



911 Turbo
Owner's Manual

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#### Orientation guides in the Owner's Manual

The orientation guides in the Owner's Manual are highlighted in yellow.

#### **Overall Table of Contents**

At the start of the Owner's Manual you will find an overview of the overall contents of the Owner's Manual.

#### **Section Contents**

There is a summary of topics with the corresponding page numbers at the beginning of each main chapter.

#### Index

There is a detailed, alphabetical index at the end of this Owner's Manual.

#### **Safety instructions in the Owner's Manual**

For your own protection and longer service life of your car, please heed all operating instructions and special warnings. These special warnings contain important messages regarding your safety and/or the potential for damage to your Porsche. Ignoring them could result in serious mechanical failure, serious personal injury or death.

Various types of safety instructions are used in this Owner's Manual.



**A** DANGER

Serious Injury or Death

Failure to observe safety instructions in the "Danger" category will result in serious injury or death.



Possible Serious Injury or Death

Failure to observe safety instructions in the "Warning" category could result in serious injury or death.



**CAUTION** 

Possible Moderate or Minor Injury

Failure to observe safety instructions in the "Caution" category can result in moderate or minor injury.

#### **NOTICE**

Possible Vehicle Damage

Failure to observe safety instructions in the "Notice" category could result in damage to the vehicle.



# 1 Information

Additional information, tips and instructions are indicated by the word "Information". Please read this information carefully and follow the instructions.

#### Dear Owner,

Thank you for choosing a Porsche 911 Turbo. No other car embodies such a unique blend of legendary heritage and cutting edge innovation. For maximum safety and pleasure, we encourage you to read the Owner's Manual and take time to familiarize yourself with the operation of your Porsche vehicle before you drive it.

a driver and ensure that anyone else driving your Porsche vehicle does the same. To prevent or minimize injury, always use your safety belts and always lawfully operate your Porsche vehicle. Always keep your Owner's Manual in the car. If you sell your Porsche vehicle, pass the Owner's Manual and other operation manuals on to the new owner.

Always drive within your own unique capabilities as

Should you have any questions regarding the operation or maintenance of your vehicle, please call 1-800-PORSCHE or contact your authorized Porsche dealership.

A separate Maintenance Booklet explains how you can keep your Porsche in top driving condition by having it serviced regularly.

A separate Warranty and Customer Information Booklet contains detailed information about the warranties covering your Porsche.

#### For U.S. only:

If you believe that your vehicle has a fault which could cause a crash, injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Porsche Cars North America, Inc. (Porsche Cars N.A.).

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety problem exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you and your dealer, or Porsche Cars N.A..

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at

1-888-327-4236 (TTY: 1-800-424-9153); go to

http://www.safercar.gov;

or write to:

Administrator, NHTSA, 1200 New Jersey Ave, SE, Washington, DC 20590.

You can also obtain other information about motor vehicle safety from http://www.safercar.gov. Your car has thousands of parts and components which have been designed and manufactured in accordance with Porsche's high standards of engineering quality and safety.

#### **WARNING**

Alteration or Misuse of Vehicle

Any alteration of the vehicle may negate or interfere with those safety features built into the vehicle. Modifications may be carried out on your vehicle only if approved by Porsche.

Your Porsche is intended to be used in a safe manner obeying the local traffic laws and in the light of driving conditions faced by you, and in accordance with the instructions provided in this Owner's Manual.

- Do not misuse your Porsche by ignoring those laws and driving conditions, or by ignoring the instructions in this manual.
- Do not alter your Porsche. Any alteration could create dangerous conditions or defeat safety engineering features built into your car.

#### **NOTICE**

Risk of damage to the engine due to inadequate supply of oil.

The fitting of racing tires (e.g. slicks) for sporting events is not approved by Porsche. Very high cornering speeds can be achieved with racing tires. However, the resulting transverse acceleration values would jeopardize the adequate supply of oil to the engine. Porsche therefore will not accept any warranty or accept any liability for damage occurring as a result of non-compliance with this provision.

Do not fit racing tires (e.g. slicks) for sporting events on your vehicle.

Regularly check your vehicle for signs of damage.

Damaged or missing aerodynamic components such as spoilers or underside panels affect the driving behavior and therefore must be replaced immediately.

Your car may have all or some of the components described in this manual.

Should you have difficulty understanding any of the explanations of features or equipment installed in your vehicle, contact your authorized Porsche dealer. He/She will be glad to assist you. Also check with your dealer on other available options or equipment.

Throughout this booklet, left is designated as the driver's side of the vehicle, and right as the passenger's side of the vehicle.

Text, illustrations and specifications in this manual are based on the information available at the time of printing.

It has always been Porsche's policy to continuously improve its products. Porsche, therefore, reserves the right to make changes in design and specification, and to make additions or improvements in its product without incurring any obligation to install them on products previously manufactured.

We wish you many miles of safe and pleasurable driving in your Porsche.

#### **Note to owners**

In Canada, this manual is also available in French. To obtain a copy contact your dealer or write to:

#### **Note aux proprietaires**

Au Canada on peut se procurer un exemplaire de ce Manuel en français auprès du concessionaire ou du:

Porsche Cars Canada, Ltd. Automobiles Porsche Canada, LTEE

5925 Airport Road Suite 420 Mississauga, Ontario Canada, L4V 1W1

Telephone number for customer assistance: 1-800-PORSCHE / Option 3

#### **Sport tires**

Sport tires (ultra high performance tires) are approved for use on public highways and comply with all statutory requirements and safety criteria. The design of the tire is also geared towards use on racing circuits (driver safety training courses, sports driving schools, Club Sport events) and provides distinct advantages here in terms of dry grip and wear compared to conventional road tires.

The major features are a reduced tread depth and a special tread pattern and carcass.

# The design features of this sports tire result in the following effects compared with other summer tires when used under normal driving conditions:

- Sport tires have a smaller tread depth, and thus can reach their wear limit sooner.
   As with all tires, the attainable mileage depends on the individual driving style and the conditions of use.
- Exercise caution when driving on wet roads, paying special attention to hydroplaning situations (stagnant water, puddles, lane grooves). Sport tires have a lower tread depth than normal tires and you must therefore adapt speed accordingly when driving on wet surfaces.
- The driver's skill level must be commensurate with the vehicle performance levels in the upper range limits, due to increased safety risks in the upper range limits.
- Sport tires are not suitable for use in cold, snowy or icy conditions. At outside temperatures below 45 °F (7 °C) change to snow tires.
- Notify anyone using your car of these characteristics and possible effects.

#### **A** DANGER

Loss of Road Surface Contact, Control over the Vehicle and Braking Ability

The reduced tire tread depth means that there is an increased risk of aquaplaning on wet roads.

When driving on wet or mud-covered roads reduce speed significantly.

## **A** DANGER

Worn Tires

Sport tires have a smaller tread depth, and thus can reach their wear limit sooner.

It is important to check tire wear frequently to avoid risk of serious personal injury or death from worn tires.

▷ Check tire wear frequently.

## Driving on Race Circuit (e.g. Sports Driving Schools, Club Sport Events)

#### Brake fluid, brake pads and brake disks

Brake fluid absorbs moisture from the air over time. This accumulation of water lowers the boiling point and can impair braking action if the brakes are subjected to high temperatures, such as can occur on race circuits (sports driving school, Club Sport events).

The brake fluid should therefore not be more than 12 months old if the vehicle is driven on race circuits (sports driving school, Club Sport events).

For more information, see the "Maintenance" booklet.

Wear on the brake pads and brake disks depends to a great extent on the driving style and driving conditions. Wear on the brake components is increased as a result of high temperatures, such as can occur on race circuits (sports driving school, Club Sport events).

Before and after driving on race circuits (e.g. sports driving school, Club Sport events), it is important therefore to carry out a professional inspection of the brake pads and brake disks for wear.

#### **Racing tires**

The fitting of racing tires (e.g. slicks) for sporting events is not approved by Porsche.

Very high cornering speeds can be achieved with racing tires. The resulting transverse acceleration values would jeopardize the adequate supply of oil to the engine.

Porsche therefore refuses to accept any guarantee or liability for damage occurring as a result of non-compliance with this provision.

# Setting and operating vehicle components when driving



Operating Components While Driving

Setting or operating the multi-function display, radio, navigation system, telephone or other equipment when driving could distract you from the traffic. You could lose control of the vehicle resulting in serious personal injury or death.

- Operate the components while driving only if the traffic situation allows you to do so safely.
- Carry out any complicated operating or setting procedures only with the vehicle stationary.

## **Engine Exhaust**



Engine Exhaust Inhalation

Engine exhaust is dangerous if inhaled. Engine exhaust fumes have many components which you can smell. They also contain carbon monoxide (CO), which is a colorless and odorless gas.

Carbon monoxide can cause unconsciousness and even death if inhaled.

Never start or let the engine run in an enclosed, unventilated area.

It is not recommended to sit in your car for prolonged periods with the engine on and the car not moving.

#### **WARNING**

California Proposition 65

Engine exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

In addition, certain fluids contained in vehicles and certain products of component wear contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

#### **Hot Exhaust Pipes**

**WARNING** 

Hot Exhaust Pipes

The exhaust pipe is hot when the vehicle is running and remains hot for some time after the vehicle is turned off

To prevent injury, make a point of noting where your vehicle's exhaust pipe is, avoid placing your legs near the exhaust pipe, and closely supervise children around the vehicle during time when the exhaust pipe could be hot. A hot exhaust pipe can cause serious burns.

#### **Portable Fuel Containers**

**A** DANGER

Portable Fuel Container Leaks

Portable fuel containers may leak, whether they are full or partially empty. Fuel leaking from a portable container carried in your vehicle could, in case of an accident, cause a fire or explosion.

Never carry additional fuel in portable containers in your vehicle.

#### **Ground Clearance**

#### NOTICE

Risk of damage to the vehicle due to lower ground clearance.

The vehicle may touch the ground as a result of reduced ground clearance.

- Drive carefully and slowly on steep slopes (e. g. parking lots, curbs, uneven roads, lifting platforms etc.).
- Avoid steep ramps.

# Porsche Ceramic Composite Brake (PCCB)

Please see the chapter "BRAKES" on page 152.

The high-performance brake system is designed for optimal braking effect at all speeds and temperatures.

Certain speeds, braking forces and ambient conditions (such as temperature and humidity) therefore might cause brake noises.

Wear on the different components and braking system, such as brake pads and brake disks, depends to a great extent on the individual driving style and the conditions of use and therefore cannot be expressed in actual miles on the road. The values communicated by Porsche are based on normal operation adapted to traffic. Wear increases considerably when the vehicle is driven on race tracks or through an aggressive driving style.

Please consult an authorized Porsche dealer about the current guidelines in effect before such use of your vehicle.

## **Dear Porsche Owner,**

A lot has gone into the manufacture of your Porsche sports car, including advanced engineering, rigid quality control and demanding inspections. These engineering and safety features will be enhanced by you...

#### the safe driver...

- who knows her/his car and all controls,
- who maintains the vehicle properly,
- who uses driving skills wisely and always drives within her/his own capabilities and the level of familiarity with the vehicle.

You will find helpful hints in this manual on how to perform most of the checks listed on the following pages. If in doubt, have these checks performed by your authorized Porsche dealer.

## **Before driving off...**

#### **Check the following items first**

- ► Turn the engine off before you attempt any checks or repairs on the vehicle.
- Be sure the tires are inflated correctly. Check tires for damage and tire wear.
- See that wheel bolts are properly tightened and not loose or missing.
- Check engine oil level, add if necessary. Make it a habit to check the engine oil with every refueling.
- Check all fluid levels such as windshield washer and brake fluid levels.

- Be sure the vehicle battery is well charged and cranks the engine properly.
- Check all doors and lids for proper operation and latch them properly.
- Check and if necessary replace worn or cracked wiper blades.
- See that all windows are clear and unobstructed.
- Check air intake slots and area between luggage compartment lid and windshield. Ensure that these areas are free of snow and ice, so the heater and the windshield wipers work properly.
- If a child will be riding in the vehicle, check child seat/child seat restraint system to ensure that restraints are properly adjusted.
- Check all exterior and interior lights for operation and that the lenses are clean.
- Check the headlights for proper aim, and if necessary, have them adjusted.
- ▷ Check under the vehicle for leaks.
- ▶ Be sure all luggage is stowed securely.

#### **Emergency equipment**

It is good practice to carry emergency equipment in your vehicle.

Some of the items you should have are: window scraper, snow brush, container or bag of sand or salt, emergency light, small shovel, first-aid kit, etc.

#### In the driver's seat...

- ▷ Check operation of the horn.
- Position seat for easy reach of foot pedals and controls. To reduce the possibility of injury from the air bag deployment, you should always sit back as far from the steering wheel as is practical, while still maintaining full vehicle control.
- Adjust the inside and outside rear view mirrors.
- ▷ Buckle your safety belts.
- Check operation of the foot and electric parking brake.
- ▶ Check all warning and indicator lights with ignition on and engine not running.
- Start engine and check all warning displays for warning symbols.
- ▶ Never leave an idling car unattended.
- Lock doors from inside, especially with children in the car to prevent inadvertent opening of doors from inside or outside. Drive with doors locked.

#### On the road...

- Never drive after you have consumed alcohol or drugs.
- Always have your safety belt fastened.
- Always drive defensively. Expect the unexpected.
- Use signals to indicate turns and lane changes.
- Turn on headlights at dusk or when the driving conditions warrant it.
- Always keep a safe distance from the vehicle in front of you, depending on traffic, road and weather conditions.
- Reduce speed at night and during inclement weather.
  - Driving in wet weather requires caution and reduced speeds, particularly on roads with standing water, as the handling characteristics of the vehicle may be impaired due to hydroplaning of the tires.
- Always observe speed limits and obey road signs and traffic laws.
- When tired, get well off the road, stop and take a rest. Turn the engine off. Do not sit in the vehicle with engine idling.
  - Please see the chapter "ENGINE EXHAUST" on page 4.
- When parked, always put the electric parking brake on and put the PDK selector lever in position P.
  - On hills also turn the front wheels toward the curb.
- When emergency repairs become necessary, move the vehicle well off the road. Turn on the emergency flasher and use other warning devices to alert other motorists. Do not park or operate the vehicle in areas where the hot exhaust system may come in contact with dry

- grass, brush, spilled fuel or other flammable material.
- ▶ Make it a habit to check the engine oil with every refueling.

# Break in hints for the first 2,000 miles (3,000 kilometers)

The following tips will be helpful in obtaining optimum performance from your new Porsche. Despite the most modern, high-precision manufacturing methods, the moving parts must still wear in with each other. This wearing-in occurs mainly in the first 2,000 miles (3,000 km).

#### Therefore:

- ▶ Preferably take longer trips.
- Avoid frequent cold starts with short-distance driving whenever possible.
- Avoid full throttle starts and abrupt stops.
- Do not exceed maximum engine speed of 4,200 rpm (revolutions per minute).
- ▷ Do not run a cold engine at high rpm either in Neutral or in gear.
- Do not let the engine labor, especially when driving uphill. Shift to the next lower gear in time (use the most favorable rpm range).
- Never lug the engine in high gear at low speeds. This rule applies at all times, not just during the break-in period.
- Do not participate in motor racing events, sports driving schools, etc. during the first 2,000 miles (3,000 kilometers).

There may be a slight stiffness in the steering, gear-shifting or other controls during the break-in period which will gradually disappear.

#### Break in brake pads and brake disks

New brake pads and disks have to be "broken in", and therefore only attain optimal friction when the car has covered several hundred miles or km. The slightly reduced braking ability must be compensated for by pressing the brake pedal harder. This also applies whenever the brake pads and brake disks are replaced.

#### **New tires**

New tires do not have maximum traction. They tend to be slippery.

Break in new tires by driving at moderate speeds during the first 60 to 120 miles (100 to 200 km). Longer braking distances must be anticipated.

#### **Engine oil and fuel consumption**

During the break-in period oil and fuel consumption may be higher than normal.

As always, the rate of oil consumption depends on the quality and viscosity of oil, the speed at which the engine is operated, the climate and road conditions, as well as the amount of dilution and oxidation of the lubricant.

Make a habit of checking engine oil with every refueling, add if necessary.

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- **B** Personal settings memory buttons See page 142.
- **C** Exterior-mirror setting See page 49.
- **D** Light switch See page 79. Overhead console
- Power windows See page 62.
- **G** Electric parking brake See page 151.
- H Ignition lock See page 146.
- Front and rear lid release
- See page 24.

  J Steering wheel adjustment See page 51.

  K Seat adjustment See page 32.



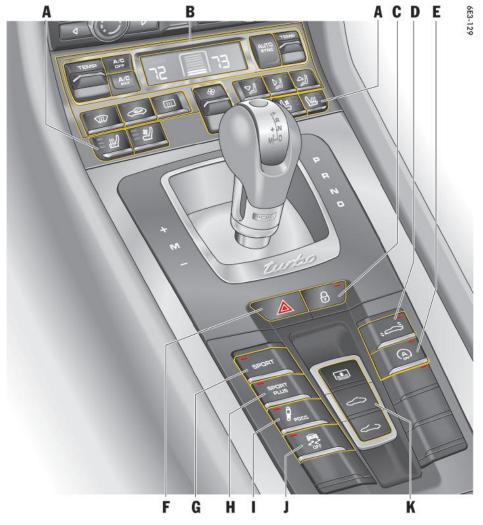
# **Steering Wheel and Instrument Panel**

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- C Engine oil pressure gauge See page 93.D Engine oil temperature gauge
- See page 92.
- **E** Speedometer See page 92.
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- I Fuel gauge See page 94.J Windshield wipers
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- K Cruise control See page 157.
- L Diagnostic socket (OBD)
- M Telephone controls, multi-function display See page 103.
- **N** Horn



# **Center Console**

- A Sport Chrono watch See page 114.
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- D Drinks holder/Cupholder See page 194.E Glove box
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- **G** Center console See page 13.
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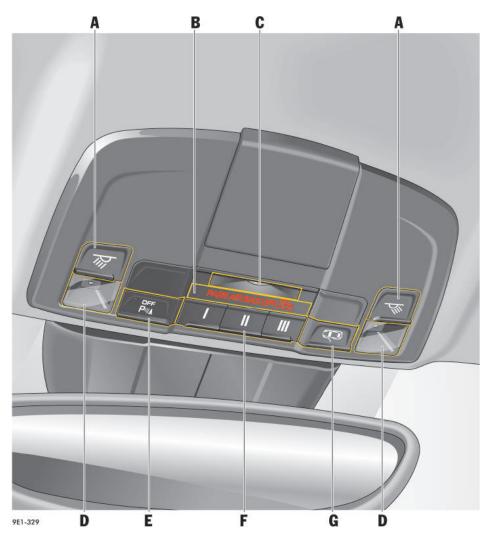


# **Control Panel**

- A Seat heating/seat ventilation See page 35.
- **B** Operating panel for air conditioning See page 55.
- **C** Central locking button See page 18.
- **D** Front/rear spoiler See page 190.
- **E** Auto Start-Stop function/coasting mode See page 151.
- **F** Emergency flasher switch See page 83.
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- Porsche Active Suspension Management (PASM)
- See page 185.

  J Porsche Stability Management (PSM)
- See page 180.

  K Operating panel for lifting/sliding roof See page 63. Control panel for convertible top See page 67.



# **Overhead Console**

- A Button for interior/reading lights See page 84.

  B PASS AIR BAG OFF warning light
- See page 45.
- **C** Interior light
- See page 84.

  D Reading lights
  See page 84.

  E ParkAssist
- See page 207.
  Garage door opener (HomeLink®)
  See page 211.
- **G** Button for interior/reading lights See page 84.

Overview Illustrations

# **Opening and Locking**

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#### Never invite car theft!

An unlocked car with the key in the ignition lock invites car theft.

A gong alarm is standard equipment in your Porsche. The gong alarm will sound if you open the driver's door while the key is still in the ignition lock. It is your reminder to pull the key out of the ignition lock and to lock the doors.

#### **WARNING**

Unattended Vehicle

Never leave your vehicle unattended with the key in the ignition lock, especially if children and/or pets are left unattended in the vehicle. They can operate power windows and other controls. If the engine is left running, they may accidentally engage the shift lever. Serious personal injury or death could result from loss of control of the

- ▷ Always remove the ignition key.
- ▷ Always set the electric parking brake.
- Lock the doors with the key or with the remote control.

#### To protect your vehicle and your possessions from theft, you should always proceed as follows when leaving your vehicle:

- Close windows.
- Close sun roof.
- Activate the electric parking brake.
- Remove ignition key (switch ignition off in vehicles that have Porsche Entry & Drive).
- Remove valuables (e.g. car documents, radio control module, cell phones, house keys) from the car.
- Lock doors.
- ▷ Lock the glove compartment.
- ▷ Close storage trays.

## **Notes on the Key and Central Locking System**

#### Key

You are provided with two car keys with integrated emergency key. These keys operate all the locks on your vehicle.

- ▷ Be careful with your car keys: do not part with them except under exceptional circumstances.
- Remove and take the ignition key with you, even if leaving the vehicle only briefly. Do not leave the ignition key in the vehicle.
- Inform your insurance company of any loss or theft of car keys or if extra or replacement keys have been cut.
- ▶ Third parties can still operate the mechanical locks with a lost key.



# 1 Information

Different vehicle settings are stored on the respective key when the vehicle is locked, provided the vehicle is fitted with the relevant equipment.

For information on storing vehicle settings on the key:

▶ Please see the chapter "COMFORT ENTRY FUNCTION" on page 34.

## **Emergency operation**

▶ Please see the chapter "EMERGENCY OPERATION - UNLOCKING THE IGNITION KEY/ CONTROL UNIT" on page 28.

## Replacement keys

Car keys can only be ordered through an authorized Porsche dealer. Sometimes, this may take a long time.

You should therefore always keep a spare key convenient. Keep it in a safe place, but under no circumstances in or on the vehicle.

The key codes of new keys have to be "taught" to the vehicle control unit by an authorized Porsche dealer. All keys belonging to the vehicle must also be taught again for this purpose. "Teach-in" can be carried out for a total of 8 car keys.



Third parties can continue to operate the mechanical locks using the lost key.

- Please consult an authorized Porsche dealer for blocking the lost key.
- Furthermore, it is recommended having the mechanical locks replaced by an authorized Porsche dealer.



# **Panic button**

In dangerous situations or when one's own safety is threatened, it is possible to draw attention to the situation by triggering an alarm.

#### To trigger an alarm

▶ Press button. The horn sounds and the emergency flasher flashes.

#### To stop the alarm

Press button again or unlock the vehicle. The horn becomes silent and the emergency flasher goes out.



## **Emergency key**

#### Removing emergency key

- 1. Push the release button to the side.
- 2. Pull out the key.

#### Inserting emergency key

▷ Slide in the key until the release button audibly engages.

## **Central Locking System**

USA: KR55WK50138 Canada: 7812D-5WK50138

This device complies with Part 15 of the FCC Rules and RSS-210 of Industry Canada.

Operation of this device is subject to the following two conditions:

- **1.** This device may not cause harmful interference, and
- this device must accept any interference received including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



# 1 Information

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment.

Such modification could void the user's authority to operate the equipment.

Any changes or modifications not expressly approved by Porsche could void the user's authority to operate this equipment.

Your vehicle is equipped with a central locking system. The following are unlocked or locked together:

- Doors
- Filler flap

The central locking system is always activated when the vehicle is unlocked and locked.

On the multi-purpose display of the instrument panel, you can set different variants for locking and unlocking. You can open all doors irrespective of the setting made.

The vehicle cannot be locked if the driver's door is not completely closed.

If one of the following components is not completely closed when you try to lock the vehicle the door is not locked:

- vehicle doors
- luggage compartment lid

The indication by the emergency flasher and by the acoustic signal will be provided after all doors and the luggage compartment lid are closed.



# 1 Information

When locking the vehicle with only the driver's door closed, the vehicle will be pre-locked. Make sure that the key is not inside the vehicle when closing the open passenger's door/luggage compartment lid.

# **Brief Overview – Opening and Locking from Outside**

The Porsche Entry & Drive option can be recognized by the buttons **A** in the door handles. This brief overview does not replace the information provided under "OPENING AND LOCKING FROM OUTSIDE".

Warnings, in particular, are not replaced by this brief overview.

