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Service Information

2011 Technik Introduction

Boxster Spyder

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Foreword

The Boxster Spyder is a new special model from Porsche that emphasises the characteristics of a roadster with a unique hood structure and lower weight. This system description provides detailed information about the innovations of the Boxster Spyder compared with the Boxster S.

Note:

The Service Information Technik does not contain any technical data or part numbers; it is not intended for use as a basis for carrying out repairs or troubleshooting technical problems. Other information for this purpose is available in PIWIS. Use should also be made of information from the Porsche Academy.

The content of this brochure corresponds to the information status of February 2010.





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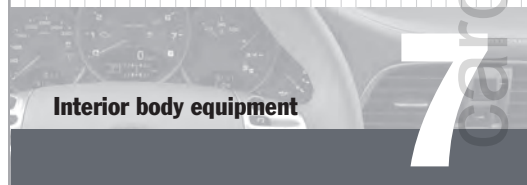
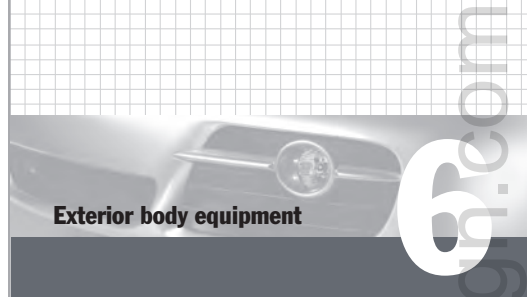
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New features/modifications

The main aim of the Boxster Spyder was to concentrate on the key features of a Porsche: intense driving experience, maximum performance and first-class design quality.

As a genuine roadster, the Boxster Spyder promises an exceptional driving experience. It was designed especially for sporty, open-top driving. The standard equipment of the Boxster Spyder has been adapted correspondingly. Instead of, for example, an air conditioning system, electric convertible top and CDR-30 audio system, the vehicle now comes with a sports chassis, mechanical rear-axle differential lock and sports bucket seats as standard. These changes have not only resulted in a reduction in the vehicle weight, they have also enhanced the overall driving experience.



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Engine and transmission

A 3.4-liter flat engine with direct fuel injection (DFI) is installed in the Boxster Spyder. Due to a performance increase of 10 hp (7 kW), this engine delivers 320 hp (235 kW) and is more powerful than the Boxster S engine. The maximum torque increases to 370 Nm at 4,750 rpm and is 10 Nm higher compared to the Boxster S.

Due to special lightweight construction measures, the Boxster Spyder achieves an outstanding power-to-weight ratio of approx. 6.6 lbs./hp (3 kg/kW).

A 6-speed manual transmission is installed in the Boxster Spyder as standard equipment. Maximum performance can be achieved using the optional Porsche Doppelkupplung (PDK) combined with the Sport Chrono Package (Plus). With 7 forward gears, the PDK transmission combines the efficiency of a manual transmission with the comfort of an automatic transmission with torque converter.

Chassis

The specially adapted chassis on the Boxster Spyder lends the vehicle an even more dynamic character.

One important feature is the lower center of gravity, which was achieved by lowering the chassis by 20 mm. This chassis configuration increases the performance potential significantly when combined with adapted stabilizers and stiffer spring/damper units. A larger negative camber is set on the two axles to reduce the cornering forces.

Brake system

The brake systems on the Boxster Spyder and the Boxster S are the same, but the braking performance of the Boxster Spyder is improved due to an 176 lbs (80 kg) reduction in weight. Available on request, the Porsche Ceramic Composite Brake (PCCB) system can withstand extremely high loads and offers clear advantages regarding response and fading stability.

Air conditioning

The Boxster Spyder does not have an air conditioning system due to its sporty overall concept. An air-conditioning system is also not available as an option.



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5 Body

General

The Boxster Spyder is first and foremost a Boxster - but a totally new interpretation. The genuine Boxster character is plain to see and the 2-seater, mid-engine roadster concept is given particular emphasis.



The new, elongated rear luggage compartment lid, in combination with the new wheels and numerous sporty features in the interior and on the exterior, creates a very distinctive appearance.

It is now probably a rare sight but despite – or maybe because of – its inspired simplicity, the manual hood has a major impact on the appearance of the Boxster Spyder.



