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Press Information

Porsche 911 Carrera 4/4S and 911 Targa 4/4S

Contents

January 2016

Highlights

The new Porsche 911 Carrera 4 and 911 Targa 4

More powerful engines with better fuel economy, a new all-wheel drive system and an innovative infotainment system with online navigation are the key ingredients for even more driving pleasure in the all-wheel drive 911 models. In the changeover to the new generation 911 Carrera 4 and 911 Targa 4, the focus is on the newly developed, sporty and fuel-efficient three-litre twin-turbo flat engines that already power the 911 Carrera models. Power distribution to all four wheels is now handled by Porsche Traction Management (PTM) from the 911 Turbo with electrohydraulic control. The new 911 models show an innovative leap with a sharpened exterior design and inside with the new Porsche Communication Management with online navigation and multi-touch monitor.

Drivetrain

Three-litre six-cylinder flat engine with twin-turbo charging, power output of 272 kW (370 hp) in the 911 Carrera 4 and 911 Targa 4. The 911 Carrera 4S and 911 Targa 4S have a power output of 309 kW (420 hp). This represents 15 kW (20 hp) more output for each model than before. The cars also offer a full measure of torque from a low 1,700 rpm and a usable speed range of up to 7,500 rpm. These are the characteristic data of exceptionally free-revving sports car engines.

Performance

With their new all-wheel drive system, the 911 Carrera 4 models now accelerate faster than their counterparts with rear-wheel drive. Expressed in figures: the 911 Carrera 4 Coupé with PDK and Sport Chrono Package sprints from zero to 100 km/h in 4.1 seconds (-0.4 s) and the S model in 3.8 seconds (-0.3 s). The Cabriolet and Targa models are just 0.2 seconds slower. Their top speeds range from 287 km/h to 305 km/h depending on the model and equipment. Sport mode of the PSM with extended performance limits for very dynamic sports car drivers.

Efficiency

Reduced fuel consumption thanks to Porsche turbocharging. In the 911 Carrera 4 Coupé with PDK, for instance, it is 7.7 l/100 km. That is 0.9 litre less per 100 km than the previous model.

Chassis

The 911 Carrera 4 and 911 Targa 4 once again significantly widen the spread between sportiness and comfort. Ten millimetres lower ride height, further developed adaptive PASM chassis as standard and optional rear axle steering for the 911 Carrera 4S and 911 Targa 4S. New automatic post-collision braking system is standard.

Infotainment

The new Porsche Communication Management system with online navigation and a state-of-the-art touchscreen is as easy to operate as a smartphone and offers new connectivity features. They include traffic information in real time, Google Earth and Google Street View. It is very easy to network with a smartphone. Numerous apps are available.

New turbo engines and new all-wheel drive system

All-wheel drive 911 cars benefit from generation changeover

Over one-third of Porsche 911 buyers choose a model with all-wheel drive. Buyers of the new 911 Carrera 4 and 911 Targa 4 will now benefit from the extra sportiness and comfort offered in this latest 911 generation. The innovative turbo engines have higher power outputs and consume less fuel, and the further developed all-wheel drive system boosts driving dynamics and safety. The standard adaptive PASM chassis with a ten millimetre lower ride height offers an even greater spread between circuit track and long distance driving. Rear axle steering – now available as an option in the 911 Carrera 4S and 911 Targa 4S models for the first time – extends the driving dynamic range even further. Inside the car, the new standard Porsche Communication Management (PCM) system offers extended functionality. It features online navigation, more connectivity and smartphone-like operation via a multi-touch monitor.

The all-wheel drive models not only adopt the many visual refinements of the new generation of 911 Carrera cars, they also set themselves apart with independent traits. The light bar between the rear lights, for instance, now has a very sculptural look. When the light is on, its depth effect is reinforced. The light bar also underscores the typical proportions of the all-wheel drive 911 cars, whose rear bodies are 44 millimetres wider, as usual. Other identifying traits of the new generation 911 cars range from their headlights with four-point daytime running lights to new door handles without shell inserts and a newly designed rear lid with vertical louvres and new three-dimensional rear lights with aura-like illumination and the characteristic four-point brake lights.

The further developed appearance underscores the extravagant elegance of the 911 Targa. With its individual design, the new 911 Targa continues to clearly set itself apart from the Coupé and Cabriolet. In a spectacular way, it combines the classic Targa idea with cutting-edge roof-activating convenience. Like the legendary original Targa, the new model has the familiar wide bar in place of B pillars, a moveable roof section over the front seats and a wrap-around rear window without C pillars. The roof section can be opened or closed at the push of a button, and when opened, the roof element is stowed behind the rear seats.

Attractive new exterior and interior colours round out its features. The new special colours carmine red and Miami blue will be introduced with the all-wheel drive 911 models. Inside, saddle brown is available as a new leather colour; also new are the special colour Bordeaux red and the new two-tone black/Bordeaux red interior.

Engines and drivetrain

More power and more torque result in faster sprints

Over four decades of Porsche experience with turbo engines from motorsport and production sports cars has gone into the newly developed flat engines. The results: all new 911 Carrera models fascinate with top grades in performance, driving pleasure and efficiency. Thanks to twin-turbo charging, the three-litre six-cylinder engines attain a power output of 272 kW (370 hp) and a torque of 450 Nm in the 911 Carrera 4 and 911 Targa 4. In the S models, the power output increases to 309 kW (420 hp) and torque to 500 Nm. This means that in both models the driver can convert an extra 15 kW (20 hp) and 60 Nm of torque into driving pleasure. The greater power of the S models comes from turbochargers with larger compressors, a specially designed exhaust system and a different engine management tuning.

