is when powering out of a bend. There is a noticeable improvement in the stability of the car – and therefore active safety. It is especially effective on uneven or loose surfaces, such as sand, ice or snow.

Another unique feature on the all-wheel drive models is the wider 'track' across the rear axle. This arrangement offers a significant improvement in driving dynamics, including greater stability when cornering. It also reduces the tendency of the body to 'roll' during rapid lane change manoeuvres.

A special 911 Carrera 4 version of Porsche Stability Management (PSM) offers two additional brake-system functions not featured in the rear-drive version: electronic brake prefill prior to an emergency stop and all-wheel brake assist.

The resulting car is easily at home in the widest range of driving environments. From the motorway and racetrack to winding mountain pass, the new 911 Carrera 4 models take every type of road – and every road surface – in their balanced and capable stride.

The intelligent application of power.

The new 911 Carrera 4.



911 Carrera 4 with PCCB and 19-inch SportDesign wheels

The beauty of the Porsche 911 concept is its remarkable versatility. Equipped with all-wheel drive, it has a broader, more stable and more manageable stance with even greater driving dynamics.

The most obvious external difference between the new 911 Carrera 4 models and the rear-wheel drive variants is

the 44-mm increase in rear axle width. Extended wheel arches accommodate wider rear tyres and a wider rear wheel track. Power is supplied by the same set of engine options as offered on the rear-wheel drive models.

On the new 911 Carrera 4 that means a 3.6-litre, six-cylinder 'boxer' unit. Maximum power

output is 239 kW (325 bhp) at 6,800 rpm. Maximum torque of 370 Nm is available from 4,250 rpm. Nought to 100 km/h (62 mph) requires 5.1 seconds. Maximum speed is 280 km/h (174 mph).

Applying that performance to all four wheels is a precision all-wheel drive system.

A viscous-coupled centre differential provides variable distribution to the front and rear axles in precisely the proportions required. At least 5% of drive is applied to the front axle, rising to approximately 35% in normal road driving and 40% in extreme situations (e.g., loss of traction on wet or uneven surfaces, or following sudden throttle lift-off while cornering).

The system combines with enhanced Porsche Stability
Management (PSM) to offer greater agility and active safety.
(See overleaf for more information on the all-wheel drive version of PSM.)

In order to accommodate the front differential, all 911 Carrera 4 models have a totally new fuel tank design. The tank capacity is 67 litres – 3 litres more than on the rear-wheel drive models.

The standard-fitment 18-inch wheels and wider rear tyres (295/35 ZR 18) provide a stable foundation for the car's heightened cornering potential. The braking system includes a 9-inch tandem booster, four-piston fixed calipers (monobloc aluminium) and vented, cross-drilled discs.

Combined, these features provide a reliable platform for both increased active safety and outright driving pleasure.



Ultimate stability and performance.

The new 911 Carrera 4S.

Porsche engineering is exclusively based on the principle of high performance. With the 911, you have unprecedented freedom to choose how that principle is applied. In the 911 Carrera 4S, we've combined the stability of all-wheel drive with the ultimate in naturally aspirated Porsche power.

Externally, the car is 44 mm wider across the rear wheel arches than the rear-wheel drive 911 Carrera. The engine is identical to that in the 911 Carrera S, using a total

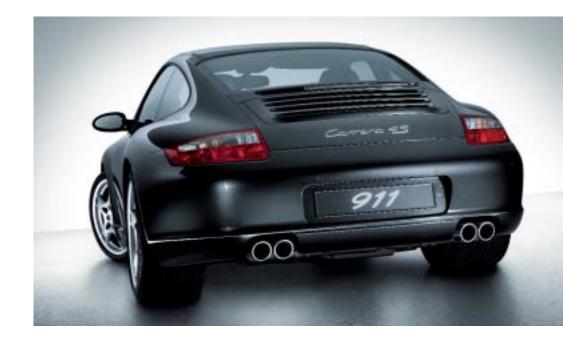
displacement of 3.8 litres to generate 261 kW (355 bhp). Maximum torque of 400 Nm is available from 4,600 rpm. Nought to 100 km/h (62 mph) requires a modest 4.8 seconds. Maximum speed in track conditions is 288 km/h (179 mph).

Permanent all-wheel drive is subtly augmented by a new evolution of Porsche Stability Management (PSM). Specially developed for the 911 Carrera 4 models, it helps to stabilise the car during cornering manoeuvres and maximise driving dynamics.

The new PSM has two additional functions not featured in the reardrive version: electronic brake prefill and all-wheel brake assist.

The first of these functions builds up pressure in the brake lines whenever the throttle is suddenly released. This operation brings each of the brake pads into light contact with the corresponding disc. If the driver goes on to apply the brakes, the response from each caliper is that much more immediate and braking distances are reduced.

In an emergency stop – i.e., when the pressure on the brake pedal exceeds a predefined threshold – the brake assist function uses the PSM hydraulics to apply maximum braking force at all four wheels.



On the new all-wheel drive models, the driver is also assisted by a 9-inch tandem brake booster. The compact tandem layout makes space for the front differential required for all-wheel drive as well as a larger-capacity fuel tank.

Nineteen-inch wheels are included as standard, as are wider-profile rear tyres (305/30 ZR 19). Other standard features include Porsche
Active Suspension Management
(PASM) or a no-cost optional sports
suspension package. Running
20 mm lower than the standard
911 Carrera chassis, the sports
suspension package includes a
mechanically locking rear differential offering improved midcorner traction.

Combined in one car, this extensive range of equipment offers exemplary road and track performance. It also establishes the 911 Carrera 4S as the most accomplished 911 featuring naturally aspirated power.



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Solar power.

The 911 Cabriolet models.

Much has been said about the power of the sun and its positive effects on man. Millions of words have been written by psychologists – never by engineers.

At Porsche, however, we are long acquainted with this unique and irresistible appeal. Nothing compares with the Cabriolet experience of driving under clear blue skies. In addition to the warmth, freedom and air, you are immersed in your natural

surroundings. All that is combined in the 911 Cabriolet with uncompromising performance and athleticism.

A key element in the 911 Cabriolet experience is the classic fabric hood. Not only does it help to minimise weight, it also lowers the car's centre of gravity. Whether open or closed, it is both visually accomplished and aerodynamically refined.

In terms of engineering and standard equipment, the 911 Cabriolet models are ideally prepared for everyday and all-year-round use. Like all Porsche vehicles, they also provide an exemplary standard of active and passive safety.

In the final analysis, what makes each car special is the fact that it's a Porsche 911. That alone will bring a brighter aspect to every journey you make.

A breath of fresh air.

The 911 Carrera Cabriolet. The 911 Carrera S Cabriolet.



911 Carrera Cabriolet

The 911 Carrera and 911 Carrera S are matched by two cars only: their respective Cabriolet versions.

In terms of engineering and technical features, the 911 Carrera Cabriolet models are virtually identical to the corresponding Coupé variants. The 3.6 or 3.8-litre engine is accompanied by an extensive array of standard equipment,

including Porsche Stability Management (PSM), Porsche Active Suspension Management (PASM; standard on 911 Carrera S models only) and Porsche Communication Management (PCM).

Both open-top variants offer the technical precision and driving dynamics you would expect from the Porsche 911. The bodyshell

structure is extremely resistant to torsional flexing, ensuring excellent handling at high speed. Active and passive safety (see page 94) are specifically matched to the performance capability of each car.

The automated hood on the Cabriolet models is both aerodynamically efficient and aesthetically refined. Visually, it enhances the clarity of line that defines the 911 shape. When the hood is extended, the curving roof flows smoothly into the broad rear section. When fully retracted, the hood-box lid helps to complement the car's power and presence.

Another benefit of the revised hood design is its exceptional aerodynamic performance. Both Cabriolet models are now just as efficient in terms of aerodynamic drag as the 911 Carrera S Coupé. The results: less wind noise, better fuel economy and even greater driving pleasure.

In terms of engineering, functionality and design, the 911 Carrera Cabriolet models bring another breath of fresh air to the new generation of Porsche 911.



911 Carrera S Cabriolet

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All-wheel drive for all-weather driving pleasure.

The new 911 Carrera 4 Cabriolet. The new 911 Carrera 4S Cabriolet.

Weather is a factor that can increase the pleasure of driving – or challenge your driving skills.

To enhance your enjoyment – and your safety – there's a choice of two new 911 Cabriolet models with permanent all-wheel drive.

The rear of each car, measured

across the wheel arches, is 44 mm wider than the standard rear-drive models. The wider rear track and the subsequent tyre contact enable greater cornering ability. Both Cabriolet models have the same source of power as the corresponding Coupé variants: a 3.6-litre or 3.8-litre flat-six engine. Both come as standard with a specially enhanced version of Porsche Stability Management (PSM). This revised edition was



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911 Carrera 4 Cabriolet with 19-inch Carrera Classic wheels



911 Carrera 4S Cabriolet

specially developed for use with permanent all-wheel drive (see page 76).

Occupant protection is comprehensively addressed with the following safety features: autodeploying roll-over bars, full-size airbags for driver and front passenger, and a new evolution of Porsche Side Impact Protection (POSIP). The key improvement in the POSIP package is the use of two side airbags for each front seat (see page 95).

The crucial feature on any convertible is, of course, the hood.

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On the 911 Cabriolet models, it is an integral part of the positive driving experience. This is achieved through careful aerodynamic design, effective weight reduction and a fast and convenient automatic action. Equally appealing when raised or lowered, the choice is always yours.

Cool in the sun. Dry in the rain.













Much of the enjoyment of open-top driving comes from seizing the moment as the clouds depart. When the rain returns, it's reassuring to know that there's a fully automatic and rapid-action hood to bring warmth and protection from the elements.

The hood system featured on the 911 Cabriolet models is both extremely light and highly robust. An integral rain channel removes standing water from either side to prevent dripping when the doors are opened.

Electrically powered, the hood is opened using a centre console button or the key remote. As the side windows descend, the hood box opens to receive the folding hood. The concertina action ensures optimum protection for the interior surface of the lining. The entire operation – be it opening or closing – requires approximately 20 seconds to complete. For added convenience, the hood can be operated while the vehicle is travelling at up to 50 km/h (31 mph).

The heated rear screen is made from scratch-resistant glass bearing the Porsche logo. When the hood is closed, the screen provides excellent rearward visibility. The inner frame is a plastic moulding, which offers a further reduction in weight. If required, the screen can be easily removed and replaced.

The interior hood lining is made from a sound and heat-insulating fabric. The overall reduction in external noise is almost comparable with the Coupé variants –

even when travelling at racetrack speeds. As a result, each model offers greater enjoyment of the distinctive Porsche sound.

Wind deflector.

All 911 Cabriolet models come with a detachable wind deflector as standard. Specially developed in the Porsche wind tunnel, it helps to minimise turbulence and noise. Easy to fit, it can be folded and stowed in the luggage compartment when not in use.

Hardtop.

Optional equipment on the 911 Cabriolet models includes a tough and lightweight aluminium hardtop, which is also easy to fit (see page 141). The interior is lined with a sound-absorbent fabric that is perfectly matched to the rest of the passenger compartment.



Wind deflector

Powerful drive. Sine and Precision delivery. Transmission

The Porsche flat-six is the heart and soul of every 911.

For more than 40 years, this ingenious design has been the subject of continuous evolution.

Today, it has reached a new level of refinement.

And a whole new level of exhilaration.

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3. Gearshift/gear selector lug

4. PASM damper

5. Coolant pipes

7. Resonance induction

8. Coolant expansion tank

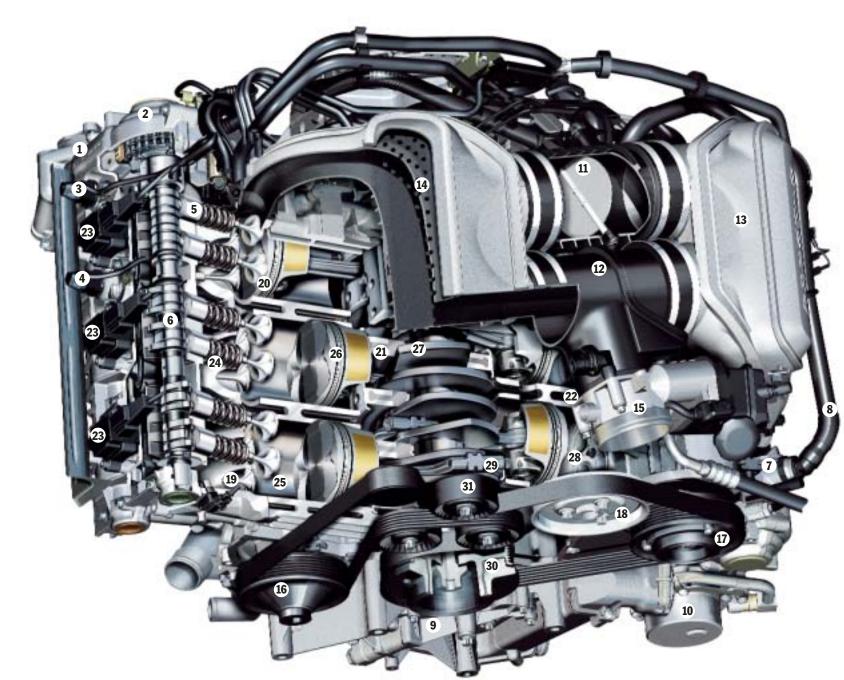
manifold 11. Silencer (right)

12. Silencer (left)

10. Connecting duct

15. Catalytic converters

16. Lambda sensor



- 1. Oil scavenge pump
- 2. Camshaft adjuster (VarioCam Plus)
- 3. Control valve for camshaft adjuster
- 4. Control valve for variable valve lift
- 5. Switchable tappets with hydraulic valve clearance adjustment
- 6. Inlet camshaft
- 7. Pre-separator
- 8. Crankcase ventilation pipe
- 9. Oil feed pump
- 10. Tandem pump
- 11. Resonance valve
- 12. Plenum duct
- 13. Plenum chamber with integrated resonator
- 14. Resonator
- 15. Electronically controlled throttle valve
- 16. Water-pump pulley
- 17. Air-conditioning compressor pulley
- 18. Power-steering pump pulley
- 19. Exhaust valve
- 20. Inlet valve
- 21. Crankshaft bearing bridge
- 22. Water jacket
- 23. Single-spark ignition coil
- 24. Valve spring
- 25. Lokasil-coated bore
- 26. Forged aluminium piston
- 27. Crankshaft
- 28. Combustion chamber
- 29. Forged connecting rod
- 30. Vibration damper
- 31. Plastic tensioner



Heart of the matter. The 911 engine.