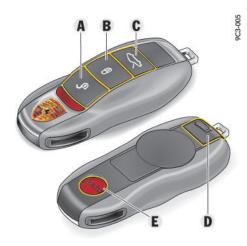


Key



Porsche Entry & Drive

What do I want to do?	What do I have to do?	What happens?
Unlocking	Using the key: Press the button of on the key once.  Press the button of on the key twice within 5 seconds.  With Porsche Entry & Drive:	The emergency flasher flashes once. The driver's door can be opened. The emergency flasher flashes once. Both vehicle doors can be opened.
	Grip the door handle fully.	The driver's door can be opened.
Locking	Using the key: Press the button ① on the key.  With Porsche Entry & Drive: Press the button A on the door handle.	The emergency flasher flashes twice. The doors are locked.
Lock if persons/animals are remaining in vehicle (Switch off the alarm system's interior surveillance)	Please see the chapter "SWITCHING OFF INTERIOR SURVEILLANCE AND INCLINATION SENSOR" on page 216.	
Switching off alarm	Unlock the vehicle. With Porsche Entry & Drive: Grip the door handle fully.	The alarm stops.



- A Unlock the vehicle
- **B** Lock the vehicle
- C Unlock the luggage compartment lid and doors
- D Emergency key
- **E** Panic button

# **Opening and Locking from Outside**

Depending on your vehicle equipment, you can unlock and lock the vehicle either with the car key or without a key by means of Porsche Entry & Drive.

#### With the key

Use the buttons on the key to unlock and lock the vehicle.



#### Information

If you unlock the vehicle with the emergency key in the door lock, you must switch the ignition on (ignition lock position 1) within 15 seconds of opening the door in order to prevent the alarm system from being triggered. The passenger's door remains locked.



#### Information

If the vehicle is unlocked using the ① button and a door or the luggage compartment lid is not opened, the vehicle is locked again automatically after 30 seconds.



#### Information

The factory settings of the vehicle are described in this section.

In the multi-function display in the instrument panel, you can change the settings and store them on the respective key for vehicles with memory. For information on modifying the unlocking and locking settings:

▶ Please see the chapter "LOCKING SETTINGS" on page 122.



#### With Porsche Entry & Drive

On vehicles with Porsche Entry & Drive, you can unlock, lock and start the vehicle without using the key.

You simply have to carry the key with you, e.g. in your trouser pocket.

Do not expose the car key to a high level of electromagnetic radiation. This could adversely affect Porsche Entry & Drive.



## **Unlocking and opening doors** Unlocking with the key

1. Press button of once. The emergency flasher flashes once. The driver's door is unlocked. or

Press button **twice** within 5 seconds. The emergency flasher flashes once. Both vehicle doors are unlocked.

2. Pull the door handle.



## **Unlocking with Porsche Entry & Drive** (keyless)

Either door can be unlocked if you have the key and position yourself on the side of the vehicle (driver's side, passenger's side) that you wish to open.

- 1. Grip the door handle fully. The emergency flasher flashes once. The doors are unlocked.
- 2. Pull the door handle.



#### Information

The vehicle is locked automatically after 30 seconds if none of the doors or the luggage compartment is opened.

If the interior surveillance system and inclination sensor have been switched off (restricted antitheft protection), this also remains the case after automatic relocking.

As a result, the doors can be opened from inside by pulling the door opener.

Inform any persons remaining in the vehicle that the alarm system will be triggered if the door is opened.

When locked again, the interior surveillance system and inclination sensor are activated once more.

#### Switching off operational readiness (for vehicles with Porsche Entry & Drive)

Operational readiness of Porsche Entry & Drive is switched off after 96 hours for the driver's door and after 36 hours for the passenger door if the vehicle is not unlocked within this time.

- 1. Pull the door handle once to activate the system again.
- 2. Pull the door handle again to open the door.

#### Side-selective door unlock function

When unlocking the vehicle, you can choose to unlock only the driver's door or also the passenger's door. You can unlock both doors irrespective of the selected setting.

▶ Press button on the key twice within 5 seconds.

For information on modifying the opening and locking settings:

▶ Please see the chapter "LOCKING SETTINGS" on page 122.

Opening and Locking 21

#### **Locking doors**

#### Locking with the key

- 1. Close the door.
- **2.** Press button (7) once.

The emergency flasher flashes twice and an acoustic signal will sound twice.

The doors cannot be opened from outside.

or

# If persons or animals are remaining in the vehicle, press button (1) twice within 2 seconds.

The emergency flasher emits one long flash. The alarm system's interior surveillance is switched off.

The doors can be opened from inside by pulling on the door opener.

Inform any persons remaining in the vehicle that the alarm system will be triggered if the door is opened.



#### Information

When locking the vehicle with only the driver's door closed, the vehicle will be pre-locked. Make sure that the key is not inside the vehicle when closing the open passenger's door/luggage compartment lid.



#### Information

The emergency flasher indicates that the vehicle has been locked successfully only when all the doors, the engine compartment lid and the tailgate are closed.



#### Locking with Porsche Entry & Drive (keyless)

You must carry the key with you.

- 1. Close all doors.
- Press the locking button A on the door handle. The emergency flasher flashes twice and an acoustic signal will sound twice.

The doors cannot be opened from outside.

or

# If persons or animals are remaining in the vehicle.

▶ press the locking button **A** on the door handle twice within 2 seconds.

The emergency flasher emits one long flash. The alarm system's interior surveillance is switched off.

The doors can be opened from inside by pulling on the door opener.

Inform any persons remaining in the vehicle that the alarm system will be triggered if the door is opened.



#### Information

The vehicle cannot be locked if any of the doors or the luggage compartment are not completely closed.

A warning signal sounds in the passenger compartment and a warning message appears on the multi-function display.

The key must be outside the vehicle when locking the vehicle doors, otherwise the vehicle doors cannot be locked.

If the key is out of range, the vehicle doors and the luggage compartment can no longer be opened after the vehicle is locked.

# Automatic door locking and automatic door unlocking



Emergency Auto Lock Override

In an emergency situation where you need to exit the car through an automatically locked door, remember the following procedure to open the door.

- Unlock the doors by pressing the central locking button **or**
- Pull the inner door handle to open the door.

In the multi-purpose display of the instrument panel, you have the option of selecting diverse variants of automatic door locking and automatic door unlocking.

For information on modifying the opening and locking settings:

▶ Please see the chapter "LOCKING SETTINGS" on page 122.

# **Opening and Locking from Inside**

The factory settings of the vehicle are described in this section.

In the multi-function display in the instrument panel, you can change the settings and store them on the respective key for vehicles with memory. For information on modifying the opening and locking settings:

▶ Please see the chapter "LOCKING SETTINGS" on page 122.



Central locking button

## **⊕** Locking doors

Press the central locking button. When the ignition is switched on, the indicator light in the button lights up.

Both vehicle doors will be locked (only if all doors are closed).

The doors can be opened from inside by pulling on the door opener.

#### **Automatic with Auto Lock**

If this function is activated, the vehicle is locked automatically when a speed of approximately 2 mph (5 km/h) is exceeded.

For information on modifying the unlocking and locking settings:

▶ Please see the chapter "LOCKING SETTINGS" on page 122.

## (1) Unlocking doors

Press the central locking button. The indicator light on the button goes out. **Both** vehicle doors will be unlocked.

#### **Automatic with Auto Unlock**

The vehicle is automatically unlocked when the ignition key is removed.

For more information on modifying the unlocking and locking settings:

▶ Please see the chapter "LOCKING SETTINGS" on page 122.



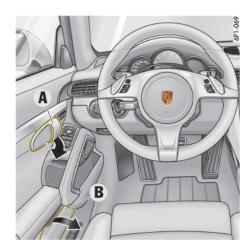
# 1 Information

If the vehicle was locked using the car key or the emergency key, it cannot be unlocked with the central locking button.



# 1 Information

In the event of an accident with airbag deployment, the doors are unlocked automatically to facilitate fast access for helpers. The emergency flasher is also activated automatically.



- A Door opener
- **B** Door storage tray

#### **Opening doors**

▶ Pull door opener (**arrow**) once.

# **Door storage tray**Opening storage tray

○ Open the cover **B**.

Keep the storage tray closed while driving for safety reasons.

## Opening and Closing the Luggage Compartment Lid and Engine Cover

**A** DANGER

Unsecured Luggage Compartment Lid

If the luggage compartment lid is not secured properly, it could fly up, blocking your vision and causing loss of control.

Should you notice at any time while driving that the lid is not secured properly, please stop immediately in a suitable place and close it.

#### **Opening luggage compartment lid**

#### **NOTICE**

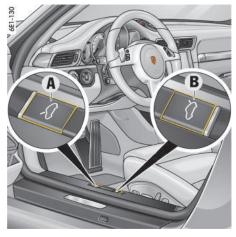
Risk of damage to luggage compartment lid or windshield wipers.

If the windshield wipers are pulled forward when you open the luggage compartment lid, the wipers or the luggage compartment lid could be damaged.

- Make sure that the windshield wipers are not pulled out forwards when opening the luggage compartment lid.
- Always switch off windshield wipers before opening the luggage compartment lid (wiper switch in position 0).

For information on windshield wipers:

Please see the chapter "WINDSHIELD WIPER AND HEADLIGHT WASHER SYSTEM" on page 86.



- A Luggage compartment lid
- B Engine cover
- 1. Open the driver's door.
- 2. Pull the release lever A next to the driver's

The luggage compartment lid is now unlocked.



- 3. Raise lid slightly and unlatch the safety catch with the red lever (arrow).
- 4. Open the luggage compartment fully.



#### Opening luggage compartment lid with the key



### Information

When the luggage compartment lid is unlocked, the vehicle doors are also unlocked.

#### Unlocking and opening luggage compartment lid with the key

- Press button .
   Raise lid slightly and unlatch the safety catch with the red lever.
- **3.** Open the lid.



#### **Unlocking and opening luggage** compartment lid with Porsche **Entry & Drive (keyless)**

The luggage compartment lid can be opened if you are in the front area of the vehicle with the key.

- Hold your hand between the Porsche Crest and the license plate (illustration).
- The lid is unlocked via a sensor and pops open.
- The vehicle doors are also unlocked.
- Raise lid slightly and unlatch the safety catch with the red lever.
- Open the lid

#### **Closing luggage compartment lid**

- 1. Lower lid and let it fall into the lock. If necessary, push the lid closed with the palm of your hand in the area of the lock.
- 2. Check that the lid has correctly engaged in the lock.

When the vehicle is in motion, a message will appear on the multi-function display in the instrument panel if the lid is not closed properly.

#### **Opening engine compartment lid with the** pull-button

#### Coupé only:

- 1. Open the driver's door.
- 2. Operate pull-button **B** next to the driver's seat. The lid is unlocked and can be raised.

#### Cabriolet only:

- **1.** Open the driver's door.
- **2.** Operate pull-button **B** next to the driver's seat. Engine compartment lid (convertible-top compartment lid) opens automatically to the service position.

## **Closing engine compartment lid** Coupé only:

- 1. Lower lid and let it fall into the lock. If necessary, push the lid closed with the palm of your hand in the area of the lock.
- 2. Check that the lid has engaged correctly in the lock.

When the vehicle is in motion, a message will appear on the multi-function display in the instrument panel if the lid is not closed properly.

## Cabriolet only:

▶ Press pull-button **B**. Engine compartment lid (convertible-top compartment lid) closes automatically.

## **Malfunctions when Opening and** Closing

#### **Emergency operation of luggage** compartment lid

If the vehicle battery is discharged, the luggage compartment lid can be opened only by connecting an external electrical power source.

▶ Please see the chapter "EMERGENCY UNLOCKING OF LUGGAGE COMPARTMENT LID" on page 270.

#### Only one door is unlocked

The setting for locking and unlocking the doors has been changed on the multi-function display in the instrument panel.

▶ Please see the chapter "SETTING DOOR UNLOCKING" on page 122.

You can open both doors irrespective of the selected setting.

▶ Press button of on the key twice within 5 seconds.



#### The vehicle cannot be unlocked

Remote control of the car key may

- fail due to a fault,
- due to a flat key battery,
- not function correctly due to radio waves (also radio contact between remote control and vehicle in the case of Porsche Entry & Drive).

If the vehicle cannot be opened, then:

- 1. Place the car key at the outside edge of the windshield on the passenger's side and, at the same time, press button (illustration).
- If the vehicle still cannot be opened, then:
- 2. Remove the emergency key from the car key. Please see the chapter "EMERGENCY KEY" on page 17.

- 3. Unlock and open the driver's door with the emergency key.
  - For this purpose, lift and hold the door handle. Insert the emergency key in the door lock, turn 90° anti-clockwise and remove the emergency key again.
- **4.** Release the door handle and open the door by pulling the door handle again.
- Switch on the ignition within 15 seconds to prevent the alarm system from triggering. Further procedure for vehicles with Porsche Entry & Drive:

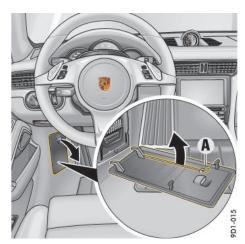
If the ignition cannot be switched on or if the engine will not start, the message "Key not found or key fault Change key position" will appear on the multi-function display.

- 6. Turn control unit back to ignition lock position 0.
- **7.** Try to start the engine again. If the engine will not start, the message ""Key not found or key fault Change key position" will appear again. The message "Operating device: turn left, pull off, insert key" appears after approx. 1 second.
- 8. Turn control unit back to ignition lock position **0** and remove it from the ignition lock. Switch on the ignition using the ignition key (not the emergency key).

## **Switching off operational readiness** (for vehicles with Porsche Entry & Drive)

Operational readiness of Porsche Entry & Drive is switched off after 96 hours for the driver's door and after 36 hours for the passenger's door, if the vehicle is not unlocked within this time.

- 1. Pull the door handle once to activate the system again.
- 2. Pull the door handle again to open the door.

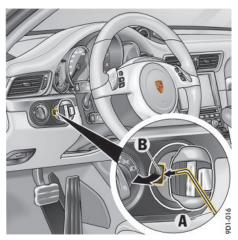


# Emergency operation – unlocking the ignition key/control unit

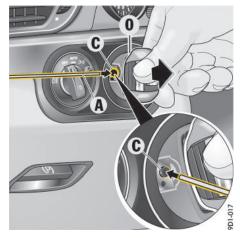
If the vehicle battery is discharged, the ignition key can be removed only if the emergency operation is performed.

Emergency operation must also be performed in order to remove the control unit from the ignition lock on vehicles with Porsche Entry & Drive.

- **1.** Grasp the fuse box cover on the driver's side at the finger hole and pull it off.
- 2. Unclip metal hook A on the inside of the fuse box cover.



 Use metal hook A to remove the plastic cover B from the ignition lock.
 Make sure not to lose the plastic cover B.



- **4.** Turn control unit/ignition key to ignition lock position **0** (initial position).
- **5.** Press metal hook **A** into opening **C**. You will hear an unlocking noise.
- **6.** Remove the control unit/ignition key in initial position **0**.
- **7.** Re-fit the plastic cover **B**.



Door lock under door handle (driver's side)

#### The vehicle cannot be locked

This is recognizable by the fact that the emergency flasher does not flash and there is no locking noise.

The remote control of the key may

- fail due to a fault,
- due to a flat key battery,
- not function correctly due to radio waves(e.g. mobile phone) in the vicinity of the vehicle (even radio contact between remote control and vehicle in the case of Porsche Entry & Drive).

## Emergency locking if the central locking system has failed

If the vehicle cannot be locked, then:

- 1. Remove the emergency key from the car key. Please see the chapter "EMERGENCY KEY" on page 17.
- 2. Open the driver's door.

3. Lift the door handle on the driver's door (illustration).

Insert the emergency key in the door lock, turn 90° clockwise and remove the emergency key

Successful locking is indicated by the hazard warning lights flashing twice.

- 4. Release the door handle and shut the door. The driver's door is now locked.
- **5.** To use the emergency locking function on the passenger's door, insert the emergency key into the door lock on the driver's door again, turn 90° clockwise and remove the emergency key again.

The passenger's door is now locked.



#### Information

Emergency locking of the passenger's door is not possible if the central locking system is defective.



#### Information

If the central locking system is defective, operating the lock cylinder in the driver's door will lock all functioning locking elements of the central locking system.

Have faults in the central locking system repaired by an authorized Porsche dealer.



#### **Emergency key**

#### Removing emergency key

- 1. Push the release button to the side.
- 2. Pull out the key.

#### Insert emergency key

▶ Push in the key until the release button engages audibly.



## Information

Different vehicle settings are stored on the respective key when the vehicle is locked, provided the vehicle is fitted with the relevant equipment.



# Trunk Entrapment

Your vehicle is equipped with an internal trunk release mechanism.

A person trapped in the luggage compartment can release the lid from the inside using the unlocking handle.

The handle is fluorescent and glows in the dark.



#### Information

When loading the luggage compartment, make sure that items of luggage or other objects cannot become caught on the handle. This could cause the luggage compartment to open unintentionally.

#### **Function**

If the luggage compartment lid is unlocked with unlocking the handle, the latch striker pops into the catch-hook position and the lid can be opened from the inside immediately.

A warning message in the multi-purpose display lights up when unlocking handle is operated.

- Stop the vehicle immediately when the warning message lights up.
- Check the luggage compartment.
- Close the lid. □



Unsecured Luggage Compartment Lid

If the warning message in the multi-purpose display lights up when the vehicle is in motion, the lid may impact in front of the windshield and can tear off.

Stop the vehicle immediately when the warning message lights up.

- ▷ Check the luggage compartment.
- Close the lid.



#### Information

The lid cannot be opened from the inside if the battery is disconnected or empty.

Safety reasons require that you unscrew the latch striker of the lid lock if you plan to put the vehicle out of operation for an extended period.

- Please consult your authorized Porsche dealer.
  - They will advise you about the necessary measures.

# **Seats, Mirrors and Steering Wheel**

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# Seat Adjustment and Head Restraints

**A** DANGER

Improper Safety Belt Use

Safety belts only offer protection when the backrest is upright and the belts are properly positioned on the body.

Improperly positioned safety belts or safety belts worn by passengers in an excessively reclined position can cause serious personal injury or death in an accident.

- Do not operate the car with the driver or passenger backrests excessively reclined.
- Please see the chapter "SEAT POSITION" on page 32.

#### **WARNING**

Seat Adjustment While Driving

The seat may move further than desired if you adjust it when driving. You could lose control of the vehicle.

Do not adjust seats while the vehicle is in motion. The backrest locks must be engaged at all times while the vehicle is in motion.

#### **A** CAUTION

Seat Adjustment

If persons or animals are in the movement range of the seat during seat adjustment, parts of the body could get trapped or crushed.

- ▶ Adjust the seat so that no-one is put a risk.
- Do not activate the comfort memory button if there is any risk of the seat crushing the occupant.
- Cancel automatic adjustment by pressing any of the seat adjustment buttons.

Do not leave children in the vehicle unattended, since they may depress the setting buttons and crush themselves or another occupant.

#### NOTICE

Risk of damage to windshield, sun visor, etc. when the seat is adjusted or folded back or forward.

Adjust the seat so that the seat backrest is not in contact with any other object.

The driver and front passenger seats provide integrated head restraints in the backrests. The head restraints are not adjustable. The rear seats do not provide head restraints.

#### **WARNING**

Failure to Adjust Head and Backrests

All occupants, including the driver, should not operate a vehicle or sit in a vehicle's seat until the headrests and backrests are placed in their proper positions so that the risk of neck injuries is minimized in the event of a crash.

- Adjust the backrest's inclination such that the headrest is in an upright position.
- Driver and passengers should be seated upright and in the center of their seats.

## **Front Seats**

#### Seat position

A ergonomically correct sitting position is important for safe and fatigue-free driving. We recommend the following procedure for adjusting the driver's seat to suit individual requirements:

- 1. Adjust the seat height to give yourself enough headroom and a good overview of the vehicle.
- Adjust the seat in fore-and-aft direction so that your leg is not fully straight and your entire foot is on the pedal when pressing the pedals fully.
- Grip the top half of the steering wheel. Set the backrest angle and the steering wheel position so that your arms are almost outstretched. However, your shoulders must still rest on the backrest.
- **4.** Adjust the seat fore-and-aft setting if necessary.

#### Adjusting the seat



Seat Adjustment While Driving

The seat may move further than desired if you attempt to adjust it when driving. You may lose control of the vehicle.

▶ Do not adjust the seat when driving.



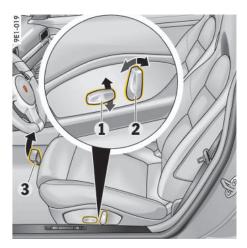
Seat Adjustment

If persons or animals are within the range of movement of the seat, they could become trapped or crushed when you adjust the seat.

▶ Adjust the seat so that no-one is put at risk.

32

Seats, Mirrors and Steering Wheel



#### Sports seat/Sports seat plus

- 1 Height adjustment
- 2 Backrest angle adjustment
- ▶ Press each control in the direction indicated by the arrows until the desired setting or the limit position is reached.
- 3 Seat fore-and-aft adjustment, mechanical
- Raise locking lever. Move seat to desired position and release lever. Ensure that the seat engages correctly.



#### **Fully-electric sports seat**

- 1 Seat angle adjustment
- 2 Height adjustment
- 3 Seat cushion depth adjustment
- 4 Seat fore-and-aft adjustment
- 5 Backrest angle adjustment
- 6 Lumbar support adjustment
- Press each control in the direction indicated by the arrows until the desired setting is reached.



#### Adaptive sports seat plus

- 1 Seat angle adjustment
- 2 Height adjustment
- 3 Seat cushion depth adjustment
- 4 Seat cushion side bolster adjustment
- 5 Backrest side bolster adjustment
- 6 Seat fore-and-aft adjustment
- 7 Backrest angle adjustment 8 Lumbar support adjustment
- ▶ Press each control in the direction indicated by the arrows until the desired setting is reached.



#### **Seat backrest**

#### Folding forward

Pull up lever in the side part of the backrest and fold the backrest forward.

#### **Folding back**

▶ Tilt back and engage the backrest so that it cannot tip forward when you brake.

#### Storing seat settings

For information on storing and retrieving the seat settings:

Please see the chapter "STORING PERSONAL SETTINGS" on page 143.

## **Comfort Entry Function**

The Easy Entry function makes it easier for you to get in and out of the vehicle.

**A** CAUTION

Easy Entry Function

If persons or animals are within the range of movement of the seat, they could be trapped or crushed when the seat moves into or out of easy entry position.

Switch off the Easy Entry function if a person is behind the driver's seat.

#### **Prerequisite**

 The function must be activated on the multifunction display.

For information on switching the Easy Entry function on and off:

▶ Please see the chapter "SWITCHING COMFORT ENTRY ON AND OFF" on page 122.

#### Leaving the vehicle

The steering wheel moves upwards:

 After the ignition key is removed or after the ignition is switched off and the driver's door is opened on vehicles with Porsche Entry & Drive.

The driver's seat moves to the rear:

 After opening the driver's door and removing the car key or after opening the driver's door on vehicles with Porsche Entry & Drive.

#### **Entering the vehicle**

Driver's seat and steering wheel are in their Comfort Entry positions.

Once the ignition key is inserted or once the ignition is switched on in the case of vehicles with Porsche Entry & Drive, the seat and steering wheel move to the stored position.



#### Information

When the key is changed, the seat may move to its new, key-specific entry position.



#### Information

Manual intervention in the seat setting interrupts the Easy Entry function.

The driving position must then be set manually.



# **Seat Heating**

The seat heating is ready for operation when the engine is running. The heating power can be adjusted to one of three settings by repeatedly pressing the heated seat button.

#### Switching on

Press heated seat button (repeatedly). The number of illuminated indicator lights shows the selected heat setting.

#### Switching off

Press the heated seat button (repeatedly) until all indicator lights go out.

Seat heating is not available when the interior temperature is high.

If the charging condition of the battery is critical, the seat heating function is restricted initially and then switched off.



#### **Seat Ventilation**

The seat ventilation is ready for operation when the engine is running. The seat ventilation can be adjusted to one of three settings by repeatedly pressing the seat ventilation button.

#### Switching on

Press the seat ventilation button (repeatedly). The number of illuminated indicator lights shows the selected ventilation setting.

#### Switching off

Press the seat ventilation button (repeatedly) until all indicator lights go out.

