



PORSCHE



The new Boxster

carmanualsonline.info



Contents

Independence	6	Free space	78
Boxster concept	8	Interior and comfort	80
Design	10	Audio and communication	94
Engineering	20		
Boxster	22	Free style	102
Boxster S	24	Personalisation	104
Forward thrust	26	Factory collection	121
Engine	26		
Transmission	42	Panorama	122
Chassis	48		
		Principle	124
The wider view	66		
Safety	68	Technical data	126
Environment	74		
		Index	128

Independence



ermanualonline.info



For some things in life,
there will never be an app.

The Boxster concept.

Spending time in the virtual world can be great fun. The only thing is, you can't feel the wind against your skin as you accelerate through every twist and turn. The Boxster celebrates real life. Whether it is known as a design classic, a powerful mid-engined sports car or a pure-bred roadster, it does full justice to its famous predecessors, such as the 356 No. 1 or the 550 Spyder.

We were faced with the question of how it could do so in the future. As ever, the answer was to be found in the harmonious blending of style with functionality and of tradition with innovation. But what is harmony? Something quaint? Something soft and delicate? Not for us.

This is why we have refined our idea of what a roadster should be and honed and sharpened it to give it a completely new expression.

We achieved this with Intelligent Performance. With increased power output at the same time as enhanced efficiency. With innovative technologies and intelligent lightweight construction. With a sporty exterior and interior with aesthetically appealing lines and curves in all the right places.

The spirit of the pure-bred roadster is very much alive and kicking. More independent than ever before. It is even more powerful, visceral and intense.

For fuel consumption and CO₂ emissions please refer to page 127.

carmanualsonline.info



carmanualsonline.info



Sometimes, spontaneity takes years of work.

Design.

Exterior.
We have redefined the Boxster in terms of its performance, and defined how the roadster of the future should look. In doing so, we have once again succeeded in creating an icon of independence. Just like its legendary predecessors, it is a Porsche that continues to epitomise the feeling of genuine freedom and advancement.

The vertical contour of the headlights was inherited from Porsche race cars of the 1960s and 1970s, but while the new Boxster may be infused with the genes of past generations, also it ushers in a new and forward-looking design ethos.

Large, imposing air intakes give the front a powerful appearance.

The side contour promises thrilling performance, while the long wheelbase and low, raked windscreen are integral to forming the stretched, wedge-shaped silhouette. With the hood closed, this impression is reinforced by the extremely sporting

roofline. Large wheels, up to 20 inches in size, make a stylish addition to the classic roadster. These emphasise the car's wide track and help to achieve a completely new level of athletic performance.

The distinctive shoulder line gives further emphasis to the wheels and, in combination with the side air intakes, to the mid-

engine layout. Such features are reminiscent of the 718 RS 60 Spyder, a lightweight mid-engine sports car that achieved success in endurance racing and hillclimbing championships alike.

Precise lines, which run elegantly across the wings to the rear, make the new Boxster unique among Porsche models.

While its overall look is just as imposing, its lines are more sharply defined than on any Porsche we've seen before.



The exclusive door styling reflects more recent Porsche design developments. In typical Porsche fashion, it has a clear function. The dynamic contouring improves airflow to the side air intakes.

At the top, it leads into a precise longitudinal edge and, at the bottom, it is underlined by the sculpted door sill. The exterior mirrors are mounted directly on the doors for impressive aerodynamics and low wind noise.



The rear wing is not only a visual treat, it deploys automatically to reduce lift. Aerodynamics and aesthetics are combined to superb effect. Retracted, the spoiler's edge makes a seamless transi-

tion to the LED taillights. The narrow direction indicators appear to extend the rear wing further. Each taillight sweeps around the central brake light and accentuates the contours of the entire unit. For



striking effect, the reversing light and rear fog light are arranged in the middle underneath the rear wing. Clearly, this lighting concept has no precedent, rather it is the result of Porsche's modern use of form.

The diffuser with stainless steel tailpipe dual tube on the Boxster S integrated into the centre adds the finishing touch to the powerfully designed rear end.

In summary, the new Boxster draws inspiration from a long history and, yet, it also incorporates the sum of our ideas of how the future should be. In doing so, it reflects a completely new interpretation

of the roadster concept – with a clear focus on looking forward.

How much independence do we really have?
It's a question of inner attitude.

Design.

Interior.

The interior of the new Boxster models delivers exactly what the exterior promises. Light, uncluttered and defined; everything is conceived with one goal in mind: the perfect drive.