The Porsche 911 would be inconceivable without the six-cylinder 'boxer' engine. Flat and compact, with a low centre of gravity, its rear-mounted installation has been maximising traction and driving dynamics for more than four decades. It is also famed for its immediacy of response, freerevving character and, of course, its sound.

More capacity. More power. More exhilaration.

Today's 911 is available with a choice of two flat-six engines offering different output ratings. Together, they satisfy the wide range of expectations among Porsche 911 drivers.

The 3.6-litre unit in the 911 Carrera models develops 239 kW (325 bhp) at 6,800 rpm. Maximum torque of 370 Nm is available



For even greater performance, the 911 Carrera S models are powered by a 3.8-litre flat-six unit offering 261 kW (355 bhp) at 6,600 rpm. The sprint from 0 to 100 km/h (62 mph) is a brief 4.8 seconds, en route to a top

requires just 5.0 seconds in

the 911 Carrera Coupé. Maximum

speed is 285 km/h (177 mph).

speed of 293 km/h (182 mph). Maximum torque output is 400 Nm beginning at 4,600 rpm. The agility of the car is considerably enhanced by the lightweight inlet and performance exhaust manifolds. The two-stage resonance valve in the air-filter housing creates a broad range of engine acoustics.

Both engine variants have a free-revving character, high output and lightweight build that are significant factors in the agility of the car.

The flat-six units are also the source of the legendary 911 sound.

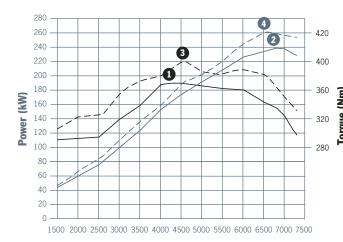
Another traditional Porsche characteristic is the surprisingly low cost of ownership. The oil change interval, for example, is 18,000 miles or every two years. A major service is only required every 36,000 miles.

Cooling system.

From precision comes efficiency.

Today's 911 combines heightened performance with lowered consumption, emissions and noise. The key to this apparently paradoxical capability is a blend of four-valve heads, VarioCam Plus and efficient engine cooling.

Extensively tested in race applications, our cross-flow cooling system provides an equal supply of coolant to each of the engine's



Engine speed (rpm)

911 Carrera: **1** 370 Nm at 4,250 rpm,

2 239 kW (325 bhp) at 6,800 rpm

911 Carrera S: **②** 400 Nm at 4,600 rpm, **④** 261 kW (355 bhp) at 6,600 rpm

six cylinders. All coolant channels are cast within the block, thus reducing the need for external hoses. The coolant is fed from hot to cold (i.e., from exhaust to inlet) in a separate flow for each cylinder. As a result, each one receives a fresh supply of coolant which has not been heated previously.

In the 3.8-litre engine, the increased performance demands a corresponding increase in cooling. To meet that requirement, we've added a more powerful coolant pump as well as two extra fins on the uprated oil/water heat exchanger.

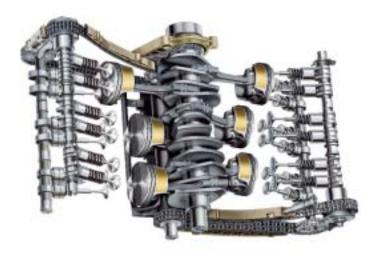
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Alloy engine. Less weight, more power.

An alloy engine is something of a compromise. Or so the theory goes. In the majority of designs, the desired weight saving and improved fuel economy come with a lowered resistance to temperature.

In the case of the 911, however, the main bearing bracket is made from aluminium alloy with cast-in iron elements. As well as minimising the effects of temperature on the bearings themselves, this arrangement successfully reduces the bearing clearances which would otherwise generate noise.

A further advantage of smaller bearing clearances is the reduction in oil requirements. Since less oil is needed, the pumps can be smaller, saving both weight and fuel while enhancing engine performance.



Main rotating assembly and valve gear

Integrated dry-sump lubrication.

This race-proven technology ensures a reliable supply of oil while reducing engine temperatures.

Oil is pumped to the lubrication points from an internal reservoir in the engine block. This arrangement has a number of advantages over a conventional system with external tank. Two additional pumps then 'scavenge' the oil from the cylinder heads and feed it back to the reservoir.

Unwanted gases are removed from the oil by means of cylindrical containers known as 'swirlpots'.

This defoaming process restores the oil's lubricating properties and helps to maintain pressure in the self-adjusting tappets.

Without it, the tappets could not function properly and both performance and emissions would be impaired.

To further reduce temperatures, each piston crown is sprayed with twin jets of oil from the main lubrication circuit.

In general, each cylinder receives a consistent supply of oil, regardless of gravitational forces. The engine is therefore inherently reliable in even the most demanding track conditions.

Oil pressure and temperature are clearly displayed in the cockpit instrument cluster. The oil level can be checked from inside the car using the central instrument display.



911 Carrera S engine

VarioCam Plus. More power at all engine speeds.

VarioCam Plus combines variable valve timing with two-stage lift on the inlet side. The resulting benefits include greater power and torque at all engine speeds, as well as smoother running, better fuel economy and fewer exhaust emissions.

Essentially, the system creates two engines out of one, switching seamlessly between them as driver inputs change. All operations



which ensures rapid acceleration and smoother running.

nism on the inlet side includes a series of electro-hydraulically

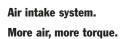


switchable tappets. Each of the 12 tappets consists of two concentric lifters which can be locked together by means of a pin at the request of the engine management system. When the tappets are locked, the outermost ring which is driven by two large profile cams – is in direct contact with the valve. When the pin is removed, the innermost lifter – operated by a smaller cam lobe - has sole influence over the amount of valve lift. The timing of each valve is steplessly controlled by means of an electro-hydraulic rotary vane adjuster at the head of each inlet camshaft.

To improve responsiveness during warm-up in cold weather, VarioCam Plus will raise the amount of lift and retard the valve timing. At medium revs and minimal load, the valve lift is lowered and timing advanced to help minimise fuel consumption and emissions.

To achieve maximum power and torque, the lift is raised and the timing advanced.

All 911 models feature EU-compliant on-board diagnostics as standard. This technology provides continuous fault detection and early warning for the exhaust and fuel supply systems. The benefits include active prevention of harmful emissions as well as consistent rates of fuel consumption.



All 911 engines are equipped with a two-stage resonance induction system. This simple technology uses the vibration of the air as it passes through the manifold to improve the efficiency of the engine. Principal benefits include increased torque at low rpm and a flatter torque curve overall.



Resonance valve in induction manifold

In the 911 Carrera S models, the entire intake system is made from lightweight plastic materials. The variable volume in the air-filter unit helps to improve the engine acoustics. At low engine speeds, the sound is resonant and deep, becoming significantly more aggressive at higher rpm. The replacement interval on the air-filter element is 36,000 miles.

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Powerful performance requires precision control.

Engine management system. The subtle difference.



Optimum performance is assured at all times thanks to the Motronic ME7.8 engine management system (see right). This high-precision ECU controls the electronic throttle, one of the key prerequisites for the standard Porsche Stability Management (PSM). It is also responsible for all engine-related functions and assemblies (see diagram). The results: optimum fuel economy, emissions and performance, regardless of driving style.

One of the most important tasks performed by engine management is cylinder-specific knock control. By preventing pre-ignition at high engine speeds, this function can avert costly damage to the pistons and cylinders. Since temperatures tend to vary in different parts of the engine, each cylinder is monitored separately. If a risk is detected, the individual ignition timing is adjusted.

Fuel system. Making every drop count.

Fuel is supplied to each of the six cylinders by means of sequential fuel injection. The timing of each injection and the volume supplied to each bank of cylinders are controlled by the engine management system. Adjustments are based on a range of variables such as throttle position, engine speed, coolant temperature and exhaust gas composition. The results are optimised combustion and fuel consumption. A hot-film air mass sensor monitors the density of the incoming air to ensure optimum combustion, regardless of weather and altitude.

Input data Used to regulate/control Engine speed (from crankshaft) Ignition system Camshaft phase angles Fuel injection Engine load Throttle valve Throttle-pedal position Heating elements in Lambda sensors gement Lambda signal ➤ Fuel pump (Motronic ME7.8) Knock sensor signal Fuel-tank venting Camshaft phase angle Temperatures – Coolant mana - Intake air Resonance valve - Engine oil - Air in engine compartment Secondary air injection Vehicle speed Engine fan Engine Starter Air-conditioning settings Diagnostics (OBD II/EOBD) Engine immobiliser status 'Sport' button Air-conditioning compressor

Ignition system. The vital spark.

The static high-voltage ignition system uses a separate ignition coil on each individual plug, ensuring optimum reliability of combustion. The role of distributor is performed by the engine management system, which can adapt ignition timing as required. If Tiptronic S, for example, requests smoother downshifts, the engine management system can modify

CAN interface to other vehicle ECUs in fully networked system via gateway device

timing accordingly. Another important benefit of reliable combustion is the car's absolute compliance with the EU4 exhaust emissions standard.

Raising performance is a tradition at Porsche. Which is why we never stop.

Powerkit Carrera S.







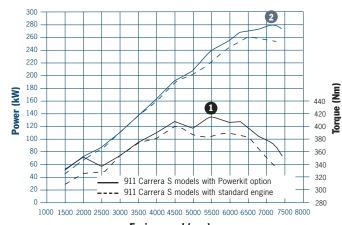
For some, engine data is dry and academic, just numbers written on a page. At Porsche, we view them as something else entirely: a precise indication of the driving pleasure that an individual car can provide.

The 911 Carrera S delivers total power output of 261 kW (355 bhp) as standard. From the moment you turn the key in the ignition, the adrenaline starts to flow. If you wish, you can raise the heartbeat higher still with the Powerkit engine conversion. Available as an option on all 911 Carrera S and 911 Carrera 4S models, it is compatible with both the six-speed

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manual gearbox and Tiptronic S.

Offering a maximum output of
280 kW (381 bhp), the results are
0 to 100 km/h (62 mph) in just
4.6 seconds, 0 to 200 km/h
(124 mph) in 14.9, and a maximum
speed of 300 km/h (186 mph;
all data valid for 911 Carrera S Coupé
with manual gearbox).



Engine speed (rpm)

1 415 Nm at 5,500 rpm

280 kW (381 bhp) at 7,200 rpm

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The key advantage of the Powerkit package is the optimised gas-flow on inlet and exhaust. This is achieved by means of modified cylinder-head geometry. Other new features include an aluminium intake manifold and revised exhaust manifolds with larger bores. Controlling it all to optimum effect is the uprated engine management system.

The performance is matched by the sight and sound of the carbon-fibre housing for the air filtration system and the sports exhaust unit with integral sports tailpipes. All are designed for optimum throughput and thus optimum engine performance. While the engine acoustics are considerably enhanced, you also retain the option of switching to lower sound levels whenever circumstances require.

In the track environment, you can fully experience the increased power output across the entire range of engine speeds. The car is more responsive, more athletic, more adept – even more of a Porsche 911.



Carbon-fibre air filter housing

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The 911.

A positive impact on any environment.



Exhaust system.

The exhaust on today's 911 is made from stainless steel. The system consists of two separate tracts, one for each bank of cylinders. The catalytic converters are extremely heat-resistant yet are quick to reach temperature when starting from cold.

Twin Lambda probes in each of the exhausts enable continuous monitoring of the combustion process. An additional pair of sensors* is used to measure the efficiency of the catalytic converters.

A sports exhaust system with integral sports tailpipes is available as an option for all 911 models.

The system enhances the engine acoustics and can also be reduced to lower sound levels whenever circumstances require.

Maintenance.

Every car requires servicing, of course, however on the 911 you'll be surprised how little.

A number of key ancillaries – generator, power-steering pump and air-conditioning compressor – are all driven by a single belt with a service life of 56,000 miles.

Overall running costs are further reduced by the lengthy replacement intervals for air filter (36,000 miles) and engine oil (18,000 miles). The spark plug interval is 56,000 miles

or a maximum of every four years. The hydraulic tappets provide automatic adjustment of all valve clearances, while the drive chains on the camshafts and auxiliary shafts will also last the life of the car.

Basic servicing is required after 18,000 miles or a maximum of two years on the road. The first major service is due at 36,000 miles or every four years at the latest. The results: lower running costs and virtually uninterrupted enjoyment from your Porsche.



Exhaust system (911 Carrera S)

^{*} Not featured in markets with leaded fuel.

Transmission.

Precision delivery. In manual or automatic.



Six-speed manual gearbox.

The six-speed manual gearbox for the 911 model range offers pure sports performance. Each of the six ratios has been carefully selected for optimum progression through the gears. The gearbox is driven through a dual-mass flywheel which helps to minimise noise in the drivetrain. The effect is enhanced by the cable-operated gear linkage which insulates the lever from the engine and gearbox.

The gear lever throw is short and precise with a rapid gearshift action. The response from the car is consistently rewarding and direct. The high-performance theme is perfectly complemented by the race-inspired pedal design.



Gear lever (911 Carrera S)

On the 911 Carrera S and 911 Carrera 4S models, the gearbox is mated to a high-performance self-adjusting clutch. The result is a 50% reduction in the added release loads which are normally encountered as the clutch begins to wear.



Tiptronic S control on steering wheel

Tiptronic S.

All 911 models are also available with optional Tiptronic S transmission. This versatile system combines fully automatic five-speed operation with the option of manual control.

In manual mode, you can change gear by hand using gearshift controls on the steering wheel. Simply press up to change up, and down to change down. The system responds to every input with virtually no interruption in drive.

In automatic mode, Tiptronic S can choose from a range of shift points for every gear. The standard gearshift pattern, designed for maximum fuel economy, can be steplessly varied up to a dedicated 'Sport' configuration for optimum high-performance driving. Each gearshift point is automatically selected based on current driving style and road conditions. Within a short space of time, you'll develop a feel for the system and begin to influence gearshifts using the throttle alone.

The benefits of Tiptronic S are particularly apparent when exploring the car's potential. Even in automatic, the rapid gearshift action enables remarkable agility under acceleration. The immediacy of response can even be compared with that of a Porsche manual gearbox.

While still in automatic, you can change gear by hand using the rocker controls on the steering wheel. This function is particularly useful when performing an overtaking manoeuvre. If there is no manual input for a period of 8 seconds, the system reverts to automatic mode.