For the first time, in combination with the all-wheel drive system that now features electro-hydraulic control, the 911 Carrera 4 models even have better acceleration figures than their rear-wheel drive counterparts. When equipped with the optional PDK and Sport Chrono Package, the 911 Carrera 4 sprints from zero to 100 km/h in 4.1 seconds (0.4 s faster than the previous model). The S model accelerates to 100 km/h in 3.8 seconds (0.3 s faster). The convertibles and the comparably equipped 911 Targa 4 take just a split second longer at an extra 0.2 seconds. Their top speeds range from 287 km/h to 305 km/h depending on the model and equipment.

Each new engine generation from Porsche traditionally combines greater output with better fuel economy. For instance, the fuel consumption of the 911 Carrera 4 Coupé with PDK has been reduced to 7.7 l/100 km. That is 0.9 litre less per 100 km than the previous model.

Inspiration from the 918 Spyder: new steering wheel with mode switch

In conjunction with the optional Sport Chrono Package, the new 911 models now have a mode switch on the steering wheel that was derived from the 918 Spyder. The mode switch consists of a rotary ring with four positions for the driving modes Normal, Sport, Sport Plus and Individual. A menu in the instrument cluster is used to combine individual settings for

the PASM, PDCC, auto stop-start function and sport exhaust system with the preferred driving modes. If the car is equipped with a PDK transmission, the mode switch has an additional button, the “Sport Response Button”. When it is pressed, the drivetrain gets set up for maximum acceleration for 20 seconds, for instance to prepare for overtaking manoeuvres. To this end, the optimal gear is engaged and for a short time the turbochargers are prepared for even more spontaneous response.

New gear ratios for manual transmission that has two-disc clutch for first time

Porsche has developed a two-disc clutch for the new generation of engines. It enables comfortable actuation forces despite the high torques that are being transmitted from the new turbocharged engines. This lets drivers enjoy the sports car‘s dynamism, e.g. on mountain roads with lots of bends or on circuit racetracks, without impairing shifting pleasure by strenuous clutch work. The gear ratios were adapted to the modified engine characteristic. The longer gear ratios, which start with the third gear, enable good fuel economy without affecting the car‘s sportiness.

PDK has new operating logic and virtual intermediate gears

The top priority in advanced development of the optional PDK was on realising greater efficiency while maintaining high levels of sportiness and comfort. For the driver, this is most apparent in the new direction in which the selector lever is moved for shifts. As in the 911 GT3 and many Porsche race vehicles, pulling the lever back now means upshifting, while pressing it forward downshifts. The PDK now also has a dual-mass flywheel with a centrifugal pendulum, intelligent overrun cut-off and virtual gears. The centrifugal pendulum, which incidentally is also used with the manual transmission, is an adaptive vibration absorber that dampens drivetrain vibrations over a broad range of engine speeds. The effect: when driving slowly, the driver can drive in a higher gear with low revs without any jolts. This enhances ride comfort and also saves on fuel.

The efficiency gains made in the 911 models with PDK are also attributable to new functions: intelligent overrun cut-off and virtual intermediate gears. Intelligent overrun cut-off occurs in such situations as when the driver releases the accelerator pedal on a motorway descent. At first, the drive control system switches to what is referred to as a coasting mode with open clutches and the engine idling. If the car's speed continues to increase, intelligent overrun cut-off engages the clutch and shuts off the fuel injection. The automatic stop-start system has learned to interrupt the flow of fuel early – at speeds below seven km/h – when rolling to a stop such as at a red light.

Virtual intermediate gears are employed during smooth, constant driving to reduce revs whenever shifting to the next higher gear would drop revs below the engine's lower rev limit. To employ the virtual gears, the transmission controller engages the higher gear, controls the relevant clutch for defined slip and transmits the drive power in this way. When the driver accelerates, the dual clutch transmission downshifts to the proper gear at lightning speed. Since the PDK has oil bath clutches, this innovative transmission function is entirely wear-free.

New all-wheel drive system with electrohydraulic control

Porsche is implementing the Porsche Traction Management (PTM) of the 911 Turbo in the new all-wheel drive 911 cars for even faster and more specific power distribution to the two axles. Here, a multi-plate clutch with electrohydraulic control supplementally engages the front-axle drive as needed for the driving situation. This functional principle lets the PTM react more quickly and sensitively than was the case in the previous models. This results in more dynamic and precise control of drive forces at the front axle, offering advantages in traction and driving dynamics. The new system can also direct more drive torque to the front wheels if necessary. At the same time, the optimised interaction of engine, transmission and all-wheel drive system contributes to even better sprinting abilities in the new all-wheel drive models.

New sport exhaust system as an option

The new switchable sport exhaust system is available as an option. Its characteristic elements are two round dual tailpipes, which are now centrally located, and of course its incomparable sporty sound. Incidentally, this sound is not digitally modified, and it enables a very quiet and discreet sound stage for relaxed cruising.