Below 59 °F (15 °C), the seat ventilation cannot be switched on, in order to prevent excessive cooling.

If the charging condition of the battery is critical, the seat ventilation function is restricted initially and then switched off.



### **Rear Seat Backrests**

Extra storage space is gained by folding the rear seat backrests forward.

#### **Folding forward**

▶ Pull lever forward and fold the backrest forward.

#### Folding back

 ▷ Tilt the backrest back until you feel it click into place. Ensure that the safety belt is properly routed.

# Safety belts

**A** DANGER

Failure to Use Safety Belts

Safety belts cannot protect the body if they are not fastened. Improperly worn safety belts increase the risk of injury in the event of an accident.

Always make sure your and your passengers' safety belts are properly fastened when seated in the vehicle.

- For your and your passengers' protection, use safety belts at all times while the vehicle is in motion.
- Use appropriate child restraint systems for all small children.
- Safety belts must be positioned on the body as to restrain the upper body and lap from sliding forward. Improperly positioned safety belts can cause serious personal injury in case of an accident.

- The shoulder belt should always rest on your upper body. The shoulder belt should never be worn behind your back or under your arm.
- For maximum effectiveness, the lap belt should be worn low across the hips.
- Pregnant women should position the belt as low as possible across the pelvis. Make sure it is not pressing against the abdomen.
- ▷ Belts should not be worn twisted.
- Do not wear belts over rigid or breakable objects in or on your clothing, such as eye glasses, pens, keys, etc. as these may cause injury.
- Several layers of heavy clothing may interfere with proper positioning of belts.
- Belts must not rub against sharp objects or damage may occur to the belt.
- ➤ Two occupants must never share the same belt at the same time.

#### **A** DANGER

Using Damaged Safety Belts

Damaged, heavily stressed or worn safety belts cannot protect the body sufficiently in the event of an accident.

- Keep belt buckles free of any obstruction that may prevent a secure locking.
- Belts that have been subjected to excessive stretch forces in an accident must be inspected or replaced to ensure their continued effectiveness in restraining you. The same applies to belt tensioner systems which have been triggered. In addition, the anchor points of the belts should be checked.
- If safety belts do not work properly, see your authorized Porsche dealer immediately.
- If the belts show damage to webbing, bindings, buckles or retractors, they should be replaced to ensure safe operation.
- Do not modify or disassemble the safety belts in your vehicle.
- The belts must be kept clean or the retractors may not work properly.
   Please see the chapter "CLEANING THE SAFETY BELTS" on page 237.
- ▶ Never bleach or dye safety belts.
- Do not allow safety belts to retract until they are completely dry after cleaning or this may cause damage to the belt.

#### **Safety-belt pretensioner**

Front safety belts are tightened in an accident, depending on the force of the collision.

#### The safety-belt pretensioners are triggered:

- In the event of front and rear impact
- In the event of side impact
- If the vehicle turns over



#### Information

The safety-belt pretensioner system can be triggered only once; the system must then be replaced.

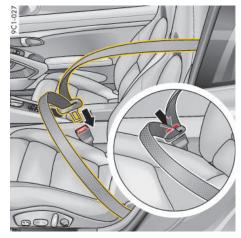
Work may be carried out on the safety-belt pretensioner system only by qualified specialist employees from an authorized Porsche dealer. Smoke is released when the safety-belt pretensioners are triggered. This does not indicate a fire in the vehicle.

# **Safety belt Warning light and warning** message

An audio-visual warning system is interconnected with the driver's safety belt. Every time the ignition is turned on, the gong will sound for about 6 seconds to remind driver and passenger to buckle up.

In addition, the gong will sound for approximately 90 seconds if vehicle speed exceeds 15 mph (24 km/h).

The safety belt warning lights in the instrument panel and multi-purpose display will go off as soon as the driver has buckled up.



### Fasten safety belt

- **1.** Assume a comfortable sitting position.
- 2. Adjust the seat backrest so that the belt always rests on your upper body and runs across the middle of your shoulder.
- 3. Grasp the belt tongue and pull the belt in a slow, continuous motion across your chest and lap.



#### Information

The belt may be blocked if the vehicle is standing at an angle or the belt is pulled out using a jerking movement.

The belt cannot be pulled out while accelerating and slowing down, when cornering and when driving uphill.

- 4. Insert the belt tongue into the appropriate buckle on the inboard side of the seat until it locks securely with an audible click.
- 5. Make sure that belts are not trapped or twisted and that they are not rubbing on sharp edges.
- 6. The horizontal section of the belt should always fit snugly across the pelvis. Therefore, after fastening the belt, always pull the diagonal part of the belt upward. Pregnant women should position the belt as low as possible across the pelvis, and ensure that it is not pressing against the abdomen.
- **7.** Also pull on the diagonal section of the belt now and again during the journey to ensure that the horizontal section remains tight.



#### Opening belt buckle an removing belt

- 1. Hold the belt tongue.
- 2. Press the red button on the belt buckle.
- 3. Guide the belt tongue to approx. 7 cm below the deflection bracket of the strap reel and lock using the plastic slide (**figure**). The function of the plastic slide is to hold the belt tongue in an easily accessible position.

# **Airbag Systems**

The vehicle is equipped with airbag and lap/ shoulder belt at both front seating positions. The airbag is a supplemental restraint at those seating positions.

The airbags in combination with the safety belts make up a safety system which offers the driver and the passenger the greatest known protection from injuries in case of accident.

Your vehicle is equipped with occupant sensing for the passenger's seat in accordance with U.S. Federal Motor Vehicle Safety Standard 208. Even if your vehicle is equipped with airbags, **the safety belts must be worn at all times**, because the front airbag system is only actuated

because the front airbag system is only actuated by frontal collisions with an impact of sufficient severity.

Below the deployment threshold of the airbag system, and during types of collisions which do not cause the actuation of the system, the safety belts provide the primary protection to the occupants when correctly worn. **Therefore, all persons within the vehicle must wear safety belts at all times** (in many states, state law requires the use of safety belts) to minimize the risk of severe injury or death in the event of a crash.

Please see the chapter "SAFETY BELTS" on page 36. The **front airbags** are located under the padded steering wheel panel on the driver's side, in the dashboard on the passenger's side, and in the knee area for both the driver and the passenger. The **side airbags** for the front seats are installed on the side in the seat backrests.

The **head airbags** are installed in the door linings.



#### Information

To minimize the risk of severe injury or death in the event of a crash, all occupants, including the driver, should always wear their safety belts whether or not an airbag is also provided at their seating position.



Safety Belts and Positioning

Airbags only can offer protection, if all occupants fasten their safety belts and retain a proper sitting position.

To provide optimal occupant protection, airbags must inflate at very high speed. If you are not wearing your safety belt or are too close to the airbag when it is deployed, inflating airbags can result in serious personal injury or death.

- ▷ Always fasten safety belts.
- Make sure there are no people, animals or objects between the driver or passenger and the area into which the airbags inflate.

- Sit back as far from the dashboard or steering wheel as is practical, while still maintaining full vehicle control.
- Always hold the steering wheel by the outer rim. Never rest your hands on the center of the steering wheel where the airbag module is located.
- Always keep feet in the footwell while driving. Do not put feet on the dashboard or the seat area. Do not lean against the inside of the door or outside the window while the vehicle is moving.

#### **A** DANGER

Safe Storage of Objects

Objects and load have to be stored securely to keep from causing injury.

- Do not transport heavy objects on or in front of the passenger seat. These could impair the function of the airbags, the safety belts, and occupant sensing.
- Do not hang objects (e.g., jackets, coats, coat hangers) over the backrest.
- Objects must not protrude out of the door storage compartment.
- Do not add any additional coverings or stickers to the steering wheel or in the area of the passenger airbag, side airbags, knee airbags, and head airbags. Doing so may adversely affect the functioning of the airbag system or cause harm to the occupants if the airbag system should deploy.

Do not use protective seat covers.

- No objects should be placed over or near the airbag on the instrument panel, because any such objects could cause harm if the vehicle is in a crash severe enough to cause the airbag to inflate.
- Give your passenger all of the information in this chapter.

# **A** DANGER

Modification to Airbag System

A modified airbag system cannot offer protection. They may not trigger or could trigger in an uncontrolled way. An uncontrolled triggering of the airbag system can result in serious personal injury or death.

- Do not modify the seat coverings, since such changes can block the seat-mounted side airbag. Do not attach additional cushions, protective coverings, or pillows to the seats. Do not affix things to the seats or cover them with other materials. Do not cover the back of the backrest. Do not make changes to the seats, the cushion or foam, the occupant sensor, and to the seat base frame.
- No changes must be made to the wiring or components of the airbag system. Doing so may disable the airbag system or cause inadvertent inflation.
- Do not install any wiring for electrical accessory equipment in the vicinity of the airbag wiring harnesses. Doing so may disable the airbag system or cause inadvertent inflation.

- If the warning light comes on, the airbag system should be repaired immediately by your authorized Porsche dealer.
- Using accessories not approved by Porsche can cause the occupant sensing to be impaired.
- Do not squeeze objects, such as the fire extinguisher, or first aid kit under the seat.
- Only have seats removed and installed by an authorized Porsche dealer so that occupant sensing components will not be damaged.

# i

#### Information

Airbag components (e.g. steering wheel, door lining, seats) may be disassembled only by an authorized Porsche dealer.

When disposing of a used airbag unit, our safety instructions must be followed. These instructions can be obtained at any authorized Porsche dealer.

# **Function of the airbag system**

Airbags are a supplemental safety system. Your primary protection comes from your safety belts. The front airbags are triggered during a frontal collision of sufficient force and direction. In the event of a side impact of corresponding force, the side airbag on the impact side is triggered.

The inflation process generates the amount of gas required to fill the airbags at the necessary pressure in fractions of a second.

Airbags help to protect the head and body, while simultaneously damping the motion of the driver and passenger in the impact direction in the event of a frontal impact or side impact.

In order to help provide protection in severe collisions which can cause death and serious injury, airbags must inflate extremely rapidly. Such high speed inflation has a negative but unavoidable side effect, which is that it can and does cause injuries, including facial and arm abrasions, bruising and broken bones. You can help minimize such injuries by always wearing your safety belts.

There are many types of accidents in which airbags are not expected to deploy. These include accidents where the airbags would provide no benefit, such as a rear impact against your vehicle. Other accidents where the airbags are designed not to deploy are those where the risk of injury from the airbag deployment could exceed any protective benefits, such as in low speed accidents or higher speed accidents where the vehicle decelerates over a longer time. Since airbag deployment does not occur in all accidents, this further emphasizes the need for you and your passengers to always wear safety belts.

Your Porsche vehicle is equipped with electronically controlled systems that help to ensure your vehicle operates properly. These systems monitor the operation of various systems and electronically store information that is useful to service technicians when they need to diagnose and repair these systems.

Your vehicle is equipped with crash-sensing and diagnostic devices that may record information at the time of a collision, including whether the airbag and seatbelt pretensioners deployed and whether the safety belt was in use.

To retrieve this information, special equipment is needed and access to the vehicle or feature that stores that data is required. Some states only allow access to such information under restricted circumstances, including:

- In response to a request of police or other government office; or
- with the consent of the registered owner, or if the vehicle is leased, with the lessee, or
- through a discovery process in litigation; or as otherwise permitted or required by law.

Your rights with respect to the information discussed above may vary from state to state. Check your state law for further information.

#### Advanced airbag

Your vehicle is equipped with occupant sensing for the passenger's seat in accordance with U.S. Federal Motor Vehicle Safety Standard 208. Depending on the weight, body positioning and shape acting on the passenger's seat, the passenger's airbag will automatically be switched on and off.

Depending on the angle and force of impact, the passenger's airbag which is switched-on will be triggered during a collision.

Precondition for switching the passenger's airbag on and off, depending on weight, body positioning and shape:

- Ignition is switched on.



Improper Front Passenger Seating

Improper seating can unintentionally impair operation of occupant sensing of the passenger's airbag.

If the weight of an adult on the passenger's seat is not properly maintained, the passenger's airbag may be switched off.

Select an upright seat position, and do not support weight on the armrests or center console, or lean out of the window while driving.

Always keep feet positioned on the floor in the footwell while driving. Do not put feet on the dashboard or the seat area.

# Seat adjustment for the passenger's seat



Reclining Passenger Seatback

Safety belts only offer protection when the backrest is positioned at an upright seating angle and the belts are properly positioned on the body.

Do not operate the car with the driver or passenger backrests excessively reclined.

#### Vehicle modifications to accommodate persons with disabilities

Because modifications to your vehicle could compromise your advanced airbag system, please call 1-800-PORSCHE prior to having your vehicle modified.

# **A** DANGER

To reduce risk of injury or death to a child from an inflating airbag in an accident, Porsche strongly recommends:

Before transporting a child on the passenger seat:

- Please see the chapter "PASS AIR BAG OFF INDICATOR LAMP DOES NOT LIGHT UP" on page 42.
- Under all normal circumstances, the child seat must be placed in the rear. Do not use a child restraint system in the front passenger seat.

# Automatic deactivation of the passenger

Before transporting a child on the passenger seat: Please see the chapter "CHILD RESTRAINT SYSTEMS" on page 42.

- When an up to one-year old child is seated in the child restraint system, the front airbag is automatically deactivated on the passenger side.
- When an adult is seated in the passenger's seat the front airbag is automatically activated.



PASS AIR BAG OFF indicator lamp



#### Information

Depending on the weight, body positioning and shape acting on the passenger's seat, it can occur in the case of heavier children that the passenger airbag is active or, in the case of very light adults or young persons, that the passenger airbag is deactivated.

The condition of the passenger airbag system is shown by the indicator lamp in the overhead operating console.

If in doubt:

Fasten the forward facing child restraint system on the rear seat or transport the passenger on the rear seat.



#### Information

After switching on the ignition, the PASS AIR BAG OFF warning light lights up for a few seconds as a check.

# PASS AIR BAG OFF indicator lamp lights up The passenger airbag is switched off.

#### PASS AIR BAG OFF indicator lamp does not light up

The passenger airbag is active and ready for operation.

#### **A** DANGER

Risk of serious personal injury or death due to the passenger airbag triggering unintentionally.

When the ignition is on and the up to one-year old child is seated in the child restraint system on the passenger seat the indicator lamp "PASS AIR BAG OFF" must be on.

If the "PASS AIR BAG OFF" indicator lamp does not light up, it could indicate a fault in the system, and the airbag could inflate in a collision, placing the child at risk of death or severe injury from the inflating airbag.

In this case:

- ▶ Child restraint systems facing forwards: Install on the rear seats.
- Child restraint systems facing rearwards: Do not drive with a rearward facing child restraint system.
- Have the fault remedied at your nearest authorized Porsche dealer.

# 繋 Airbag Warning light

Faults are indicated by a warning light on the tachometer.

The airbag warning light illuminates when the electronic monitoring of the airbag system detects a malfunction of the sensors, safety belt system, occupant detection system, PASS AIR BAG OFF indicator lamp, related wiring, airbag modules and control units.

- ▷ In the following cases you should immediately consult an authorized Porsche dealer in order to assure the airbag system is functioning properly:
- If the warning light does not light up when the ignition is switched on or
- If the warning light does not go out once the engine is running or
- If the warning light appears while driving.



# 1 Information

If you sell your Porsche, notify the purchaser that the vehicle is equipped with airbags, and refer them to the chapter "Airbag systems" in the owner's manual (safety and disposal rules). Further information on the airbag system can be found on stickers attached to the sun visors, as well as on all airbag components.

For special recommendations on the use of child restraints:

▶ Please see the chapter "CHILD RESTRAINT SYSTEMS" on page 42.

# **Child Restraint Systems**

Porsche recommends that all infants and children be restrained in child restraint systems at all times while the vehicle is in motion in accordance with applicable laws.

When possible, use only child restraint systems recommended by Porsche. These systems have been tested and adjusted to the interior of your Porsche and the appropriate child weight groups. Other systems have not been tested and could entail an increased risk of injury.

The use of infant or child restraints is required by law in all 50 US states and the Canadian provinces. The child restraint system should be one that complies with U.S. Federal/Canadian Motor Vehicle Safety Standards and should be secured by a lap belt portion of a lap-shoulder belt or for child seats equipped with the LATCH system (Lower Anchorage and Tether for Children, also known as ISOFIX) to the LATCH anchorages. All child restraint systems are designed to be secured in vehicle seats by lapbelts or the lapbelt portion of a lap-shoulder belt.

You can obtain child seats that are LATCH compatible at your authorized Porsche dealer.

▷ Always observe the separate installation instructions for your child seat.



Improper use of child restraint

Children could be endangered in a crash if their child restraints are not properly secured in the vehicle

Make sure that all child restraints are properly secured.

**42** Seats, Mirrors and Steering Wheel

A statement by the seat manufacturer of compliance with this federal standard can be found on the instruction label on the restraint and in the instruction manual provided with the restraint.

# **DANGER**

Child Restraint in Front Seat

The use of a child restraint system in the front passenger's seat can result in serious personal injury or death to the child from an airbag deployment.

To reduce risk of injury from an inflating airbag in an accident, Porsche strongly recommends:

Please see the chapter "PASS AIR BAG OFF INDICATOR LAMP DOES NOT LIGHT UP" on page 42.

#### **DANGER**

Improper Use of Child Restraint

- Follow all child restraint instructions and warnings in this manual.
- When using an infant or child restraint system, be sure to follow all manufacturer's instructions on installation and use.
- Infants and small children should neither be held on the lap, nor should they share a safety belt with another occupant while the vehicle is in motion
- Children too big for child restraint systems must use regular safety belts. A shoulder belt can be used providing it does not cross the face or the neck of the child.
- Choose a child restraint system according to the weight of the child.
- Child restraint systems that are damaged or have been heavily stressed in an accident must be replaced immediately.
- Children could be endangered in a crash if their child restraints are not properly secured in vehicle.
- Do not affix objects to child restraint systems or cover them with other materials.
- For maximum safety and protection, do not use a child restraint system in the front passenger seat.

### **Direction of installation for child restraint** systems

According to accident statistics, children are safer when properly restrained in the rear seating positions than in the front seating positions. Under all normal circumstances, the forward facing child seat must be placed in the rear.

▶ Do not use a child restraint system in the front passenger seat.

#### Group 0 and 0+: Children up to 29 lbs (13 kg)

Children of this weight must be transported in a restraint system which is installed on the passenger's seat facing rearward.

# Group I: Children in between 20 lbs (9 kg) and 40 lbs (18 kg)

Children of this weight are transported in child restraint systems facing forward.

Whenever possible, these child restraint systems should be installed on the rear seats.

#### Group II: Children in between 33 lbs (15 kg) and 55 lbs (25 kg)

Children of this weight are transported in child restraint systems facing forward.

Whenever possible, these child restraint systems should be installed on the rear seats.

#### Group III: Children in between 49 lbs (22 kg) and 80 lbs (36 kg)

Children of this weight are transported in child restraint systems facing forward.

Whenever possible, these child restraint systems should be installed on the rear seats.

If a child restraint system must be fastened to the passenger's seat, the passenger's seat must be adjusted to the upper rear position.



#### Information

If a child seat with top tether is adapted for use on the front seat, do not use Toptether in the rear.

# Using child restraint systems in the front passenger seat

**A** DANGER

Child Restraint in Front Seat

The use of a child restraint system in the front passenger seat can result in serious personal injury or death to the child from an airbag deployment.

To reduce risk of injury from an inflating airbag in an accident, Porsche strongly recommends:

Please see the chapter "PASS AIR BAG OFF INDICATOR LAMP DOES NOT LIGHT UP" on page 42.

However, there may be serious situations where it might be necessary to place a child in the front seat so that he/she can be kept under direct observation to prevent an immediate risk to the child (for example, while driving to the doctor or hospital). The following instructions are provided to you solely for that purpose.

- Seek appropriate advice from your authorized Porsche dealer about the possible installation of a Porsche child restraint system.
- If a child restraint system must be fastened to the passenger's seat, adjust the passenger's seat as far away from the airbag as possible.
- If emergency or other serious conditions require a child to be placed in the front seat, exercise extreme caution and defensive driving of your vehicle.

# Child restraint system for up to one-year old children

If the child restraint system must be fastened to the passenger's seat in exceptional cases:

- When an up to one-year old child is seated in the child restraint system, the front airbag is automatically deactivated on the passenger side.
- Make sure that the "PASS AIR BAG OFF" indicator lamp lights up.
- Adjust the passenger's seat as far away from the airbag as possible.



Child Seat Detection Fault

When the ignition is on and the up to one-year old child is seated in the child restraint system on the passenger seat the indicator lamp "PASS AIR BAG OFF" must be on.

If the "PASS AIR BAG OFF" indicator lamp does not light up, it could indicate a fault in the system, and the airbag could inflate in a collision, placing the child at risk of death or severe injury from the inflating airbag.

In this case:

- Child restraint systems facing forwards: Install on the rear seats.
- Child restraint systems facing rearwards: Do not drive with a rearward facing child restraint system.
- Have the fault remedied at your nearest authorized Porsche dealer.

#### Child restraint system for children older than one year

Your vehicle is equipped with occupant sensing for the passenger's seat in accordance with U.S. Federal Motor Vehicle Safety Standard 208. Depending on the weight, body positioning and shape acting on the passenger's seat, the passenger's airbag will automatically be switched on or off.

In case of doubt, fasten the child restraint system on the rear bench.

#### Small adult passengers

▶ Make sure that the PASS AIR BAG OFF indicator lamp does not light up.

#### **A** CAUTION

Adult Use of Front Seats

When the ignition is on and the small adult passenger is seated on the passenger seat, the indicator lamp "PASS AIR BAG OFF" must be off. If the "PASS AIR BAG OFF" indicator lamp lights up, it could indicate a fault in the system. In this case:

▶ Have the fault remedied at your nearest authorized Porsche dealer.

#### **Automatic locking retractor**

The safety belts for the front passenger and rear seats are equipped with an automatic locking retractor for securing the child restraint system. When activated, this retractor allows you to securely fasten the child restraint system in place so that inadvertent movements will not occur.

#### **A** DANGER

Child Seat in Front

The use of a child restraint system on the front passenger seat can result in serious personal injury or death to the child from an airbag deployment.

To reduce risk of injury from an inflating airbag in an accident, Porsche strongly recommends:

Under all normal circumstances, the child seat must be placed in the rear. Do not use a child restraint system on the front passenger seat.

If there are emergency reasons for transporting a child in the front passenger seat, use a child restraint seat and the automatic locking retractor function. Follow the other safety instructions on the previous pages in this section.



PASS AIR BAG OFF indicator lamp

#### A DANGER

Adjusting Child seat After Fastening

▶ After fastening the child restraint system, do not adjust the seat in any direction.

Moving the seat could adjust the safety belt against the child restraint and cause the "PASS AIR BAG OFF" indicator lamp to go off and activate the airbag system.

▶ Check the condition of the passenger airbag system shown by the indicator lamp in the overhead operating console.

#### Activating the automatic locking retractor

- 1. If a child restraint system must be fastened to the passenger's seat, adjust the passenger's seat as far away from the airbag as possible.
- 2. Position child seat according to the child seat's manufacturer instructions.
- 3. Pull the safety belt retractor completely out. At this point the locking mechanism is activated.
- 4. Insert the safety belt tongue into the buckle and make certain that it is properly latched. Make no more adjustments to the seat.
- 5. Allow the safety belt to retract until it is tight on the child restraint system. You may further tighten the belt by pulling on it to allow more of it to retract.

Make sure that excessive safety belt forces do not occur by moving the seat with the child seat installed.

#### Releasing the safety belt

- 1. Unbuckle the safety belt latch.
- 2. Then make certain that the belt has fully retracted. At this point the automatic locking feature will be disengaged. Seek appropriate advice from your authorized

Porsche dealer about the possible installation of a Porsche child restraint system.

# **LATCH Child Seat System**

LATCH child seats are the best option for mounting a child seat in your Porsche. Such LATCH child seats can be installed only using the LATCH system in the rear seats.

Use only child restraint systems with the LATCH system (Lower Anchorage and Tether for Children) recommended by Porsche.

These systems have been tested and adjusted to the interior of your Porsche and the appropriate child weight groups.

Other systems have not been tested and could entail an increased risk of injury.

You can obtain child seats that are LATCHcompatible at your authorized Porsche dealer. Always observe the separate installation instructions for your child seat.