The power, the contouring, the driver's vision, indeed the entire concept, are all drawn in the direction of travel. The intelligent operating concept and the logical arrangement of the controls keep the driver's concentration purely on the road. The elevated centre console cocoons the driver perfectly and reduces the distance from the steering wheel to the gear lever for fast and ergonomic gearshifts. It's just

one of many principles that we've transferred from the racetrack to the road.

The door styling is similarly dynamic. The door pulls mirror the lines of the centre console and blend seamlessly into the distinctive design. The door storage compartments are sweeping and practical.

As you would expect from a sports car, the driver sits low down. Sports seats are fitted as standard. The athletic proportions of the new Boxster models made it possible to introduce a new interior architecture. The result is a feeling of space and light without compromising the authentic roadster experience.

Are you ready to assert your independence? The ignition lock, as ever, is on the left. The three-spoke sports steering wheel falls perfectly to hand. As is typical of a Boxster, there are three circular dashboard instruments. The instrument on the right is now a 4.6-inch TFT screen that shows information from the on-board computer or audio information from the CDR audio system, which is fitted as standard. An inconspicuous shroud shades the instruments for optimum visibility.

The steering wheel rim, gear lever/selector and door pull inlays are finished in tactile leather. Silver-coloured details add to the refined tone; these include the

dashboard trim strip, the side and centre air vent surrounds and the centre console. As an option, the sporty elegance of the new Boxster models can be further enhanced with a comprehensive suite of interior trims and upholstery.

1 Boxster S with natural leather interior in Carrera Red, four-spoke steering wheel and other optional equipment





carmanualsonline.info



Knowledge should never
be confined to books.

Engineering.

What use is expertise if it isn't put into
practice and applied to the road?

In the Boxster, the 2.7-litre horizontally
opposed six cylinder engine delivers
195 kW (265 hp); in the Boxster S, the
3.4-litre equivalent generates 232 kW
(315 hp). Both mid-mounted engines
feature direct fuel injection (DFI) and Vario-
Cam Plus for a significant increase in both
power output and efficiency. The SPORT
button on the centre console is fitted
as standard and opens up even more agile
responses. Power is transmitted to the
wheels by a lightweight six-speed manual
gearbox or the optional 7-speed Porsche
Doppelkupplung (PDK).

A series of innovative technologies is key
to achieving exemplary efficiency. As
standard, these include the auto start/stop
function, electrical system recuperation,
energy-saving electromechanical power
steering, intelligent thermal management
and, in conjunction with PDK, the coast-
ing function. The result. The result is a
significant reduction in fuel consumption
and, therefore, a reduction in CO₂ emis-
sions of up to 16% compared with the
previous model (depending on the equip-
ment variant).

Porsche Stability Management (PSM)
provides stability at the limits of sporty
performance. Available as an option,

enhanced Porsche Active Suspension
Management (PASM) offers continuous
adjustment of damping forces based on
the selected mode. Dynamic performance
can be further improved with optional
Porsche Torque Vectoring (PTV). The
optional Sport Chrono Package includes
dynamic gearbox mounts for the first
time. They contain a fluid with magnetic
properties, which enables them to adapt
instantly to driving conditions and counter-
act the effects of inertia. The results are
perceptibly more stable handling during
performance driving, as well as a higher
level of ride comfort.

The brakes at the front axle have a greater
surface area for improved braking perfor-
mance. The Porsche Ceramic Composite
Brake (PCCB) is available as
an option.

The hood on the new Boxster models
makes it easy to clear your head. Fully
electric, it opens and closes in around nine
seconds and is operable up to a speed of
approx. 30 mph (50 km/h).

The intelligent lightweight construction,
which uses aluminium for substantial
parts of the bodyshell, doors and luggage
compartment lids, helps to achieve an
excellent power-to-weight ratio.

For fuel consumption and CO₂ emissions please refer to page 127.

carmanualsonline.info®



Don't think about taking a step back.
Unless it gives you a better run-up.

Boxster.

A roadster is not simply a car. The new Boxster is not simply a roadster. It's a sports car that brings you closer to the road, closer to real life and connects you with your own free spirit.

Its 2.7-litre flat-six engine with direct fuel injection (DFI) and VarioCam Plus produces 195 kW (265 hp) at 6,700 rpm and maximum torque of 280 Nm is

available from 4,500 rpm to 6,500 rpm. The top speed is 164 mph (264 km/h). With the precisely geared six-speed manual gearbox fitted as standard, the Boxster accelerates from 0 to 62 mph (0 to 100 km/h) in just 5.8 seconds. With the optional 7-speed Porsche Doppelkupplung (PDK) and the optional Sport Chrono Package including dynamic gearbox mounts, this time is cut to 5.5 seconds.