Chassis and brakes

A standard feature: PASM chassis with ten millimetre lower ride height

A Porsche 911 with all-wheel drive represents an exemplary combination of traction and driving safety with sporty driving dynamics. In the new generation, Porsche is extending this spread even more. The revised all-wheel drive system harmonises especially well with the newly tuned PASM chassis with its ten millimetre lower ride height. For the first time, this chassis is standard equipment in all Carrera models, boosting stability during fast cornering. At the same time, the new shock absorber generation with its broader spread of characteristics enhances comfort by its even more precise response characteristic and improves car body connection during dynamic driving.

A sport chassis is available as an option for the 911 Carrera 4 Coupé versions; it lowers the ride height by an additional ten millimetres compared to the new standard chassis, yet it also offers significantly better comfort due to its new tuning. For drivers with even sportier aspirations, Porsche Dynamic Chassis Control (PDCC) – an active roll compensation system – is available as an option.

When equipped with the optional active rear axle steering that is available for the 911 Carrera 4S and 911 Targa 4S, the new models benefit from chassis technology from the 911 Turbo and 911 GT3. Stability is noticeably increased in the 911 cars when the front and rear wheels are turned in the same direction starting at a speed of 80 km/h. At speeds up to 50 km/h, the wheels are turned counter to one another for improved agility. This also provides for better manoeuvrability in city traffic thanks to its turning circle being reduced by 0.4 metres. The improved handling is transmitted to the driver via the new generation steering wheel with a design based on the steering wheel of the 918 Spyder. The basic steering wheel has a diameter of 375 millimetres, and the optional GT sport steering wheel measures 360 millimetres. For uncompromising everyday practicality, Porsche offers a hydraulic lift system with lifting cylinders integrated into the struts of the front suspension. At the push of a button, ground clearance at the front is increased by 40 millimetres within 5 seconds, which prevents the vehicle underbody from touching the ground, such as on steep garage exits.

Reinforced brake system now has automatic post-collision braking system

Whenever the performance of a Porsche car is enhanced, Porsche also strengthens its braking ability. The front brakes of the 911 Carrera and 911 Targa 4 now have new, larger four-piston brake callipers, which grip brake discs (330 mm x 34 mm) that are six millimetres thicker. In the 911 Carrera 4S and 911 Targa 4S, Porsche uses six-piston callipers and brake discs that are ten millimetres larger in diameter at 350 mm x 34 mm. They are joined by pins to a new aluminium brake bell, which reduces unsprung masses and thereby contributes toward better driving dynamics. The optional ceramic brake system (PCCB) now comes entirely from the 911 Turbo, so it includes larger brake discs (front: 410 mm x 36 mm, rear: 390 mm x 32 mm) and larger brake callipers to match.

On top of that, Porsche is equipping its new generation 911 cars with an automatic post-collision braking system. This system can reduce the severity of a secondary collision by automatically braking the vehicle after an initial collision. The automatic post-collision braking system is triggered when the airbag sensors detect an impact of a specific severity. Then the system autonomously initiates braking at a maximum deceleration rate of 0.6 g. The driver can override the automatic post-collision braking system at any time. Its functionality is deactivated when the driver presses the accelerator pedal, for instance. It is also deactivated if the driver initiates hard braking at an even higher rate of deceleration. Essentially, the assistance system applies the brakes until a residual vehicle speed of ten km/h is reached.

Porsche Stability Management with new PSM Sport mode

The sharpened sportiness of the 911 cars also influenced the control of Porsche Stability Management (PSM). In conjunction with the optional Sport Chrono Package, the system offers a separate mode setting known as “PSM Sport” that is activated by pushing the PSM button on the centre console. Functionally, it differs significantly from the normal PSM On mode, and its activation is now independent of the Sport Plus mode of the Sport Chrono Package. When the PSM Sport mode is activated, an indicator in the instrument cluster and the yellow “PSM Off” lamp light up to inform the driver. The new PSM Sport mode lets drivers with racing aspirations approach the performance limits of the 911 even closer – such

as on a circuit track. Compared to PSM On, the new function permits much larger yaw movements about the vertical axis and more slip at the drive wheels, letting drivers experience the sports car's dynamic performance even better. This makes it unnecessary for even ambitious sports car drivers to fully deactivate PSM. However, the PSM Off mode is still available, which is selected by a long activation of the PSM button. This is in keeping with the Porsche philosophy that drivers should be able to fully deactivate control systems if they wish. But even in the PSM Off mode and new PSM Sport mode, hard braking within the ABS control range activates the full range of stabilising assistance by PSM until the brakes are released.

Specifications Porsche 911 Carrera 4*

Body:

Two-plus-two seat coupé; lightweight body in aluminium-steel construction with doors, boot and bonnet lids made of aluminium; two-stage driver and front passenger airbags; side and head airbags for driver and front passenger.

Aerodynamics:

Drag coefficient c_d:	0.29
Frontal area A:	2.05 m^2
c_d x A:	0.6

Engine:

Water-cooled flat-six engine; aluminium engine block and cylinder heads; four overhead camshafts, four valves per cylinder, variable inlet and outlet valve timing; inlet valve lift (VarioCam Plus); hydraulic valve clearance adjustment; direct petrol injection; bi-turbo charging; one three-way catalytic converter per cylinder bank, each with two oxygen sensors; engine oil 13.1 litres (refill volume 8.0 litres); electronic ignition with solid-state ignition distribution (six active ignition modules); thermal management for coolant circulation; auto start/stop function.