In addition to the above, Tiptronic S offers the following useful functions:

When the car is started, a warm-up programme increases the engine's rpm to bring the catalytic converters up to temperature.

If the car is driven assertively, the system automatically selects the 'Sport' gearshift pattern without any need to use the kickdown. Unlike conventional automatic transmissions, Tiptronic S will not perform an upshift before entering a corner, only to shift down again on exit because the speed has dropped off. Acceleration out



Tiptronic S gear selector

of corners is therefore smooth and uninterrupted. Mid-corner gearshifts are also prevented, thereby enhancing stability and safety.

Under heavy braking, the system shifts down to use engine braking to slow the car. An incline sensor improves uphill acceleration and makes better use of engine braking on descent. If traction is lost under

braking in the wet, the system automatically changes up to restore lateral grip and bring the car back into line.

Discover more about your favourite roads.

And your skill as a driver.

The 911 chassis is not only more athletic than ever, it is also more comfortable and secure.

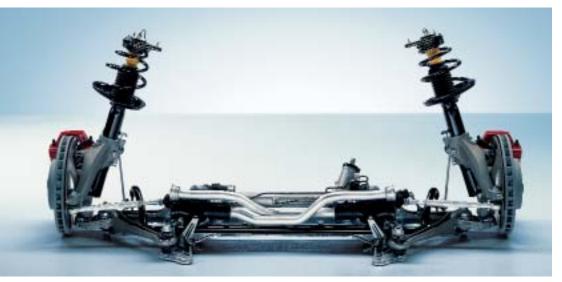
The entire chassis concept has been carefully designed to offer agile handling and natural control in all road and track scenarios.

Every driver input is conveyed through the chassis with unprecedented immediacy and precision.

Feedback from the road is equally precise, enabling optimum car control.



Standard suspension. Precision, versatility and control.



Front axle (911 Carrera S)

The enhanced power output on today's 911 is matched to an uprated axle concept. Combined, they deliver exceptional handling with generous safety reserves.

Lightweight design has produced major weight savings, particularly on the unsprung masses.

Changing lanes is smooth and secure, even when travelling at high speed. Pitch and roll have been significantly reduced, as have noise and vibration from the road. Overall stability is extremely good and the suspension is highly responsive.

The front axle concept is based around proven McPherson-strut suspension. The wheels are located by means of longitudinal and transverse links and run on specially reinforced bearings. This arrangement ensures high-precision wheel location. The benefits on the road include excellent

straight-line stability and superlative all-round handling. Braking is enhanced with the aid of spoiler elements in each of the front cooling ducts.

The rear axle structure is a raceproven design featuring multi-link LSA (Lightweight, Stable, Agile) subframe-based suspension. Its lightweight construction is another key element in the car's exceptional driving dynamics. The axle kinematics improve stability under acceleration by reducing unwanted compression. The lightweight strut has an aluminium damper in place of a conventional steel design to help maximise handling agility.

The standard chassis on the 911 Carrera S models is 10 mm lower than on the 911 Carrera.

Other unique features include continuous damping control in the form of Porsche Active Suspension Management (PASM). See page 70 for more details.



Rear axle (911 Carrera S)

. • 67 •



Sports suspension.

Available as an extra-cost option on the 911 Carrera Coupé, and no-cost option on the 911 Carrera S Coupé, this all-inclusive package is specifically designed for even greater racetrack performance.

Key features include firmer and lower springs (20 mm lower than standard 911 Carrera, 10 mm lower than PASM-equipped 911 Carrera S), new anti-roll bars with greater torsional strength, and firmer damper settings.

Also included is a mechanically locking rear differential offering greater levels of traction on poor road surfaces or when exiting hairpin bends.

Please note that this option cannot be combined with Porsche Active Suspension Management (PASM) and is only available in conjunction with a six-speed manual gearbox and 19-inch wheels.

Wheels.

The aluminium alloy wheels on the 911 model range feature lightweight construction and larger dimensions offering better performance on road and track. The 911 Carrera models come with 18-inch wheels, while the 911 Carrera S has a distinctive 19-inch design. The Carrera S wheel is also available as an option on all 911 Carrera models. Other 19-inch wheels are available as optional equipment (see page 143).



18-inch Carrera III wheel



19-inch Carrera S wheel

. 69

Porsche Active Suspension Management (PASM). Better traction, smoother ride.







Left: Rebound in 'Normal' mode bypass valve open Right: Rebound in 'Sport' mode bypass valve closed





bypass valve open
Right: Compression in 'Sport' mode –
bypass valve closed

PASM is an electronic control system which uses continuous adjustment of damping force to maintain optimum ride quality and comfort. The push-button system is standard equipment on all 911 Carrera S models and optional on the 911 Carrera.

PASM has two setup modes, 'Normal' and 'Sport', which share only a minimal degree of overlap. While 'Normal' provides a blend of performance and comfort, the 'Sport' setup mode has a much firmer range of settings. The system responds to changing road

conditions and/or driving style by applying a variable damping force as defined for the selected setup mode ('Normal' or 'Sport').

To do that, PASM uses a series of sensors which monitor all the movements of the car's body. The PASM control unit then evaluates this data and modifies the damping force on each of the wheels in accordance with the selected mode. The results are a reduction in pitch and roll as well as consistent road-holding from all four wheels.

If 'Sport' mode is selected, the suspension is set to a harder damper rating. If the quality of the road surface falls below a certain threshold, the system immediately changes to a softer rating within the 'Sport' setup range. This adjustment enhances occupant comfort

as well as traction and grip. When the road surface improves, PASM automatically reverts to the original, harder rating.

If 'Normal' mode is selected, and the car is driven assertively, PASM automatically switches to a harder rating within the 'Normal' setup range. As the dampers become stiffer, the car becomes more stable and responds with more immediacy to driver inputs.

In either case, the result is the same: a car which adapts the way it handles and rides to the way you personally like to drive.



.70 .

Steering.
Accurate control, intelligent variability.



The rack-and-pinion steering is sensitive and precise, offering excellent contact with the road. Hydraulic power assistance ensures easier manoeuvrability, as do the modest turning circle

and lock-to-lock travel. While parking requires only minimal steering effort, the directional stability when travelling at speed is comparable with that of a racing car.

An important feature on today's 911 is the variable steering ratio. Around the straight-ahead position, the ratio is less direct, enabling smoother manoeuvres on the motorway. Turn the wheel harder,

and the ratio will increase, allowing easier cornering and parking.

Despite this variability, there is no loss of feedback and overall agility is retained at all steering positions.

Low-speed manoeuvrability is further enhanced by a modest turning circle of just 10.9 metres – despite the width of the tyres.

.73.

Porsche Stability Management (PSM). Precision. Safety. Manoeuvrability.

Porsche Stability Management (PSM) is an automatic control system offering valuable assistance in critical road scenarios. To do that, PSM uses a range of sensors to monitor the direction, speed, yaw velocity (speed of rotation around the vertical axis) and lateral acceleration of the car. Based on this information, it can then calculate the actual direction of travel. If the car begins to oversteer or

understeer, PSM applies selective braking on individual wheels to bring it back into line. Whenever PSM is required to intervene, an indicator light in the cockpit is illuminated.

Another scenario in which PSM is invaluable is when applying the throttle on wet or other low-grip surfaces. Here, PSM uses the ABD (automatic brake differential) and

ASR (anti-slip regulation) functions to maintain traction and stability.

Included as standard equipment,
PSM assists with high-precision
inputs that enhance the athleticism
and agility of each model. When
'Sport' mode is selected on
the optional Sport Chrono Package Plus (see page 78), the
PSM threshold is further extended
to enable greater driver



Oversteer without PSM Oversteer with PSM Car steers ♣ PSM corrects off line steering and stabilises car **Understeer without PSM Understeer with PSM** Car steers ♣ PSM corrects off line steering and stabilises car

involvement – particularly at speeds of up to 70 km/h (44 mph).

The integral ABS offers shorter braking distances and therefore greater active safety. PSM inputs are smooth and precise, thus enhancing comfort as well.

If you'd rather drive without PSM, the system can be disabled leaving only the automatic brake differential in place. PSM remains present in the background and will only intervene under heavy braking where at least one front wheel requires ABS assistance.

With its balanced blend of precision, stability, safety and performance, Porsche Stability Management is a natural application of the Porsche engineering philosophy.

The all-wheel drive variants are equipped with a specially developed version of PSM offering two additional functions. See overleaf for details.

.75.

Enhanced PSM for all-wheel drive. Traction to the power of 4.

The all-wheel drive system featured in the new 911 Carrera 4 models includes a viscous-coupled centre differential. This ingenious device provides automatic torque distribution to the front and rear axles in precisely the proportions required. It also compensates for any externally induced difference in the speed of rotation at each axle. The coupling itself consists of an outer casing and a central shaft,

both of which are fitted with a series of interleaved plates. The space between these plates is filled with a high-viscosity silicone fluid.

If the front and rear axles are rotating at different speeds, the frictional properties of the silicone fluid cause torque to be directed away from the plates that are rotating more quickly and towards

those rotating more slowly. At least 5% of drive torque is always applied to the front wheels. In normal driving conditions, the proportion is approximately 35%, rising as high as 40% in extreme situations (e.g., loss of traction on wet or uneven surfaces, or following sudden throttle lift-off while cornering).

The system is augmented by a new evolution of Porsche Stability Management (PSM) developed for the 911 Carrera 4 models. In addition to the benefits of the rear-drive version, this revised PSM offers two new functions which help to minimise braking distances.

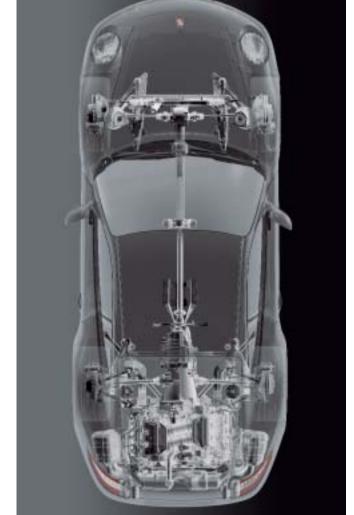
If the driver suddenly releases the throttle, PSM automatically readies the braking system.

The pressure in the brake lines is marginally increased, bringing each of the pads into light contact with the corresponding disc.

If the driver goes on to apply the brakes, the response from each caliper is that much more immediate and braking distances are reduced.

In an emergency stop – i.e., when the pressure on the brake pedal exceeds a predefined threshold – the brake assist function uses the PSM hydraulics to apply maximum braking force at all four wheels.

Working in conjunction with the variable differential, this new evolution of PSM offers better dynamics, greater agility and exceptional vehicle stability. In short: all of the things that make your car a Porsche.



All-wheel drive system



Multi-plate viscous coupling

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Sport Chrono Package Plus. Enhancing performance.



All 911 models offer generous reserves of powerful sports performance. In order to explore that capability to the full, choose the optional Sport Chrono Package Plus. This integrated system provides simultaneous

enhancement for engine, chassis and optional Tiptronic S transmission. The results are even greater performance and pleasure from your Porsche, in both track and road scenarios.

Key system components include digital and analogue timers, a 'Sport' select button on the centre console, a performance display and a personal memory in PCM.

When 'Sport' mode is selected, the engine management system applies a new set of variables to enhance the engine response. A modified throttle map relates the pedal angle in the footwell to a much wider angle of opening in the throttle. As a result, the engine has a much more positive reaction to every pedal input. In the higher gears, a hard rev-limiter helps protect the engine under acceleration.

While this is happening, the PASM system (standard on 911 Carrera S models, optional on 911 Carrera models) is also switching to 'Sport' mode. The dampers become firmer, enabling faster turn-in as well as better road-holding and traction.

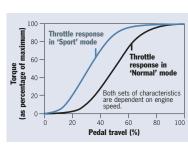
On vehicles with Tiptronic S, the automatic gearshifts become faster and more dynamic. Lift off from the throttle – even at high revs – and the system immediately shifts down to apply engine braking. There are also no unwanted upshifts in manual mode when approaching the engine rev limit. Since the driver has full control over every upshift, the handling of the car is much more secure, particularly when braking for a corner.

To minimise assistance from PSM, the trigger threshold for this system is raised. The result is a more natural and involving response to lateral and longitudinal forces. Mid-corner agility is considerably enhanced, with greater scope for oversteer on turn-in and exit. This added freedom of movement is particularly apparent in lower-speed sequences and bends.

For maximum dexterity, PSM can be partially disabled while the



'Sport' button on centre console



Comparison of throttle maps in 'Normal' and 'Sport' mode

car is still in 'Sport' mode. PSM simply monitors the forces acting on the car and will only intervene in the most critical of situations, e.g., when ABS assistance is required on both front brakes.

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To help you quantify this increased performance, the Sport Chrono Package Plus includes a swivel-mounted timer on the dashboard. Functions are accessed via the control stalk for the on-board computer. Analogue dials measure

hours, minutes and seconds, while a separate digital field displays whole seconds, tenths and one hundredths of a second. The digital field runs in parallel with a second display which is conveniently located in the instrument cluster. Individual lap times can be viewed, stored and analysed using a special performance display which is added to Porsche Communication Management (see page 112). Available information includes the time and distance travelled on

the current lap, as well as the number of laps completed and the respective times. The system can also display the current fastest lap and the remaining range till empty. Driving times can be recorded for any stretch of road and

benchmark times can be defined.

Other useful features include a memory function which is accessible via PCM. This can be used to store a range of personal preferences, such as daytime driving lights, 'Welcome Home' light

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function, air conditioning, rain sensor activation and door-lock mode.

Space to breathe. Tety and When holding your breath. Security

Rapid braking.

Excellent headlight illumination.

Safe airbag deployment.

Effective crash protection.

The standard safety features on the Porsche 911 are equal to the car's performance.



What have we learnt from more than 23,000 racing victories? The crucial importance of safety.



With more than 50 years' experience in all forms of motorsport, we have an intimate understanding of active safety. On today's 911, we've used that experience to create one of the safest cars on the road.

The chassis, for example, offers a uniquely balanced ride with generous safety reserves. The flexibility and torque of the new flat-six engine enable easier overtaking manoeuvres. To contain that performance, all 911 models are equipped with powerful braking systems.

The aerodynamic surfaces, especially the new underbody panelling, generate increased levels of downforce. As a result, the car remains stable on the road with exemplary grip.

particularly when travelling at high speed.

The optional Tyre Pressure Monitoring (TPM) provides early warning of any drop in pressure via the on-board computer display and a dedicated warning light.