#### Using a LATCH child seat system

The rear seats are equipped with the LATCH system (lower anchorage and anchor points for tether straps on the back of the backrests).

#### Removing the backrest lower section

Detach the backrest lower section at the top center (Velcro strap) and disengage from the ISOFIX brackets.

Markings on the right and left for the LATCH child seat anchorage can be found on the backrest lower section of the rear seats.

The anchor bars A for the LATCH child seat anchorage can be found under the backrest lower section.

# **Child Restraint Anchorages**

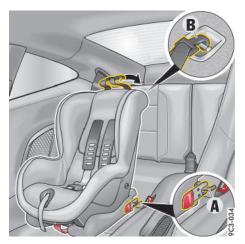
**WARNING** 

Misuse of Child seat **Restraint Anchorages** 

Child restraint anchorages are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adults safety belts or harnesses.

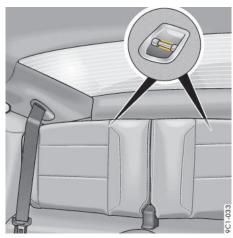
- ▶ Do not misuse the child restraint anchorages. Only attach one child seat tether per anchorage.
- They are not designed to withstand loads imposed by adults.
- Please see the chapter "AUTOMATIC LOCKING RETRACTOR" on page 45.

If your child restraint seat or seats require the use of a tether strap, you will want to use the anchor points provided behind the rear seat backrests. To ensure proper installation, see your authorized Porsche dealer.



# **Installing a LATCH child seat system**

- Always observe the separate installation instructions for your child seat.
- Secure the child seat to retaining lugs **A** as outlined in the operating manual for the child
- 2. Pull the child seat to check that both fastening points are engaged correctly.



**3.** If the child restraint seat or seats require the use of a tether strap, attach the tether strap **B** to the anchor point behind the rear seat backrests and pull it tight.

#### **Roll-Over Protection**

On the Cabriolet, a roll-over protection system installed behind the rear seats is extended within fractions of a second in the event of an accident. This generates a loud noise. If necessary, the seat-belt tensioners for the front seats will be activated.

Please see the chapter "SAFETY-BELT PRETENSIONER" on page 37.

The roll-over protection system consists of two extendable assemblies which, together with the windshield frame, ensure sufficient headroom for all occupants if the vehicle rolls over.

#### NOTICE

Risk of damage to the convertible top and roll-over protection when opening and closing the convertible top.

Extended roll-over protection will obstruct the movement of the convertible top.

Do not open or close the convertible top with the roll-over protection extended.

#### **A** DANGER

A roll-over protection system that has been tampered with or obstructed in its movement may malfunction, resulting in serious or fatal injury. A roll-over protection system that has been tampered with does not offer any protection. It may be triggered inadvertently, or not respond when needed.

- Do not modify the wiring or components of the roll-over protection system.
- Keep body parts and objects out of the area of movement of the extendable assemblies.
- ▶ Do not open the covers of the extendable assemblies.
- Make sure that no water or cleaning agents get into the roll-over protection system when cleaning the vehicle.
- If the roll-over protection system is in any way faulty, please contact an authorized Porsche dealer to do this work.

# i

#### Information

If the roll-over protection is triggered when the convertible top is closed, the rear window is destroyed.

# 🍂 Airbag Warning light

If the roll-over protection system is faulty, the airbag warning light on the instrument cluster will light up. Extension of the extendable assemblies is not ensured.

► Have the fault repaired immediately at an authorized Porsche dealer.

#### **Triggered roll-over protection system**

- Never press the extendable assemblies back into the original position.
- Please contact an authorized Porsche dealer.

#### **Exterior Mirrors**

The convex mirror on the passenger's side and the aspherical mirror on the driver's side provide a larger field of view.

#### **WARNING**

Judging Distance in Convex Side Mirror

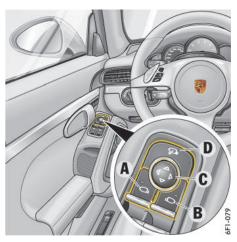
Vehicles or objects appear smaller in convex mirrors and further away than they are in reality.

- ▶ Bear this distortion in mind when estimating the distance of vehicles behind you and when reversing into a parking space.
- Also make use of the interior mirror for judging distance.

#### NOTICE

Risk of damage to the exterior mirrors when washing the vehicle in a car wash.

Fold in exterior mirrors before using the car wash.

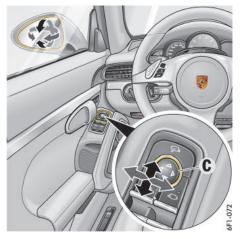


- Exterior mirror selection driver's side
- Exterior mirror selection passenger's side
- C Adjusting exterior mirrors
- Folding in exterior mirrors electrically (where equipped)

# **Adjusting exterior mirrors**

The electrical exterior mirror adjuster is ready for operation:

- With ignition switched on.
- After the ignition is switched off and before the driver's or passenger's door is first opened, but for a maximum of 10 minutes.



- 1. Press selection button A for the driver's side and selection button **B** for the passenger's
  - The indicator light on the pressed button lights up.
- 2. Move the exterior mirrors to the correct position by pressing the adjustment button C.

#### If the electrical adjustment facility fails

▷ Adjust the mirror by pressing on the mirror face.

#### Folding in exterior mirrors manually

▷ Swivel the mirror housing inwards by hand as far as it will go.

#### **Folding out exterior mirrors manually**

▷ Swivel the mirror housing outwards by hand as far as it will go.

# Folding exterior mirrors in and out electrically

 Press button **D**.
 Both exterior mirrors fold in and out automatically.

#### If the electrical adjustment facility fails

▶ Fold mirror in or out manually.



#### Information

At speeds greater than approx. 30 mph (50 km/h), the exterior mirrors can no longer be folded in.

# Folding exterior mirrors in and out automatically

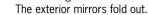
The exterior mirrors are folded in automatically after the vehicle is locked.

Prerequisite:

The function is activated on the multi-function display.

#### Folding exterior mirrors out automatically

Switch on ignition.





#### Information

The exterior mirrors do not fold out automatically after the ignition is switched on if they were folded in manually using the button **D**.

#### If the electrical adjustment facility fails

Fold the mirror outwards by hand as far as it will go.

#### Storing exterior mirror settings

On vehicles with memory, individual exterior mirror settings can be stored on the person buttons on the driver's side and on the car key.

For further information on retrieving and storing vehicle settings:

▶ PLEASE SEE THE CHAPTER "COMFORT ENTRY FUNCTION" on page 34.

# **Exterior mirror heating**

The exterior mirror heating is activated automatically when the heated rear window is switched on while the engine is running.

For information on switching on the heated rear

window:

Please see the chapter "HEATED REAR

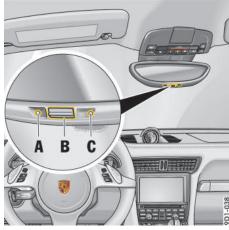
WINDOW/ EXTERIOR MIRROR HEATING" on page 60.

If the charging condition of the battery is critical, the exterior mirror heating function is restricted initially and then switched off.

# Swivelling down mirror glass as parking aid

When reverse gear is engaged, the mirror on the **passenger's side** swivels down slightly to show the curb area.

Please see the chapter "SWIVELLING DOWN MIRROR GLASS AS PARKING AID" on page 210.



# Automatic Anti-Dazzle Interior and Exterior Mirrors

The interior mirror's reflection is undistorted. Sensors on the front and rear sides of the interior mirror measure the incident light. The mirror automatically changes to anti-dazzle position or reverts to its normal state, depending on the light intensity.



#### Information

The incident light within the detection area of light sensor **C** must not be restricted (e.g. by stickers on the rear window).

#### Switching off automatic anti-dazzle function

▶ Press button **B**.

The indicator light **A** goes out.

**50** 

Seats, Mirrors and Steering Wheel



#### Information

The anti-dazzle function switches off automatically if:

- Reverse gear is engaged or
- Interior lighting is switched on.

#### Switching on automatic anti-dazzle function

Press button **B**. The indicator light A lights up.



Electrolyte fluid may escape if the mirror glass is broken

Electrolyte fluid may escape from broken mirror glass. This fluid irritates the skin and eyes.

If the electrolyte fluid should come into contact with the skin or eyes, rinse it off immediately with clean water.

Seek medical attention if necessary.

#### **NOTICE**

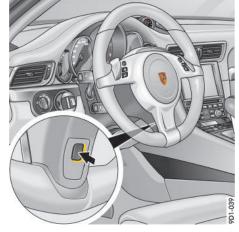
Risk of damage to paintwork, leather, plastic parts and clothing.

Electrolyte fluid can be removed only while it is still wet.

▷ Clean the affected parts with water.

#### **Automatic anti-dazzle exterior mirror**

The exterior mirrors change to anti-dazzle position automatically in synchronization with the interior mirror.



# **Steering Wheel Heating**

The steering wheel heating can be switched on and off using the button on the rear of the steering wheel when the ignition is switched on.

#### Switching steering wheel heating on/off

Press button.

The message "Steering wheel heating switched on" or "Steering wheel heating switched off" appears on the multi-function display for 2 seconds.

# **Steering Wheel Adjustment**

The steering wheel can be adjusted electrically in four directions depending on the vehicle equipment.

**WARNING** 

Steering Wheel Adjustment While Driving

The steering wheel may move further than desired if you attempt to adjust it when driving. You may lose control of the vehicle.

▷ Do not adjust the steering wheel when driving.

**A** CAUTION

Memory Steering Wheel Movement

If persons or animals are in the movement range of the steering wheel during adjustment or if the person buttons are pressed unintentionally when the vehicle is at a standstill, parts of the body could get trapped or crushed.

▶ Do not leave children in the vehicle unattended.



#### Adjusting steering wheel

Move the control switch under the steering column in the relevant direction until the desired setting is reached.

The steering wheel setting is stored in the vehicle settings.

For further information on storing and retrieving the steering wheel setting:

PLEASE SEE THE CHAPTER "COMFORT ENTRY FUNCTION" on page 34.

# **Multi-function Steering Wheel**

**WARNING** 

Setting and operating when driving

You may be distracted from paying attention to the road if you set or operate the multi-function display, radio, navigation system, telephone or other equipment when driving. You may lose control of the vehicle.

- ▷ Operate the equipment when driving only if the traffic situation allows you to do so safely.
- Carry out any complicated operating or setting procedures only when the vehicle is stationary.

Depending on the equipment in your vehicle, you can use the function keys of the multi-function steering wheel to operate the following Porsche communication systems:

- Telephone
- PCM
- CDR-31
- Multi-function display in the instrument panel



### Readiness of the multi-functional steering wheel for operation

- With ignition switched on.
- ▶ Please observe the operating instructions supplied for the Porsche communication systems before operating the function buttons.



#### Information

The Porsche communication systems cannot be switched on and off using the multi-function steering wheel.

### **Function buttons on the multi-function** steering wheel



# 1 Information

The rotary buttons at the top left and right of the steering wheel can also be pressed.



#### Turn volume control

Upwards - increase volume. Downwards - decrease volume.

#### Press volume control

Switch volume/mute on and off.



#### Turn rotary knob

Select/highlight the main menu or menu item in the multi-function display. To do this, turn the rotary knob upwards or downwards.

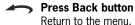
#### Press rotary knob

Go to submenu or activate selected function.



#### Press diamond button

Call up the stored function. The button can be assigned the desired function in the multi-function display on the instrument panel.





**Press Handset Hangup button** End or refuse a telephone call.



#### **Sun Visors**

- Swivel the sun visor down to prevent dazzle from the front.
- If you are dazzled from the side, unclip the sun visor from the inner bracket and swivel it round so that it is in front of the door window.



# Vanity Mirror

The vanity mirror on the rear of the sun visor is closed with a cover.

The vanity mirror illumination is switched on automatically when the cover is opened.



Cover of vanity mirror open

The mirror glass may break in the event of an accident and may enter the passenger compartment if the cover is open.

▶ Keep the cover closed when driving.

# NOTICE

Risk of damage to the vanity mirror cover.

- ▶ Do not force the cover beyond its end position.
- Keep the cover closed when closing the convertible top.

# **Air Conditioning**

Automatically Controlled 2-zone Air	
Conditioning	.5
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# **Automatically Controlled 2-zone Air Conditioning**

The temperature can be set individually for the driver's and passenger's side.

In automatic mode the air conditioning system exercises full control over the air temperature, air distribution, and air quantity. A number of factors (such as ambient air temperature, amount of sunlight, etc...) are used by the system to determine the optimum settings for the current

Automatic mode is deactivated as soon as the settings are adjusted manually. In this case, automatic climate control still regulates the air-conditioning functions that have not been modified manually.



Interior temperature sensor

#### **Sensors**

To avoid impairing the function of the air conditioning system, the interior temperature sensor for the air-conditioning system must not be covered or taped over.



# Information

Additional air conditioning settings can be made on the multi-function display on the instrument panel:

Please see the chapter "SETTING AIR CONDITIONING" on page 123.

All air-conditioning system settings are stored on the respective car key when the vehicle is locked, on vehicles with memory.

# Information on air-conditioning compressor

The air-conditioning compressor

- Can switch off briefly to ensure sufficient engine cooling if the engine is operating under extreme load.
- Switches off automatically at temperatures below approx. 36 °F (2 °C) and cannot be switched on, even manually.
- Operates most effectively with the windows
  - If the vehicle has been in the sun for a long time, it is a good idea to ventilate the interior briefly with the windows open.
- Depending on the outside temperature and humidity, condensation can drip from the evaporator and form a pool under the vehicle. This is normal and not a sign of leakage.

#### Information on automatic load switch-off

If the charging condition of the battery is critical, the following air-conditioning or heating functions are restricted initially and then switched off:

- Seat heating
- Seat ventilation
- Heated rear window/Exterior mirror heating
- Fresh-air blower
- Air-conditioning compressor



#### A/C mode

In automatic mode, A/C mode is activated by default.

The power for the air conditioning compressor is fully controlled by the air conditioning system depending on the current operating requirements. The air-conditioning compressor is switched off automatically at outside temperatures of less than approx. 36 °F (2 °C).

#### Switching A/C mode on

If you wish to cool the passenger compartment to a temperature lower than the outside temperature, A/C mode must be activated.

Press button A/C OFF.

The indicator light on the button goes out. The air-conditioning compressor is switched on.

or

Press button AUTO/SYNC.

The cooling function is activated.

# Switching A/C mode off

A/C mode can be switched off manually to save fuel, for example.

Press button A/C OFF.

The indicator light on the button lights up. The air-conditioning compressor is switched off.

The cooling function is deactivated.

#### **SYNC** mode

In SYNC mode, the temperatures on the driver's and passenger's side are synchronized and are regulated via button **TEMP** on the driver's side.

#### Switching on SYNC mode

- Press button AUTO/SYNC and hold until SYNC appears on the display.
- Regulate the temperature on the driver's and passenger's side via button **TEMP** on the driver's side.

### Switching off SYNC mode

▶ Press button AUTO/SYNC or button TEMP on the passenger's side.



#### A/C MAX mode

In A/C MAX mode, the passenger compartment is cooled at maximum power.

The interior temperature is not regulated automatically.

If the vehicle has been in the sun for a long time, it is a good idea to ventilate the interior briefly with the windows open.

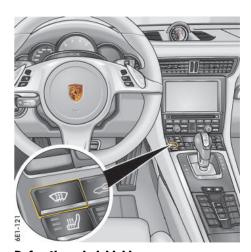
#### Switching A/C MAX mode on

Press button A/C MAX. The indicator light on the button lights up.

#### Switching A/C MAX mode off

Press button A/C MAX.
 The indicator light on the button goes out.
 or

Press button AUTO/SYNC.



# **Defrosting windshield**

# **Activating defrosting function**

Press button .

The indicator light on the button lights up. The air flows to the windshield and the front side windows.

The windshield is demisted or defrosted as quickly as possible.

# **Deactivating defrosting function**

▶ Press button .

The indicator light on the button goes out.

Press button AUTO/SYNC.



#### **Air-recirculation mode**

# Switching on air-recirculation mode

Press button .

The indicator light on the button lights up. The outside-air supply is interrupted and only the inside air is recirculated.

#### Switching air-recirculation mode off

▶ Press button <</p>
. The indicator light on the button goes out.



# Information

If the air-conditioning compressor is switched off manually or automatically, recirculated air mode ends after approx. 3 minutes.

#### Setting automatic air-recirculation mode

In automatic air-recirculation mode, the fresh air supply is adjusted depending on the air quality. Automatic air-recirculation mode can be switched on and off on the multi-function display. Air-recirculation mode is deactivated automatically to prevent the windows from misting at outside temperatures of less than approx. 41 °F (5 °C). For information on adjusting automatic air-recirculation mode on the multi-function display:

▶ Please see the chapter "SETTING AIR CONDITIONING" on page 123.



#### Information

The recommended operating mode is automatic air-recirculation mode (default setting).



A - Set temperature left/right

B - Set air quantity

#### **Setting temperature**

For personal comfort, the interior temperature can be adjusted individually for the driver's and passenger's side between 61 °F (16 °C) and 85 °F (29.5 °C). Recommendation: 72 °F (22 °C). The selected temperature is shown on the display.

#### Increasing temperature

 Press button **TEMP** upwards.
 The preset temperature value is shown on the air-conditioning display.



#### Information

Pressing button **AUTO/SYNC** selects the preset temperature.



#### Information

The air-conditioning system always cools and heats the passenger compartment to the preset temperature at maximum cooling or heating temperature.

Setting the temperature temporarily to a lower or higher value does **not** cool or heat the passenger compartment to the desired temperature more quickly.

### Set air quantity

The selected air quantity is shown in a bar display above the button **3.** The more bars that are displayed, the more air flows into the passenger compartment.

#### Increasing air quantity

▶ Press button upwards.

#### Reducing air quantity

Press button downwards.

Pressing button **AUTO/SYNC** switches back to automatic mode.

If the air quantity was reduced so much that **OFF** appears on the air-conditioning display, the outside-air supply is interrupted and the air-conditioning compressor is switched off.



Air Shut-off Impairing Vision

The windows can mist up if the air quantity setting is **OFF**.

- Only select air quantity setting **OFF** for short periods.
- Press button upwards (increase air quantity).



# **Setting air distribution manually**

- Press button 2. The air flows to the windshield and the side windows.
- Press button .
  The air flows from the central and side vents.
  The air vents must be open.
- Press button **3**. The air flows to the footwell.

The indicator light on the button lights up.

#### **Cancelling manual air distribution**

▶ Press the relevant air distribution button again.
 The indicator light on the button goes out.

#### or

Press button **AUTO/SYNC**.

Air quantity and distribution are controlled automatically and variations are compensated.



#### **Extended ventilation panel**

The extended ventilation panel on top of the dashboard can be activated or deactivated separately in the multi-function display on the instrument panel.

The air flow in the passenger compartment is less direct.

The automatic control of the air-conditioning system adjusts the air flow quantity automatically.



#### **Air Vents**

Air vents are located on the dashboard that can be opened and closed manually. The direction of the air flow can also be adjusted.

#### **Opening vents**

Turn the thumb wheel on the air vent upwards.

#### **Closing vents**

Turn the thumb wheel on the air vent downwards.



# Information

For optimal air conditioning, we recommend keeping the center air vents closed during the cold season and to only open them as required for the purpose of warming the hands.

#### **Changing air flow direction**

▷ Swivel vent vanes in the desired direction.

# Air-conditioning settings on the multi-function display

Additional settings relating to vehicle air conditioning can be adjusted in the multi-function display on the instrument panel.

For information on air-conditioning settings on the multi-function display:

▶ PLEASE SEE THE CHAPTER "SETTING AIR CONDITIONING" on page 123.

Three air flow settings are available in automatic mode:

#### "Soft":

Recommended for passengers sensitive to draughts with a preference for gentle air conditioning.

"Normal":

Default setting.

"Strong":

Stronger ventilation in the passenger compartment.

The air flow is clearly noticeable.

#### **Extended ventilation panel**

dashboard can be activated or deactivated separately.

#### **Auto air-recirculation mode**

▷ Auto air-recirculation mode can be switched on and off.



# **Heated Rear Window/ Exterior Mirror Heating**

Heated rear window/exterior mirror heating is ready for operation when the engine is running.

# **Switching on**

▶ Press button .The indicator light on the button lights up. Depending on the outside temperature, the heating switches off automatically after approx. 5 to 20 minutes.

▶ The heating can be switched back on by pressing the button again.

# **Switching off**

▶ Press button . The indicator light on the button goes out. If the charging condition of the battery is critical, the heated rear window/exterior mirror heating function is restricted initially and then switched off.

Air Conditioning

# **Windows, Sunroof and Cabriolet**

Power windows	02
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Convertible Top and Wind Deflector	70

#### **Power Windows**

**WARNING** 

Opening and closing the windows

When opening or closing the windows, particularly in one-touch mode, parts of the body may get trapped between the moving window and fixed vehicle parts.

- Take care to ensure that nobody can be injured when the windows open or close.
- Always remove the ignition key when leaving the vehicle or switch ignition off on vehicles with Porsche Entry & Drive. Always take the ignition key with you when leaving the vehicle. Uninformed persons could injure themselves by operating the power windows.
- Do not leave children in the vehicle unattended.

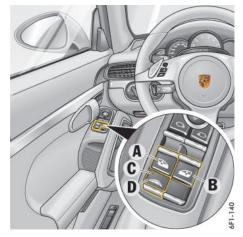
### **Readiness for operation of power windows**

The power windows are ready for operation:

- With ignition switched on.
- After the ignition is switched off and before the driver's or passenger's door is first opened, but for a maximum of 10 minutes. One-touch operation for closing the door windows is available only when the ignition is switched on.

#### Cabriolet

When the convertible top is open, the rear side windows can only be closed if the door windows are closed.



- A Power window, driver's side
- $\boldsymbol{B}$  Power window, passenger's side
- C Cabriolet: LED indicator for switching between front/ rear power windows
- **D** Cabriolet: Switch for front/rear power windows

#### **Opening/closing windows**

On the Cabriolet, select front or rear power windows with switch D.

The LED C in switch D indicates that the rear windows are selected.

#### Opening window with the switch

Press the relevant switch until the window has reached the desired position.

# Closing window with the switch

Pull the relevant switch until the window has reached the desired position.



#### Information

The switches have a two-stage function. Both detent positions can be felt clearly when you actuate the switch.

# First setting - manual operation

- If the relevant switch is moved to the first position, the window is opened or closed manually.
- The window stops when the switch is released.
- Second setting one-touch operation If the relevant switch is moved fully to the second position, the window is opened or closed automatically.
  - Actuate the switch again to stop the window at the desired position.



#### Information

If a door window is blocked during closing, it will stop and open again by several centimeter. If the window is blocked a second time within approximately 10 seconds, one-touch operation is disabled for this window.

The window can be closed manually. The window then closes with its full closing force.

One-touch operation is enabled again once the window has been closed completely using the manual closing function.

#### **WARNING**

Closing the windows manually

If one-touch operation is disabled after the window is blocked, the window will close with its full closing force when the manual closing function is used.

Ensure that nobody can be injured, pinched or crushed when the windows close.

## Storing end position of the windows after connecting the vehicle battery

The end positions of the windows are lost when the battery is disconnected and reconnected. One-touch operation of the windows is disabled. Perform these steps for all windows:

- 1. Close window completely **once** by pulling the rocker switch.
- 2. If the window is completely closed, briefly pull the rocker switch again 3 times.
- 3. Open the window completely once by pressing the rocker switch.

#### **Sunroof**

The electric sunroof and the roll-up sunblind can be operated using the buttons in the center console.

# **WARNING**

Opening and closing the sunroof and roll-up sunblind

When opening or closing the roof or sunblind, particularly when using one-touch operation, parts of the body may become trapped between moving and fixed vehicle parts.

- Ensure that nobody is injured when operating the roof or roll-up sunblind.
- Always remove the ignition key when leaving the vehicle or switch ignition off on vehicles with Porsche Entry & Drive. Always take the ignition key with you when leaving the vehicle. Uninformed persons (e.g. children) could injure themselves when operating the sunroof or rollup sunblind.
- In case of danger, press the sliding roof or sunblind button immediately.

#### NOTICE

Damage to the roof, if the roof is opened or lifted when a roof transport system is fitted and the roof collides with the carrier/load.