Bore	91.0 mm
Stroke	76.4 mm
Displacement	2,981 cm^3
Compression ratio	10:1
Engine power	370 hp (272 kW) at 6,500 rpm
Max. torque	450 Nm at 1,700 – 5,000 rpm
Power output per litre	124.1 hp/l (91.2 kW/l)
Max. engine speed	7,500 rpm
Fuel type	super plus

Electrical system:

12 Volt; alternator 2,450 W; battery 80 Ah; electrical system recuperation.

* Specifications may vary according to markets

Status: January 2016

Power transmission: Engine and transmission bolted to form one drive unit; active all-wheel drive with electro-hydraulically controlled, map-controlled multi-plate clutch (PTM); seven-speed manual transmission with two-disc clutch; optional seven-speed dual clutch transmission (PDK).

Gear ratios	Manual transmission	PDK
1st gear	3.91	3.91
2nd gear	2.29	2.29
3rd gear	1.58	1.58
4th gear	1.18	1.18
5th gear	0.94	0.94
6th gear	0.79	0.79
7th gear	0.62	0.62
Reverse	3.55	3.55
Total RA ratio	3.09	3.09
Final drive ratio, front axle	3.46	3.46
Clutch diameter	240 mm	202/153 mm

Chassis: Front axle: strut suspension (MacPherson type, Porsche optimised) with wheels independently suspended by transverse links, longitudinal links and struts; cylindrical coil springs with internal dampers; electromechanical power steering; optional front axle lift system.

Rear axle: multi-link suspension with wheels independently suspended on five links; cylindrical coil springs with coaxial internal dampers.

Porsche Active Suspension Management (PASM) with electronically controlled dampers; two manually selectable damping programmes.

Brakes:	Dual-circuit brake system with separate circuits for front and rear axles; Porsche Stability Management (PSM); vacuum brake booster; brake assistant; electric duo-servo parking brake; auto-hold function; post-collision braking system. Front axle: four-piston aluminium monobloc brake callipers, perforated and internally ventilated brake discs with 330 mm diameter and 34 mm thickness. Rear axle: four-piston aluminium monobloc brake callipers, perforated and internally ventilated brake discs with 330 mm diameter and 28 mm thickness.			
Wheels and tyres:	Front	8.5 J x 19	with	235/40 ZR 19
	Rear	11.5 J x 19	with	295/35 ZR 19
Weights:	Unladen weight (DIN)			1,480 (1,500) kg
	Permissible gross weight			1,925 (1,940) kg
Dimensions:	Length			4,499 mm
	Width			1,852 mm
	Width with door mirrors			1,978 mm
	Height			1,295 mm
	Wheelbase			2,450 mm
	Track widths		front	1,541 mm
			rear	1,558 mm
	Luggage comp. capacity		front	125 l
			rear	260 l
	Fuel tank capacity (refill volume)			68 l (67 l)

Values in brackets refer to vehicles with PDK transmission.

Performance figures:	Top speed	292 (290) km/h
	Acceleration	
	0 – 100 km/h	4.5 (4.3) s
	with Sport Plus and PDK	4.1 s
	0 – 200 km/h	15.8 (15.3) s
	with Sport Plus and PDK	15.0 s
Fuel consumption:	Combined	8.7 (7.7) l/100 km
(NEDC)	Urban	12.2 (10.1) l/100 km
	Extra-urban	6.7 (6.3) l/100 km
CO_2 emissions:	Combined	201 (177) g/km
Emissions class:		Euro 6

Values in brackets refer to vehicles with PDK transmission.

Specifications Porsche 911 Carrera 4S*

Body:

Two-plus-two seat coupé; lightweight body in aluminium-steel construction with doors, boot and bonnet lids made of aluminium; two-stage driver and front passenger airbags; side and head airbags for driver and front passenger.

Aerodynamics:

Drag coefficient c_d:	0.30
Frontal area A:	2.05 m^2
c_d x A:	0.62

Engine:

Water-cooled flat-six engine; aluminium engine block and cylinder heads; four overhead camshafts, four valves per cylinder, variable inlet and outlet valve timing; inlet valve lift (VarioCam Plus); hydraulic valve clearance adjustment; direct petrol injection; bi-turbo charging; one three-way catalytic converter per cylinder bank, each with two oxygen sensors; engine oil 13.1 litres (refill volume 8.0 litres); electronic ignition with solid-state ignition distribution (six active ignition modules); thermal management for coolant circulation; auto start/stop function.

Bore	91.0 mm
Stroke	76.4 mm
Displacement	2,981 cm^3
Compression ratio	10:1
Engine power	420 hp (309 kW) at 6,500 rpm
Max. torque	500 Nm at 1,700 – 5,000 rpm
Power output per litre	140.9 hp/l (103.7 kW/l)
Max. engine speed	7,500 rpm
Fuel type	super plus

Electrical system:

12 Volt; alternator 2,940 W; battery 80 Ah; electrical system recuperation.

* Specifications may vary according to markets

Status: January 2016

Power transmission: Engine and transmission bolted into combined drive unit; active all-wheel drive with electro-hydraulically controlled, map-controlled multi-plate clutch (PTM); seven-speed manual transmission with mechanically locking rear differential and Porsche Torque Vectoring (PTV); optional seven-speed dual clutch transmission (PDK) with controlled rear locking differential and PTV Plus.