At the front of the car, the main headlight units have an elegant, compact design. The parking, fog



Halogen headlight



Bi-Xenon headlight

and indicator lights are now housed in separate twin modules on the front apron moulding.

The new lighting arrangement is distinctively Porsche and instantly recognisable at night.

The Bi-Xenon headlights on the 911 Carrera S models (optional on 911 Carrera) provide near-perfect illumination of the road. The system is based on the latest

gas-discharge technology and features dynamic range control. The resulting brightness is approximately double that of conventional halogen units. In dipped or main-beam mode, the lights are stronger and more uniform, helping to minimise driver fatigue. Other standard features include a headlight cleaning system and fog-lights.

The high-level third brake light beneath the rear screen comprises rapid-response LEDs. Since the light is obscured when the spoiler is extended, this element has another LED brake light on its trailing edge.

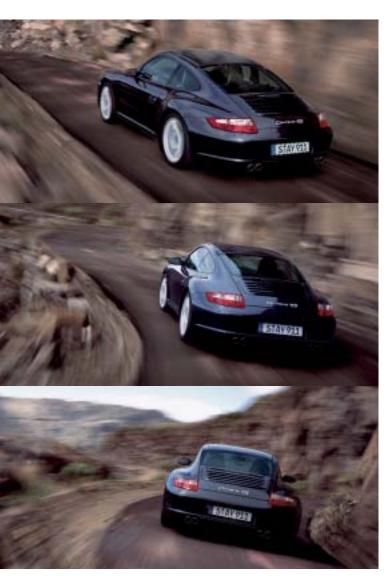
Two additional lights on the inside of each door help improve convenience and safety. The kerb light (white) provides useful illumination when stepping out of the car. The safety light (red) warns approaching traffic that the door is currently open.



High-level third brake light

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Active safety: standard braking system. Advancing the art of deceleration.



The 911 is famous for its powerful acceleration – and its powerful braking. On all 911 models, the standard braking system is one of the most advanced ever featured in a standard production car. Its rapid deceleration is paired with excellent fade-resistance and straight-line stability in even the toughest road and track conditions.

The monobloc aluminium fixed calipers are extremely rigid yet remarkably light and precise. The calipers are quick to grip and release, while pedal travel is short and easy to modulate.

On the 911 Carrera models, the calipers are four-piston units with an elegant black anodised finish. Disc diameter is 318 mm at the front and 299 mm at the rear.

To match the added performance of the 911 Carrera S models, we've combined larger, stronger four-piston fixed calipers made from robust aluminium with a larger pad surface and 330-mm discs at front and rear. Visually, the brakes are clearly identifiable from the red paint finish on each caliper.

All 911 models are equipped with cross-drilled discs for optimum braking in the wet. The distinctive drill-hole pattern enables faster response by allowing rapid dispersal of the water vapour generated under braking. All four discs are also internally vented for better heat dispersal.

Other features include fourchannel ABS offering a smoother, low-pulse action. A powerful 10-inch booster on the rear-wheel drive models enables easier pedal inputs. Airflow is enhanced in the brake cooling ducts thanks to modified spoiler elements.

On the new all-wheel drive models (911 Carrera 4 and 911 Carrera 4S), the driver is assisted by a 9-inch tandem brake booster.

Safety is further enhanced on the all-wheel drive models thanks to two new functions in the specially revised version of Porsche Stability Management (see page 76 for details).

Overall, the result is a powerful capability that is crucial to the performance of the car.



Standard disc and caliper (911 Carrera S)

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Active safety: optional braking system. Porsche Ceramic Composite Brake (PCCB).



PCC

All 911 models are also available with a new evolution of the Porsche Ceramic Composite Brake (PCCB). The latest in a long line of racederived technologies, PCCB combines an ultra-robust ceramic disc with high-performance composite pads.

The PCCB disc is made from a specially treated carbon-fibre compound that is silicated in a high-vacuum process at 1,700 °C. The result is a disc that is not only much harder than steel, but also more resistant to high temperatures.

To maximise cooling in extreme track and downhill usage, the new evolution has a modified system of internal vents. Now with twice the number of cooling channels, the new vent geometry offers a better flow of air through the disc. With more cooling channels, there are more internal walls creating greater structural stability. Together with the modified drill-hole pattern, the ring of vent openings around the rim of the disc is one of the key identifying features of the new evolution.

One characteristic which has not changed is the thermal stability of the ceramic material. As well as ensuring dimensional stability, it is extremely resistant to any form of corrosion and offers excellent acoustic damping properties.

The discs are gripped by six-piston monobloc aluminium calipers at the front, and four-piston calipers at the rear. Together, these units provide extremely high and, above all, consistent levels of friction under braking. Overall response is fast and precise with only moderate pedal force required.



The key advantage of PCCB is the total weight saving over conventional metal discs of approximately 50%. As well as enhancing performance and fuel economy, this represents an enormous reduction in both unsprung and rotating mass. This, of course, produces

major benefits in terms of comfort, road-holding, handling and agility. For more information, see the latest PCCB brochure available from your Porsche Centre.

3.

Passive safety: bodyshell structure. Intelligent crash technology.

The 911 easily complies with all statutory requirements around the world in respect of frontal, side, diagonal and rear impact protection.

The reinforced bodyshell contains a highly resilient passenger cell offering exceptional crash protection. At the front of the car, the cell is protected by a patented system of longitudinal and transverse members (1). In the event of an accident, energy is absorbed by three separate load paths, one above the other, which help to

disperse the force of impact and minimise cell deformation.

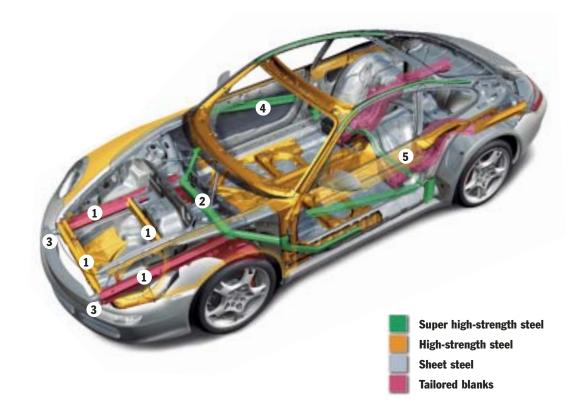
Additional features include a highly rigid bulkhead cross-member (2) made from super high-strength steel. This element is designed to absorb impact forces from the longitudinal members and thus protect both front footwells.

In a minor collision, a system of easily replaceable impact absorbers (3) prevents costly damage to the underlying bodyshell structure.

The upper section of each door features additional reinforcements (4) which enhance the rigidity of the car. An additional load path (5) is used to channel energy through the upper part of the shell and thus further protect the passenger cell.

In 1985, Porsche began using super high-strength steel elements in its door design to achieve greater occupant protection. On today's 911, that protection is enhanced with the aid of super high-tensile boron steel.

Another, perhaps less obvious, safety feature on all 911 models is the high-quality surface protection. More than 25 years ago, Porsche became the first manufacturer in the world to use a hot-dip galvanised steel shell. This exacting process is absolutely fundamental to the legendary durability of our high standard of crash protection,



cars. It also ensures a consistently

even after many years on the road. To underline our confidence in this exceptional build quality, all 911 models come with a ten-year anti-corrosion warranty, three-year paint warranty and two-year warranty on the car as a whole.

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Passive safety: airbag system. All-round occupant protection.

Many years ago, Porsche became the first German manufacturer to offer full-size airbags for driver and front passenger as standard. More recently, we set the benchmark again with a non-azide gas generant based on an organic propellant. This proven technology not only makes airbags lighter and more compact, it also makes them easier to recycle. In today's 911, we've made another innovation in the form of two-stage full-size airbags for driver and front passenger. In the event of an accident, the airbag control unit can measure

the force and direction of impact, before inflating each airbag accordingly. In a low-speed crash, the airbag is only partially inflated, thereby minimising discomfort to the occupants.





The airbag control unit is located in the centre tunnel where it receives additional information from a pair of impact sensors near the headlights. This arrangement allows faster and more accurate crash evaluation and thus better airbag deployment.

The twin front airbags are further augmented by Porsche Side

Impact Protection (POSIP). This comprehensive package features two additional airbags on each front seat instead of the usual one. A thorax airbag is located in the side of each backrest, while a head airbag can be found in each door. All four airbags have an individual volume of approximately 8 litres, ensuring maximum protection over the entire seat adjustment range.

The head restraints for driver and front passenger form an integral part of each seat. Other standard features include an energy-absorbing steering column, three-point seat belts with height adjustment (Coupé models only), front seat-belt pretensioners and force limiters, energy-absorbing elements in the dash-board, and flame-retardant materials throughout the interior.

Passive safety: Cabriolet occupant protection. The key to relaxation: safety when it matters most.



The 911 Cabriolet is an open invitation to enjoy the full pleasure of summer driving. It is also designed as a serious proposition when used responsibly on the racetrack. To meet both of these needs, the standard of passive safety on all 911 Cabriolet models is more than a match for their performance capability.

Despite the modest weight of each Cabriolet model, you'll find a torsional rigidity and flexural strength that are exemplary among two-plus-two convertibles. Body flexing is reduced to a minimum on even the most poorly surfaced roads. The bodyshell structure is strengthened further by an additional brace member which extends to the rear wheel housings.

Both Cabriolet models feature an automatically deploying roll-over system, which provides additional protection if the car overturns. The system consists of two



spring-loaded roll-over bars which are housed behind the rear seats. The roll-over sensor – part of the airbag control unit – is used to monitor changes in vehicle attitude and contact with the road as well as longitudinal and lateral acceleration. If the car overturns, the padded roll-over bars are immediately and automatically deployed.

As on the Coupé models, all
Cabriolet variants are equipped
with the new generation of
Porsche Side Impact Protection
(POSIP). Each door is fitted with
an energy-absorbing panel which
combines with two side airbags
for each front seat: a thorax airbag
located in the side of the seat
backrest, and a head airbag which
deploys upwards from the door.

All four airbags have an individual volume of approximately 8 litres, ensuring maximum protection over the entire seat adjustment range.

Thus equipped, the new Cabriolet models provide an unprecedented level of open-top safety and thus greater enjoyment from the car.

Optimum ergonomics and driver involvement for uncompromising comfort on the road.

In terms of engineering, the Porsche 911 offers a simple definition of precision: Improve that which is essential.

Remove that which is not.

Focus on that which matters most: the driver.

Through the application of these principles we've created a driving environment that is always a uniquely rewarding drive.



Interior.

Designed exclusively for the enjoyment of driving.

Practicality is one of the guiding principles of the Porsche 911 concept. A prime example is the passenger compartment. All switches and controls are carefully positioned for easy, intuitive operation. In fact, the only reason to look down from the road is to appreciate the stylish design.

The ergonomic controls are easy to use and let you focus on the driving experience. The five round instruments are perfectly placed within the driver's field of vision. The air-conditioning system is fully automatic and features a highly effective active carbon filter.

The standard steering wheels – three-spoke in the 911 Carrera models and three-spoke sports in

the 911 Carrera S models – offer 40 mm of reach and 40 mm of height adjustment. A three-spoke multifunction steering wheel is also available as an option on all model variants. This convenient alternative offers direct access to key audio functions as well as satellite navigation and telephone (if fitted).

The tinted front glass is combined with a generous rear screen on the Coupé models and glass rear screen on the Cabriolet variants to ensure excellent foreand-aft visibility. The front side windows have a water-repellent finish, which automatically disperses moisture and dirt. The result: optimum visibility in poor weather conditions.



Instruments.

Optimum clarity for greater safety and comfort.



Instrument cluster (911 Carrera S)

The five round instruments in every 911 are one of the classic features of Porsche design.

In this latest evolution, the spacing is wider, enabling 'at-a-glance'

access to all information. In the 911 Carrera S models, the instrument dials have a stylish aluminium-coloured finish. The digital display in the centreleft dial contains the main and trip odometers. The central display, in the rev-counter dial, presents data from the on-board

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911 Carrera | Comfort



Dashboard (911 Carrera S) with various options, including leather interior, Sport Chrono Package Plus, cruise control, navigation module and Tyre Pressure Monitoring (TPM)



 \cdot 102 \cdot

Seating. Optimum comfort, safety and support.



Instrument cluster (911 Carrera)

computer. This multi-purpose presents the time and external field is standard on all models temperature.

and includes a permanent

digital speedometer. The third

display, in the centre-right dial,

The dot-matrix technology used in each of these fields provides

a higher resolution for icons and text. Design and legibility are further enhanced by the brilliant white backlight illumination.



Electrically adjustable seat



Adaptive sports seat

Standard seats.

The standard seats provide exceptional comfort thanks to generous upholstery, optimum lateral support, a low-level seat base offering greater headroom, and a dedicated spring system that is matched to the 911 chassis. The high side bolsters provide excellent support while cornering, without any sense of restriction. The generous range of adjustment options means that virtually every driver can find the ideal position, regardless of physical build.

Standard features include a part-leather finish and three adjust-ment options: fore/aft (mechanical), height (mechanical) and backrest (electric). Optional alternatives include an electrically adjustable seat offering full power control of fore/aft position, height, backrest angle, squab angle and lumbar support.

A memory function stores personal preferences for seat position, lumbar support and exterior mirrors.

Sports seats.

The optional sports seats offer firmer upholstery than the standard design as well as higher side bolsters on the backrest and squab for added lateral support. The fore/aft position and height are manually adjustable, while the backrest has electric control.

Adaptive sports seats.

This alternative seat option combines excellent comfort with first-rate track performance. The comprehensive range of power adjustment controls includes fore/aft position, squab height,



backrest angle, lumbar support,

squab side bolsters and backrest

variability ensures generous com-

side bolsters. This exceptional

fort on long-distance journeys

as well as precision support on

the racetrack or winding country

the exterior mirror position on

settings except for the squab

and backrest side bolsters.

the driver's side as well as all seat

roads. A memory function includes

Rear seat and storage area

Rear seats.

The folding rear seats in all 911 models are surprisingly comfortable for a car of this capability. The generous rear storage area offers valuable loadspace, even when the seats are in use. Fold the backrests down and there's an additional 205 litres in the Coupé models and 155 litres in the Cabriolet variants.



Position controls on adaptive sports seat

Child seats.

The front passenger seat is specially designed to carry an ISOFIX-compatible child seat. For the necessary preparation – including airbag deactivation – see the new Tequipment 911 catalogue. A comprehensive range of Porsche child seats is also available.

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Intelligent practicality. Elegant design.