Do not open or lift the roof when a roof transport system is fitted.

### Operational readiness of the sunroof and roll-up sunblind

The sunroof and roll-up sunblind are ready for operation:

With ignition switched on.



#### Information

The roof and sunblind have a force limiter. If the roof or sunblind are obstructed during the closing operation, they will open again immediately.

At speeds above 120 mph (200 km/h) and at temperatures below -22 °F (-30 °C), the roof can only be closed. The opening function is disabled.



#### A - Open roof

- B Lift/lower roof
- C Close roof

# **Steel Sunroof**

# **Opening the roof**

#### First setting - manual operation

Pull and hold button **A** in the first setting until the desired position is reached.

#### Second setting - one-touch operation

Briefly pull button A to the second setting. The roof opens automatically to the end position.

The process can be interrupted by pulling button **A** or **C** again.

# Lifting/lowering the roof

Press button **B**. The roof is lifted/lowered to the end position.

The process can be interrupted by pressing button **B** again.

**64** Windows, Sunroof and Cabriolet

# **Closing the roof**

# First setting - manual operation

> Pull and hold button **C** in the first setting until the desired position is reached.

# Second setting - one-touch operation

▶ Briefly pull button **C** to the second setting. The roof closes automatically.

The process can be interrupted by pulling button **C** or **A** again.



- A Open/close sunblind
- **B** Lift/lower roof
- C Open/close roof

# **Glas Sunroof**

# **Opening the roof**

#### First setting - manual operation

Press and hold button **C** in the first setting until the desired position is reached.

#### Second setting - one-touch operation

Briefly press button C to the second setting. The roof opens automatically to the end position.

The process can be interrupted by pressing button  ${\bf C}$  again.

# Lifting/lowering the roof

Press button **B**. The roof is lifted/lowered to the end position.

The process can be interrupted by pressing button **B** again.

#### **Closing the roof**

#### First setting - manual operation

Pull and hold button **C** in the first setting until the desired position is reached.

#### Second setting - one-touch operation

Briefly pull button C to the second setting. The roof closes automatically.

The process can be interrupted by pulling button C again.

#### **Opening the roll-up sunblind**

#### First setting - manual operation

Pull and hold button A in the first setting until the desired position is reached.

#### Second setting - one-touch operation

Briefly pull button A to the second setting. The sunblind opens automatically to the end

The process can be interrupted by pressing button A again.

#### Closing the roll-up sunblind

# First setting - manual operation

Press and hold button **A** in the first setting until the desired position is reached.

#### Second setting - one-touch operation

Briefly press button **A** to the second setting. The sunblind closes automatically to the end position.

The process can be interrupted by pressing button A again.



# 1 Information

If the sunroof is partly or fully open, the sunblind can only be closed as far as the front edge of the sunroof.

If the sunblind is closed, it will be opened (pulled along) automatically when the sunroof is opened.

### Warning message on multi-function display

If there is a fault in the sunroof the warning "Close sunroof completely" appears on the multifunction display.

Close sunroof with button **C**. Have the fault corrected by an authorized Porsche dealer at the next opportunity.

# **Emergency closing of sunroof**

#### Emergency closing after repeated intervention from the force limiter

If the closing operation of the roof is impeded by an obstruction, it can be closed manually with increased force.

#### To perform emergency closing:

- 1. Remove the obstruction.
- 2. Pull and hold button C in the first setting until the roof closes and stops in the closed

Repeat closing operation if necessary

#### Emergency operation if roof drive mechanism fails

If the roof drive mechanism is defective, it can be closed manually using the hexagon key from the tool kit.

Before using emergency operation, check that the fuse is intact.

For information on changing fuses:

▶ Please see the chapter "CHANGING FUSES" on page 267.



- 1. Carefully lever off the cap from the roof liner using a screwdriver, for example.
- 2. Take the hexagon key out of the tool kit in the luggage compartment.

For information on the tool kit:

▶ Please see the chapter "TOOLS" on page 198.



- 3. Insert the hexagon key all the way into the opening.
- 4. Applying continuous upward pressure, turn the key clockwise until the roof is fully closed.
- **5.** Remove the key.
- **6.** Refit the cap.
- 7. Stow the key in the tool kit.
- Have the fault corrected at an authorized Porsche dealer.

#### Storing end position of the sunroof

The end positions of the roof are lost after disconnection/connection of the vehicle battery, if the vehicle battery is exhausted or after jump lead starting, after emergency operation or after changing the fuse for the roof.

# **WARNING**

Storing the end position

The roof closes with its full closing force when storing the end position.

▶ Ensure that nobody is injured when closing the roof.

The vehicle must be stationary in order to store the end position of the roof.

- 1. Switch on ignition.
- 2. Pull and hold button C in the first setting until the roof closes and stops in the closed

The process for storing the end position begins after approximately 10 seconds. The roof now opens and closes once automatically. Storage is now complete.

If this process is not executed, please perform the following procedure:

Pull and hold button C in the first setting until the roof closes fully and stops. If necessary, repeat the closing operation until the roof has stopped moving completely.

The process takes a maximum of 15 seconds. Start the storing process again if the button is released before the roof has stopped moving completely.

#### Storing end position of the roll-up sunblind

The end positions of the sunblind are lost after disconnecting/connecting the vehicle battery, if the vehicle battery is exhausted or after jump lead starting, after emergency operation or after changing the fuse for the sunblind.

**WARNING** 

Storing the end position

The sunblind closes with its full closing force when storing the end position.

▶ Ensure that nobody is injured when closing the sunblind.

To store the end position for the sunblind, the vehicle must be stationary and the end position for the roof must already be stored.

- 1. Switch on ignition.
- 2. Press and hold button A in the first setting until the sunblind closes and stops in the closed position.

The process for storing the end position begins after approximately 10 seconds. The sunblind now opens and closes once automatically. Storage is now complete. If this process is not executed, please perform the following procedure:

Press and hold button **A** in the first setting until the sunblind closes fully and stops. If necessary, repeat the closing operation until the sunblind has stopped moving completely. The process takes a maximum of 15 seconds. Start the storing process again if the button is released before the sunblind has stopped moving completely.

#### Cleaning the air deflector

#### Cleaning the air deflector with the roof open.

- 1. Switch on the ignition and open the roof fully with button B.
  - If the air deflector is not fully extended, drive the vehicle for a short distance with the roof open until it is fully extended.
- 2. Clean the air deflector and net using a damp sponge.

# **Convertible Top**

Brief operating instructions can be found on the back of the driver's sun visor.

Please see the chapter "CAR CARE INSTRUCTIONS" on page 231.

#### NOTICE

Risk of damage to convertible top and convertibletop mechanism.

- ▷ Do not operate convertible top:
- At temperatures below 20 °F (0 °C).
- When one side of the vehicle is on a curb, a lifting platform or a jack.
- When items of luggage or other objects hinder the movement of the convertible top.
- With the roll-over bars extended.
- Avoid frequent operation of the convertible top with the engine off; the vehicle battery will rapidly discharge.
- Only drive with the convertible top fully open or closed (end positions).
- ▶ Before opening the convertible top, ensure that there are no objects in the area behind the rear seats.
- ▶ When opening or closing the convertible top, ensure that there is sufficient clearance above it (e.g. in the garage).
- To prevent damp stains and abrasion damage, open the convertible top only when it is in a dry, clean state.
- Park the vehicle in the shade if possible, since continuous exposure to the sun attacks textiles, rubber and colors.
- ▶ The convertible top may only be operated when driving on a level surface.
- The convertible top must not be operated in a strong head wind (above approx. 50 mph (80 km/h)).

#### **Door windows and side windows**

The side windows are lowered automatically when **the convertible top is opened**. The door windows close automatically if operation of the convertible top is continued after it has reached its final position.

The rear side windows open automatically when the door windows are opened.

The side windows are lowered automatically when the **convertible top is closed**. All windows close automatically if operation of the convertible top is continued after it has reached its final position.

# Conditions for operating the convertible top

 The ignition must be switched on (engine running or switched off).

exceeded.

 Maximum speed up to approx. 30 mph (50 km/h).
 Opening/closing of the convertible top will be interrupted if the maximum speed is

#### **Opening convertible top**

**WARNING** 

Opening the convertible top

When opening the convertible top, parts of the body can become trapped between the convertible-top mechanism or convertible-top compartment lid and fixed vehicle parts.

- When opening the convertible top, make sure that nobody is at risk of injury from the convertible-top mechanism or the convertibletop compartment lid.
- In order to interrupt convertible-top operation in the event of danger, immediately release the switch.
- Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.



 Pull and hold the switch until the convertible top has reached its final position or until the windows are in their desired position.
 The message on the multi-function display goes out.

In case of danger, release the switch. Convertible top operation stops.

#### **Closing convertible top**

#### **WARNING**

Closing the convertible top

When closing the convertible top, parts of the body can become trapped between the convertible-top mechanism or convertible-top compartment lid and fixed vehicle parts.

- When closing the convertible top, make sure that nobody is at risk from injury from the convertible-top mechanism or the convertibletop compartment lid.
- In order to interrupt convertible-top operation in the event of danger, immediately release the
- Keep the lids of the vanity mirrors in the sun visors closed when closing the convertible top.
- Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.



Pull and hold the switch until the convertible top has reached its final position or until the windows are in their desired position. The message on the multi-function display goes out.

In case of danger, release the switch. Convertible top operation stops.

# **Messages on on-board computer**



Convertible top status

Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.

#### **Wind Deflector**

**WARNING** 

Raising the wind deflector

Persons sitting on the rear seats may be trapped when raising the wind deflector.

- ▶ Ensure that nobody can be injured when raising the wind deflector.
- In case of danger, release the switch immediately.

#### NOTICE

Risk of damage to wind deflector and seat backrests. At extreme backrest angles, the wind deflector can collide with the seat backrests.

▶ Before raising the wind deflector, always adjust both seat backrests to the upright position.



# **Raising/lowering the wind deflector**Conditions for operating the wind deflector

- The ignition must be switched on (engine running or switched off).
- Maximum speed up to approx.:
   75 mph (120 km/h) for lowering and
   124 mph (200 km/h) for raising.
   If these speeds are exceeded, raising/ lowering of the wind deflector is not possible.
- Press and hold the switch until the end position of the wind deflector is reached and the message on the multi-function display goes out.

# Emergency Operation of Convertible Top and Wind Deflector



Moving convertible top parts during emergency operation

- Always carry out emergency operation with the greatest care.
- Do not activate the convertible top and wind deflector during emergency operation.

#### **NOTICE**

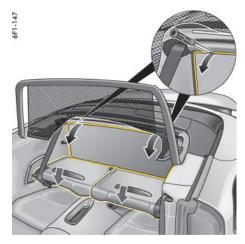
There is a risk of damage to the convertible top and convertible-top mechanism.

Do not activate the convertible top during emergency operation.

#### **NOTICE**

Risk of damage to convertible top and convertibletop mechanism.

- After emergency operation, do not operate the convertible top.
- Drive slowly to an authorized Porsche dealer.



#### **Before emergency operation**

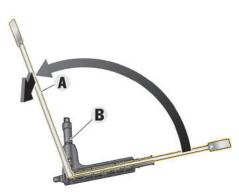
Before carrying out emergency operation, please check:

- 1. Was the ignition switched on during operation of the wind deflector and convertible top with the switch?
- **2.** Are the fuses defective? Please see the chapter "CHANGING FUSES" on page 267.
- 3. Remove the ignition key so that the wind deflector and convertible top are not activated unintentionally.

#### Removing the rear wall trim panel

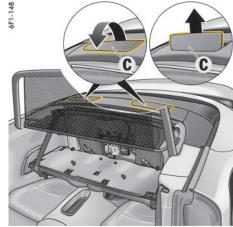
- 1. Fold the rear seat backrests forward (illustration).
- Carefully lever the rear wall trim panel out of the clip points using the screwdriver (from the tool kit) and fold it forward or pull off the rear wall trim panel using the two loops (depending on vehicle equipment) and fold it forward (illustration).

3. Remove the emergency operation key A from the rear wall trim panel.

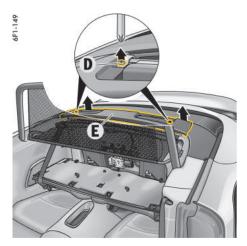


**Emergency operation of wind deflector** 

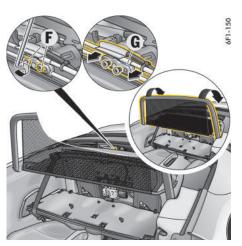
1. Remove plastic attachment  $\boldsymbol{\mathsf{B}}$  from the emergency operation key **A**. Swivel the metal insert approx. 90° up out of the plastic attachment **B** and pull out forwards.



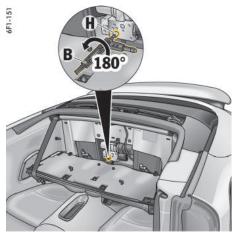
2. Fold both roll-over protection covers C forward and unclip them by pulling them up.



- 3. Unscrew both screws **D** on the roll-over protection cover using the screwdriver.
- 4. Release roll-over protection cover **E** out of the clip points by pulling them upwards.



- $\textbf{5.} \ \ \textbf{Unscrew screws} \ \textbf{F} \ \textbf{on the wind deflector motor}$ using the metal insert **A** (TORX<sup>®</sup>) of the emergency operation key.
- 6. Pull retaining bracket G forward (lever it out using the screwdriver if necessary) until the gears no longer engage. Remove retaining bracket.
- 7. Retract the wind deflector manually.



## Releasing convertible-top drive

▶ Using the hexagon on the plastic attachment **B**, turn the emergency hand screw H approx. 180° anti-clockwise.

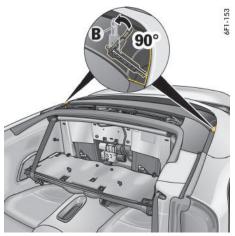
## NOTICE

Only loosen emergency hand screw  ${\bf H}$ , do not unscrew it completely.

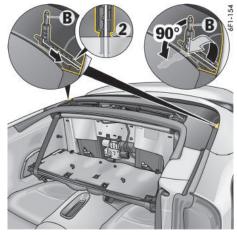


## **Opening the convertible-top compartment**

- 1. Reassemble plastic attachment **B** and metal insert A.
- 2. Insert the metal end of the emergency operation key between the convertible-top compartment lid and convertible top. Ensure that the bend of the plastic attachment **B** is pointing towards the rear of the vehicle.
- **3.** Guide the emergency operation key forward along the plastic trim until it slides into opening K up to marking 1 on the plastic attachment B.



**4.** Turn the emergency operation key approx. 90° in the direction of travel so that the plastic attachment **B** is pointing upwards.



- **5.** Insert the emergency operation key up to marking 2 on the plastic attachment B and turn a further 90° in the direction of travel until a noticeable resistance is overcome.
- 6. Turn the emergency operation key approx. 90° against the direction of travel and remove it.
- **7.** Repeat the procedure (steps 2 to 6) on the opposite side.



- 8. Using both hands on the driver's and passenger's side, firmly pull the convertibletop compartment lid upwards.
- 9. Grasp the convertible-top compartment lid in the center from the rear and set to the upright position.



# Emergency operation of rear side trim panel flaps

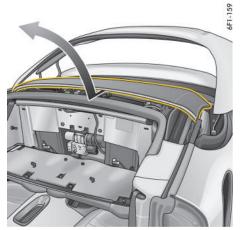
1. Disconnect both connectors L.



- 2. Loosen both screws  ${\bf M}$  on the motor/gear unit using the metal insert  ${\bf A}$  (TORX  $^{\!(\!g\!)}\!$  ) of the emergency operation key.
- 3. Pull motor/gear unit **N** forward (lever it out using the screwdriver if necessary) until the gears no longer engage.



4. Press both rear side flaps downwards manually until the end position is reached.



**Closing the convertible top** 

1. From the passenger compartment, grasp the convertible top at the center and pull it manually out of the storage compartment until it is approximately half closed.



Risk of injury due to crushing during closing

If body parts are located within the range of movement of the convertible top or in the area of the convertible top lock during closing, there is a risk of pinching or crushing.

- ▶ Make sure that:
- no persons are within the range of movement of the convertible top during closing.
- hands are not pinched or crushed by parts of the convertible top lock.



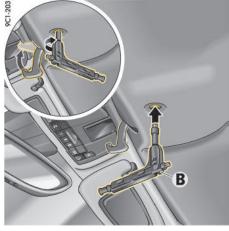
2. Remove stopper O at the access point for convertible-top lock emergency operation.



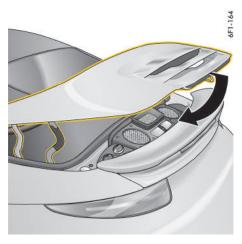
- 3. Remove plastic attachment  ${\bf B}$  from the emergency operation key. Swivel metal insert A approx. 90° up out of the plastic attachment **B** and pull out forwards.
- 4. Insert plastic attachment B into the access point for the convertible-top lock emergency operation and turn it to the left or right until it slips into the socket.
- **5.** Turn plastic attachment **B** anti-clockwise until the latching hook is fully extended (noticeable resistance).



**6.** Pull the convertible top to the windshield frame manually.



**7.** To fully close the convertible top, turn plastic attachment **B** clockwise until the latching hook fully engages in the catch (noticeable resistance).



## **Closing the convertible-top compartment** lid

**WARNING** 

Closing of the convertible-top compartment lid

Parts of the body may become trapped between the convertible-top compartment lid and fixed vehicle parts when closing the convertible-top compartment lid.

- ▶ Place your hands on top of the convertible-top compartment lid when pushing.
- 1. Stand behind the vehicle.
- 2. Grasp the convertible-top compartment lid above the brake light and push forward against noticeable resistance until it is completely closed.
- 3. Push the convertible-top compartment lid manually into the closed end position. The convertible-top compartment lid is not locked.
- 4. Hand-tighten emergency hand screw H clockwise.

# **Lights, Turn Signals and Windshield Wipers**

Light Switch	. 79
Instrument Lighting	.82
Turn Signal/High Beam/	
Headlight Flasher Stalk/Parking Light Switch	.82
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## Light Switch

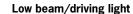
## OFF Light is switched off

Daytime driving lights are switched on when the ignition is switched on.

## AUTO Automatic driving light assistant

Side lights
License plate light instr

License plate light, instrument lighting, daytime driving lights switched off.



Only with ignition on. Fog light function and highway light are switched off.

## **()**≢ Rear fog light

**■**D

Pull the switch in the low beam position. Indicator light lights up.

## i

### Information

If the ignition key is removed and the door is opened while the lights are on, an audible signal (gong) warns of possible battery discharge.

 In some countries, differences are possible due to legal requirements.

The vehicle's exterior lights can mist up due to temperature and humidity. This misting will dry off after a sufficient distance has been driven.

## Low beam/driving light

If the light switch is set to the position **AUTO**, the low beam is switched on automatically in the following situations:

- Dusk
- Darkness
- Driving through tunnels
- Raii
- Highway driving (on vehicles with Porsche Dynamic Light System PDLS)

When the low beam is switched on, the indicator light on the speedometer lights up.



## Information

Fog is not automatically recognized.

In the event of fog, the driving light must be switched on manually.

## **Daytime driving lights**

If the light switch is set to position **OFF** (light off), the daytime driving lights come on automatically when the ignition is switched on.

If the light switch is set to position **AUTO**, the daytime driving lights come on automatically in bright conditions and when the ignition is switched on

The daytime driving lights are not active when the light switch is set to position (low beam/driving light).

## **Automatic driving light assistant**

The automatic driving light assistant is a comfort function. The driving light (low beam) is switched on and off automatically depending on the ambient brightness.

The automatic driving light assistant also controls the daytime driving lights, low beam, Automatic Coming Home lights and the equipmentdependent dynamic cornering light.

The automatic driving light assistant is activated when the light switch is set to the position **AUTO**. Despite possible support by the driving light assistant, it is the responsibility of the driver to switch on the driving light using the conventional light switch in accordance with the relevant national regulations.

Activating the headlights using the driving light assistant therefore does not absolve the driver of responsibility for correct operation of the driving light.

## **WARNING**

Driving without lights

If you drive without lights, this may significantly restrict your visibility and also the ability of other road users to see your vehicle.

Always carefully monitor the automatic driving light control.



## Information

In the event of a fault in the automatic driving light assistant/Porsche Dynamic Light System (PDLS), the PDLS warning light in the instrument panel flashes.

For information on indicator lights and warning lights on the instrument panel:

- ▶ Please see the chapter "INSTRUMENT PANEL USA MODELS" on page 90.
- Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.

## **Rain function**

The driving light is switched on automatically after five seconds of continuous wiper operation. If the wipers have not been used for approx. 4 minutes, the driving light is switched off.

## Automatic Coming Home lights (Welcome Home function/Entry function)

## **Switching on Automatic Coming Home lights**

▷ Set light switch to AUTO .

The following lights remain switched on for a certain period to allow you to get in and out of your vehicle safely and with improved visibility in darkness:

- Daytime driving lights,
- Courtesy lights in the folded out exterior mirrors (on vehicles with electrically foldable mirrors).
- Rear side marker lights,
- License plate lights.

### Welcome Home function (off delay)

When the vehicle is locked, the lights remain switched on for the duration of the off delay preset on the multi-function display.

For information on adjusting the off delay of the external lights on the multi-function display:

▶ Please see the chapter "ADJUSTING EXTERIOR LIGHTS" on page 120.

## Entry function/Exit function

When the vehicle is unlocked, the area around the vehicle is illuminated for the duration of the off delay preset on the multi-function display. The lights are switched off when the ignition is switched on or the light switch is set to a position other than **AUTO** .

For information on adjusting the off delay of the external lights on the multi-function display:

▶ PLEASE SEE THE CHAPTER "ADJUSTING EXTERIOR LIGHTS" on page 120.

# Porsche Dynamic Light System (PDLS) Dynamic cornering light

Above a speed of approx. 5 mph (8 km/h), the low beam light is swiveled in the direction of the curve to illuminate the road more clearly, depending on the speed of the vehicle and the extent to which the steering wheel is turned.

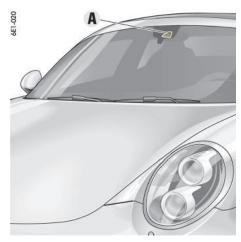
In the event of a fault in the dynamic cornering light, the PDLS warning light in the instrument panel flashes.

### **Highway function in darkness**

The distribution characteristics of the driving light change when driving in darkness at vehicle speeds above approx. 80 mph (130 km/h). The light beam becomes longer and the field of vision increases.

### Fog lights

The distribution characteristics of the driving light change when the rear fog light is switched on at vehicle speeds below approx. 43 mph (70 km/h). The light beam becomes wider and reduces glare.



## **Porsche Dynamic Light System Plus** (PDLS Plus)

## **High Beam Assistant**

When High Beam Assistant is switched on, a camera A detects the light sources of oncoming vehicles and vehicles in front, and automatically selects between low beam and high beam. The function activates in darkness if the following conditions are present:

- Light switch position **AUTO** is selected.
- Vehicle speed is more than approx. 37 mph (60 km/h).
- High Beam Assistant is activated on the multi-function display in the instrument panel. Please see the chapter "ACTIVATING AND DEACTIVATING HIGH BEAM ASSISTANT" on page 120.

High Beam Assistant on is selected on the high

Please see the chapter "ACTIVATING/ DEACTIVATING HIGH BEAM ASSISTANT" on page 82.

As an anti-glare precaution for built up areas, High Beam Assistant is not available at speeds below 20 mph (30 km/h).

The lights also switch from high to low beam automatically as soon as a built up area is detected.

For information on warning messages on the multi-function display:

Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.

## 1 Information

To help make sure that nothing interferes with camera operation:

Do not block the camera area A with objects (e.g. stickers).

The camera **A** must always be kept free of dirt. ice and snow to ensure that it is fully functional. For car care instructions:

Please see the chapter "CAR CARE INSTRUCTIONS" on page 231.