Power is transmitted to the road by 18-inch Boxster wheels. Their distinctive five-spoke design affords an unobstructed glimpse of the braking system's black four-piston aluminium monobloc fixed calipers. The optional Porsche Ceramic Composite Brake (PCCB) provides motorsport braking performance.

The slats on the front air intakes are painted in the vehicle's exterior colour. The sound produced by the central tailpipe in brushed stainless steel is unmistakably Porsche.

Lean, muscular and athletic, the car has inherited motorsport genes. They are

characteristic of the Porsche family and are vital to the irresistible appeal of the sports car. They are traits that make the Boxster the sports star among roadsters. Dynamic performance, whether the hood is open or closed, has become synonymous with driving pleasure.

For fuel consumption and CO₂ emissions please refer to page 127.

carmanualsonline.info



Why live life on standby?

Boxster S.

Life cannot be lived too intensely. Driving should be truly engaging. This is the core message of the new Boxster S.

Producing 232 kW (315 hp) at 6,700 rpm, its 3.4-litre flat-six engine with CFI and VarioCam Plus delivers a mighty 37 kW (50 hp) and 80 Nm more than the engine in the Boxster. Maximum torque of 360 Nm is available from 4,500 rpm to 5,800 rpm.

The sprint from 0 to 62 mph (0 to 100 km/h) is completed in 5.1 seconds and a top speed of 173 mph (279 km/h) can be achieved.

Nevertheless, the dynamic performance of the new Boxster S can be further enhanced. With the optional Porsche Doppelkupplung (PDK) transmission and the optional Sport Chrono Package, the

0 to 62 mph (0 to 100 km/h) acceleration time drops to a mere 4.8 seconds. Optional Porsche Torque Vectoring (PTV) offers increased agility and driving pleasure at the same time as improving traction and handling. The Boxster S delivers excitement at every twist and turn.

For fuel consumption and CO₂ emissions please refer to page 127.

Extra horsepower demands a higher level of safety. The front brake discs are 15 mm larger in diameter than those on the Boxster and the brake calipers are finished in red. 19-inch Boxster S light-alloy wheels with a double-spoke design are fitted as standard and create an exceptionally powerful presence for a roadster.

The slats on the front air intakes are finished in black. The Boxster S comes with Bi-Xenon headlights as standard. The centrally positioned dual-tube twin tailpipe in brushed stainless steel sounds as impressive as it looks.

In the interior of the Boxster S, the door panel armrests and the storage

compartment lid in the centre console are additionally upholstered in leather. The rev counter has an aluminium-coloured dial face.

The Boxster S is an even more vehement interpretation of the classic roadster. It has been engineered to provide an immediate, intense experience. Standby mode is not an option.

carmanualsonline.info



Forward thrust

Always mid-engined.
Never middle ground.

Boxer engines.

At Porsche, the mid-mounted boxer engine is more than a tradition, it is a legend.

One of the most renowned examples of its use was in the 550 Spyder. In conjunction with an intelligent lightweight construction, this arrangement delivered outstanding agility and cornering dynamics and proved to be a key factor in the countless victories achieved on some of the world's most famous racetracks. In the 1960s, the 718 RS 60 Spyder contributed to the triumphant success of the mid-engined race car with wins in hillclimbing and endurance events.

The mid-mounted engine belongs at Porsche and it belongs in the Boxster. The advantages speak for themselves. The concentration of mass close to the centre of the vehicle and the low centre of gravity produce extraordinary agility and cornering dynamics. At the same time, weight is uniformly distributed between the front and rear axles and handling characteristics are particularly well balanced. The combined result enables the driver fully enjoy every corner and maintain excellent control over the vehicle.

For us, there are many reasons to remain faithful to the mid-mounted engine concept, to keep transferring performance from the racetrack to the road and to continue to combine tradition with innovation. How do we do it? Through Intelligent Performance, our commitment to high power with comparatively low fuel consumption and emission figures.

With this aim, we developed two compact and lightweight boxer engines that are characterised by their ability to deliver high levels of power and efficiency simultaneously. Both engines are equipped

with efficient technologies as standard, including VarioCam Plus, direct fuel injection (DFI), auto start/stop, electrical system recuperation and enhanced thermal management.