Glove compartment

The key to comfort in the Porsche 911 is our care and attention to detail. All models offer a range of practical features that make every journey a pleasure.

Matching upholstered armrests on the door and centre console provide greater driver comfort, particularly on long-distance trips. Twin cupholders for driver and front passenger are neatly concealed in the trim strip beneath the front passenger airbag. Below is a lockable glove compartment with handy CD storage. Additional compartments can be found in each of the doors as well as in the



Cupholders

centre console. Two 12-Volt sockets (including the cigarette lighter) provide power for all your accessories. An optional fire extinguisher can also be installed directly in front of the driver's seat. Thanks to its compact dimensions, it is never in the way but always within easy reach.

'Welcome Home' lighting.

This standard function provides automatic illumination via the fog-light units whenever the key remote is used to lock or unlock the car. As the name suggests,

it is particularly convenient when returning home after dark. On vehicles equipped with the optional Sport Chrono Package Plus, it is possible to programme the delay via the Porsche Communication Management (PCM) terminal.

ParkAssist.

This optional parking aid is automatically enabled whenever you select reverse gear. Move too close to a stationary object and a warning signal is emitted. Continue to reverse and the tone increases in frequency. The gap is measured by a row of ultrasonic sensors, which are neatly concealed in the rear bumper.

Cruise control.

Also available as an option, this practical system has an effective speed range of 30–240 km/h

(20–149 mph) and can even be used in first gear. The system is operated using a separate control stalk on the steering column.

HomeLink®.

This optional garage-door opener is located in the cockpit roof console and offers remote opening for up to three garage doors. It can also be used with compatible home lighting and alarm systems.

Rear wiper.

On all 911 Coupé models, the optional rear wiper has a flat and streamlined 'aero' blade which is neatly integrated into the design of the car.

Interior and exterior mirrors.

Automatically dimming interior and exterior mirrors (right and left) are available as optional equipment. The package also includes

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an integrated rain sensor for the front wiper system.

Slide/tilt sunroof.

This electrically operated and steplessly adjustable slide/tilt sunroof is also available as an option on the 911 Coupé models. The tilt position is designed to offer comfortable ventilation of the passenger compartment even when travelling at high speed.



ParkAssist



Slide/tilt sunroof

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Luggage compartment (911 Carrera)



Luggage compartment with PTS ultralight edition trolley case (large) from Porsche Design Driver's Selection

Luggage compartment.

In addition to the 205 litres of loadspace in the rear seat area, the rear-wheel drive models have a 135-litre front luggage compartment. On the all-wheel drive models, that volume is reduced

to a still generous 105 litres of additional space. The bulkhead panelling conceals the standard audio amplifier and the DVD drive for the optional navigation module. On rear-drive models, it also contains the optional CD autochanger.

Roof transport system.

The optional roof transport system available for all 911 Coupé models is specially designed to complement the aerodynamics of the car. The platform is made from lightweight aluminium and is therefore extremely easy to fit. A range of attachments can be used with the system, including a roof box and carriers for bikes, skis and snowboards. For a full range of attachments, please refer to the Tequipment 911 (Type 997) catalogue. Maximum roof load is 75 kg.

Anti-theft protection.

All 911 models have an engine immobiliser with in-key transponder and a comprehensive alarm system featuring contact-sensitive exterior protection and radar-based interior surveillance.

Vehicle tracking system.

This optional preparation available for all 911 models allows future installation of a vehicle tracking system obtainable from Porsche Tequipment. The tracking system enables remote location of a stolen vehicle across most of the countries in Europe. Additional requirements include fitment of a higher capacity battery.



Roof transport system



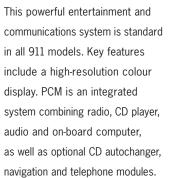
Roof transport system with roof box fitted

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Porsche Communication Management (PCM). Audio, communication and information in one.



Porsche Communication Management (PCM)



The integrated CD drive can also be used to play MP3 audio files recorded on CD. In addition, PCM provides easy-access control of the performance display and memory function included with the optional Sport Chrono Package

Radio functionality includes 20 FM and 20 MW presets, Dynamic AutoStore, and RDS two-tuner frequency diversity. This latter function uses a second tuner to search for the best possible signal for a selected station.

Optional extras include a naviga-

Speaker in door panel

tion module with separate DVD drive in the luggage compartment (see page 114). One of the benefits of this arrangement is that the standard CD drive can be used exclusively for audio CDs.

Sound Package Plus.

This quality sound system is offered as standard equipment in all 911 models. Power is supplied by a 4 x 25-Watt unit in the PCM terminal and an external analogue system in the luggage compartment for the low and mid-range speakers (2 x 70 and 40-Watts). The result is a generous audio experience that is tailored to the cockpit through a total of nine loudspeakers.

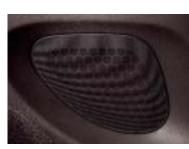
Output settings are adjusted via the sound menu in PCM. A loudness function accentuates bass and treble at lower volume levels.

Antenna diversity.

The PCM package includes four radio antennae which are 'sandwiched' inside the windscreen glass. These are used by the twintuner module to find the strongest available signal for any given station and maintain optimum FM reception.



Speaker in dashboard



Speaker in rear side panel

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On-board computer.

The PCM computer offers a wide range of information, including average fuel consumption, average speed, range till empty, journey time and external temperature. It can also be used to view data from the optional Tyre Pressure Monitoring (TPM). The computer is operated using a separate control stalk and can display key information in the central dial of the instrument cluster. The same

control stalk is used to operate the timing functions in the optional Sport Chrono Package Plus.

Electronic logbook.

This optional addition to PCM enables automatic logging on every journey of mileage, route distance, date and time as well as starting location and destination. Data can be downloaded from PCM via infrared and processed on PC using

software included with the package. This easy-to-use option fulfils all the requirements for automatic logbooks as specified by the German revenue authorities.

Navigation system.

The optional GPS navigation module includes dynamic route guidance via TMC (Traffic Message Channel). This function provides a visual overview of traffic congestion as well as automatic calculation of alternative routes. Other features include a navigation DVD drive in the luggage compartment and an easy-touse menu structure. After entering your destination, the system determines your position using GPS and then guides you to your destination via the best possible route.

The DVD drive offers faster data access than equivalent CDs, and therefore faster route calculation. The number of zoom levels has also been increased to improve the map display. Navigation data for most European countries is included on a single DVD.

Extended navigation module.

In combination with PCM, this optional expansion module enables

PORSCHEPLATZ

PORSCHEPLATZ

Zieleingabe
Zielspeicher
Teurplanung
Reufenogtionen
Status

SCHWIEBERDINGER STRASS

SEL03.04 Hell



automatic navigation along a previously recorded route (reverse route navigation) as well as compass and GPS-based navigation in regions not covered by your navigation DVD.

Telephone module.

The optional GSM telephone has a 12-digit keypad and a handsfree facility offering excellent call quality. The hands-free microphone is located next to the steering column and is ideally positioned for the driver. The system supports SMS (text) messaging as well as card-free calls to emergency services. An optional passive (keyless) handset with leather-trimmed console enables clearer communication as well as greater privacy when making a call.



Passive handset

CDC-4 CD autochanger.

This optional CD autochanger has a total capacity of six audio CDs and installs beneath a panel in the luggage compartment (see page 110). All 911 models come with an autochanger preparation as standard.

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Porsche and BOSE®. Working in harmony.

BOSE® Surround Sound System.

All 911 models are now available with the optional BOSE® Surround Sound System. To ensure optimum quality, this advanced digital package was developed in conjunction with the car itself.

Power is supplied by a seven-channel MOST®-based digital amplifier featuring 5 x 25-Watt linear amps and a single 100-Watt switching unit. MOST® (Media Orientated Systems Transport) is a fibre-optic bus network offering fast data transfer and perfect signal quality.



Mid-range speaker in door

A second switching amp in the active subwoofer provides an additional 100 Watts of power. A total of 13 loudspeakers (12 in the Cabriolet models) create a panoramic soundstage for all four seat positions. The balanced, lifelike and crystal-clear sound is the product of numerous audio technologies.

The most apparent of these,
BOSE® Automotive Surround
Sound, uses independent channels
at front and rear to create a
push-button panorama of space
and sound. The sense of depth
is further enhanced with the aid of
patented BOSE® Signal Processing
(BSP). Thanks to Centerpoint™
technology, even stereo recordings
can be split into five separate
channels.

AudioPilot[™] noise compensation technology provides automatic adjustment of music output based on current road speed and ambient noise. The result is a clearer and more consistent sound, with no need for manual adjustment.

Active equalisation matches all sound output to the unique acoustics of the 911 interior. The realistic sound covers the entire

frequency spectrum and can be enjoyed from all seat positions.

On the Cabriolet models, the system has a special open-top sound programme that is automatically selected when the hood is opened and deselected when the hood is closed.

The dynamic loudness function included on the system is a more sophisticated technology than conventional alternatives.

By enhancing the lower frequencies in low-volume sound, it actively compensates for the reduced sensitivity of the human ear. In some recordings, it can reveal passages

of music that would otherwise go unnoticed.

Combined, these technologies provide concert-hall quality in all driving conditions.



Some say life is a competition. So why not make it fun?

The Porsche 911 is an everyday car. Developed by racing enthusiasts.

What may at first seem to be a contradiction in terms is in fact a Porsche principle.

It is a rule which states that race engineering developed on the track delivers exceptional performance on the road.

It also means you have the platform required for your own participation in racing events.



Porsche motorsport events. The other side of your Porsche.



911 GT3 Cup

Nürburgring, Le Mans, Hockenheim, Mille Miglia, Daytona, Paris-Dakar, Monte Carlo, Targa Florio.

At Porsche, we've competed in virtually every major motor race in the world. There is hardly a corner, hairpin or chicane that we do not know by heart.

This unique intimacy is just one of the secrets of our enduring race success. It is the key to more than 23,000 race victories in little over 50 years.

Throughout our history, our desire to go racing has always been a defining passion. It has also enabled us to develop new technologies for use in road-car production.

As a result, your 911 is already prepared for use in a number of race classes. For amateur drivers in Germany, for example, there's the Porsche Sports Cup series. For professionals, there's a choice of national Porsche Carrera Cup championships or the international Porsche Michelin Supercup.

Our latest competition vehicle is the new 911 GT3 Cup, based on the current Type 997 model. In 2005, it will feature exclusively in the Porsche Michelin Supercup.

Porsche Michelin Supercup.

The Porsche Michelin Supercup is the world's fastest international single-make race series. A major support event at the 12 European rounds of the Formula One World

Championship, it is watched by audiences in the hundreds of thousands. Every one of the Supercup teams runs the same production-based 911 GT3 Cup (Type 997) equipped with Michelin racing tyres. As a result, each race is a fascinating battle of strategic race planning and outright driver skill.

The new generation of 911 GT3 Cup features a number of key race technologies. Important new additions include a sequential gearbox as well as the first ever use in the 911 GT3 Cup of the Porsche Ceramic Composite Brake. Weight has been reduced to just 1,150 kg, while the specially uprated and race-prepared flat-six engine develops 294 kW (400 bhp) from a 3.6-litre displacement.

The result: thrilling race action pitting established professionals and promising young talent against special VIP guest drivers.



911 GT3 Cup

Engineering performance Comments that doesn't cost the earth.

The Porsche 911 is a model of precision.

With more power, more comfort and greater all-round safety.

Its environmental standards are equally impressive: less emissions, more economy and longer service intervals.



Porsche and the environment. A tradition of commitment and innovation.



At Porsche, we are proud of our proven track record when it comes to protecting the environment. In 1966, the first official European emissions test to be approved by the US environmental authority, the EPA, was performed on a 911

at our factory in Zuffenhausen. Since then, Porsche has remained a leading innovator within this crucial field of car design.

Exhaust emission control.

The 911 is designed for powerful performance – but not at the expense of the environment. Both 911 engines – 3.6 and 3.8-litre – comply with the stringent EU4

exhaust emissions standard as well as LEV regulations in the United States. As a result, the 911 is not only one of the most athletic cars on the road, it is also one of the cleanest.

To achieve this combination, we've used a range of eco-friendly technologies, including two-stage catalytic converters. This 'cascade' catalyst system consists of two specially coated monolith substrates on each of the twin exhaust tracts. Ultra-fine honeycomb channels ensure optimum performance with only minimal back-pressure on the engine. The primary catalyst is the smaller of the two, enabling faster warm-up for greater efficiency when the engine is started from cold.

The latest technologies are also employed when monitoring the twin exhausts. The engine management system uses a pair of 'Lambda' or oxygen sensors to analyse the

exhaust gas from each bank of cylinders and modify combustion accordingly. A second pair of Lambda sensors, one for each exhaust, then verifies the efficiency of the catalytic converters.*

The ultimate result is a reduction in emissions – under all operating conditions.

Recycling.

One of the most important considerations on any new Porsche is how to minimise weight.

On today's 911, we've used a high proportion of cast aluminium alloys, synthetic materials, and high-tensile sheet steel. On all 911 models, approximately 20% of components are made from lightweight alloys.

All materials are carefully selected to minimise any impact on the environment. The twin exhaust system, for example, is made entirely from stainless steel. All lightweight materials are easily recyclable, while the variety of synthetic components has been reduced. Recycled plastics are used in all areas of the car. To simplify processing, all materials are labelled for separate recycling.

In all, approximately 85% of today's 911 is compatible with current recycling techniques.

Water-based paints are used throughout the car, thus reducing dependence on chemical solvents in both production and subsequent servicing. All parts of the vehicle are free from asbestos, CFCs, and components manufactured using CFCs. The result is a car in which environmental protection is an integral part of the design.

^{*} Not featured in markets with leaded fuel.



Maintenance.

Longer service intervals are not only easier on resources, they

also reduce ownership costs.

Over the years, we have consistently improved our service schedules, while lowering the

number of service tasks. In the case of the 911, we'll let the figures speak for themselves:

Engine oil: every 18,000 miles or two years. Spark plugs: every 54,000 miles or four years. Oil filter: every 18,000 miles. Air filter: every 36,000 miles. Ancillary drive belt: every 54,000 miles. Fuel filter: good for the entire life of the car.

A major service is required after 36,000 miles. Based on mileage alone, today's 911 requires just three services every 54,000 miles.

The result is a major reduction in servicing costs – with corresponding benefits for the environment.

Noise.

The new 911 complies with all current noise regulations – without any form of engine encapsulation. To do that, we've eliminated noise at source: engine components are more rigid, moving parts lighter, and tolerances have been reduced to a minimum. Additional features such as high-efficiency silencers

and resonators in the induction system help to lower noise throughout the life of the car. The result is a purer and more distinctive sound – with all the character you'd expect from a Porsche.