Gear ratios	Manual transmission	PDK
1st gear	3.91	3.91
2nd gear	2.29	2.29
3rd gear	1.58	1.58
4th gear	1.18	1.18
5th gear	0.94	0.94
6th gear	0.79	0.79
7th gear	0.62	0.62
Reverse	3.55	3.55
Total RA ratio	3.09	3.09
Final drive ratio, front axle	3.46	3.46
Clutch diameter	240 mm	202/153 mm

Chassis: Front axle: strut suspension (MacPherson type, Porsche optimised) with wheels independently suspended by transverse links, longitudinal links and struts; cylindrical coil springs with internal dampers; electromechanical power steering; optional front axle lift system.

Rear axle: multi-link suspension with wheels independently suspended on five links; cylindrical coil springs with coaxial internal dampers; optional rear-wheel steering.

Porsche Active Suspension Management (PASM) with electronically controlled dampers; two manually selectable damping programmes.

Brakes:

Dual-circuit brake system with separate circuits for front and rear axles; Porsche Stability Management (PSM); vacuum brake booster; brake assistant; electric duo-servo parking brake; auto-hold function; post-collision braking system.

Front axle: six-piston aluminium monobloc brake callipers, perforated and internally ventilated brake discs with 350 mm diameter and 34 mm thickness.

Rear axle: four-piston aluminium monobloc brake callipers, perforated and internally ventilated brake discs with 330 mm diameter and 28 mm thickness.

Wheels and tyres:	Front	8.5 J x 20	with	245/35 ZR 20
	Rear	11.5 J x 20	with	305/30 ZR 20
Weights:	Unladen weight (DIN)			1,490 (1,510) kg
	Permissible gross weight			1,950 (1,965) kg
Dimensions:	Length			4,499 mm
	Width			1,852 mm
	Width with door mirrors			1,978 mm
	Height			1,298 mm
	Wheelbase			2,450 mm
	Track widths		front	1,543 mm
			rear	1,558 mm
	Luggage comp. capacity		front	125 l
			rear	260 l
	Fuel tank capacity (refill volume)			68 l (67 l)

Values in brackets refer to vehicles with PDK transmission.

Performance figures:	Top speed	305 (303) km/h
	Acceleration	
	0 – 100 km/h	4.2 (4.0) s
	with Sport Plus and PDK	3.8 s
	0 – 200 km/h	14.1 (13.6) s
	with Sport Plus and PDK	13.3 s
Fuel consumption:	Combined	8.9 (7.9) l/100 km
(NEDC)	Urban	12.4 (10.3) l/100 km
	Extra-urban	6.8 (6.6) l/100 km
CO_2 emissions:	Combined	204 (180) g/km
Emissions class:		Euro 6

Values in brackets refer to vehicles with PDK transmission.

Specifications Porsche 911 Carrera 4 Cabriolet*

Body:

Two-plus-two seat cabriolet; lightweight body in aluminium-steel construction with doors, boot and bonnet lids made of aluminium; fully automatic panel bow top; two-stage driver and front passenger airbags; side and head airbags for driver and front passenger.

Aerodynamics:

Drag coefficient c_d:	0.30
Frontal area A:	2.05 m^2
c_d x A:	0.62

Engine:

Water-cooled flat-six engine; aluminium engine block and cylinder heads; four overhead camshafts, four valves per cylinder, variable inlet and outlet valve timing; inlet valve lift (VarioCam Plus); hydraulic valve clearance adjustment; direct petrol injection; bi-turbo charging; one three-way catalytic converter per cylinder bank, each with two oxygen sensors; engine oil 13.1 litres (refill volume 8.0 litres); electronic ignition with solid-state ignition distribution (six active ignition modules); thermal management for coolant circulation; auto start/stop function.

Bore	91.0 mm
Stroke	76.4 mm
Displacement	2,981 cm^3
Compression ratio	10:1
Engine power	370 hp (272 kW) at 6,500 rpm
Max. torque	450 Nm at 1,700 – 5,000 rpm
Power output per litre	124.1 hp/l (91.2 kW/l)
Max. engine speed	7,500 rpm
Fuel type	super plus

Electrical system:

12 Volt; alternator 2,450 W; battery 80 Ah; electrical system recuperation.

* Specifications may vary according to markets

Status: January 2016

Power transmission: Engine and transmission bolted to form one drive unit; active all-wheel drive with electro-hydraulically controlled, map-controlled multi-plate clutch (PTM); seven-speed manual transmission with two-disc clutch; optional seven-speed dual clutch transmission (PDK).

Gear ratios	Manual transmission	PDK
1st gear	3.91	3.91
2nd gear	2.29	2.29
3rd gear	1.58	1.58
4th gear	1.18	1.18
5th gear	0.94	0.94
6th gear	0.79	0.79
7th gear	0.62	0.62
Reverse	3.55	3.55
Total RA ratio	3.09	3.09
Final drive ratio, front axle	3.46	3.46
Clutch diameter	240 mm	202/153 mm

Chassis: Front axle: strut suspension (MacPherson type, Porsche optimised) with wheels independently suspended by transverse links, longitudinal links and struts; cylindrical coil springs with internal dampers; electromechanical power steering; optional front axle lift system.

Rear axle: multi-link suspension with wheels independently suspended on five links; cylindrical coil springs with coaxial internal dampers.

Porsche Active Suspension Management (PASM) with electronically controlled dampers; two manually selectable damping programmes.