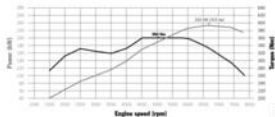
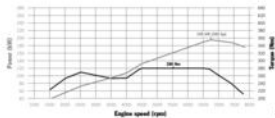
What else could we have given the mid-mounted engine? An even more agile response. One press of the SPORT button on the centre console makes engine performance even more dynamic for driving pleasure at the limits of performance. Let's take a look in more detail.

For fuel consumption and CO₂ emissions please refer to page 127.

Powerful Street / Engine



carmanualsonline.info



2.7-litre engine.

The Boxster is equipped with a 2.7-litre flat-six engine with direct fuel injection (DFI) and VarioCam Plus. It generates 119 kW (165 hp) at 6,700 rpm. The maximum torque of 280 Nm is available over a broad engine speed range from 4,500 rpm to 6,500 rpm.

The new Boxster with six-speed manual gearbox accelerates from 0 to 62 mph (0 to 100 km/h) in 5.8 seconds and reaches a top speed of 164 mph (264 km/h). With the optional Porsche Doppelkupplung (PDK), it completes the 0 to 62 mph (0 to 100 km/h) sprint

in 5.7 seconds and achieves a maximum speed of 162 mph (262 km/h). In conjunction with PDK, the optional Sport Chrono Package, the sprint time is reduced to just 5.5 seconds.

3.4-litre engine.

The Boxster S is powered by a 3.4-litre flat-six engine with direct fuel injection (DFI) and VarioCam Plus. It develops 232 kW (315 hp) at 6,700 rpm and the maximum torque of 360 Nm is produced between 4,500 rpm to 5,800 rpm.



The new Boxster S with six-speed manual gearbox races from 0 to 62 mph (0 to 100 km/h) in 5.1 seconds and reaches a top speed of 173 mph (279 km/h). With optional PDK, an acceleration time of 5.0 seconds and a maximum speed of 172 mph (277 km/h) are achieved.

In conjunction with the optional Sport Chrono Package, the Boxster S with PDK finishes the sprint in only 4.8 seconds.

1 Power output and torque chart for the Boxster
2 Power output and torque chart for the Boxster S
3 Engine, gearbox and exhaust system of the Boxster S
4 Boxster S engine



Resonance intake manifold.

The resonance effect, where the air mass inside the intake manifold is caused to oscillate is used to optimise the induction process at all engine speeds. The engine in the Boxster S is additionally equipped with a switchable resonance valve.

The results are high torque, a flatter torque curve and high power output. The sound produced is characteristically resonant and deep, as you would expect of a Boxster.

Direct fuel injection (DFI).

Direct fuel injection (DFI) is featured as standard in both Boxster models. Multi-hole injectors deliver fuel directly into the combustion chamber with millisecond precision. The injection pattern has been optimised for torque, power output, fuel consumption and emissions.

With direct injection, the engine management system regulates injection timing individually for each cylinder, as well as the injection rate for each cylinder bank. This optimises the combustion process and therefore fuel economy. Depending on the engine operating conditions, multiple fuel injections can take place on

each operating cycle. This allows the catalytic converter to reach normal operating temperature sooner after a cold start and a higher maximum torque to be achieved.

DFI improves the internal cooling of the combustion chamber by having the mixture prepared directly in the cylinder. This allows for a higher compression ratio, which helps to deliver higher power output at the same time as enhanced engine efficiency. Injection is regulated by the electronic engine management system and emissions are monitored by the stereo Lambda sensors.

For fuel consumption and CO₂ emissions please refer to page 127.

carmanualsonline.info



VarioCam Plus.
VarioCam Plus is a two-in-one engine concept for adjusting the intake camshafts and switching the lift of the intake valves.

The system first differentiates between driver inputs that typify normal, everyday driving and those inputs that demand maximum performance. The electronic engine management system then imperceptibly adapts valve operation to the prevailing conditions.



This results in instant acceleration and extremely smooth running.

In short, VarioCam Plus provides extraordinary power with comparatively low fuel consumption.

Integrated dry-sump lubrication. Integrated dry-sump lubrication ensures a reliable supply of oil even when a sporty driving style is adopted and the vehicle is experiencing powerful lateral acceleration. It also has additional cooling functions.

The oil tank is located in the engine, thereby eliminating the need for an external oil tank which saves both space and weight.

To reduce power losses and increase efficiency, an electronically controlled oil pump supplies the lubricating points inside the engine as and when required. This results in optimum supply of oil, lower fuel consumption and reduced emissions.