Fuel system.

In the fuel supply system, we've minimised the evaporation of hydrocarbons. This is achieved through a combination of active carbon filter and special fuel-tank coating. All fuel lines are made from aluminium, while those carrying vapours are made from multi-layer plastic.

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You've seen our vision of the perfect 911. Now it's time for yours.

isation

Can perfection be measured in physical precision?
Or in fractions of a second on the racetrack?

For us, it's a quality expressed in years. Forty-two, to be precise.

Now in its sixth generation, the Porsche 911 is even closer to the original ideal.

Today it is a car that lacks just one thing: your own personal signature.

Over the following pages, you will find a comprehensive range of factory-fitted personalisation options.

Each is designed to help you create your vision of the perfect Porsche.



Colours.



The Porsche 911 is a powerful expression of character and individuality. One of the most important considerations in this respect is, of course, your choice of colour. Exterior options range from four solid and eight metallic colours to five 'special' paint finishes. On Cabriolet models, there are four hood colours available. Inside the cockpit, there's a choice of nine interior colours as well as three two-tone combinations.

If you cannot find the colour you require, we can usually mix it for you. After all, when a car is this special, it should look exactly the way you want it to.

To see how the available colours would look on your car, visit www.porsche.com and use the online Porsche Car Configurator.

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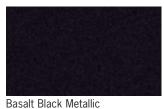
Solid exterior colours.

Metallic exterior colours.

Special exterior colours.

Hood colours.













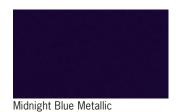
Guards Red



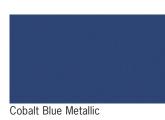










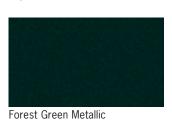






Speed Yellow









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Standard interior colours.

Leatherette/leather/ soft-touch paint.1)

Black



Stone Grey



Carpet.

Black

Stone Grey

Sand Beige

Palm Green

Ocean Blue

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Sand Beige



Palm Green



Ocean Blue

Rooflining.2)

Black

Stone Grey

Sand Beige

Palm Green

Ocean Blue

Special interior colours.

Leather/soft-touch paint.3)



Terracotta

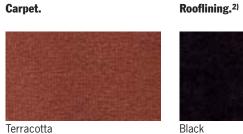
Cocoa





Cocoa

Carpet.





Black

Two-tone interior.

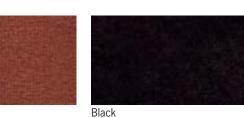
Leather/soft-touch paint.



Black and Terracotta5)

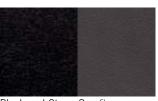


Carpet.



Rooflining.2)

Terracotta



Black and Stone Grey⁶⁾

Black and Sand Beige⁶⁾



Black



Sand Beige

Black

Natural leather interior.

Leather/soft-touch paint.



Dark Grey⁴⁾





Rooflining.2)



Black



- Soft-touch paint in interior colour, film finish in interior colour on sun visors and inner door-sill guards.
 Rooflining in Alcantara (Coupé models) or black fabric (Cabriolet models).
- 3) Soft-touch paint in interior colour, black film finish on sun visors and inner door-sill guards.
- ⁴⁾ Black soft-touch paint, black film finish on sun visors and inner door-sill guards.
- 5) Soft-touch paint in interior colour or black, black film finish on sun visors and inner door-sill guards.
- 6) Soft-touch paint in interior colour or black, black film finish on sun visors, film finish in interior colour on inner door-sill guards.

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Natural Brown³⁾





Natural Brown

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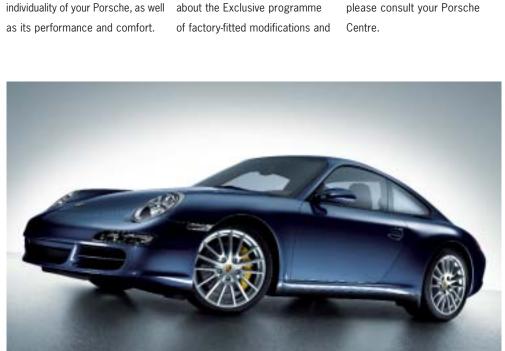
Making it yours. Optional equipment for the 911 model range.

The standard specification on the Porsche 911 is already second find the full range of options listed to none. In order to make it truly unique, there's a comprehensive individual items, please refer to range of options to choose from. the 911 price list. Each is a blend of stylish design and exceptional engineering quality. For more ideas on personalising Combined, they will enhance the your 911, ask your Porsche Centre concerning personalisation,

by category. To find out more about

Over the following pages, you will the Tequipment range of approved accessories.

> For a taste of what's possible, you'll find a selection of modified vehicles in the current Porsche Exclusive catalogue. For all queries please consult your Porsche

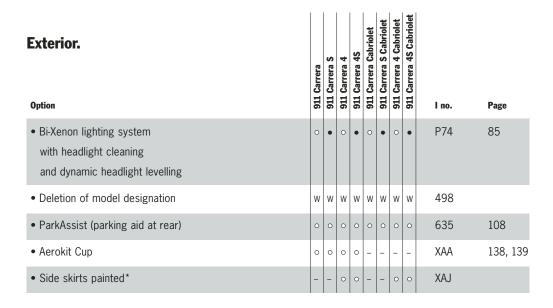


911 Carrera 4 with PCCB and SportDesign wheels



Aerokit Cup, wheels painted in exterior colour, sports exhaust system with four-tube sports tailpipes

Exterior. Option	911 Carrera	911 Carrera S	911 Carrera 4	911 Carrera 4S	911 Carrera Cabriolet	911 Carrera S Cabriolet	911 Carrera 4 Cabriolet	911 Carrera 4S Cabriolet	l no.	Page
Metallic paint	0	0	0	0	0	0	0	0	Code	132
Special colours	0	0	0	0	0	0	0	0	Code	133
Colour to sample	0	0	0	0	0	0	0	0	Code	





Aerokit Cup, wheels painted in exterior colour

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^{*} Introduction planned for late 2005.

not available ○ extra-cost option
 standard equipment W no-cost option For more information on the options featured in this catalogue, please refer to the 911 price list.

Page

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X51

249

450

475





Rain sensor

Rear wiper (with aero blade)

Exterior.	911 Carrera	911 Carrera S	911 Carrera 4	911 Carrera 4S	1 Carrera Cabriolet	1 Carrera S Cabriolet	1 Carrera 4 Cabriolet	1 Carrera 4S Cabriolet		
Option	6	6	6	6	911	911	911	911	l no.	Page
Rear wiper (with aero blade)	0	0	0	0	-	-	-	-	425	109, 140
Grey top tint on windscreen	0	0	0	0	0	0	0	0	567	
Automatically dimming interior and exterior mirrors with integrated rain sensor	0	0	0	0	0	0	0	0	P12	109, 140
Electric slide/tilt sunroof	0	0	0	0	-	_	-	-	650	109
Hardtop	-	-	-	-	0	0	0	0	550	141
Roof transport system	0	0	0	0		-	-	-	549	110

· 140

Sports suspension package (20 mm lower) with mechanical rear differential lock	o w o w P17 69
CO.Z	

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Engine, transmission and chassis.

• Powerkit for 911 Carrera S models (upgrade to 280 kW

(381 bhp)*, includes sports exhaust system (XLF)

and four-tube sports tailpipes

• Porsche Ceramic Composite Brake

• Porsche Active Suspension Management

(PASM) with ride height lowered by 10 mm

Option

• Tiptronic S

(PCCB)

For more information on the options featured in this catalogue, please refer to the 911 price list.

⁹¹¹ Carrera Cabriolet with hardtop

^{*} Introduction planned for late 2005.

not available ○ extra-cost option
 standard equipment W no-cost option





Porsche Ceramic Composite Brake (PCCB)

Stainless steel tailpipes, chrome-plated (911 Carrera S)

Engine, transmission and chassis. Option	911 Carrera	911 Carrera S	911 Carrera 4	911 Carrera 4S	911 Carrera Cabriolet	911 Carrera S Cabriolet	911 Carrera 4 Cabriolet	911 Carrera 4S Cabriolet	l no.	Page
Sport Chrono Package Plus	0	0	0	0	0	0	0	0	640	78
Stainless steel tailpipes, chrome-plated	0	0	0	0	0	0	0	0	X54	142
Sports exhaust system with four-tube sports tailpipes	0	0	0	0	0	0	0	0	XLF	138
• Short shifter	0	0	0	0	0	0	0	0	XCZ	

Option	911 Carr	911 Can	911 Carr	911 Carr	l no.	Page				
• 19-inch Carrera S wheel	0	•	0	•	0	•	0	•	403	142
• 19-inch Carrera Classic wheel	0	0	0	0	0	0	0	0	405	143
19-inch SportDesign wheel	0	0	0	0	0	0	0	0	407	137, 143
19-inch Carrera Sport wheel* (for 911 Carrera 4 models; includes 17-mm spacers on rear axle)	0	0	0	0	0	0	0	0	XRR	143
Wheel centres with full-colour Porsche Crest	0	0	0	0	0	0	0	0	446	137
• Wheels painted in exterior colour (includes wheel centres with full-colour Porsche Crest)	0	0	0	0	0	0	0	0	XD9	138, 139
Tyre Pressure Monitoring (TPM)	0	0	0	0	0	0	0	0	482	84
• 5-mm spacers on front and rear axle*	0	0	0	0	0	0	0	0	XRP	

not available ○ extra-cost option
 standard equipment W no-cost option
 For more information on the options featured in this catalogue, please refer to the 911 price list.



19-inch Carrera S wheel



Wheels.

19-inch Carrera Classic wheel



19-inch SportDesign wheel



19-inch Carrera Sport wheel

^{*} Introduction planned for late 2005.





Memory controls

Cruise control

Interior.	1 Carrera	911 Carrera S	1 Carrera 4	1 Carrera 4S		1 Carrera S Cabriolet	1 Carrera 4 Cabriolet	1 Carrera 4S Cabriolet		
Option	911	91	911	911	911	911	911	911	I no.	Page
HomeLink® (programmable garage-door opener)	0	0	0	0	0	0	0	0	608	109
Cruise control	0	0	0	0	0	0	0	0	454	108, 144
• Instrument dials in black	•	W	•	W	•	W	•	W	022	
• Instrument dials in interior colour Sand Beige/Terracotta/Natural Brown	0	0	0	0	0	0	0	0	XFD/ XFE/ XFF	
Instrument dials in exterior colour Guards Red/Speed Yellow/Carrara White	0	0	0	0	0	0	0	0	XFG/ XFH/ XFJ	145
• Preparation for vehicle tracking system*	0	0	0	0	0	0	0	0	674	110

Interior.	911 Carrera	911 Carrera S	911 Carrera 4	911 Carrera 4S	. Carrera Cabrio	. Carrera S Cabr	. Carrera 4 Cabr	. Carrera 4S Cal		
Option	911	911	911	911	911	911	911	911	l no.	Page
Electrically adjustable seats	0	0	0	0	0	0	0	0	P15	106
Sports seats	0	0	0	0	0	0	0	0	P77	106
Adaptive sports seats	0	0	0	0	0	0	0	0	P01	106
Sports seat backrests in leather**	0	0	0	0	0	0	0	0	XSB	
• Sports seat backrests painted**	0	0	0	0	0	0	0	0	XSA	
Seat heating	0	0	0	0	0	0	0	0	342	
• Seat belts in Silver Grey/Guards Red/ Speed Yellow	0	0	0	0	0	0	0	0	XSH/ XSX/ XSY	80
Rear centre console painted	0	0	0	0	0	0	0	0	XME	
• Fire extinguisher	0	0	0	0	0	0	0	0	509	
Sports-style footrest	0	0	0	0	0	0	0	0	XXZ	



Instrument dials in exterior colour (Guards Red)

^{*} Introduction planned for early 2006.
** Introduction planned for late 2005.

not available ○ extra-cost option
 standard equipment W no-cost option



Leather interior in special colour (Cocoa), various other personalisation options

Interior: leather. Option	911 Carrera	911 Carrera S	911 Carrera 4	911 Carrera 4S	911 Carrera Cabriolet	911 Carrera S Cabriolet	911 Carrera 4 Cabriolet	911 Carrera 4S Cabriolet	l no.	Page
• Leather seats	0	0	0	0	0	0	0	0	Code	
Soft ruffled leather seats	0	0	0	0	0	0	0	0	982	151
• Leather interior package (includes seats, dashboard upper/lower sections, door panels and rear side panels in smooth-finish leather)										
– in standard colour	0	0	0	0	0	0	0	0	Code	
- in special colour	0	0	0	0	0	0	0	0	Code	
- in two-tone combination	0	0	0	0	0	0	0	0	970	147
– in natural leather	0	0	0	0	0	0	0	0	998	
– in colour to sample	0	0	0	0	0	0	0	0	Code	

^{*} Introduction planned for late 2005.