### **WARNING**

Lack of attention

The driver remains responsible while driving, e.g. manually operating the high beam according to light, visibility and traffic conditions, regardless of High Beam Assistant. The system is no substitute for careful attention on the part of the

Manual intervention may be required in the following situations:

- In unfavorable weather conditions, e.g. rain, snow, ice, heavy spray.
- On roads where oncoming traffic is partly obscured, e.g. highways.
- Where there are road users with poor lights, e.g. cyclists.
- On tight bends, or on sharp humps or dips.
- In poorly lit built up areas.
- Where there are strong reflections, e.g. signs.
- Where the windshield in the camera area is misted, dirty, icy or covered with stickers.
- Drive with extreme care.
- Always pay attention to the traffic situation and the area around the vehicle.
- Change to using the high beam manually according to light, visibility and traffic conditions.



## **Instrument Lighting**

The lighting is automatically adjusted to the ambient brightness via light sensors.

In addition, when the vehicle lighting is switched on, the instrument and switch brightness can be adjusted manually.

Turn adjustment button A in the appropriate direction and hold until the desired brightness has been reached.

## **WARNING**

Adjusting the brightness while driving

Adjusting the brightness while driving may cause you to lose control of the vehicle.

Do not reach through the steering-wheel spokes when driving.



# Turn Signal/High Beam/Headlight Flasher Stalk/Parking Light Switch

Turn signal, low beam and high beam are ready for operation when the ignition is on.

- 1 Turn signal light, left
- 2 Turn signal light, right
- 3 High beam, High Beam Assistant
- 4 Headlight flasher (also with the ignition switched off)

## Stalk in center position - dipped beam

### **Turn signal lights**

Push the stalk once to the lower or upper pressure point 1 or 2.

The turn signal lights flash three times.

## **High-beam headlight**

## Switching on and off (on vehicles WITHOUT High Beam Assistant)

- Switching on: Push the stalk once to the front pressure point 3.
   The indicator light | lights up on the tachometer.
- Switching off: Push the stalk once to the rear pressure point 4.

## Activating/deactivating High Beam Assistant

The following conditions must be met before High Beam Assistant is activated:

- Darkness
- Light switch position AUTO is selected.
- Vehicle speed is more than approx. 37 mph (60 km/h).
- High Beam Assistant is activated on the multifunction display in the instrument panel.
   Please see the chapter "ACTIVATING AND DEACTIVATING HIGH BEAM ASSISTANT" on page 120.
- Activating: Push the stalk once to the front pressure point 3.
  - The indicator light in the speedometer FA lights up. The vehicle automatically selects between low beam and high beam. If the high beam is switched on, the indicator light On the tachometer lights up.
- Deactivating: Push the stalk once to the rear pressure point 4.
  - The High Beam Assistant can only be deactivated if the indicator light **■○** on the tachometer is lit.

## Switching on and off (on vehicles WITH High Beam Assistant)

If the High Beam Assistant was deactivated or if the requirements are not met, high beam can be switched on and off manually.

The following conditions must be met:

- Darkness
- The light switch position **AUTO** is selected.
- **Switching on**: Push the stalk twice to the front pressure point 3.
  - The indicator light on the tachometer lights up.
- Switching off: Push the stalk once to the rear pressure point 4.

## **Operating the headlight flasher**

▶ Push the stalk once to the rear pressure point 4.

The indicator light  $\blacksquare \bigcirc$  on the tachometer lights up briefly.

For information on High Beam Assistant:

Please see the chapter "HIGH BEAM ASSISTANT" on page 81.

### **Parking light**

The parking light can only be switched on when the ignition is switched off.

Move the stalk up 2 or down 1 to switch on the right or left parking light.

If the parking light is switched on, the message "Parking light on" will appear on the multifunction display in the instrument panel after the ignition is switched off.

For information on warning messages on the multifunction display:

Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.



## 🛕 Emergency Flasher

The emergency flasher can be switched on regardless of the position of the ignition lock.

## Switching on and off

Press the emergency flasher button on the center console.

All turn signal lights and the indicator light in the button flash when the button is operated. If the emergency flasher remains active for longer periods, the illumination phase of the flashing interval is shortened to preserve the lights.

### **A** DANGER

**Emergency Stopping** 

Other vehicles could collide with your vehicle if you are parked in a dangerous position.

- Whenever stalled or stopped for emergency repairs, move the car well off the road. Switch on the emergency flasher and mark the car with road flares or other warning devices.
- Do not remain in the car. Someone approaching from the rear may not realize your vehicle is stopped and cause a collision.

### **▲** WARNING

Hot Exhaust System and **Tailpipe** 

Exhaust fumes and the exhaust system are very hot when the engine is running. The exhaust system (including the tailpipe) remains hot for some time after the vehicle is turned off.

Do not park or operate the vehicle in areas where the hot exhaust system may come in contact with dry grass, brush, fuel spill or other flammable material.

### **WARNING**

**Engine Heat Danger** When Working

The engine and surrounding components become very hot when the engine is running.

▷ Before working on any part in the engine compartment, turn the engine off and let it cool down sufficiently.



A - Button for interior/reading lights

**B** - Switching automatic interior/reading lights on/off

## **Interior/Reading Lights**

## Interior/reading lights

## Switching interior/reading lights on and off

▶ Press button A.

## **Dimming (brightness adjustment)**

Press button A for at least 1 second and hold until the desired level of brightness is achieved.

## Switching automatic interior/ reading lights on and off

Depending on equipment, the interior/reading lights can be switched on and off using **button B** or in the **multi-function display** menu.

#### Using button "B":

▶ Press button **B**.

When automatic interior/reading lights are switched off, the indicator light in the button lights up.

When the automatic interior lighting is switched on in darkness, the interior lighting is

- switched on: when a door is unlocked or opened, or when the ignition key is removed from the ignition lock.
- switched off: when both doors have been closed, after a delay of approx. 120 seconds.
   The off delay time can be preset on the multifunction display.

The interior lighting goes out as soon as the ignition is switched on or the vehicle is locked.

▶ Please see the chapter "SETTING INTERIOR LIGHTING OFF DELAY" on page 121.

### In the multi-function display menu:

On the multi-function display, you can set whether the interior/reading lights should be switched on or remain switched off when a door is unlocked or opened or when the ignition key is removed from the ignition lock:

 Please see the chapter "ACTIVATING OR DEACTIVATING INTERIOR LIGHTS WHEN THE DOOR IS OPENED (DEPENDING ON EOUIPMENT)" on page 120. The off delay for the interior/reading lights when both doors are closed can be set on the multifunction display:

▶ Please see the chapter "SETTING INTERIOR LIGHTING OFF DELAY" on page 121.

## Switching off of interior/reading lights to protect the battery

In darkness, the interior lighting is switched off 16 minutes after the engine stops to preserve the vehicle battery.

In daylight conditions, interior lights that were switched on manually are switched off automatically after 1 minute.

## **Orientation lighting**

Lights in the overhead operating console and at the ignition lock help vehicle occupants to locate important controls in the vehicle in darkness and ensure better overall orientation. The lights are switched on when the vehicle is unlocked and switched off again automatically when the vehicle is locked.

## **Dimming (brightness adjustment)**

The brightness of the orientation lighting is adjusted on the multi-function display.

▶ Please see the chapter "ADJUSTING BRIGHTNESS OF ORIENTATION LIGHTING" on page 121.

## **Ambient lighting**

If the vehicle is driven at night, a discreet light provides subtle illumination for the passenger compartment. The ambient lighting is switched off automatically when the vehicle is locked.

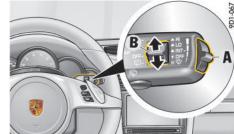
## **Brief Overview – Windshield wipers**

This brief overview does not replace the information provided under "WINDSHIELD WIPER/ WASHER STALK".

Warnings, in particular, are not replaced by this brief overview.







Switch for rain sensor sensitivity (A) and rear wiper (B)

What do I want to do?	What do I have to do?
Wipe automatically at front (rain sensor operation)	Press the stalk to detent position 1.
Adjusting the rain sensor operation sensitivity	Adjust switch <b>A</b> on the right of the stalk upwards (wipe more often) or downwards (wipe less often).
Wipe at front	Slow: Press the stalk to detent position <b>2</b> .  Fast: Press the stalk to detent position <b>3</b> .  Once: Briefly move stalk to position <b>4</b> (holding stalk in position <b>4</b> accelerates wiping action).
Spray and wipe at front	Pull stalk towards the steering wheel at position 5 and hold.
Wipe at rear (intermittent wiping)	Push switch <b>B</b> upwards to detent position <b>INT</b> .
Wipe at rear (wipe once)	Push switch <b>B</b> all the way up or down.

## Windshield Wiper/Washer Stalk

**A** CAUTION

Cleaning Windshield

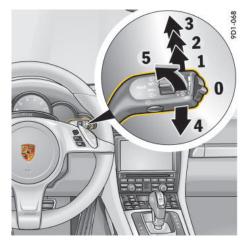
In rain sensor operation, the windshield wipers wipe automatically if moisture is detected on the windshield.

Always switch off windshield wipers before cleaning the windshield to avoid unintentional operation (rain sensor operation).

#### NOTICE

Risk of damage to the luggage compartment lid, windshield, rear window and wiper system.

- Only wipe the windshield when sufficiently wet, otherwise it could become scratched.
- Loosen frozen wiper blades before starting to drive.
- Do not operate a frozen headlight washer system.
- Always switch off windshield wipers in car washes to prevent them wiping unintentionally (rain sensor operation).
- Do not operate headlight washer system in car washes.
- Always switch off windshield wipers before cleaning the windshield to avoid unintentional operation (rain sensor operation).
- Always hold the wiper arm securely when replacing the wiper blade.
- Always switch off windshield wipers before opening the luggage compartment lid (wiper switch in position 0).
- When replacing wiper blades, observe different lengths of the wiper blades.



## Windshield wiper and headlight washer system

#### 0 - Windshield wipers off

When the windshield wipers are switched off and also occasionally after the ignition is switched off, the wipers move up slightly from their rest position so that the wiping edges are aligned correctly.

## Rain sensor operation, Windshield wipers

▶ Press the wiper stalk upwards to the first click.

## 2 - Windshield wipers - slow

Press the wiper stalk upwards to the second click.

## 3 - Windshield wipers - fast

Press the wiper stalk upwards to the third click.

## 4 - One-touch operation Windshield wipers

Press the wiper stalk downwards.
 The windshield wipers carry out one wiping cycle.

## 5 - Windshield wiper and washer system

Pull wiper stalk towards the steering wheel. The system wipes as long as the stalk is pulled towards the steering wheel.

When the wiper stalk is released, a few drying wipes are performed.

After every 10 wipes on the windshield, the headlights are cleaned automatically.



## Information

> If heavily soiled, repeat wash.

Persistent dirt (e.g. insect residues) should be removed regularly.

For information on car care:

> Please see the chapter "CAR CARE INSTRUCTIONS" on page 231.

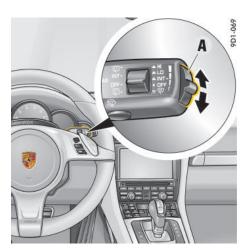
Windshield wiper blades that are in perfect condition are vital for a clear view.

Please see the chapter "WIPER BLADES" on page 224.

## Fitting ice or sun shields and wiper blade replacement

After switching off the ignition, press the wiper stalk once downwards **4**.

The wipers move upwards to an angle of approx. 45°.



## Rain sensor operation, windshield wipers

In rain sensor mode, the amount of rain on the windshield is measured. The wipe interval is automatically controlled accordingly.

Rain sensor operation is activated automatically at speeds of less than approx. 2.5 mph (4 km/h) when the windshield wipers are switched on.

If a speed of approx. 5 mph (8 km/h) is exceeded, the system switches to the preselected wiper speed.



### Information

- If the wiper stalk is in position 1 when the ignition is switched on, the rain sensor is activated as soon as the vehicle speed exceeds approx. 2.5 mph (4 km/h).
- If the wiper stalk is in position 2 or 3 when the ignition is switched on, the windshield wipers remain switched off until the wiper stalk is actuated.



### Information

The wiper is stopped when the luggage compartment lid is opened.

After closing the luggage compartment lid, the wiper stalk must be operated in order to switch the wiper back on.

### Adjusting the rain sensor sensitivity

high sensitivity.

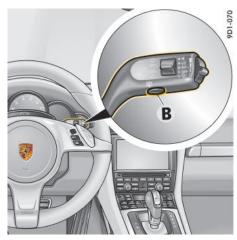
> The setting is confirmed by one wipe of the windshield.

Move switch A downwards low sensitivity.

## Activating and deactivating automatic rain sensor operation on the multi-function display

For information on automatic rain sensor operation:

Please see the chapter "ACTIVATING AND DEACTIVATING RAIN SENSOR OPERATION" on page 121.



### Headlight washer system

The washer sprays only while low beam or high beam is activated.

▶ Press button **B** under the wiper stalk. After every 10 wipes on the windshield, the headlights are cleaned automatically as well. The wipe count starts from zero again when the low beam is switched off.



## **Rear window wiper**

## Switching on intermittent operation of rear window wiper

Press switch **C** upwards to detent position **INT**.

## Switching off intermittent operation of rear window wiper

Press switch C downwards to detent position OFF.

## Manual wiping

Press switch C of the wiper stalk downwards out of detent position OFF or upwards out of detent position INT LO, HI and hold.

## Switching on the rear window wiper when reverse gear is engaged

In the multi-function display, you can configure the rear wiper to automatically perform a series of wipes when it rains or when the windshield wipers are used while reverse gear is engaged.

For information on configuring the automatic function for activating the rear wiper when reverse gear is engaged:

Please see the chapter "SETTING ACTIVATION OF THE REAR WIPER WHEN REVERSE GEAR IS ENGAGED" on page 121.



## Information

Clean the wiper blades with window cleaner at regular intervals, especially after washing the vehicle in a car wash.

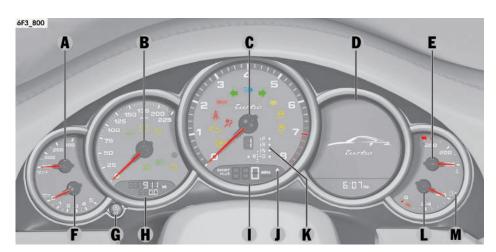
We recommend Porsche window cleaner. If the wiper blades are very dirty (e.g. soiled with insect remains), they can be cleaned with a sponge or cloth.

If the wiper blades judder or squeak, this may be due to the following:

- If the vehicle is washed in an automatic car wash, wax residues may adhere to the windshield. These wax residues can be removed only by using window cleaner concentrate.
  - Please see the chapter "WASHER FLUID WINDSHIELD" on page 224.
- The wiper blades may be damaged or worn.
- ▶ Replace damaged wiper blades immediately.
- Contact an authorized Porsche dealer for more information.

## **Instrument Panel and Multi-Function Display**

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## **Instrument Panel USA Models**

- A Engine oil temperature gauge
- **B** Speedometer
- **C** Tachometer
- **D** Multi-function display
- **E** Coolant temperature gauge
- F Engine oil pressure gauge
- **G** Reset button for trip counter display/ brightness setting for instrument panel
- **H** Odometer
- I Digital speedometer
- J Upshift indicator
- Indicator for selector-lever position Gear display
- **L** Fuel gauge
- M Marking showing position of filler flap

## Warning and indicator lights on the tachometer

**(€** 

Emission control warning light (Check Engine)



Airbag warning light



Safety belt warning light



PSM warning light



PSM OFF warning light



ABS warning light
Turn signal, left



Turn signal, right

BRAKE

Brake warning light

High beam indicator light

**(A)** 

Electric parking brake warning light

## Warning and indicator lights on the speedometer

HOLD

**HOLD** function indicator light

Low beam indicator light

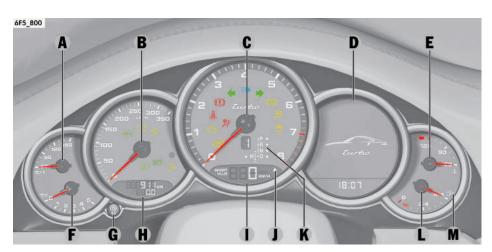
**≣C**A

High Beam Assistant indicator light

PDLS warning light

(!)

Tire pressure warning light



## **Instrument Panel Canada Models**

- A Engine oil temperature gauge
- **B** Speedometer
- C Tachometer
- **D** Multi-function display
- E Coolant temperature gauge
- F Engine oil pressure gauge
- **G** Reset button for trip counter display/ brightness setting for instrument panel
- **H** Odometer
- I Digital speedometer
- J Upshift indicator
- **K** Indicator for selector-lever position Gear display
- L Fuel gauge
- M Marking showing position of filler flap

## Warning and indicator lights on the tachometer

الت

Emission control warning light (Check Engine)



Airbag warning light



Safety belt warning light



PSM warning light



PSM OFF warning light



ABS warning light
Turn signal, left



Turn signal, right



Brake warning light



High beam indicator light

(A)

Electric parking brake warning light

## Warning and indicator lights on the speedometer

HOLD

**HOLD** function indicator light

Low beam indicator light

**≣C**A

High Beam Assistant indicator light

PDLS warning light

(!)

Tire pressure warning light

## **Displays on the Instrument Panel**

## A - Engine oil temperature gauge

A warning message will appear on the multifunction display in the instrument panel if the engine oil temperature is too high.

- Reduce engine speed and engine load immediately if the red zone is reached.
- For information on warning messages on the multi-function display:
- Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.

### **B** – Speedometer

The analog display **B** is located on the left next to the tachometer in the instrument panel.

### C - Tachometer

The start of the red zone on the tachometer or rev-counter scale is a visual warning of the maximum permissible engine speed.

If the red zone is reached during acceleration, fuel feed is interrupted in order to protect the engine.

## **D** – Multi-function display

For information on the multi-function display:

Please see the chapter "OPERATING THE MULTI-FUNCTION DISPLAY ON THE INSTRUMENT PANEL" on page 96.

## E - Coolant temperature gauge

If the cooling system is in any way faulty, consult an authorized Porsche dealer.

## Pointer in the lower area - engine cold

Avoid high engine speeds and heavy engine loading.

## Pointer in the middle – normal operating temperature

Pointer may move up to the red area when the engine is heavily loaded and outside temperature is high.

## Coolant temperature warning

If the coolant temperature is too high, the temperature gauge needle moves to the maximum mark and the temperature gauge warning light lights up.

The warning message "Engine too hot Park vehicle to cool down" will also appear on the multi-function display in the instrument panel.

- ▷ Switch engine off and let it cool.
- Check radiators and air guides in front end of vehicle for obstructions.
- Check the coolant level.
   Top up with coolant if necessary.
- ▶ Have the fault corrected.
- Please see the chapter "CHECKING THE COOLANT LEVEL AND ADDING COOLANT" on page 242.
- Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.



## Information

To prevent excessive temperatures, the cooling air ducts must not be obstructed by covering them (e.g. with film, "stone guards", etc.).

## **Coolant level warning**

At engine temperatures **below 140 °F (60 °C)**: A low coolant level is indicated by the warning message **"Refill coolant Observe engine temperature"** on the multi-function display in the instrument panel.

▶ Add coolant.

At engine temperatures **above 140 °F (60 °C)**: A low coolant level is indicated by the warning message **"Refill coolant immediately Do not drive on"** on the multi-function display in the instrument panel. The temperature gauge needle also moves to the maximum mark and the temperature gauge warning light flashes.

- ▷ Switch engine off and let it cool.
- ▷ Add coolant.

If the coolant level is low, warning indicators may light up if the vehicle tilts at an extreme angle (e.g. steep slopes) or generates high lateral acceleration while traveling round long bends (e.g. driving in circles). If the warnings do not disappear once the vehicle has assumed "normal" operating state, check the coolant level.

- Please see the chapter "CHECKING THE COOLANT LEVEL AND ADDING COOLANT" on page 242.
- Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.

## NOTICE

Risk of engine damage.

- Do not continue driving if the warning persists even when the engine coolant level is correct.
- Have the fault corrected.

## F - Engine oil pressure gauge

The oil pressure is controlled as required and should be at least 51 psi (3.5 bar) at an engine speed of 5000 rpm.

The engine oil pressure varies depending on the engine speed, oil temperature and engine load.

## If oil pressure drops abruptly and a message is displayed on the multi-function display when the engine is running or while driving:

- Stop immediately in a suitable place.
- ▷ Switch off the engine.
- Check whether there is an obvious oil leak on or under the car.
- Select "Oil measurement" on the multifunction display.
- Please see the chapter "DISPLAY AND MEASUREMENT OF THE ENGINE OIL LEVEL" on page 101.
- ▷ Add engine oil if necessary.

## **NOTICE**

Risk of engine damage.

- Do not continue driving if there is an obvious oil leak.
- Do not continue driving if the warning message appears even when the oil level is correct.

## G – Reset button for trip counter display/ brightness setting for instrument lighting Resetting trip counter display

▶ Press rotary switch **G** for approx. 1 second. The trip counter display is reset to "0".

## Adjusting brightness of instrument lighting

For information on adjusting the brightness of the instrument lighting:

▶ Please see the chapter "INTERIOR/READING LIGHTS" on page 84.

### H - Odometer

The displays for the total mileage and individual trips are integrated in the speedometer on the instrument panel.

The upper display counts the total mileage, the lower display shows individual trips. After exceeding 6,213 miles or 9,999 kilometers, the trip counter returns to 0.

## I - Digital speedometer

The digital speedometer **I** is integrated in the tachometer on the instrument panel.

### J - Upshift prompt indicator

The consumption-oriented shift indicator to the right of the digital speed display on the tachometer helps you to develop a fuel-saving driving style.

The upshift indicator lights up – prompting you to shift up to the next-higher gear – depending on the selected gear, engine speed and accelerator pedal position.

Change to the next-higher gear when the upshift indicator lights up.

## **K – PDK indicator for selector-lever** position

When the engine is running, the selector-lever position is indicated in gates  $\bf D$  or  $\bf M$ .

## Warning messages

### If the selector lever is between two positions

- Effects:
  - The corresponding selector-lever position in the instrument panel flashes **and** the warning **"Engage gear selector properly"** appears on the multi-function display.
- Action required:
   Operate the footbrake and engage the selector lever properly.

### If there is a fault in the transmission

 Depending on priority, either the "Transm. fault Poss. no R gear Drive on poss." warning or the warning "Transm. failure Park vehicle safely" will appear on the multifunction display.



## Transm. fault Poss. no R gear Drive on poss.

- Effects:
   Restricted gearshift comfort,
   reverse gear may not function.
- Action required:
   Have the fault corrected immediately at an authorized Porsche dealer.

## ting:

## Transm. failure Park vehicle safely

- Effect:
- Vehicle can be driven only until it comes to a stop.
- Action required:

It is not possible to continue driving. Stop the vehicle immediately in a suitable place. Have the fault corrected at an authorized Porsche dealer. If the vehicle has to be towed: Please see the chapter "TOWING" on page 278.

## Warning "Drive temperature too high Reduce load"

- Effects:
  - "Warning jerks" can be felt when driving off and the engine power may be restricted.
- Action required:
  - Do not hold the vehicle with the accelerator on a hill, for example. Hold the vehicle with the brake. Reduce engine load. Stop the vehicle in a suitable place if possible. Allow the engine to run in selector-lever position **P** or **N** until the warning disappears.
- Please see the chapter "LIMP-HOME MODE" on page 178.

## **Porsche Doppelkupplung**

When the engine is running, the display shows the currently engaged gear.

### L - Fuel gauge

The fuel gauge displays the contents of the tank when the ignition is on.

For information on fuel quality and refill capacities:

Please see the chapter "FILLING CAPACITIES" on page 289.

For information on fuel and refueling:

▶ Please see the chapter "FUEL" on page 227. If the vehicle's inclination changes (e.g. uphill/downhill driving), minor deviations in the gauge may occur.

### Fuel reserve warning

If less than approximately 3.2 U.S. gallons (12 liters) remains in the tank, the warning light on the multi-function display lights up when the ignition is switched on or the engine is running.

Refuel at the next opportunity.

### **NOTICE**

A shortage of fuel may damage the emission control system.

- ▶ Never drive the tank dry.
- ▶ If the warning lights have come on, do not take bends at high speed.

For information on the emission control system:

Please see the chapter "EMISSION CONTROL SYSTEM" on page 225.

## **Battery/Alternator**



## **Warning message**

The warning message "Generator fault Park vehicle safely" will appear on the multi-function display in the instrument panel if the vehicle electrical system voltage drops significantly.

- Stop at a safe place and switch the engine off. For information on warning messages on the multi-function display:
- Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.

### **Possible causes**

- Defect in the battery charging system
- Broken drive belt

### **NOTICE**

Risk of engine damage.