Brakes:

Dual-circuit brake system with separate circuits for front and rear axles; Porsche Stability Management (PSM); vacuum brake booster; brake assistant; electric duo-servo parking brake; auto-hold function; post-collision braking system.

Front axle: four-piston aluminium monobloc brake callipers, perforated and internally ventilated brake discs with 330 mm diameter and 34 mm thickness.

Rear axle: four-piston aluminium monobloc brake callipers, perforated and internally ventilated brake discs with 330 mm diameter and 28 mm thickness.

Wheels and tyres:	Front	8.5 J x 19	with	235/40 ZR 19
	Rear	11.5 J x 19	with	295/35 ZR 19
Weights:	Unladen weight (DIN)			1,550 (1,570) kg
	Permissible gross weight			1,975 (1,990) kg
Dimensions:	Length			4,499 mm
	Width			1,852 mm
	Width with door mirrors			1,978 mm
	Height			1,290 mm
	Wheelbase			2,450 mm
	Track widths		front	1,541 mm
			rear	1,558 mm
	Luggage comp. capacity		front	125 l
			rear	160 l
	Fuel tank capacity (refill volume)			68 l (67 l)

Values in brackets refer to vehicles with PDK transmission.

Performance figures:	Top speed	289 (287) km/h
	Acceleration	
	0 – 100 km/h	4.7 (4.5) s
	with Sport Plus and PDK	4.3 s
	0 – 200 km/h	16.5 (16.0) s
	with Sport Plus and PDK	15.7 s
Fuel consumption:	Combined	8.9 (7.9) l/100 km
(NEDC)	Urban	12.4 (10.3) l/100 km
	Extra-urban	6.9 (6.5) l/100 km
CO_2 emissions:	Combined	206 (182) g/km
Emissions class:		Euro 6

Values in brackets refer to vehicles with PDK transmission.

Specifications Porsche 911 Carrera 4S Cabriolet*

Body: Two-plus-two seat cabriolet; lightweight body in aluminium-steel construction with doors, boot and bonnet lids made of aluminium; fully automatic panel bow top; two-stage driver and front passenger airbags; side and head airbags for driver and front passenger.

Aerodynamics:

Drag coefficient c_d:	0.30
Frontal area A:	2.05 m^2
c_d x A:	0.62

Engine: Water-cooled flat-six engine; aluminium engine block and cylinder heads; four overhead camshafts, four valves per cylinder, variable inlet and outlet valve timing; inlet valve lift (VarioCam Plus); hydraulic valve clearance adjustment; direct petrol injection; bi-turbo charging; one three-way catalytic converter per cylinder bank, each with two oxygen sensors; engine oil 13.1 litres (refill volume 8.0 litres); electronic ignition with solid-state ignition distribution (six active ignition modules); thermal management for coolant circulation; auto start/stop function.

Bore	91.0 mm
Stroke	76.4 mm
Displacement	2,981 cm^3
Compression ratio	10:1
Engine power	420 hp (309 kW) at 6,500 rpm
Max. torque	500 Nm at 1,700 – 5,000 rpm
Power output per litre	140.9 hp/l (103.7 kW/l)
Max. engine speed	7,500 rpm
Fuel type	super plus

Electrical system: 12 Volt; alternator 2,940 W; battery 80 Ah; electrical system recuperation.

* Specifications may vary according to markets

Status: January 2016

Power transmission: Engine and transmission bolted into combined drive unit; active all-wheel drive with electro-hydraulically controlled, map-controlled multi-plate clutch (PTM); seven-speed manual transmission with two-disc clutch, mechanically locking rear differential and Porsche Torque Vectoring (PTV); optional seven-speed dual clutch transmission (PDK) with controlled rear locking differential and PTV Plus.

Gear ratios	Manual transmission	PDK
1st gear	3.91	3.91
2nd gear	2.29	2.29
3rd gear	1.58	1.58
4th gear	1.18	1.18
5th gear	0.94	0.94
6th gear	0.79	0.79
7th gear	0.62	0.62
Reverse	3.55	3.55
Total RA ratio	3.09	3.09
Final drive ratio, front axle	3.46	3.46
Clutch diameter	240 mm	202/153 mm

Chassis: Front axle: strut suspension (MacPherson type, Porsche optimised) with wheels independently suspended by transverse links, longitudinal links and struts; cylindrical coil springs with internal dampers; electromechanical power steering; optional front axle lift system.

Rear axle: multi-link suspension with wheels independently suspended on five links; cylindrical coil springs with coaxial internal dampers; optional rear-wheel steering.

Porsche Active Suspension Management (PASM) with electronically controlled dampers; two manually selectable damping programmes.

Brakes:	Dual-circuit brake system with separate circuits for front and rear axles; Porsche Stability Management (PSM); vacuum brake booster; brake assistant; electric duo-servo parking brake; auto-hold function; post-collision braking system. Front axle: six-piston aluminium monobloc brake callipers, perforated and internally ventilated brake discs with 350 mm diameter and 34 mm thickness. Rear axle: four-piston aluminium monobloc brake callipers, perforated and internally ventilated brake discs with 330 mm diameter and 28 mm thickness.			
Wheels and tyres:	Front	8.5 J x 20	with	245/35 ZR 20
	Rear	11.5 J x 20	with	305/30 ZR 20
Weights:	Unladen weight (DIN)			1,560 (1,580) kg
	Permissible gross weight			2,000 (2,015) kg
Dimensions:	Length			4,499 mm
	Width			1,852 mm
	Width with door mirrors			1,978 mm
	Height			1,293 mm
	Wheelbase			2,450 mm
	Track widths		front	1,543 mm
			rear	1,558 mm
	Luggage comp. capacity		front	125 l
			rear	160 l
	Fuel tank capacity (refill volume)			68 l (67 l)

Values in brackets refer to vehicles with PDK transmission.