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Body



Body



A focus on lightweight construction is the key feature of the Boxster Spyder that ensures excellent agility. Weight has been saved intelligently – partly with features that could easily be dispensed with due to the very specific interpretation of the vehicle concept (for example the air conditioning). Other measures are completely invisible to the driver (for example aluminum doors). It was therefore possible to reduce the overall vehicle weight of the Boxster Spyder by 176 lbs (80 kg) compared with the Boxster S.

Aerodynamics and air guide

One aim in developing the Boxster Spyder was to further consolidate our leading position in the competitive field of aerodynamics. To this end, efforts focused on reducing the aerodynamic propulsion forces to take due account of the increased performance. At the same time, drag was further lowered despite the higher demands placed on the cooling system for cooling the brakes and engine.

The aerodynamic values of the Boxster Spyder have been consistently optimized to improve driving dynamics. The c_d value is identical to the Boxster S and the drag is even lower due to the smaller frontal area. The outstanding aerodynamics make a significant contribution to safe handling at high speeds and to low fuel consumption.

The two longitudinal convex curves on the rear luggage compartment lid optimize drag when the convertible top is open and reduce turbulence behind the standard wind deflector.

Furthermore, the larger fixed rear spoiler and a more pronounced lip on the front spoiler both contribute to optimising the aerodynamics.

Body

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Bodyshell

The bodyshell of the new Boxster Spyder is identical to that of the Boxster S. The most eye-catching new feature is the rear luggage compartment lid.

Doors

The doors on the Boxster Spyder are manufactured from aluminum and are 33 lbs. (15 kg) lighter than standard doors. The door panel without the oddments tray and with door opener loops rounds off the lightweight construction package. The door windows have a new, more dynamic contour and are perfectly adapted to the line defined by the flat contour of the convertible top.

Rear luggage compartment lid

The rear luggage compartment lid and the convertible top compartment lid on the standard Boxster are replaced with a new single-piece aluminum lid. Two longitudinal convex curves that tail off towards the rear have been incorporated into the lid to improve aerodynamics. The pneumatic spring for raising the rear luggage compartment lid has been replaced with a lightweight strut.



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6 Body equipment, exterior

General

Important feature of a classic roadster: a compact, lightweight fabric convertible top. All current Boxster models have a technically perfected roof system to continue this tradition.

The convertible top of the Boxster Spyder has been reduced to the bare essentials to maximize the roadster concept. The electric top is replaced by a simple, extremely sleek 2-piece fabric top that weighs only 13 lbs. (6 kg).



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Convertible top

The line of the convertible top begins directly on the windshield frame and extends flat across the newly adapted door window contours and in 2 fins towards the elongated luggage compartment lid at the rear. The overall weight of the top has been reduced by 46 lbs. (21 kg) (despite the addition of a standard wind deflector).

A reduction in the weight at the very top of the vehicle gives the vehicle a lower center of gravity and so the chassis has been lowered by 20 mm, which has further optimized the driving dynamics.



Another new feature is the variability of the 2-piece roof system, which consists of a sun shield and a weather protector.

Sun shield

The sun shield (weight 11 lbs./5 kg) protects against intensive sunlight. However, the areas beside and behind the passengers remain largely exposed to create a completely new open-top driving feeling: In direct contact with the environment and driving conditions, yet still protected from unpleasant heat and glare.



Danger

Risk of damage to the vehicle and the sun shield. Vehicles with a installed sun shield must not exceed speeds of 124 mph (200 km/h).

Weather protector

The additional weather protector with plastic rear window (weight 2.2 lbs./1 kg) closes off the rear and sides of the cabin and with the door windows raised, provides adequate protection against adverse weather conditions and rain up to a maximum speed of 93 mph (150 km/h).

The roof system offers better protection in this configuration but is not suitable for car washes. See also "CAR CARE INSTRUCTIONS" in the operating instructions.

The folded 2-piece top is stored in the cavity between the rear luggage compartment and the passenger compartment, and can be installed in just a few minutes by one person.