Interior: leather.	. Carrera		. Carrera 4	. Carrera 4S		. Carrera S Cabriolet	Carrera 4 Cabriolet	. Carrera 4S Cabriolet		
Option	911	911	911	911	911	911	911	911	I no.	Page
Extended trim package (dashboard) in leather	0	0	0	0	0	0	0	0	EAA	
• Instrument surround in leather	0	0	0	0	0	0	0	0	XNG	
• Steering column casing in leather*	0	0	0	0	0	0	0	0	XNS	
Three-spoke sports steering wheel in leather	0	•	0	•	0	•	0	•	435	
Three-spoke steering wheel in smooth-finish leather	0	0	0	0	0	0	0	0	459	
Three-spoke sports steering wheel in smooth-finish leather	0	0	0	0	0	0	0	0	460	
• Three-spoke sports steering wheel in smooth-finish leather, padded	0	0	0	0	0	0	0	0	XPA	
Three-spoke multifunction steering wheel in smooth-finish leather	0	0	0	0	0	0	0	0	431	103



Two-tone interior (Black/Stone Grey), various other personalisation options

not available ○ extra-cost option ● standard equipment W no-cost option

Interior: leather. Option	911 Carrera	911 Carrera S	911 Carrera 4	911 Carrera 4S	911 Carrera Cabriolet	911 Carrera S Cabriolet	911 Carrera 4 Cabriolet	911 Carrera 4S Cabriolet	l no.	Page
Extended trim package (doors) in leather	0	0	0	0	0	0	0	0	XTV	
Porsche Crest embossed on head restraints	0	0	0	0	0	0	0	0	XSC	148
Passive handset in leather*	0	0	0	0	0	0	0	0	XEA	
Rear centre console in leather	0	0	0	0	0	0	0	0	XMZ	147
Rooflining in leather	0	0	0	0	-	-	-	-	XMA	
Sun visors in leather	0	0	0	0	0	0	0	0	XMP	
• Interior light surround in leather*	0	0	0	0	-	-	-	-	XZD	
• Floor mats with leather edging and Porsche logo (front)	0	0	0	0	0	0	0	0	XX1	
• Inner door-sill guards in leather	0	0	0	0	0	0	0	0	XTG	



Porsche Crest on head restraints



Macassar interior trim, various other personalisation options

Interior: macassar (dark satin wood).	911 Carrera	911 Carrera S	911 Carrera 4	911 Carrera 4S	911 Carrera Cabriolet	911 Carrera S Cabriolet	911 Carrera 4 Cabriolet	911 Carrera 4S Cabriolet	l no.	Page
Macassar interior package	0	0	0	0	0	0	0	0	801	149
• Extended trim package (dashboard) in macassar	0	0	0	0	0	0	0	0	EAB	149
• Three-spoke multifunction steering wheel in macassar	0	0	0	0	0	0	0	0	451	149
Extended trim package (doors) in macassar	0	0	0	0	0	0	0	0	XTT	149
Rear centre console in macassar	0	0	0	0	0	0	0	0	XJT	149

^{*} Introduction planned for late 2005.

⁻ not available ○ extra-cost option • standard equipment W no-cost option



Sycamore interior trim, various other personalisation options

Interior: sycamore (light satin wood). Option	911 Carrera	911 Carrera S	911 Carrera 4	911 Carrera 4S	911 Carrera Cabriolet	911 Carrera S Cabriolet	911 Carrera 4 Cabriolet	911 Carrera 4S Cabriolet	I по.	Page
Sycamore interior package	0	0	0	0	0	0	0	0	802	150
Extended trim package (dashboard) in sycamore	0	0	0	0	0	0	0	0	EAC	150
• Three-spoke multifunction steering wheel in sycamore	0	0	0	0	0	0	0	0	452	150
Extended trim package (doors) in sycamore	0	0	0	0	0	0	0	0	XTU	150
Rear centre console in sycamore	0	0	0	0	0	0	0	0	XJU	150

Interior: carbon. Option Page • Carbon interior package 803 151 • Extended trim package (dashboard) in carbon EAD 151 • Three-spoke multifunction steering wheel in carbon 453 151 • Extended trim package (doors) in carbon XTL 151 • Rear centre console in carbon XMJ 151 • Outer door-sill guards in carbon X69



Carbon interior trim, various other personalisation options

⁻ not available ○ extra-cost option • standard equipment W no-cost option
For more information on the options featured in this catalogue, please refer to the 911 price list.



Aluminium Look interior trim, various other personalisation options

Interior: aluminium/stainless steel.	911 Carrera	911 Carrera S	911 Carrera 4	911 Carrera 4S	911 Carrera Cabriolet	911 Carrera S Cabriolet	911 Carrera 4 Cabriolet	911 Carrera 4S Cabriolet	l no.	Page
					-	-	-			
Extended trim package (dashboard) in Aluminium Look	0	0	0	0	0	0	0	0	EAE	152
• Instrument surround in Aluminium Look	0	0	0	0	0	0	0	0	XCL	152
• Three-spoke multifunction steering wheel in Aluminium Look	0	0	0	0	0	0	0	0	XPV	145, 152
• Extended trim package (doors) in Aluminium Look	0	0	0	0	0	0	0	0	XTW	152
• Gear lever in aluminium*	0	0	0	0	0	0	0	0	X97	
Rear centre console in Aluminium Look	0	0	0	0	0	0	0	0	XCK	152
• Sports seat backrests in Aluminium Look*	0	0	0	0	0	0	0	0	XCG	
Outer door-sill guards in stainless steel	0	0	0	0	0	0	0	0	X70	

^{*} Introduction planned for late 2005.

Audio and communication.	1 Carrera	911 Carrera S	1 Carrera 4	1 Carrera 4S	1 Carrera Cabriolet	1 Carrera S Cabriolet	1 Carrera 4 Cabriolet	1 Carrera 4S Cabriolet		
Option	911	6	911	911	911	911	911	911	I no.	Page
Navigation module for PCM	0	0	0	0	0	0	0	0	670	114
Extended navigation module	0	0	0	0	0	0	0	0	672	115
Electronic logbook	0	0	0	0	0	0	0	0	641	114
Telephone module for PCM	0	0	0	0	0	0	0	0	666	115
Passive handset for telephone module	0	0	0	0	0	0	0	0	668	115
BOSE® Surround Sound-System	0	0	0	0	0	0	0	0	680	116
CDC-4 CD autochanger (six-disc)**	0	0	0	0	0	0	0	0	692	115, 153
• External antenna	W	W	w	W	W	W	W	W	461	

^{**} May be incompatible with some copy-protected audio CDs.



CDC-4 six-disc CD autochanger

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not available ○ extra-cost option
 standard equipment W no-cost option

Factory collection 911

The total Porsche experience.

Where better to experience the first moments with your Porsche than at the home of Porsche engineering.

Over 50 years ago, the first production Porsche was created by hand in a modest red-brick building right here in Zuffenhausen. From those humble beginnings, the factory has evolved into one of the most advanced production facilities in the world. Today, it's home to a new generation of automotive legends: the 911, the Boxster, and, of course, your Porsche.

Our factory collection programme offers a unique insight into the origins and making of your Porsche. Like your car, a visit to Zuffenhausen is an absorbing mix of past and future, history and innovation, heritage and creativity.

To take advantage of this exclusive opportunity, please inform your Porsche Centre when you place your specification. A collection date can then be arranged when the final information regarding the build of your car has been confirmed. Your Porsche can be collected on any working day* (Monday to Friday) at a time that suits your requirements.

The easiest way to travel from outside Germany is to fly to either Stuttgart or Frankfurt and then continue by train, taxi or hire car.

Please note that there are a number of formalities that must be completed when you take delivery of your car. For full details, please consult your Porsche Centre, who will also be happy to assist when it comes to planning your trip.

* Please note that collection is not possible during the factory shutdown periods.



Porsche Museum

Make the most of your journey. And discover more about your Porsche.

Your visit to Zuffenhausen is a unique opportunity to learn more about the origins of your Porsche.

Our factory tour offers a detailed insight into the latest production processes. These range from engine assembly and the preparation of upholstery, to the 'marriage' of powertrain, bodyshell and chassis components.

The factory tour is one of our oldest traditions and is usually conducted by a retired member of staff. Each of our guides is a genuine Porsche enthusiast

with a genuine passion for the marque.

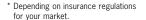
On average, the tour takes around 1.5 hours to complete, and follows every stage in the creation of a Porsche.

Next, you can visit the Porsche Museum, where you'll find a fascinating cross-section of legendary Porsche models from every era of our history.

If there's time, you can relax in the customer lounge or browse in the Porsche Design Driver's Selection shop. You can also enjoy a three-course lunch at our exclusive VIP restaurant.

The highlight of your visit, however, will undoubtedly be the moment when you take delivery of your Porsche. The keys will be presented by a member of the Factory Collection Team who will explain everything you need to know about the car.

Finally, you can take your place behind the wheel, and experience what it means to drive your own Porsche. For the perfect introduction to the world of Porsche ownership*, why not follow your visit with one of the fascinating tours available from the Porsche Travel Club.





Porsche factory in Zuffenhausen



Porsche Design Driver's Selection shop

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We've developed a range of innovative financial services, carefully tailored to the needs of Porsche owners, including competitive finance and leasing schemes, insurance and the Porsche Card.



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With our factory-fitted personalisation programme, you can now create your perfect Porsche. In terms of styling, specification or both. All modifications are uniquely handcrafted for your car.



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Porsche Design Driver's Selection

This exclusive collection of clothing and accessories combines timeless elegance and unmistakable quality to complement the Porsche model range.

Service

Porsche Used Car Programme

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In rational terms, it is pure precision; emotionally, it requires no words. It is a car for those who appreciate performance in every one hundredth of a second.

A sporting legend for more than 40 years, it's now ready to explore once more. Enthralling, personal, the sixth generation:

The Porsche 911.



Technical data

	911 Carrera Coupé	911 Carrera S Coupé
Engine		
Cylinders	6	6
Displacement	3,596 cm ³	3,824 cm ³
Max. power (DIN)	239 kW (325 bhp)	261 kW (355 bhp)
at rpm	6,800	6,600
Max. torque	370 Nm	400 Nm
at rpm	4,250	4,600
Compression ratio	11.3:1	11.8:1
Transmission		
Layout	Rear-wheel drive	Rear-wheel drive
Manual gearbox	6-speed	6-speed
Tiptronic S (optional)	5-speed	5-speed
Chassis		
Front axle	McPherson-strut suspension	McPherson-strut suspension
Rear axle	LSA multi-link suspension	LSA multi-link suspension
Steering	Variable steering ratio,	Variable steering ratio,
	power-assisted (hydraulic)	power-assisted (hydraulic)
Turning circle	10.9 m	10.9 m
Brakes	Four-piston monobloc aluminium	Four-piston monobloc aluminium
	fixed calipers front and rear, discs	fixed calipers front and rear, discs
	internally vented and cross-drilled	internally vented and cross-drilled
Vehicle stability system	PSM (with ABS 8.0)	PSM (with ABS 8.0)
ABS	Bosch ABS 8.0	Bosch ABS 8.0
Wheels	Front: 8J x 18 ET 57	Front: 8J x 19 ET 57
	Rear: 10J x 18 ET 58	Rear: 11J x 19 ET 67
Tyres	Front: 235/40 ZR 18	Front: 235/35 ZR 19
	Rear: 265/40 ZR 18	Rear: 295/30 ZR 19

	911 Carrera Coupé	911 Carrera S Coupé
Weights	Manual/Tiptronic S	Manual/Tiptronic S
Unladen weight (DIN)	1,395 kg/1,435 kg	1,420 kg/1,460 kg
Unladen weight (EC)*	1,470 kg/1,510 kg	1,495 kg/1,535 kg
Permissible gross weight	1,810 kg/1,855 kg	1,820 kg/1,865 kg
Performance	Manual/Tiptronic S	Manual/Tiptronic S
Top speed	285 km/h (177 mph)/	293 km/h (182 mph)/
	280 km/h (174 mph)	285 km/h (177 mph)
0-100 km/h (0-62 mph)	5.0 secs/5.5 secs	4.8 secs/5.3 secs
0-160 km/h (0-99 mph)	11.0 secs/12.0 secs	10.7 secs/11.6 secs
Flexibility 80–120 km/h	6.5 secs/6.7 secs	6.1 secs/6.2 secs
(50-75 mph)	(5th/4th gear)	(5th/4th gear)
Fuel consumption/emissions	Manual/Tiptronic S	Manual/Tiptronic S
Urban in I/100 km (mpg)	16.1 (17.5)/16.5 (17.1)	17.1 (16.5)/17.9 (15.8)
Extra urban in I/100 km (mpg)	8.1 (34.9)/8.1 (34.9)	8.4 (33.6)/8.4 (33.6)
Combined in I/100 km (mpg)	11.0 (25.7)/11.2 (25.0)	11.5 (24.6)/11.7 (24.1)
CO ₂ emissions (g/km)	266/270	277/283
Dimensions/aerodynamics		
Length	4,427 mm	4,427 mm
Width	1,808 mm	1,808 mm
Height	1,310 mm	1,300 mm
Wheelbase	2,350 mm	2,350 mm
Luggage compartment volume	135 litres	135 litres
(German Car Manufacturers' Ass	soc.)	
Tank capacity (refill volume)	64 litres	64 litres
Drag coefficient	0.28	0.29

^{*} Weight is calculated in accordance with the relevant EC Directives and is valid for standard specification vehicles only.

Optional equipment means greater weight. The figure given includes 68 kg representing the driver and 7 kg for luggage.

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	911 Carrera 4 Coupé	911 Carrera 4S Coupé
Engine		
Cylinders	6	6
Displacement	3,596 cm ³	3,824 cm ³
Max. power (DIN)	239 kW (325 bhp)	261 kW (355 bhp)
at rpm	6,800	6,600
Max. torque	370 Nm	400 Nm
at rpm	4,250	4,600
Compression ratio	11.3:1	11.8:1
Transmission		
Layout	All-wheel drive	All-wheel drive
Manual gearbox	6-speed	6-speed
Tiptronic S (optional)	5-speed	5-speed
Chassis		
Front axle	McPherson-strut suspension	McPherson-strut suspension
Rear axle	LSA multi-link suspension	LSA multi-link suspension
Steering	Variable steering ratio,	Variable steering ratio,
	power-assisted (hydraulic)	power-assisted (hydraulic)
Turning circle	10.9 m	10.9 m
Brakes	Four-piston monobloc aluminium	Four-piston monobloc aluminium
	fixed calipers front and rear, discs	fixed calipers front and rear, discs
	internally vented and cross-drilled	internally vented and cross-drilled
Vehicle stability system	Enhanced PSM (with ABS 8.0)	Enhanced PSM (with ABS 8.0)
ABS	Bosch ABS 8.0	Bosch ABS 8.0
Wheels	Front: 8J x 18 ET 57	Front: 8J x 19 ET 57
	Rear: 11J x 18 ET 51	Rear: 11J x 19 ET 51
Tyres	Front: 235/40 ZR 18	Front: 235/35 ZR 19

	911 Carrera 4 Coupé	911 Carrera 4S Coupé
Weights	Manual/Tiptronic S	Manual/Tiptronic S
Unladen weight (DIN)	1,450 kg/1,490 kg	1,475 kg/1,515 kg
Unladen weight (EC)*	1,525 kg/1,565 kg	1,550 kg/1,590 kg
Permissible gross weight	1,865 kg/1,910 kg	1,875 kg/1,920 kg
Performance	Manual/Tiptronic S	Manual/Tiptronic S
Top speed	280 km/h (174 mph)/	288 km/h (179 mph)/
	275 km/h (171 mph)	280 km/h (174 mph)
0-100 km/h (0-62 mph)	5.1 secs/5.6 secs	4.8 secs/5.3 secs
0-160 km/h (0-99 mph)	11.2 secs/12.2 secs	10.8 secs/11.7 secs
Flexibility 80–120 km/h	6.6 secs/6.8 secs	6.2 secs/6.3 secs
(50-75 mph)	(5th/4th gear)	(5th/4th gear)
Fuel consumption/emissions In accordance with 80/1268/E	Manual/Tiptronic S C as valid at time of going to press	Manual/Tiptronic S
Urban in I/100 km (mpg)	16.6 (17.0)/17.4 (16.2)	17.5 (16.1)/18.0 (15.7)
Extra urban in I/100 km (mpg)	8.4 (33.6)/8.6 (32.8)	8.5 (33.2)/8.6 (32.8)
Combined in I/100 km (mpg)	11.3 (25.0)/11.6 (24.4)	11.8 (23.9)/11.9 (23.7)
CO ₂ emissions (g/km)	272/280	285/286
Dimensions/aerodynamics		
Length	4,427 mm	4,427 mm
Width	1,852 mm	1,852 mm
Width Height	1,852 mm 1,310 mm	1,852 mm 1,300 mm
	7	
Height	1,310 mm	1,300 mm
Height Wheelbase	1,310 mm 2,350 mm 105 litres	1,300 mm 2,350 mm
Height Wheelbase Luggage compartment volume	1,310 mm 2,350 mm 105 litres	1,300 mm 2,350 mm

^{*} Weight is calculated in accordance with the relevant EC Directives and is valid for standard specification vehicles only.