For fuel consumption and CO₂ emissions please refer to page 127.

Thermal management.

The Boxster models feature a new version of thermal management to reduce friction losses that arise during the warm-up phase.

Thanks to the selective control strategy and on-demand, gradual activation of the various cooling circuits, the engine and gearbox warm up to normal operating temperature more rapidly. The consequent reduction in friction also reduces fuel consumption and CO₂ emissions. During sporty driving, thermal management also acts to reduce temperatures so that a high level of performance is maintained.

Our cross-flow cooling system, as used in motorsport, supplies each engine cylinder uniformly with coolant, which protects the valves against thermal overload and, therefore, premature wear. This improves combustion and keeps emissions, fuel consumption and noise comparatively low.

Exhaust system.

In the new Boxster models, each cylinder bank has its own stainless-steel exhaust tract. Downstream of their respective rear silencer, the tracts converge into a connecting tube and a single (Boxster) or twin (Boxster S) tailpipe. The stereo Lambda control circuitry controls and

monitors each cylinder bank separately. For each exhaust tract, four corresponding oxygen sensors regulate the composition of the exhaust gas and monitor the performance of the catalytic converters. Having separate tracts means that the exhaust gas can flow more freely. The resulting reduction in pressure loss has a positive impact on power output, torque and the unmistakable engine sound.

Available as an option for the new Boxster models is the sports exhaust system¹⁾ including sports tailpipe. It produces an even more resonant Porsche sound.

¹⁾ Not available at launch. Please consult your Centre for availability.

1 Boxster tailpipe
2 Boxster S twin tailpipe



For fuel consumption and CO₂ emissions please refer to page 127.

Powerful Street / Engine

carmanualsonline.info



Engine management.
The electronic engine management system ensures optimum engine performance at all times. It regulates all engine-related functions and assemblies. The results are optimum power output and torque with comparatively low fuel consumption and emissions.

Another function is the cylinder-specific knock control. Since engine cylinders never all work under exactly the same conditions, the knock control function monitors each one separately. The ignition point is shifted individually, as and when necessary, to protect the cylinders and pistons at high engine speeds and

loads. For compliance with EU Standards, the on-board diagnostics detect any faults and defects that may occur in the exhaust and fuel systems and then notify the driver immediately. This also prevents increased pollutant emissions and unnecessary fuel consumption.

SPORT button.
The SPORT button on the centre console is fitted as standard. When selected, Sport mode is activated to provide greater response and enhanced driving pleasure. Throttle response becomes even more direct, the rev-limiter is adjusted to a harder setting and engine

dynamics are tuned for performance driving. The auto-start/stop function is also deactivated.

With the optional Porsche Doppelkupplung (PDK) transmission, the shift points are reconfigured and reconfigured to operate

at higher engine speeds. Shift times are reduced and gearshifts become firmer and more immediate, while throttle-blip downshifts are accompanied by an emotive engine sound. Coasting mode (p. 44) is deactivated automatically.

Auto start/stop function.
The auto start/stop function, which is integrated as standard in the new Boxster models, switches off the engine when you stop, select neutral and release the clutch pedal. In cars with

Porsche Doppelkupplung (PDK), it is simply a case of applying and holding the brake.

All audio and communication systems remain switched on, as does the air conditioning system.

1 SPORT button
2 Auto start/stop button

For fuel consumption and CO₂ emissions please refer to page 127.

carmanualsonline.info

The engine will restart as soon as you operate the clutch or, in cars with PDK, release the brake. This fuel-saving innovation is designed primarily for use in towns or congested motorway traffic.

The auto start/stop function can be deactivated and reactivated using a separate button on the centre console. The function may be deactivated automatically under particular circumstances, e.g. in extreme outside temperatures, when the SPORT button is selected or when there is low battery charge.

Cruise control

This optional automatic speed controller for the 19 to 149 mph (30 to 240 km/h) speed range is operated using a switch on a separate control stalk on the steering column. The advantages are clear, not only can cruise control be used as a means of staying within the speed limit, it also helps you to save fuel by maintaining a constant speed.

Electrical system recuperation

For enhanced efficiency the new Boxster models are equipped with intelligent electrical system recuperation. The vehicle battery is recharged by the generator predominantly under braking. Thanks to

this selective recharging, when you request full driving power the maximum possible output can be directed straight to the road.