Body equipment, exterior

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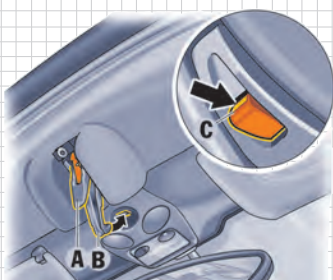
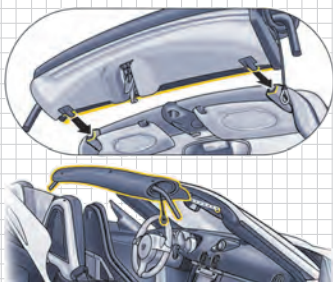
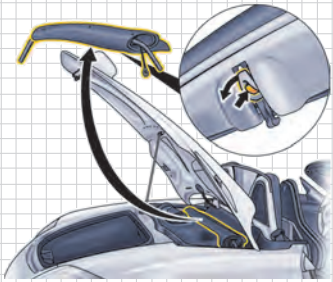
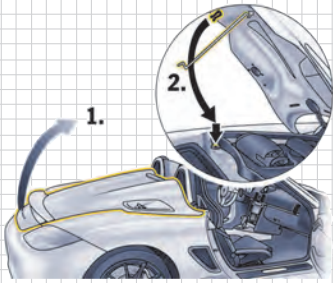


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Note

The sun shield can also be used without the weather protector.



Assembling the sun shield and the weather protector

Installing the sun shield

- 1 – Open the rear luggage compartment lid.

Unclip the support from the rear luggage compartment lid and insert in the mounting on the left in front of the convertible top compartment.

- 2 – Remove the sun shield from the convertible top compartment.

Make sure that the locking lever on the front of the sun shield is open.

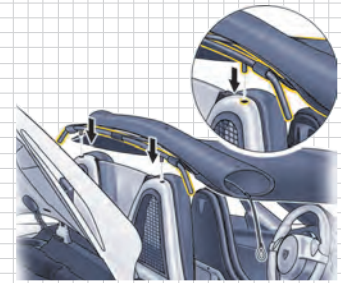
- 3 – Guide the sun shield forwards into the mountings on the windshield frame.

Make sure that the two centering tabs are seated securely in both mountings.

- 4 – Pull back the locking lever **A** on the front catch and lock into place. The locking

hook **B** must engage in the windshield. A white marking line visible on the red locking button **C** indicates that the lever is locked correctly.

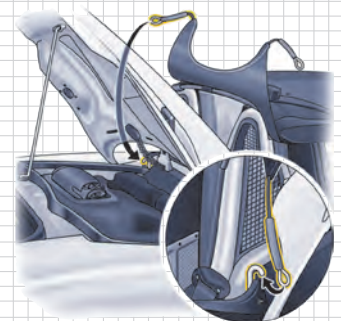
5 – Unroll the sun shield and insert the pins on the bow tube into the guide sleeves on the roll-over bar.



6 – Remove the retaining eye on the tension rope from the retaining pocket on the sun shield.



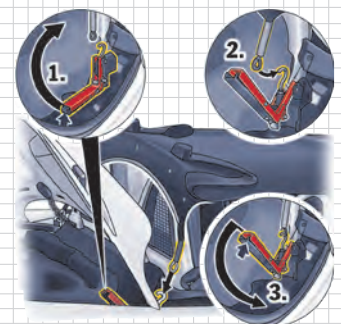
7 – Hook the retaining eye on the tension rope over the fastening hook underneath the roll-over bar on the left side of the vehicle.

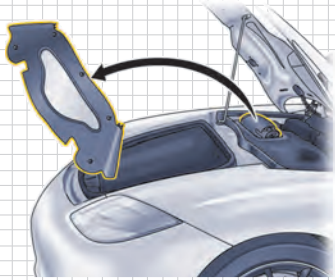


8 – Release the red tensioning lever on the right side of the vehicle. Actuate the release handle underneath the tensioning lever to do this.

9 – Hook the retaining eye on the tension rope over the fastening hook on the tensioning lever.

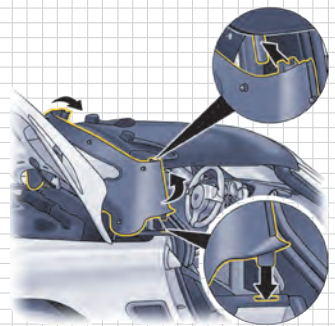
10 – Push down the tensioning lever until it locks with an audible click. Keep fingers away from the area under the tensioning lever so that they are not pinched when the lever is locked.



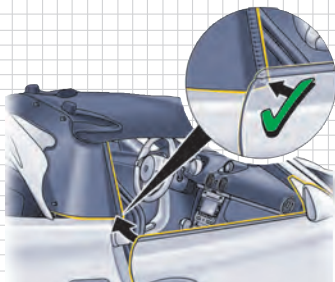


Installing the weather protector

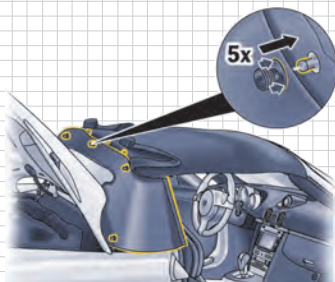
11 – Remove the weather protector from the convertible top compartment in the luggage compartment and carefully unroll. Avoid scratching the plastic screen while doing this.