Performance figures:	Top speed	303 (301) km/h
	Acceleration	
	0 – 100 km/h	4.4 (4.2) s
	with Sport Plus and PDK	4.0 s
	0 – 200 km/h	14.8 (14.3) s
	with Sport Plus and PDK	14.0 s
Fuel consumption:	Combined	9.0 (8.0) l/100 km
(NEDC)	Urban	12.6 (10.4) l/100 km
	Extra-urban	6.8 (6.7) l/100 km
CO_2 emissions:	Combined	208 (184) g/km
Emissions class:		Euro 6

Values in brackets refer to vehicles with PDK transmission.

Specifications Porsche 911 Targa 4*

Body:

Two-plus-two seat Targa with steel rollover protection bar and retractable central roof section; lightweight body in intelligent aluminum-steel construction with wings, doors, boot and bonnet lids made of aluminum; two-stage driver and front passenger airbags; side and head airbags for driver and front passenger.

Aerodynamics:

Drag coefficient c_d:	0.30
Frontal area A:	2.05 m^2
c_d x A:	0.62

Engine:

Water-cooled flat-six engine; aluminum engine block and cylinder heads; four overhead camshafts, four valves per cylinder; variable inlet and outlet valve timing, inlet valve lift (VarioCam Plus); hydraulic valve clearance adjustment; direct petrol injection; bi-turbo charging; one three-way catalytic converter per cylinder bank, each with two oxygen sensors; engine oil 13.1 liters (refill volume 8.0 liters); electronic ignition with solid-state ignition distribution (six active ignition modules); thermal management for coolant circulation; auto start/stop function.

Bore	91.0 mm
Stroke	76.4 mm
Displacement	2,981 cm^3
Compression ratio	10:1
Engine power	370 hp (272 kW) at 6,500 rpm
Max. torque	450 Nm at 1,700 – 5,000 rpm
Power output per liter	124.1 hp/l (91.2 kW/l)
Max. engine speed	7,500 rpm
Fuel type	super plus

Electrical system:

12 Volt; alternator 2,450 W; battery 80 Ah; electrical system recuperation.

* Specifications may vary according to markets

Status: January 2016

Power transmission: Engine and transmission bolted together to form a single drive unit; active all-wheel drive with electro-hydraulically actuated, map-controlled multi-plate clutch (PTM); seven-speed manual transmission with two-plate clutch; optional seven-speed dual clutch transmission (PDK)

Gear ratios	Manual transmission	PDK
1st gear	3.91	3.91
2nd gear	2.29	2.29
3rd gear	1.58	1.58
4th gear	1.18	1.18
5th gear	0.94	0.94
6th gear	0.79	0.79
7th gear	0.62	0.62
Reverse	3.55	3.55
Constant RA ratio	1.16	1.16
Total RA ratio	3.09	3.09
Final drive ratio, front axle	3.46	3.46
Clutch diameter	228 mm	202/153 mm

Chassis: Front axle: strut suspension (MacPherson type, Porsche optimized) with wheels independently suspended by transverse links, longitudinal links and struts; cylindrical coil springs with internal dampers; electromechanical power steering; optional front axle lift system.

Rear axle: multi-link suspension with wheels independently suspended on five links; cylindrical coil springs with coaxial internal dampers.

Porsche Active Suspension Management (PASM) with electronically controlled dampers; two manually selectable damping programs.

Brakes:

Dual-circuit brake system with separate circuits for front and rear axles; Porsche Stability Management (PSM); vacuum brake booster; brake assistant; electric duo-servo parking brake; auto-hold function; post-collision braking system.

Front axle: four-piston aluminum monobloc brake calipers, perforated and internally ventilated brake discs with 330 mm diameter and 34 mm thickness.

Rear axle: four-piston aluminum monobloc brake calipers, perforated and internally ventilated brake discs with 330 mm diameter and 28 mm thickness.

Wheels and tires:	front	8.5 J x 19	with	235/40 ZR 19
	rear	11.5 J x 19	with	295/35 ZR 19
Weights:	Unladen weight (DIN)			1,570 (1,590) kg
	Permissible gross weight			2,000 (2,015) kg
Dimensions:	Length			4,499 mm
	Width			1,852 mm
	Width with door mirrors			1,978 mm
	Height			1,288 mm
	Wheelbase			2,450 mm
	Track widths		front	1,541 mm
			rear	1,558 mm
	Luggage comp. capacity		front	125 l
			rear	160 l
	Fuel tank capacity (Refill volume)			68 l (67 l)

Values in brackets refer to vehicles with PDK transmission.