Servicing

In the Boxster models, the generator and air conditioning system are driven by a single self-adjusting belt. The drive chains on the camshafts do not normally require servicing. With the sole exception of the spark plugs, the ignition system is also maintenance free in normal servicing. In short, longer service intervals mean longer-lasting driving pleasure.



For fuel consumption and CO₂ emissions please refer to page 127.

Powerful Street / Engine

carmanualsonline.info



Act or relax as you please.

Transmission.



Six-speed manual gearbox.

The new Boxster models are equipped as standard with a lightweight six-speed manual gearbox. Gearshifts are smooth and optimally adapted to the respective engine map. Shift throws are short and sporty and the gear lever is easy to operate, enabling a rapid gearshift action and providing a truly engaging driving experience. The upshift indicator located in the central circular instrument helps you to maximise fuel efficiency.

The elevated centre console gives you an authentic sports car feel. It positions the gear lever close to the steering wheel,



which enables you to change gear as fast and as ergonomically as possible.

Porsche Doppelkupplung (PDK). Available as an option for the new Boxster models is a completely refined 7-speed Porsche Doppelkupplung (PDK), featuring both manual and automatic modes. PDK offers extremely fast gear changes with no interruption in the flow of power, improved acceleration over the manual gearbox, very short response times, reduced fuel consumption and a distinct increase in comfort.

In total, PDK has seven forward gears at its disposal. Gears 1 to 6 have a sports ratio

and top speed is reached in 6th gear. The 7th gear ratio is longer and keeps engine speed low to improve ride comfort and reduce fuel consumption at higher speeds.

The design of PDK is similar to two conventional gearboxes in one. The odd numbered gears are housed on one assembly and the even numbered gears on another, each having its own clutch. While one gear is engaged, PDK pre-selects the next gear based on driver input. When the next gear is requested, drive is switched from one clutch to the other in milliseconds, delivering gear changes with no loss of drive.



- 1 Gear lever for six-speed manual gearbox
- 2 PDK gear selector
- 3 PDK gearshift switches on multifunction steering wheel
- 4 Porsche Doppelkupplung (PDK) half gearbox 1: gears 1, 3, 5, 7, R half gearbox 2: gears 2, 4, 6

For fuel consumption and CO₂ emissions please refer to page 127.

carmanualsonline.info

With the SPORT button selected, the full advantages of the new version of PDK are brought into play: a more immediate response to throttle inputs, even shorter shift times and swift, throttle-blip downshifts on overrun and when braking – always accompanied by an emotive engine sound.

With the optional Sport Chrono Package, PDK is enhanced by the 'Launch Control' and 'motorsport-derived gearshift strategy' functions (p. 63) for even faster gear changes and the best possible performance thanks to a boost in torque during upshift phases. Overrun downshifts provide extremely sporty braking and acceleration for added excitement.

Coasting

The coasting function available with Porsche Doppelkupplung (PDK) enables you to save even more fuel where the situation allows. The engine is decoupled from the transmission to prevent deceleration caused by engine braking. In this way, optimum use is made of the vehicle's momentum, allowing it to coast for longer distances.

For example, you may want to slow down from 60 mph to 40 mph in anticipation of the change of speed limit ahead. As you ease off the accelerator pedal, PDK deselects the current gear automatically and you begin to coast in neutral until you have reached your desired speed. As soon as you operate the accelerator or

brake pedal, PDK re-engages the appropriate gear within fractions of a second. The process is smooth and seamless thanks to the extremely fast clutch.

Another way to reduce fuel consumption is to utilise the coasting function on downhill gradients that are gentle enough for you to maintain a constant speed. Efficient on long journeys, such as on the motorway, PDK remains ready to respond as swiftly and precisely as you would expect.

In short, driving in coasting mode makes a real impact on fuel consumption without any need for compromise on comfort or sporty performance.

For fuel consumption and CO₂ emissions please refer to page 127.

Porsche Street | Transmission



ermanualsonline.info



A love of freedom is no reason to lose self-control.

Chassis.

Even when you want to make a break from everyday life, you should still keep your feet on the ground.

The chassis of the new Boxster models are an excellent match for the powerful engines. Axle components are made predominantly of aluminium. This lightweight material helps to keep the weight of the vehicle and its unsprung masses low, which reduces fuel consumption, improves comfort and increases agility.

The wide track is a prominent feature to provide additional stability and enhanced comfort, the wheelbase has been extended by 60 mm compared with that of the

previous model. The new independent suspension features lightweight spring strut axles with longitudinal and transverse links and, at the front, cross members that have been refined for optimum control. As a result, each wheel moves precisely to ensure excellent directional stability and superior handling in all situations.