12 – Insert the lateral struts on the weather protector into the mountings on the right and left side of the vehicle and clip into the bow tube at the top.



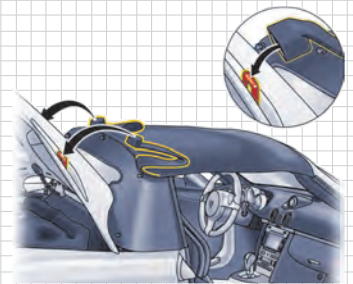
13 – Make sure that the front edge of the fabric and the rubber seal on the weather protector are clamped against the vehicle body when the door is closed. Otherwise water may enter.



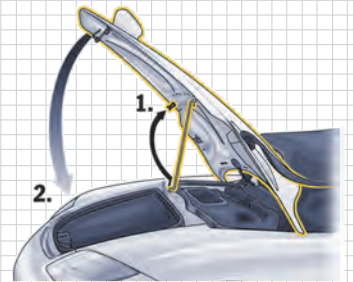
14 – Button the weather protector to the sun shield. Hold the larger ring on the outside of the fastening buttons so that they can snap into place freely.

Securing the sun shield

15 – Push the caps attached to the sun shield fins onto the red clip on the rear luggage compartment lid until they lock with an audible click.



16 – Raise the luggage compartment lid slightly and clip the strut into the mounting on the luggage compartment lid.



17 – Lower the luggage compartment lid and close by pushing down near the lock with the palm of the hand.

Removal of the sun shield and weather protector is performed in reverse order.



Exterior

Other key features on the exterior of the Boxster Spyder include:

- Redesigned lateral air inlet grilles at the front and reduction of the front light module to an independent LED position light
- Black front spoiler lip



- Redesigned air intakes in the rear side section with black grille
- Decorative side strip with "PORSCHE" logo in contrasting color
- Roll-over bar painted in Black
- Windshield with grey top-tint
- Free-standing brake light between the two convex curves on the rear luggage compartment lid





S VM 908

Boxster Spyder

7 Body equipment, interior

General

The interior of the new Boxster Spyder was derived from the Boxster S and has been modified with an emphasis on ergonomics and authenticity. The basic color of the interior is black but it can be upgraded to red or different shades that match the vehicle colour.



Trim

The omission of the CDR-30 audio system from the center console at the front creates additional storage space for gloves, a hat, glasses and other objects required when driving with the top down. The rear center console and the trim on the switch panel are painted in the same color tone as the vehicle color to lend an additional visual accent. Cupholders are only available on request at no extra charge to keep the weight of the vehicle to a minimum. The trim surround on the central and side air vents is also available in sporty Black. To continue the exterior color scheme of

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the Boxster Spyder inside the passenger compartment, the aluminum doors have been lined with door panels similar to those on the 911 GT3 RS. The door storage compartments have been omitted. The door opener loops are available in contrasting red or black, depending on the interior color, and match the color of the seat belts. The shift pattern on the standard shift lever and optional Porsche Doppelkupplung (PDK) selector lever is red. The air conditioning system and CDR-30 audio system have been omitted. The omission of these two features has reduced the overall vehicle weight by approx. 35 lbs (16 kg).

Instruments

The dials in the instrument cluster are black. The instrument box has been omitted to keep the weight to a minimum. The stopwatch from the optional Sport Chrono Package (Plus) also has a matching black dial.

Steering wheel

The optional three-spoke sports steering wheel for Porsche Doppelkupplung (PDK) with shift paddles and an extremely sporty, high-quality design is already installed in the 911 Turbo.

Seats

The Boxster Spyder is equipped with lightweight sports bucket seats as standard. The design of the glass and carbon fiber-reinforced plastic (GFRP/CFRP) seat shell makes an important contribution to reducing the weight of the vehicle by approx. 26 lbs. (12 kg) compared to the standard seats of the Boxster S. The sports bucket seat also increases lateral support of the driver during cornering. The surface of the attractive seat shell is made from exposed carbon. The sports seat is available with an optional leather cover at no extra cost.