The engine cooling does not function if the drive belt is torn.

- Do not continue driving.
- Have the fault corrected.
- Please contact an authorized Porsche dealer.

## **Check Engine** (Emission Control)



### Warning light

The emission control system detects malfunctions that could cause increased pollutant emissions or consequential damage etc. well in advance. Faults are indicated by the warning light on the instrument panel which then either lights up continuously or flashes.

The faults are recorded in the control unit's fault memory.

The warning light on the instrument panel lights up when the ignition is switched on as a lamp check and goes out approx. 1 second after the engine

The warning light on the instrument panel flashes to indicate operating states (e.g. engine misfiring) which may cause damage to certain parts of the emission control system.

In this case, immediately reduce the engine load by easing off the accelerator pedal. In order to avoid consequential damage to the engine or the exhaust-gas cleaning system

(e.g. catalytic converter): Please contact an authorized Porsche dealer.

### **NOTICE**

Risk of damage to the emission control system. If the warning light on the instrument panel continues flashing even when you have eased off the accelerator pedal, the emission control system may overheat.

- Stop as soon as possible in a safe place. Make sure that combustible materials, such as dry grass or leaves, cannot come into contact with the hot exhaust system.
- Switch off the engine.
- Have the fault corrected at an authorized Porsche dealer.

## **Acoustic Signals**

A speaker in the instrument panel generates acoustic signals.

The warning message "Instrument cluster/ Park Assist audio fault Service required" will appear on the multi-function display in the instrument panel if a speaker fault occurs. The speaker cannot generate acoustic signals.

Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.

# Operating the Multi-Function Display on the Instrument Panel

On the multi-function display, you can view information relating to the relevant vehicle equipment, operate the audio source (radio, CD, iPod, etc.), check the oil level, check the tire pressure, use the stopwatch or operate the navigation system.

You can also modify different vehicle settings in the "**Vehicle**" menu.

It is not possible to describe all details of the functions in this Owner's Manual. The examples clearly demonstrate the functional principle and clarify the menu structure.



Operation of the multifunction display, radio, navigation system, telephone etc. during driving.

You may be distracted from paying attention to the road if you set or operate the multi-function display, radio, navigation system, telephone or other equipment when driving. You may lose control of the vehicle.

- Operate the equipment while driving only if the traffic situation allows you to do so safely.
- Carry out any complicated operating or setting procedures only when the vehicle is stationary.



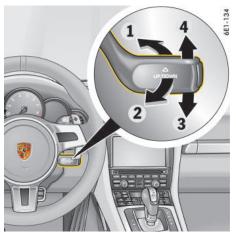
Multi-function display



## Information

The multi-function display is only active when the ignition is on.

Certain menus are only available when the vehicle has stopped, e.g. the adjustment menu for tire pressure monitoring.



## Operating principle on vehicles without multi-function steering wheel

The multi-function display is operated with the lower lever on the right of the steering column.

## Selecting menu, function, setting option

Push the lever downwards (position 3) or upwards (position 4).

### Confirming selection (Enter)

Push the lever forward (position 1).

### Moving back one or several selection levels

Pull the lever towards the steering wheel (position 2) once or several times.



## Operating principle on vehicles with multi-function steering wheel

The multi-function display is operated using the rotary knob **A**, the Back button **B** and the diamond ◊ button **C**, which can be assigned as required.

Please see the chapter "FUNCTION BUTTONS ON THE MULTI-FUNCTION STEERING WHEEL" on page 53.

### Selecting menu, function, setting option

□ Turn rotary knob A upwards or downwards.

## Confirming selection (Enter)

▶ Press rotary knob A.

## Moving back one or several selection levels

▶ Press button **B** (Back button).

## Individual assignment of the diamond button

Porsche Communication Management (PCM) functions, CDR functions or multi-function display functions can be assigned to the  $\Diamond$  button in the multi-function display on the instrument panel. Audio source selection is preset by default. For information on individual assignment of the  $\Diamond$  button:

▶ Please see the chapter "CHANGING BUTTON ASSIGNMENT ON MULTI-FUNCTION STEERING WHEEL" on page 127.

For information on Porsche Communication Management (PCM) and CDR:

Please refer to the separate operating instructions.



- A Upper status area
- B Title area with menu indicator
- C Information area
- D Lower status area

# **Areas on the multi-function display** Upper status area/Lower status area

The upper  ${\bf A}$  and lower status area  ${\bf D}$  permanently display basic information, such as the radio station, compass, time and temperature or the remaining range.

The display contents of the upper and lower status area can be individually adapted.

For information on adapting the multi-function display:

Please see the chapter "ADAPTING APPEARANCE OF MULTI-FUNCTION DISPLAY" on page 118.

## Title area with menu indicator

The menu item currently selected is displayed in the title area  ${\bf B}$ .

The menu indicator on the right shows the position of the current menu item in the overall menu and displays the number of other menu items on this menu level.

The wider the menu indicator, the fewer menu items the current menu contains.

### Information area

The information area **C** displays the menu items currently available for selection or after a menu item is selected, information relating to this menu item or other selection options.

# Activating functions, opening submenus and accessing setting options from the main menu areas

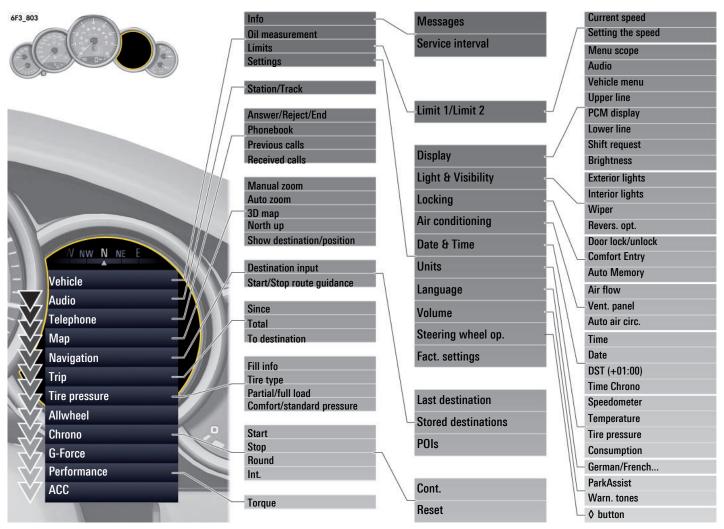
Press the rotary knob **A** or push the right lower lever on the steering wheel forwards (position **1**) to access menus, other functions and setting options regardless of the main menu area.

- **1.** Select main menu and confirm.
- 2. Select function, submenu or setting option and confirm.

### **Browsing through long lists**

When searching for an entry in long telephone and audio lists on vehicles with PCM, you can skip directly to other entries with the same first letter.

- Briefly press the rotary knob A or hold the control stalk in position 3 or 4.
   A letter selection screen appears.
- Select the desired first letter and confirm. The marking skips to the first list entry beginning with the letter selected.



## **Vehicle Menu**

A large amount of vehicle information can be displayed and vehicle settings made in the "Vehicle" main menu.

1. Main menu "Vehicle" in the main menu.

The vehicle information display can be adapted individually.

For information on adapting the vehicle menu:

▶ Please see the chapter "ADAPTING DISPLAY CONTENTS IN VEHICLE INFORMATION AREA" on page 118.

## **Displaying vehicle information**

Pending warning messages, information on forthcoming service intervals and the average fuel consumption can be viewed in the "Info" sub-menu of the "Vehicle" main menu area.

- 1. Main menu "Vehicle"
  - > "Info" and confirm.



### Displaying messages

All current warning messages and vehicle messages can be viewed on the multi-function display.

The warning symbol in the lower status area indicates the number of pending warning messages.

If several warning messages are pending, you can browse through the message list.

- 1. Main menu "Vehicle"
  - > "Info"
- 2. "Messages" and confirm.

## Displaying service intervals

The internal mileage counter indicates when the next vehicle service is due.

- 1. Main menu "Vehicle"
  - > "Info"
- 2. "Service intervals" and confirm.
- 3. Select the desired service interval and confirm.

Available service interval displays:

- "Service"
- "Interm. service"
- "Oil change"

## Display and measurement of the engine oil level

### NOTICE

Risk of engine damage due to inadequate lubrication.

- Regularly check the oil level each time before refueling.
- Do not allow the oil level to fall below the minimum mark.

### Prerequisites for the oil-level gauge:

- 1. Park the vehicle on a level surface.
- 2. Switch off engine, which is at operating temperature.
- 3. Wait for approx. 1 minute.
- 4. Select the "Oil measurement" function on the multi-function display.

## Selecting the Oil measurement function on the multi-function display

- 1. Main menu "Vehicle" Select > "Oil measurement" and confirm.
- ▶ Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.









Example displays for oil level A - Maximum oil level reached

- B Minimum oil level reached
- C Oil level below minimum **D** - Oil level above maximum

## Measured oil level

The oil level reading is shown on the segment display in the Oil measurement menu.

If the segments are filled in green up to the top line (illustration A), the oil level has reached the maximum mark.

▶ Under no circumstances add engine oil. If the bottom segment is shown in yellow (illustration B), the oil level has reached the minimum mark.

The message "Oil level minimum reached Refill oil" appears on the multi-function display. ▶ Add engine oil immediately.

If the bottom segment is red (illustration C), the oil level has dropped below the minimum mark.

The message "Oil level below min. Refill oil at once Do not drive on" appears on the multifunction display.

Add engine oil immediately.

## Top-up quantity

The difference between the minimum and maximum marks on the segment display is approx. 1.8 quarts (1.7 liters).

▶ Never add more engine oil than required to reach the maximum mark.

If the segments are shown in yellow up to the top edge (illustration **D**), this indicates that the maximum engine filling capacity has been exceeded. Exceeding the maximum capacity may result in blue smoke formation and cause longterm damage to the catalytic converters depending on the overfill quantity and various external influences.

If too much engine oil was added, the message "Oil level above maximum Consult a workshop Driving permitted" appears on the multi-function display.

▶ Have the oil quantity corrected at the next opportunity.

Please contact an authorized Porsche dealer.

## Measuring the oil level after topping up engine oil or opening the engine compartment lid

The oil level can be checked after waiting for approx. 1 minute with the vehicle parked on a level surface and the engine at operating temperature. If the engine compartment lid is opened when the engine is cold (e.g. in order to top up engine oil), the oil level cannot be displayed for a certain time. The message "No information about oil level available at present" appears on the multifunction display.

▶ Engine oil should therefore only be topped up with the engine at operating temperature. This ensures short waiting times for the soonest possible oil level display.

### **Failure**

If the oil-level indicator fails, the message "Oil level measurement fault Consult a workshop **Driving permitted**" appears on the multi-function display.

### **Setting speed limits**

If a speed limit is preset and activated on the multi-function display, a warning message appears if the speed limit is exceeded.

A speed limit can be used to remind the driver to keep to the maximum speed permitted for the tire type fitted to the vehicle, for example.

1. Main menu "Vehicle" > "Limits" and confirm.

## Setting a speed limit

- 1. Main menu "Vehicle" > "Limits"
- 2. Select "Limit 1: ---" or "Limit 2: ---" and confirm.
- 3. Select "Current speed" or "---" and confirm.

You can either adopt the current speed of the vehicle or specify your own speed limit.

## Activating and deactivating speed limits

- 1. Main menu "Vehicle"
  - > "Limits"
- 2. Select "Limit 1: ---" or "Limit 2: ---" and confirm.
- 3. Select "Active"
- **4.** Confirm your selection.

Limit is active.

Limit is not active.

## **Adjusting vehicle settings**

Various vehicle settings can be modified in the "Settings" submenu.

For information on modifying vehicle settings: ▶ Please see the chapter "VEHICLE SETTINGS

ON THE MULTI-FUNCTION DISPLAY" on page 117.

## **Audio Menu**

In the "Audio" main menu, you can select a radio station either from the station list or the list of stored stations, depending on the settings, or a track from the active audio source, e.g. disk.

- 1. Select "Audio" in the main menu and confirm.
- 2. Select the desired radio station or track and confirm.

For information on adjusting audio menu settings: ▶ Please see the chapter "ADAPTING DISPLAY CONTENTS OF AUDIO MAIN MENU" on page 118.

## **Phone Menu**

In the "Phone" main menu, you can retrieve telephone numbers stored in the phonebook or in lists of most recently dialed or received calls.

1. Main menu "Phone" and confirm.

## **Dialing telephone number**

- 1. Main menu "Phone"
- 2. "Phonebook" or "Previous calls" or "Received calls" and confirm.
- **3.** Select the desired telephone number and confirm.

## **Answering calls**

- 1. Main menu "Phone"
- 2. Select "Answer" and confirm.

## Rejecting calls

- 1. Main menu "Phone"
- 2. "Reject" and confirm.

## **Ending a call**

- 1. Main menu "Phone"
- 2. "End call" and confirm.

## Making multiple calls simultaneously

During an active telephone conversation, you have the option of starting another telephone conversation.

You can have a separate conversation with the person you have called or alternatively start a conference call together with the other caller.

## Making additional calls

During a current call:

- 1. Main menu "Phone"
- 2. "New call" and confirm.

## Switching between callers

- 1. Main menu "Phone"
- 2. "Swap" and confirm.

## Adding a caller to a conference call

- 1. Main menu "Phone"
- 2. "Conference" and confirm.

## Map Menu

In the "Map" main menu, you can view and modify the map display on the navigation system.

1. Main menu "Map" in the main menu.

## **Modifying map display**

- 1. Main menu "Map" and confirm.
- 2. Select display option and confirm.
- 3. Confirm your selection.
  - **I** Function is active.
  - Function is not active.

Available display options:

"Auto zoom"

The scale of the map is set automatically from the current position of the vehicle to the next navigation maneuver point.

- "3D map"
  - Three-dimensional map display.
- "North up"

The map always faces north.

## **Enlarging and reducing map display**

The zoom factor of the map display can be adapted individually.

- 1. Main menu "Map"
  - > "Manual zoom" and confirm.
- 2. Select the desired zoom setting and confirm the setting.

## **Displaying current location or destination**

You can view the navigation destination or current vehicle position on an enlarged section of the map.

- 1. Main menu "Map"
- 2. "Show destination" or "Show position" and confirm.

## **Navigation Menu**

In the "Navigation" main menu, you can enter a navigation destination, start route guidance and view the navigation information for an active route.

1. Main menu "Navigation" and confirm.

## **Entering navigation destination**

You can enter a navigation destination in the multi-function display.

Only navigation destinations from the list of previous destinations or from the list of preset POIs or stored destinations can be selected.

- 1. Main menu "Navigation"
  - > "Destination input"
- 2. "Last destination" or "Stored destinations" or "POIs" and confirm.
- 3. Select desired navigation destination and confirm.

## Starting route guidance

If route guidance is inactive and you have entered a new navigation destination you can then start route guidance.

- 1. Main menu "Navigation"
- 2. "Start route guidance" and confirm.

## Stopping route guidance

You can stop route guidance while in progress.

- 1. Main menu "Navigation"
- 2. "Stop route guidance" and confirm.



## **Trip Menu**

In the "Trip" main menu, the driving data:

- Ride time
- Distance
- Average fuel consumption
- Average speed

can be retrieved and reset.

1. Main menu "Trip". in the main menu.

### Displaying driving data

There are three driving data displays available.

- 1. Main menu "Trip".
- 2. Select "1 since" or
  - "2 consecutive" or
  - "3 to destination"
  - and confirm.

Available driving data:

### "since"

Driving data since the last vehicle start. The driving data is reset automatically once the vehicle has remained stationary for 2 hours (with the ignition switched off).

#### "Total"

Cumulative driving data.

The driving data is added progressively until a reset is performed. The data is retained even if the ignition key is removed.

## "to destination"

Driving data up to navigation destination. If route guidance is active, the driving data is calculated and displayed up to the navigation destination.

## Resetting driving data

The selected driving data display can be reset.

- 1. Main menu "Trip".
- 2. Select the relevant driving data display and confirm.
- 3. Select "Reset" and confirm.

## **Tire Pressure Menu (Tire Pressure Monitoring System, TPMS)**

This device complies with Part 15 of the FCC Rules and RSS-210 of Industry Canada.

Operation of this device is subject to the following two conditions:

- 1. This device may not cause harmful interference, and
- 2. this device must accept any interference received including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Each tire, including the spare (if provided), should be checked monthly when cold and inflated to the inflation pressure recommended by the vehicle manufacturer on the vehicle placard or tire inflation pressure label. (If your vehicle has tires of a different size than the size indicated on the vehicle placard or tire inflation pressure label, you should determine the proper tire inflation pressure for those tires.)

For information on the tire inflation pressure label: ▶ Please see the chapter "TIRES AND WHEELS" on page 244.

As an added safety feature, your vehicle has been equipped with a tire pressure monitoring system (TPMS) that illuminates a low tire pressure telltale (warning light) when one or more of your tires is significantly under-inflated.

Accordingly, when the low tire pressure telltale illuminates, you should stop and check your tires as soon as possible, and inflate them to the proper pressure. Driving on a significantly underinflated tire causes the tire to overheat and can lead to tire failure. Under-inflation also reduces

fuel efficiency and tire tread life, and may affect the vehicle's handling and stopping ability. The display as well as the settings for the Tire Pressure Monitoring System take place on the multi-function display.

However, the tire pressure must still be set manually on the wheel.

▶ Please see the chapter "TIRE PRESSURE FOR COLD TIRES (68 °F/ 20 °C)" on page 287.

## **WARNING**

Maintaining Tire Pressure

Driving the vehicle with low tire pressure increases the risk of a tire failure and resulting loss of control. Furthermore, low tire pressure increases rate of wear of the affected tires.

Please note that the Tire Pressure Monitoring System is not a substitute for proper tire maintenance, and it is the driver's responsibility to maintain correct tire pressure, even if underinflation has not reached the level to trigger illumination of Tire Pressure Monitoring System low tire pressure telltale. Low tire pressure reduces the road safety of the vehicle and destroys the tire and wheel.

Tire Pressure Monitoring System gives a warning about a pressure drop caused by natural diffusion as well as about a gradual loss of pressure caused by foreign objects.

Tire Pressure Monitoring cannot warn you about tire damage that occurs suddenly (e.g. flat tire due to abrupt external effects).

- ▶ When a red tire pressure warning appears. stop immediately in a suitable place and check the tires for damage. If necessary, remedy the damage with a tire sealant.
- Do not by any means continue to drive with defective tires.

Sealing the tire with tire sealant is only an emergency repair so you can drive to the nearest specialist workshop.

The maximum permitted speed is **50 mph** (80 km/h).

- Do not drive with tires in which the tire pressure drops again very quickly. In case of doubt, have tires checked by a specialist workshop.
- Defective tires must be replaced immediately at an authorized Porsche dealer.

## Tires must never be repaired under any circumstances.

If Tire Pressure Monitoring System is defective (e.g. defective wheel transmitter), contact an authorized Porsche dealer immediately and have the damage repaired.

The tire pressure will not be monitored at all or will be monitored only partially when Tire Pressure Monitoring System is defective.

For information on warning messages on the multipurpose display:

- Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.
- Incomplete entries or selection of the wrong tires on the multi-purpose display affect the accuracy of warnings and messages. The settings in the tire pressure menu must be updated following a wheel change or changes in vehicle loading.
- Use only the pressure differences shown in the "Fill info" display in the Tire pressure menu or from the corresponding tire pressure warning when correcting the tire pressure.
- Tires can lose air over time without a tire defect being present. A tire pressure warning

will then appear on the multi-purpose display. Check the tire pressure at the next opportunity.



## (!) Warning light



Attention to TPMS Malfunction Indicator

Your vehicle has also been equipped with a TPMS malfunction indicator to indicate when the system is not operating properly.

The TPMS malfunction indicator is combined with the low tire pressure telltale.

When the system detects a malfunction, the telltale will flash for approximately one minute and then remain continuously illuminated. This sequence will continue upon subsequent vehicle start-ups as long as the malfunction exists. When the malfunction indicator is illuminated, the system may not be able to detect or signal low tire pressure as intended.

TPMS malfunctions may occur for a variety of reasons, including the installation of replacement or alternate tires or wheels on the vehicle that prevent the TPMS from functioning properly.

Always check the TPMS malfunction telltale after replacing one or more tires or wheels on your vehicle to ensure that the replacement or alternate tires and wheels allow the TPMS to continue to function properly.

Instrument Panel and Multi-Function Display

The warning light in the instrument panel lights up:

- When a loss in pressure has been detected.
- In the event of a defect in Tire Pressure Monitoring or a temporary fault.
- When learning new fitted wheels/wheel transmitters, as long as the vehicle's own wheels have not yet been recognized.

The tire pressure warning light on the instrument panel goes out only when the cause of the fault has been rectified.

#### **Overview of tire pressure monitoring** functions

Tire Pressure Monitoring offers the following functions:

- Display of the actual tire pressure when stationary and while the vehicle is in motion.
- Tire pressure warnings in two stages (yellow and red warning).
- In the "TPMS" menu, the settings "Fill info" (display of the deviation from the required pressure, refill pressure), "Tire type", "Full load" and "Comfort press." are available when the vehicle is stationary.



Tire pressure display on the multi-function display

#### **Selecting the TPMS function on the** multi-function display

#### 1. Select the "TPMS" main menu.

The "TPMS" function displays the temperaturedependent tire pressures (actual pressures) in the four wheels.

You can watch the tire pressure rise as the temperature increases while driving.



#### Information

This display of the actual pressures is only for information.

Under no circumstances should the tire pressures be changed based on this display.

## 1 Information

After the ignition is switched on, it can take up to approx. 1 minute until all tire pressures are displayed. Dashes (-.-) appear instead of the tire pressures.



Viewing current settings in the TPMS menu (only when vehicle is stationary)

- 1. Main menu "TPMS".
- 2. Confirm "TPMS".



#### Viewing Fill info in the TPMS menu

You can read the tire pressures to be corrected on this display.

- 1. Main menu "TPMS".
- 2. Confirm "TPMS".
- 3. Select the "Fill info" menu and confirm.

The tire pressure to be corrected (refill pressure) is indicated on the displayed wheel.

Example: If "-2 psi"/"-0.2 bar" is displayed for the front right tire, 2 psi/0.2 bar/20 kPa must be added to this tire.

The displayed pressures take into account the tire temperature.

▶ Use only the pressure values shown in the "Fill info" display in the "TPMS" main menu or from the corresponding tire pressure warning when correcting the tire pressure.

If the tires are not yet "taught", the new required pressures are displayed instead of the actual differential pressures.

For information on teaching tires:

▶ Please see the chapter "SYSTEM LEARNING" on page 111.

## Selecting tire type in the TPMS menu (type and size of fitted tire)

#### **WARNING**

Exceeding Maximum Rated Tire Speed

Exceeding the maximum tire speed could result in a tire burst, causing loss of control of the vehicle.

- Always observe the permissible maximum speed of the respective tire.
- Porsche recommends obeying all traffic laws at all times to maintain the safety of yourself and all vehicle occupants.

#### **WARNING**

Entering Tire Data and Display

Incomplete entries or selection of the wrong tires on the multi-function display affect correct indication of warnings and messages.

The settings must be updated in the "Tire pressure" menu after changing a wheel, filling with tire sealant or adding air (after previous warning "Check tires").

Please see the chapter "RED WARNING – "CHECK TIRES"" on page 112.

The new tire type and tire size must be selected even if the settings for the new set of wheels are the same as for the old wheels.

- 1. Main menu "TPMS".
- 2. Confirm "TPMS".
- 3. Select "Tire type" and confirm.
- 4. Select

o "20" Summer" or "20" Winter" and confirm.

- Option is selected.
- Option is not selected.

The selected setting appears in the TPMS menu in the line "Tire type" (e.g. "20" (W)" with the setting option "20" Winter").

Tire selection has only been completed successfully when the following message appears on the multi-function display (example):

## "No tire pressure monitoring System is learning".

▶ Please see the chapter "CHANGING A WHEEL AND REPLACING TIRES" on page 113.



#### Information

The message **"Action cancelled"** appears if the setting process is interrupted.

All entries made up to this point are lost, and the original settings remain in effect.

Before fitting tires with dimensions that are not already stored in the multi-function display, the missing information should be added to the multi-function display by your authorized Porsche dealer.

- Please contact an authorized Porsche dealer.
- ▶ Use only tires approved by Porsche.