What does this mean for the driver? The sophisticated engineering of the chassis, combined with the mid-engined layout, achieves impressive dynamic performance. Body roll and pitch have been practically eliminated to offer a level of agility that turns each corner into an incomparable experience.

Porsche Active Suspension Management (PASM).

Optional PASM, the electronic damping control system, suits the new Boxster models down to the ground. PASM actively and continuously regulates the damping force for each wheel according to the road conditions and driving style. In addition, the suspension is lowered by 10 mm.

The driver can select between two different modes: 'Normal' which is a blend of performance and comfort, and 'Sport' where the setup is much firmer. Depending on the mode selected,

therefore, PASM can be both sportier and more comfortable than the standard chassis. The PASM control unit evaluates the driving conditions and modifies the damping force on each of the wheels in accordance with the selected mode.

Sensors record the body movements that accompany powerful acceleration, braking or uneven road surfaces. This enables intelligent adaptation of damper stiffness for the selected mode, optimising contact between each individual tyre and the road and reducing pitch.





In 'Sport' mode, the suspension is set to a harder damper rating. On uneven roads, PASM immediately switches to a softer rating, thereby improving contact between the tyres and the road. When the road surface improves,

PASM automatically reverts to the original, harder rating. If 'Normal' mode is selected and the driver's style becomes more assertive, PASM switches to a harder rating to increase driving stability and road safety.

The results are tangible: increased driving stability, enhanced driving pleasure and improved performance.

Steering.
One definition of efficiency is a system that works only when it is needed, and then does so in a particularly effective way.

This was the guiding principle for our engineers in the development of the new

electromechanical steering system. Whereas a conventional hydraulically assisted steering system draws engine power continuously, the electric motor in the electromechanical arrangement uses energy only when the steering wheel is actually turned. As a result, fuel consumption is reduced and the absence

of hydraulic fluid eliminates the need for servicing, both of which also have benefits for the environment.

The Boxster concept was designed to offer outstanding cornering performance. The new steering system delivers and it even improves the typical Porsche steering feel.

It features a variable steering ratio and responds precisely and directly as well as providing customary agility: a high level of comfort and plenty of direct feedback from the road. Power steering Plus, the optional speed-sensitive power steering system, minimises steering effort during manoeuvring and parking.

1 Front axle of the Boxster S
2 Rear axle of the Boxster S





Wheels.

The standard wheels on the new Boster models have been enlarged by one inch compared with those of the previous models. Made from a lightweight alloy, the larger wheels reinforce the car's imposing presence and further improve sporty performance.

The new Boster is equipped with 18-inch wheels. Their minimalist five-spoke design is sporty and elegant in equal measure. Tyre sizes are 235/45 ZR 18 and 265/45 ZR 18 at the front and rear respectively.

The Boster S has 19-inch wheels with a dynamic dual-spoke design. The tyre size at the front is 235/40 ZR 19 and 265/40 ZR 19 at the rear.

The larger rolling circumference improves comfort and performance. At the same

time, the rolling resistance of the new generation of tyres has been reduced which, in turn, helps to reduce fuel consumption.

Wheels up to 20 inches are available as an option.

Tyre Pressure Monitoring (TPMS).

Optional Tyre Pressure Monitoring (TPM) sends warnings to the on-board computer's display screen in the event of low tyre pressure. The 4.6-inch TFT screen in the instrument cluster enables the driver to check the pressure in all four tyres. The

system updates quickly and accurately after an engine start, tyre pressure correction or wheel change – for increased comfort and safety.

1 18-inch Boster wheel
2 19-inch Boster S wheel



Brakes.

Porsche brakes set standards worldwide for stopping power and stability. For the new Boxster models, braking performance is as essential as driving performance.

Both models are equipped with four-piston aluminium monobloc fixed calipers at the front and rear. This design means that, not only are the brakes extremely resistant to deformation, they are light weight for a particularly fast and sensitive braking response.

The new generation of brake caliper at the front axle, combined with enlarged brake pads and the newly developed brake booster, has managed to improve

braking and component stability even during continuous use. These two characteristics have also been optimised by the newly developed brake ventilation system with a modified air spoiler at the front and rear axles.

The enhanced dynamics of the Boxster and Boxster S also demand appropriate brake discs. All Boxster brake discs are internally vented and cross-drilled for improved braking in wet conditions. On the Boxster S, the diameter of the front brake discs has been enlarged by 15 mm to 330 mm. At the rear, the diameter is the same as on the Boxster – 299 mm. The brake calipers on the Boxster and Boxster S are black and red respectively.