Optional equipment means greater weight. The figure given includes 68 kg representing the driver and 7 kg for luggage.

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	911 Carrera Cabriolet	911 Carrera S Cabriolet
Engine		
Cylinders	6	6
Displacement	3,596 cm ³	3,824 cm ³
Max. power (DIN)	239 kW (325 bhp)	261 kW (355 bhp)
at rpm	6,800	6,600
Max. torque	370 Nm	400 Nm
at rpm	4,250	4,600
Compression ratio	11.3:1	11.8:1
Transmission		
Layout	Rear-wheel drive	Rear-wheel drive
Manual gearbox	6-speed	6-speed
Tiptronic S (optional)	5-speed	5-speed
Chassis		
Front axle	McPherson-strut suspension	McPherson-strut suspension
Rear axle	LSA multi-link suspension	LSA multi-link suspension
Steering	Variable steering ratio,	Variable steering ratio,
	power-assisted (hydraulic)	power-assisted (hydraulic)
Turning circle	10.9 m	10.9 m
Brakes	Four-piston monobloc aluminium	Four-piston monobloc aluminium
	fixed calipers front and rear, discs	fixed calipers front and rear, discs
	internally vented and cross-drilled	internally vented and cross-drilled
Vehicle stability system	PSM (with ABS 8.0)	PSM (with ABS 8.0)
ABS	Bosch ABS 8.0	Bosch ABS 8.0
Wheels	Front: 8J x 18 ET 57	Front: 8J x 19 ET 57
	Rear: 10J x 18 ET 58	Rear: 11J x 19 ET 67
Tyres	Front: 235/40 ZR 18	Front: 235/35 ZR 19
	Rear: 265/40 ZR 18	Rear: 295/30 ZR 19

	911 Carrera Cabriolet	911 Carrera S Cabriolet
Weights	Manual/Tiptronic S	Manual/Tiptronic S
Unladen weight (DIN)	1,480 kg/1,520 kg	1,505 kg/1,545 kg
Unladen weight (EC)*	1,555 kg/1,595 kg	1,580 kg/1,620 kg
Permissible gross weight	1,875 kg/1,920 kg	1,885 kg/1,930 kg
Performance	Manual/Tiptronic S	Manual/Tiptronic S
Top speed	285 km/h (177 mph)/	293 km/h (182 mph)/
	280 km/h (174 mph)	285 km/h (177 mph)
0-100 km/h (0-62 mph)	5.2 secs/5.7 secs	4.9 secs/5.4 secs
0-160 km/h (0-99 mph)	11.4 secs/12.4 secs	11.0 secs/12.0 secs
Flexibility 80–120 km/h	6.7 secs/7.0 secs	6.4 secs/6.5 secs
(50-75 mph)	(5th/4th gear)	(5th/4th gear)
Fuel consumption/emissions In accordance with 80/1268/E0	Manual/Tiptronic S as valid at time of going to pre	Manual/Tiptronic S
Urban in I/100 km (mpg)	16.4 (17.2)/17.0 (16.6)	17.3 (16.3)/17.9 (15.8)
Extra urban in I/100 km (mpg)	8.1 (34.9)/8.1 (34.9)	8.4 (33.6)/8.4 (33.6)
Combined in I/100 km (mpg)	11.2 (25.2)/11.4 (24.8)	11.6 (24.4)/11.7 (24.1)
CO ₂ emissions (g/km)	270/275	280/283
Dimensions/aerodynamics		
Length	4,427 mm	4,427 mm
Width	1,808 mm	1,808 mm
Height	1,310 mm	1,300 mm
Wheelbase	2,350 mm	2,350 mm
Luggage compartment volume	135 litres	135 litres
(German Car Manufacturers' Ass	soc.)	
Tank capacity (refill volume)	64 litres	64 litres
Drag coefficient	0.29	0.29

^{*} Weight is calculated in accordance with the relevant EC Directives and is valid for standard specification vehicles only. Optional equipment means greater weight. The figure given includes 68 kg representing the driver and 7 kg for luggage.

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	911 Carrera 4 Cabriolet	911 Carrera 4S Cabriolet
Engine		
Cylinders	6	6
Displacement	3,596 cm ³	3,824 cm ³
Max. power (DIN)	239 kW (325 bhp)	261 kW (355 bhp)
at rpm	6,800	6,600
Max. torque	370 Nm	400 Nm
at rpm	4,250	4,600
Compression ratio	11.3:1	11.8:1
Transmission		
Layout	All-wheel drive	All-wheel drive
Manual gearbox	6-speed	6-speed
Tiptronic S (optional)	5-speed	5-speed
Chassis		
Front axle	McPherson-strut suspension	McPherson-strut suspension
Rear axle	LSA multi-link suspension	LSA multi-link suspension
Steering	Variable steering ratio,	Variable steering ratio,
Turning sivels	power-assisted (hydraulic)	power-assisted (hydraulic)
Turning circle Brakes	10.9 m	10.9 m
Вгаке ѕ	Four-piston monobloc aluminium	Four-piston monobloc aluminium
	fixed calipers front and rear, discs	fixed calipers front and rear, discs
Vahiala atabilita austau	internally vented and cross-drilled	internally vented and cross-drilled
Vehicle stability system	Enhanced PSM (with ABS 8.0)	Enhanced PSM (with ABS 8.0)
ABS	Bosch ABS 8.0	Bosch ABS 8.0
Wheels	Front: 8J x 18 ET 57	Front: 8J x 19 ET 57
_	Rear: 11J x 18 ET 51	Rear: 11J x 19 ET 51
Tyres	Front: 235/40 ZR 18	Front: 235/35 ZR 19
	Rear: 295/35 ZR 18	Rear: 305/30 ZR 19

	911 Carrera 4 Cabriolet	911 Carrera 4S Cabriolet
Weights	Manual/Tiptronic S	Manual/Tiptronic S
Unladen weight (DIN)	1,535 kg/1,575 kg	1,560 kg/1,600 kg
Unladen weight (EC)*	1,610 kg/1,650 kg	1,635 kg/1,675 kg
Permissible gross weight	1,920 kg/1,965 kg	1,930 kg/1,975 kg
Performance	Manual/Tiptronic S	Manual/Tiptronic S
Top speed	280 km/h (174 mph)/	288 km/h (179 mph)/
	275 km/h (171 mph)	280 km/h (174 mph)
0-100 km/h (0-62 mph)	5.3 secs/5.8 secs	4.9 secs/5.4 secs
0-160 km/h (0-99 mph)	11.6 secs/12.6 secs	11.1 secs/12.1 secs
Flexibility 80–120 km/h	6.8 secs/7.1 secs	6.5 secs/6.6 secs
(50-75 mph)	(5th/4th gear)	(5th/4th gear)
Fuel consumption/emissions In accordance with 80/1268/E0	Manual/Tiptronic S as valid at time of going to provide the second seco	Manual/Tiptronic S
Urban in I/100 km (mpg)	16.6 (17.0)/17.4 (16.2)	17.5 (16.1)/18.0 (15.7)
	0.4.(22.6).(0.6.(22.0)	8.5 (33.2)/8.6 (32.8)
Extra urban in I/100 km (mpg)	8.4 (33.6)/8.6 (32.8)	0.0 (33.2)/0.0 (32.0)
Extra urban in I/100 km (mpg) Combined in I/100 km (mpg)	11.3 (25.0)/11.6 (24.4)	11.8 (23.9)/11.9 (23.7)
. 10		. ,
Combined in I/100 km (mpg)	11.3 (25.0)/11.6 (24.4)	11.8 (23.9)/11.9 (23.7)
Combined in I/100 km (mpg) CO ₂ emissions (g/km)	11.3 (25.0)/11.6 (24.4)	11.8 (23.9)/11.9 (23.7)
Combined in I/100 km (mpg) CO ₂ emissions (g/km) Dimensions/aerodynamics	11.3 (25.0)/11.6 (24.4) 272/280	11.8 (23.9)/11.9 (23.7) 285/286
Combined in I/100 km (mpg) CO ₂ emissions (g/km) Dimensions/aerodynamics Length Width	11.3 (25.0)/11.6 (24.4) 272/280 4,427 mm	11.8 (23.9)/11.9 (23.7) 285/286 4,427 mm
Combined in I/100 km (mpg) CO ₂ emissions (g/km) Dimensions/aerodynamics Length	11.3 (25.0)/11.6 (24.4) 272/280 4,427 mm 1,852 mm	11.8 (23.9)/11.9 (23.7) 285/286 4,427 mm 1,852 mm
Combined in I/100 km (mpg) CO ₂ emissions (g/km) Dimensions/aerodynamics Length Width Height	11.3 (25.0)/11.6 (24.4) 272/280 4,427 mm 1,852 mm 1,310 mm	11.8 (23.9)/11.9 (23.7) 285/286 4,427 mm 1,852 mm 1,300 mm
Combined in I/100 km (mpg) CO ₂ emissions (g/km) Dimensions/aerodynamics Length Width Height Wheelbase	11.3 (25.0)/11.6 (24.4) 272/280 4,427 mm 1,852 mm 1,310 mm 2,350 mm	11.8 (23.9)/11.9 (23.7) 285/286 4,427 mm 1,852 mm 1,300 mm 2,350 mm
Combined in I/100 km (mpg) CO ₂ emissions (g/km) Dimensions/aerodynamics Length Width Height Wheelbase Luggage compartment volume	11.3 (25.0)/11.6 (24.4) 272/280 4,427 mm 1,852 mm 1,310 mm 2,350 mm	11.8 (23.9)/11.9 (23.7) 285/286 4,427 mm 1,852 mm 1,300 mm 2,350 mm

^{*} Weight is calculated in accordance with the relevant EC Directives and is valid for standard specification vehicles only.

Optional equipment means greater weight. The figure given includes 68 kg representing the driver and 7 kg for luggage.

	911 Carrera S Coupé	911 Carrera 4S Coupé
	with Powerkit	with Powerkit
Engine		
Cylinders	6	6
Displacement	3,824 cm ³	3,824 cm ³
Max. power (DIN)	280 kW (381 bhp)	280 kW (381 bhp)
at rpm	7,200	7,200
Max. torque	415 Nm	415 Nm
at rpm	5,500	5,500
Compression ratio	11.8:1	11.8:1
Performance	Manual/Tiptronic S	Manual/Tiptronic S
Top speed	300 km/h (186 mph)/	296 km/h (184 mph)/
	294 km/h (183 mph)	290 km/h (180 mph)
0-100 km/h (0-62 mph)	4.6 secs/5.1 secs	4.6 secs/5.1 secs
0-200 km/h (0-124 mph)	14.9 secs/17.6 secs	15.4 secs/18.1 secs
Flexibility 80-120 km/h	6.1 secs/6.2 secs	6.2 secs/6.3 secs
(50-75 mph)	(5th/4th gear)	(5th/4th gear)
Fuel consumption/emissions	Manual/Tiptronic S	Manual/Tiptronic S
In accordance with 80/1268/EC	as valid at time of going to press	
Urban in I/100 km (mpg)	18.1 (15.6)/18.8 (15.0)	18.4 (15.4)/18.9 (14.9)
		0.0.401.71.40.0.401.41
Extra urban in I/100 km (mpg)	8.6 (32.8)/8.8 (32.1)	8.9 (31.7)/9.0 (31.4)
Extra urban in I/100 km (mpg) Combined in I/100 km (mpg)	8.6 (32.8)/8.8 (32.1) 12.0 (23.5)/12.3 (23.0)	8.9 (31.7)/9.0 (31.4) 12.4 (22.8)/12.5 (22.6)

	911 Carrera S Cabriolet	911 Carrera 4S Cabriolet
	with Powerkit	with Powerkit
Engine		
Cylinders	6	6
Displacement	3,824 cm ³	3,824 cm ³
Max. power (DIN)	280 kW (381 bhp)	280 kW (381 bhp)
at rpm	7,200	7,200
Max. torque	415 Nm	415 Nm
at rpm	5,500	5,500
Compression ratio	11.8:1	11.8:1
Performance	Manual/Tiptronic S	Manual/Tiptronic S
Top speed	300 km/h (186 mph)/	296 km/h (184 mph)/
	294 km/h (183 mph)	290 km/h (180 mph)
0-100 km/h (0-62 mph)	4.7 secs/5.2 secs	4.7 secs/5.2 secs
0-200 km/h (0-124 mph)	15.5 secs/18.3 secs	16.0 secs/18.8 secs
Flexibility 80-120 km/h	6.4 secs/6.5 secs	6.5 secs/6.6 secs
(50-75 mph)	(5th/4th gear)	(5th/4th gear)
Fuel consumption/emissions	Manual/Tiptronic S	Manual/Tiptronic S
In accordance with 80/1268/E0	as valid at time of going to press	
Urban in I/100 km (mpg)	18.3 (15.4)/18.8 (15.0)	18.4 (15.4)/18.9 (14.9)
Extra urban in I/100 km (mpg)	8.7 (32.5)/8.8 (32.1)	8.9 (31.7)/9.0 (31.4)
Combined in I/100 km (mpg)	12.2 (23.2)/12.3 (23.0)	12.4 (22.8)/12.5 (22.6)
CO ₂ emissions (g/km)	293/296	299/300

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