Performance figures:	Top speed	289 (287) km/h
	Acceleration	
	0 – 100 km/h	4.7 (4.5) s
	with Sport Plus and PDK	4.3 s
	0 – 200 km/h	16.5 (16.0) s
	with Sport Plus and PDK	15.7 s
	0 – 60 mph	4.5 (4.3) s
	with Sport Plus and PDK	4.1 s
	1/4 mile (400 m)	12.9 (12.7) s
	with Sport Plus and PDK	12.6 s
Fuel consumption:	Combined	8.9 (7.9) l/100 km
(NEDC)	Urban	12.4 (10.3) l/100 km
	Extra-urban	6.9 (6.5) l/100 km
CO_2 emissions:	Combined	206 (182) g/km
Emissions class:		Euro 6

Values in brackets refer to vehicles with PDK transmission.

Specifications Porsche 911 Targa 4S*

Body:

Two-plus-two seat Targa with steel rollover protection bar and retractable central roof section; lightweight body in intelligent aluminum-steel construction with wings, doors, boot and bonnet lids made of aluminum; two-stage driver and front passenger airbags; side and head airbags for driver and front passenger.

Aerodynamics:

Drag coefficient c_d:	0.30
Frontal area A:	2.05 m^2
c_d x A:	0.62

Engine:

Water-cooled flat-six engine; aluminum engine block and cylinder heads; four overhead camshafts, four valves per cylinder; variable inlet and outlet valve timing, inlet valve lift (VarioCam Plus); hydraulic valve clearance adjustment; direct petrol injection; bi-turbo charging; one three-way catalytic converter per cylinder bank, each with two oxygen sensors; engine oil 13.1 liters (refill volume 8.0 liters); electronic ignition with solid-state ignition distribution (six active ignition modules); thermal management for coolant circulation; auto start/stop function.

Bore	91.0 mm
Stroke	76.4 mm
Displacement	2,981 cm^3
Compression ratio	10:1
Engine power	420 hp (309 kW) at 6,500 rpm
Max. torque	500 Nm at 1,700 – 5,000 rpm
Power output per liter	140.9 hp/l (103.7 kW/l)
Max. engine speed	7,500 rpm
Fuel type	super plus

Electrical system:

12 Volt; alternator 2,940 W; battery 80 Ah; electrical system recuperation.

* Specifications may vary according to markets

Status: January 2016

Power transmission: Engine and transmission bolted into combined drive unit; active all-wheel drive with electro-hydraulically actuated, map-controlled multi-plate clutch (PTM); seven-speed manual transmission with two-plate clutch, mechanical rear-axle differential lock and Porsche Torque Vectoring (PTV); optional seven-speed dual clutch transmission (PDK) with controlled rear locking differential and PTV Plus.

Gear ratios	Manual transmission	PDK
1st gear	3.91	3.91
2nd gear	2.29	2.29
3rd gear	1.58	1.58
4th gear	1.18	1.18
5th gear	0.94	0.94
6th gear	0.79	0.79
7th gear	0.62	0.62
Reverse	3.55	3.55
Constant RA ratio	1.16	1.16
Total RA ratio	3.09	3.09
Final drive ratio, front axle	3.46	3.46
Clutch diameter	228 mm	202/153 mm

Chassis: Front axle: strut suspension (MacPherson type, Porsche optimized) with wheels independently suspended by transverse links, longitudinal links and struts; cylindrical coil springs with internal dampers; electromechanical power steering; optional front axle lift system.

Rear axle: multi-link suspension with wheels independently suspended on five links; cylindrical coil springs with coaxial internal dampers; optional rear-wheel steering.

Porsche Active Suspension Management (PASM) with electronically controlled dampers; two manually selectable damping programs.

Brakes:	Dual-circuit brake system with separate circuits for front and rear axles; Porsche Stability Management (PSM); vacuum brake booster; brake assistant; electric duo-servo parking brake; auto-hold function; post-collision braking system. Front axle: six-piston aluminum monobloc brake calipers, perforated and internally ventilated brake discs with 350 mm diameter and 34 mm thickness. Rear axle: four-piston aluminum monobloc brake calipers, perforated and internally ventilated brake discs with 330 mm diameter and 28 mm thickness.			
Wheels and tires:	front	8.5 J x 20	with	245/35 ZR 20
	rear	11.5 J x 20	with	305/30 ZR 20
Weights:	Unladen weight (DIN)			1,580 (1,600) kg
	Permissible gross weight			2,025 (2,040) kg
Dimensions:	Length			4,499 mm
	Width			1,852 mm
	Width with door mirrors			1,978 mm
	Height			1,293 mm
	Wheelbase			2,450 mm
	Track widths		front	1,543 mm
			rear	1,558 mm
	Luggage comp. capacity		front	125 l
			rear	160 l
	Fuel tank capacity (Refill volume)			68 l (67 l)

Values in brackets refer to vehicles with PDK transmission.

Performance figures:	Top speed	303 (301) km/h
	Acceleration	
	0 – 100 km/h	4.4 (4.2) s
	with Sport Plus and PDK	4.0 s
	0 – 200 km/h	14.8 (14.3) s
	with Sport Plus and PDK	14.0 s
	0 – 60 mph	4.2 (4.0) s
	with Sport Plus and PDK	3.8 s
	1/4 mile (400 m)	12.6 (12.4) s
	with Sport Plus and PDK	12.1 s
Fuel consumption:	Combined	9.0 (8.0) l/100 km
(NEDC)	Urban	12.6 (10.4) l/100 km
	Extra-urban	6.8 (6.7) l/100 km
CO_2 emissions:	Combined	208 (184) g/km
Emissions class:		Euro 6

Values in brackets refer to vehicles with PDK transmission.