Porsche Ceramic Composite Brake (PCCB).

From the start, Porsche has been synonymous with motorsport. Ever since 1948, when we found our identity on the racetrack, we have taken the experience we have gained and applied it to the road. The optional Porsche Ceramic Composite Brake (PCCB) is a fine example. This brake system has already had to cope with the harshest requirements of motor racing and is fitted in cars that compete in demanding events such as the Porsche Mobil 1 Supercup.

The cross-drilled PCCB ceramic brake discs for the new Boxster have a diameter of 350 mm front and rear for even more formidable braking performance.

The use of six-piston aluminium monobloc fixed brake calipers on the front axle and four-piston units at the rear – all finished in yellow – ensures extremely high brake forces which, crucially, are exceptionally consistent.

PCCB enables shorter braking distances in even the toughest road and race conditions. Excellent fade resistance ensures greater balance when slowing from racetrack speeds.

- 1 Standard brake on the Boxster
- 2 Standard brake on the Boxster S
- 3 Porsche Ceramic Composite Brake (PCCB)



Another key advantage of PCGB is the extremely low weight of the ceramic brake discs, which are approximately 50% lighter than standard discs of similar design and size. As well as enhancing performance and fuel economy, this

represents a major reduction in unsprung and rotating masses. The consequence of this is better road holding and increased comfort, particularly on uneven roads, as well as greater agility and improved handling.

Please note that circuit racing, trackday use and other forms of performance driving can significantly reduce the service life of even the most durable pads and discs. As with conventional high-performance braking systems,

we recommend that all brake components be professionally inspected and replaced where necessary after every track event.

Electric parking brake.

The electric parking brake, which can be activated and deactivated manually, is released automatically as you pull away with your seat belt fastened. A hill hold function is integrated as standard

for the manual gearbox and for PDK. It assists you in making a comfortable, smooth and roll-free start on an incline. Whenever you come to halt on an incline, this is detected automatically and the braking effect of the electric parking

brake is supplemented by application of the wheel brakes. As long as a gear remains engaged, the brake pressure is maintained at all four wheels. To pull away, simply apply throttle (manual gearbox; apply throttle and release

the clutch pedal). The wheel brakes are released as soon as sufficient starting torque is available and the parking brake is released as the vehicle moves off.



Porsche Stability Management (PSM), Enhanced Porsche Stability Management (PSM) is fitted as standard. This system automatically maintains stability even at the limits of dynamic driving performance. Sensors continuously monitor the speed, yaw velocity and lateral

acceleration of the car. Using this information, PSM is able to calculate the actual direction of travel at any given moment. If the car begins to oversteer or understeer, PSM applies selective braking on individual wheels in order to restore stability.

Under acceleration on wet or low-grip road surfaces, PSM improves traction – as well as agility and safety – using the automatic brake differential (ABD) and anti-slip regulation (ASR). Integrated ABS is designed to minimise braking distances.

If you prefer an ever sportier drive, PSM can be switched off. For your safety, however, PSM remains set to intervene if the vehicle is braked and ABS assistance is required. ABS and ABD remain switched on at all times. Also included with PSM are engine drag torque control (EDC),

precharging of the brake system and brake assist. If you suddenly release the accelerator pedal, PSM automatically prepares for your next action: the braking system is precharged so that the brake pads are already in light contact with the brake discs. Maximum braking power is

therefore achieved much sooner. Brake assist detects a panic braking situation and generates the brake pressure required for maximum deceleration.



Porsche Torque Vectoring (PTV). This optional system for increasing dynamic performance and stability varies the distribution of torque to the rear wheels and includes a mechanically locking rear differential.

When the car is driven assertively into a corner, moderate brake pressure is applied to the inside rear wheel. Consequently, a greater amount of drive force is distributed to the outside rear wheel, inducing an additional rotational pulse

(yaw movement) around the vehicle's vertical axis. This results in a direct and sporty steering action as the car enters the corner.

At low and medium vehicle speeds, PTV significantly increases agility and steering precision. At high speeds and when accelerating out of corners, the rear differential lock ensures greater driving stability

on a range of surface conditions, including the wet and snow.

The results are remarkable stability, easier handling and outstanding traction as well as greater agility at every speed with

precise steering and stable load transfer characteristics. What else? As ever, lots of excitement at every twist and turn.