The available items in the tire pressure menu depend on the model type. For this reason, some of the selection options shown here may not be available on your multi-function display.

#### **Selecting load in the TPMS menu**

- 1. Main menu "TPMS".
- 2. Confirm "TPMS".
- 3. Full load Full load is selected.
  - Full load Partial load is selected.

Change or select the desired load type by enabling or disabling the "Full load" box.

▶ Adapt the pressure of the tires to the selected load type. Please see the chapter "VIEWING FILL INFO IN THE TPMS MENU" on page 108.



If this menu is not displayed, the specified tire pressures are valid for all types of vehicle load.

#### Selecting comfort/standard pressure in the TPMS menu

For speeds up to 165 mph (270 km/h), the tire pressures can be reduced to increase suspension

If you select "Comfort press.", the TPMS system automatically uses lower pressure values when monitoring tire pressure.

If "Comfort press." is deactivated or standard pressure is activated, the standard required pressures suitable for speeds up to the maximum vehicle speed are automatically monitored.

- 1. Main menu "TPMS".
- 2. Confirm "TPMS"
- 3. Comfort pressure Comfort pressure is selected.
  - Comfort press. Standard pressure is selected.

Change or select comfort pressure/standard pressure by enabling or disabling the "Comfort pressure" box.

The comfort tire pressures are included in the technical data

in "Fill info" when the "Comfort press." menu is activated.

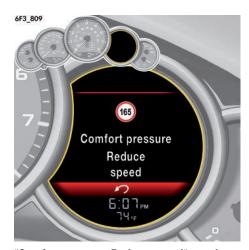


Low Tire Pressure Loss of Control

Prolonged driving at low tire pressure or even short-term driving at high speeds on tires which have too low a pressure is likely to result in a loss of control of your vehicle, either due to a failure to maintain directional control under side loads or due to tire failure.

Tires are inflated to comfort pressure at the factory, which is not suitable for driving at very high speeds.

- ▷ Always adjust the pressure in the tires to the standard pressure setting when driving at higher speeds.
- Remember to adjust the setting in the Tire Pressure Monitoring System accordingly.



#### "Comfort pressure Reduce speed" warning

If the maximum speed of the preset comfort pressure is exceeded and the tire pressure is below a critical limit, a warning message appears on the multi-function display.



Driving at excessive speeds when the comfort pressure is active

Driving at excessive speeds when the comfort pressure is active will destroy the tires.

- Reduce speed to below the displayed maximum speed.
- Always inflate the tires to the standard tire pressure when driving at higher speeds.

#### **System learning**

Tire Pressure Monitoring System begins to "learn" the tires after a wheel change, wheel transmitter replacement or update of the tire settings. During this process, TPMS recognizes the wheels and their locations.

The message "No tire pressure monitoring System is learning" appears on the multifunction display.

The wheel learning process takes place exclusively when the vehicle is being driven (vehicle speed above 16 mph (25 km/h)).

TPMS requires a certain amount of time to learn the wheels. During this time, the current tire pressures are not available on the multi-function display:

- The tire pressure warning light stays on until all wheels have been learned.
- Lines (-.-) appear on the display of the "TPMS" function.
- The required pressures for cold tires (68 °F/ 20 °C) are shown under "Fill info" in the "TPMS" main menu.

Position and pressure information is displayed as soon as TPMS has assigned the wheels recognized as belonging to the vehicle to the correct wheel positions.

- Check the tire pressure for all wheels under "Fill info".
- Correct the tire pressure to the required pressure if necessary (differential pressure value "0.0").

#### **Tire pressure warnings**

The tire pressure warning light on the instrument panel and a corresponding message on the multifunction display warn about loss of pressure in two stages (yellow and red), depending on the amount of pressure loss.



#### Yellow warning - "Top off air"

The pressure in the tire is more than 4 to 7 psi/ 0.3 to 0.5 bar/30 to 50 kPa too low. The tire pressure warning specifies the affected tire and the target tire pressure.

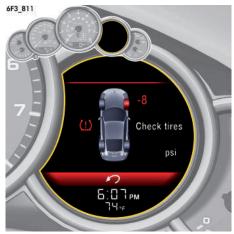
▶ Fill up with air at the next opportunity.

This tire pressure warning appears:

- for approx. 10 seconds when the vehicle is stationary and the ignition is switched off or
- when the ignition is switched on again.

The warning can be acknowledged when the ignition is switched on.

The tire pressure warning light in the instrument panel goes out only when the tire pressure has been corrected (differential pressure value "0.0").



#### Red warning - "Check tires"

At speeds below 100 mph (160 km/h):

The pressure in the tire has dropped by 20 % below the required pressure or by more than 7 psi/0.5 bar/50 kPa. This significant pressure loss is a danger to road safety.

At speeds above 100 mph (160 km/h):

- The pressure in the tire has dropped by **more** than 6 psi/0.4 bar/40 kPa. This significant pressure loss is a danger to road safety.
- When the tire pressure warning appears, stop immediately at a suitable location. Check the indicated tire for signs of damage. If necessary, fill in tire sealant and set the correct tire pressure.

This tire pressure warning also appears when driving and can be acknowledged. The tire pressure warning light in the instrument panel goes out only when the tire pressure has

been corrected (differential pressure value "0.0").



#### "Tire pressure Reduce speed" warning

At speeds above 165 mph (270 km/h):

- The pressure in the tire has dropped by **more** than 4 psi/0.3 bar/30 kPa. This pressure loss is a danger to road safety.
- When the tire pressure warning appears, reduce speed to below 165 mph (270 km/h) until the warning disappears. When driving at very high speeds, increase the tire pressure to the required pressure (differential pressure value "0.0").

For information on tire sealing compound:

▶ Please see the chapter "FILLING IN TIRE SEALANT" on page 265.

#### Warning light

The warning light in the instrument panel lights up:

- When a loss in pressure has been detected (warning light: lights up continuously).
- In the event of a defect in TPMS or a temporary fault (warning light: flashes for 60 seconds, then lights up continuously).
- When learning new fitted wheels/wheel transmitters, as long as the vehicle's own wheels have not yet been recognized (warning light: flashes for 60 seconds, then lights up continuously).

A warning message also appears on the multifunction display in the instrument panel.

Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.

The tire pressure warning light on the instrument panel goes out only when the cause of the fault has been rectified.

#### **Changing a wheel and replacing tires**

- New wheels must be fitted with radio transmitters for Tire Pressure Monitoring
  - Before tires are changed, the battery charge condition of the wheel transmitters should be checked
- Please contact an authorized Porsche dealer.
- Switch off the ignition when changing a wheel. The tire settings on the multi-function display must be updated after changing a wheel.

If the tire settings are not updated, the message "Tire change? Update settings" is displayed on the multi-function display.

Update the multi-function display settings the next time the vehicle is stationary.

#### Pressure increase as the result of temperature increase

In accordance with physical principles, the tire pressure changes as the temperature changes. For every 18 °F (10 °C) change in temperature, the tire pressure increases or decreases by around 1.5 psi/0.1 bar/10 kPa.

#### Partial monitoring

Monitoring of the other wheels is continued if there is a fault in one or two wheel transmitters.

- The tire pressure warning light lights up.
- The message "Restricted monitoring" appears on the multi-function display.
- No tire pressures are displayed on the multifunction display for wheels with faulty wheel transmitters.

#### No monitoring

In the event of faults, Tire Pressure Monitoring System cannot monitor the tire pressure. The warning light on the instrument panel lights up and a corresponding message appears on the multi-function display.

Monitoring is not active:

- In the event of a defect in TPMS or if more than 2 wheel transmitters are defective.
- If wheel transmitters for Tire Pressure Monitoring System are missing.
- During the learning phase after the tire settings have been updated.
- After a wheel change without updating the tire settings.
- If more than four wheel transmitters are recognized.
- If there is external interference by other radio sources, e.g. wireless headphones.
- If tire temperatures are too high.
- ▶ Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.



#### **Allwheel Menu**

#### (Porsche Traction Management PTM)

In the "Allwheel" main menu, the current torque distribution between front and rear axles is shown graphically in the form of bar diagrams.

1. Main menu: Select "Allwheel" and confirm.

For information on the operating principle of the

PLEASE SEE THE CHAPTER "PORSCHE TRACTION MANAGEMENT (PTM)" ON PAGE 180.



## **Chrono Menu (Stopwatch)**

You can use the stopwatch to measure any times, e.g. on race circuits or on work-related journeys. Measured lap times can be stored and evaluated if the vehicle is equipped with Porsche Communication Management (PCM).

▶ Please observe the chapter "SPORT DISPLAY" in the separate PCM operating instructions.

#### Stopwatch on the dashboard

The stopwatch has an analog and a digital display. The large pointer of the analog display measures the seconds. The two small pointers measure hours and minutes. The display restarts at zero after 12 hours.

Seconds and increments of 1/10th and 1/100th of a second can be read on the digital display.

The digital display and the multi-function display can show up to 99 hours and 59 minutes.

#### Stopwatch timing displays

The stopwatch time is displayed at different positions on the dashboard:

- In the stopwatch on the dashboard.
- In the "Chrono" menu in the multi-function display on the instrument panel.
- In the "CAR" main menu on the PCM.

### Displaying the time on the stopwatch

You can configure the stopwatch on the dashboard to display the time in the multi-function display on the instrument panel.

For information on displaying the time on the stopwatch:

▶ Please see the chapter "DISPLAYING TIME IN STOPWATCH ON DASHBOARD" on page 125.

#### **Chrono on multi-function display**

All stopwatch displays are started and stopped in the "Chrono" menu on the multi-function display. For instructions on using the multi-function display:

- Please see the chapter "OPERATING THE MULTI-FUNCTION DISPLAY ON THE INSTRUMENT PANEL" on page 96.
- 1. Main menu "Chrono" and confirm.



#### Information

If you exit the "Chrono" menu while the stopwatch is running, measurement will continue.

The stopwatch stops after the ignition is switched off. If the ignition is switched on again within approximately 4 minutes, the stopwatch will continue to run.

The only way to reset the stopwatch to zero is by selecting "Reset" in the "Chrono" menu. For information on resetting the stopwatch:

Please see the chapter "RESETTING THE STOPWATCH TIME" on page 116.



- A Number of completed laps
- B Current stopwatch time
- C Reference time (fastest lap)
- Circle display: Comparison of current lap time with the reference time

#### **Starting timing**

- 1. Main menu "Chrono"
- 2. Select "Start" and confirm.

The stopwatch time **B** is displayed simultaneously on all stopwatch displays in the vehicle.

#### Stopping lap/Starting new lap

The current stopwatch time can be stored as a lap time while the stopwatch is still running.

- 1. Main menu "Chrono"
- 2. Select "Round" and confirm.

The lap counter value **A** is incremented by one. The time of the fastest completed lap is stored temporarily as a reference value C.

The stopwatch time **B** and the circle display **D** turn a different color to indicate whether the current lap time is guicker than, slower than or identical to the current fastest lap.

- Green: Current lap time is faster.
- Yellow: Current lap time is identical.
- Red: Current lap time is slower.



#### Information

If a reference time has not been stored yet, the reference time position **C** remains blank. The segment display is not colored.

A maximum of 63 laps can be stored during each session.

#### Storing intermediate time

You can store an intermediate time while the stopwatch is still running.

- 1. Main menu "Chrono"
- 2. Select "Int." and confirm.

The intermediate time is displayed temporarily on the multi-function display. It is not stored. Timing continues in the background.

#### **Stopping timing**

You can stop the stopwatch at any time.

- 1. Main menu "Chrono"
- 2. Select "Stop" and confirm.

The stopwatch time **B** stops.

#### **Continuing timing**

You can resume timing again after stopping the stopwatch.

- 1. Main menu "Chrono"
  - > "Stop"
- 2. "Res." and confirm.

The stopwatch time **B** continues.

### Resetting the stopwatch time

The stopwatch time can be reset to zero.

- 1. Main menu "Chrono"
  - > "Stop"
- 2. Select "Reset" and confirm.

All stopwatch time displays are reset to zero.

116 Instrument Panel and Multi-Function Display

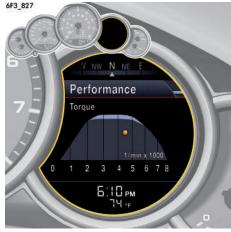


#### **G-Force Menu**

In the "G-Force" main menu, the current lateral and longitudinal acceleration forces are shown graphically in the form of a circular diagram. The maximum occurring longitudinal and lateral acceleration forces are displayed in the "G-Force max" sub-menu.

The values can be reset via the menu item "**Reset**".

- 1. "G-Force" main menu
- 2. Confirm "G-Force max".
- 3. "Reset" and confirm.



### **Performance Menu**

#### **Torque**

In the "**Performance**" main menu, the current torque is displayed graphically as a function of engine speed.

When "**Sport**" or "**Sport Plus**" mode is activated, the additional on-demand torque (overboost function) appears as a white area in the curve. For information on the overboost function:

- Please see the chapter "OVERBOOST FUNCTION" on page 188.
- 1. Main menu "Performance"
- 2. Select "Torque" and confirm.

#### **ACC Menu**

For information on operating and display options for the adaptive cruise control:

 $\,\,{\,\trianglerighteq}\,\,$  Please see the chapter "ADAPTIVE CRUISE CONTROL" on page 157.

### **Vehicle Settings on the Multi-Function Display**

Different settings can be adjusted in the multi-function display on the instrument panel depending on the vehicle equipment.

On vehicles with memory, the settings are stored on the car key or the person buttons in the driver's door.

For information on the memory:

Please see the chapter "STORING PERSONAL SETTINGS" on page 143.



Setting or operating the multi-function display when driving

Setting or operating the multi-function display when driving could distract you from paying attention to traffic. You could lose control of the

▶ Carry out any complicated operating or setting procedures only with the vehicle stationary and in park.

#### **Selecting settings menu**

- 1. Main menu "Vehicle" > "Settings"
  - and confirm.

#### Selecting setting options or activating vehicle functions

A symbol positioned in front of a setting option indicates whether the option is selected or a vehicle function is activated.

#### Selecting one of several options

- Option is selected.
- Option is not selected.

#### **Activating and deactivating functions**

- Function is activated.
- Function is deactivated.

#### **Reset to factory settings**

All settings made in the multi-function display can be reset to the factory settings:



## i Information

All personal settings that have already been stored will be lost as a result of resetting to factory settings.

- 1. Main menu "Vehicle"
  - > "Settings"
- 2. "Fact. settings" and confirm.
- 3. Select "Yes" and confirm.

#### **Adapting appearance of multi-function** display

The contents and appearance of the multi-function display can be adapted individually.

- 1. Main menu "Vehicle"
  - > "Settings"
  - > "Display" and confirm.

#### Selecting main menu display contents

Individual elements in the main menu can be hidden and shown as required.

The main menu items "Vehicle" and "ACC" cannot be hidden.

- 1. Main menu "Vehicle"
  - > "Settings"
    - > "Display"
- 2. Select "Menu scope" and confirm.
- 3. Select the desired main menu items.
- **4.** Confirm your selection.
  - Menu item is displayed. Menu item is hidden.

## Adapting display contents of audio main

In the audio main menu, you can display either a list of all radio stations currently within range or a list of all stored radio stations.

- 1. Main menu "Vehicle"
  - > "Settings"
  - > "Display"
- 2. "Audio"

and confirm.

3. Select the desired display contents and confirm.

Available display contents:

- "Station list" List of stations currently within range.
- "Preset list" List of stored stations.



Multi-function display configuration example

#### Adapting display contents in vehicle information area

You can select four of the many items of vehicle information for display in the "Vehicle" menu and assignment to the display areas 1, 2, 3 and 4.

- 1. Main menu "Vehicle"
  - > "Settings"
    - > "Display"
- 2. "Vehicle menu"
  - and confirm.
- 3. Select "1:" or
  - "2:" or
  - "3:" or
  - "4:"
  - and confirm.
- **4.** Select the desired display contents and confirm.

#### Available display contents:

- "Veh. voltage"
- "Oil pressure"
- "Oil temperature"
- "Boost pressure"
- "Coolant temp." Coolant temperature
- "Fuel Range"
- "Dst: Arrival" Arrival time at destination
- "Int.: Arrival" Arrival time at intermediate destination
- "Dst: Trip time" Driving time to destination
- "Int.: Trip time" Driving time to intermediate destination
- "Compass"
- "GPS height"
- "Time"
- "Date".
- "Station/Track" Current radio station/ music track
- "Phone info" Network strength/network
- "Blank line" Line remains empty



#### Information

One item of information cannot be assigned to several areas or one area **and** the "**Upper line**".

#### Adapting upper status area

You can assign various items of information to the upper status area **A** in the multi-function display.

- 1. Main menu "Vehicle"
  - > "Settings"
  - > "Display"
- 2. "Upper line" and confirm.
- **3.** Select the desired display contents and confirm.

#### Available display contents:

- "Station name"
- "Fuel Range"
- "Compass"
- "Blank line"

No information is displayed in the upper status area **A**.

## Displaying PCM information on the multi-function display

You can configure the multi-function display to temporarily display different items of information relating to Porsche Communication Management (PCM).

- 1. Main menu "Vehicle"
  - > "Settings"
    - > "Display"
- 2. Select "PCM display" and confirm.
- **3.** Select the PCM information in the main menu.
- 4. Confirm your selection.
  - Information is displayed.
  - Information is not displayed.

#### Available PCM information:

#### "Map info"

Navigation map appears automatically when navigation information is available.

"Phone info"

Information on incoming and outgoing calls is displayed.

- "Voice control"

Help text appears when the voice control button is pressed.

"Arrow info"

Navigation arrow appears automatically when navigation information is available.

"Speed limit"

Speed limits marked on the map in the navigation system are displayed.

#### Adapting lower status area

You can assign the current time and outside temperature to the lower status area B in the multi-function display.

- 1. Main menu "Vehicle"
  - > "Settings"
    - > "Display"
- 2. "Lower line" and confirm.
- **3.** Select the desired display contents and confirm.

Available display contents:

- "Time"
- "Temperature"
- "Time & Temp."

#### Adjusting display brightness

The brightness of the multi-function display can be adjusted to suit individual requirements.

- 1. Main menu "Vehicle"
  - > "Settings"
  - > "Display"
- 2. "Brightness" and confirm.
- 3. Adjust to the desired display brightness and confirm the setting.

#### **Light and visibility settings**

The exterior lights, interior lighting and visual aids for reversing the vehicle can be adapted individually.

- 1. Main menu "Vehicle"
  - > "Settings"
  - > "Light & Visibility" and confirm.

#### Adjusting exterior lights

You can adapt the exterior light functions on the vehicle e.g. off delays of the Welcome Home and Entry functions in the "Exterior lights" menu.

- 1. Main menu "Vehicle"
  - > "Settings"
    - > "Light & Visibility"
    - > "Exterior lights" and confirm.

#### Activating and deactivating High Beam Assistant

High Beam Assistant can be activated and deactivated. The settings remain stored when the ignition is switched on and off.

- 1. Main menu: Select "Vehicle"
  - > "Settings"
    - > "Light & Visibility"
      - > "Exterior lights"
- 2. Select "High beam assist."
- 3. Confirm your selection.

High Beam Assistant is activated. High Beam Assistant is deactivated.

#### Adjusting off delay for Welcome Home and **Entry functions**

The off delay of the Welcome Home and Entry functions can be adapted individually.

- 1. Main menu "Vehicle"
  - > "Settings"
    - > "Light & Visibility"
      - > "Exterior lights"
- 2. "Fade-out"

and confirm.

3. Set desired off delay and confirm the setting.

#### Adjusting interior lights

Interior light functions on the vehicle can be adapted individually in the "Interior lights" menu.

- 1. Main menu: Select "Vehicle"
  - > "Settings"
    - > "Light & Visibility"
    - > "Interior lights" and confirm.

#### Activating or deactivating interior lights when the door is opened (depending on equipment)

You can configure the interior lights to be switched on when the door is opened.

- 1. Main menu "Vehicle"
  - > "Settings"
    - > "Light & Visibility"
      - > "Interior lights"
- 2. Select "by opening door" in the display.

3. Confirm your selection.



Interior lights are activated. Interior lights are deactivated.

#### Adjusting brightness of orientation lighting

The brightness of the orientation lighting can be adapted individually.

- 1. Main menu "Vehicle"
  - > "Settings"
    - > "Light & Visibility" > "Interior lights"
- 2. "Ambient light" and confirm.
- **3.** Adjust to the desired brightness and confirm the setting.

#### **Ambient lighting**

The brightness of the ambient lighting can be adapted individually.

- 1. Main menu "Vehicle"
  - > "Settings"
  - > "Light & Visibility" > "Interior lights"
- 2. Select "Ambient light" and confirm.
- 3. Adjust to the desired brightness and confirm the setting.

#### Setting interior lighting off delay

The off delay for the lighting in the passenger compartment after closing the vehicle doors can be adapted individually.

- 1. Main menu "Vehicle"
  - > "Settings"
  - > "Light & Visibility" > "Interior lights"
- 2. "Fade-out"

and confirm.

3. Set desired off delay and confirm the setting.

#### Setting activation of the rear wiper when reverse gear is engaged

You can configure the rear wiper to automatically perform a series of wipes when it is raining when reverse gear is engaged.

- 1. Main menu "Vehicle"
  - > "Settings"
    - > "Light & Visibility"
      - > "Wiper"
- 2. "Rear wiper"

and confirm.

3. Select the desired setting and confirm.

Available setting options:

"Automatic"

The rear wiper performs a series of wipes when reverse gear is engaged.

"Manual"

The rear wiper is not activated when reverse gear is engaged.

#### Activating and deactivating rain sensor operation

You can configure the windshield wiper to adjust its speed automatically when it is raining.

- 1. Main menu "Vehicle"
  - > "Settings"
    - > "Light & Visibility"
      - > "Wiper"
- 2. Select "Rain sensor" and confirm.
- 3. Select the desired setting and confirm.

Available setting options:

"Automatic"

Wiper speed is adjusted automatically.

"Manual"

Wiper speed must be adjusted manually using the wiper stalk.

#### Adjusting reversing options

You can configure the exterior mirror to lower automatically when reverse gear is engaged.

- 1. Main menu "Vehicle"
  - > "Settings"
    - > "Light & Visibility"
      - > "Revers. opt." and confirm.

#### Lowering exterior mirror on passenger's side when parking

You can configure the door mirror on the passenger's side to tilt downwards automatically when reverse gear is engaged to provide a better view of the curb.

- 1. Main menu "Vehicle"
  - > "Settings"
    - > "Light & Visibility"
      - > "Revers. opt." and confirm.
- 2. Select "Lowering mirr.". in the main menu.
- 3. Confirm your selection.
  - **Exterior** mirror is lowered. Exterior mirror is not lowered.

### **Locking settings**

The locking and unlocking settings on the vehicle can be adjusted.

The Easy Entry function can be switched on and off.

- 1. Main menu "Vehicle"
  - > "Settings"
  - > "Locking" and confirm.

#### Setting door unlocking

You can configure specific doors to unlock when the vehicle is unlocked.

- 1. Main menu "Vehicle"
  - > "Settings"
  - > "Locking"
- 2. "Door unlock" and confirm.
- 3. Select the desired setting and confirm.

Available setting options:

"All doors"

All doors are unlocked when the vehicle is unlocked.

"Driver's door"

The driver's door is unlocked when the vehicle is unlocked.

#### **Setting door locking**

You can configure the doors to remain unlocked or lock automatically after a delay on entering the vehicle.

- 1. Main menu "Vehicle"
  - > "Settings"
    - > "Locking"
- 2. "Door lock"
- and confirm.
- 3. Select the desired setting and confirm.

Available setting options:

"Off"

The doors are not locked automatically after entering the vehicle.

"After ign. on"

The doors are locked automatically when the ignition is switched on.

"After drive-off"

The doors are locked automatically after driving off.

### Switching Comfort Entry on and off

You can configure the driver's seat and steering wheel to move back automatically and allow the driver to get in and out of the vehicle more easily.

- 1. Main menu "Vehicle"
  - > "Settings"
    - > "Locking"
- 2. Select "Comfort Entry". in the main menu.
- **3.** Confirm your selection.
  - Comfort Entry is activated.
  - Comfort Entry is deactivated.

#### Switching Auto Memory on and off

It is possible to determine whether personal settings are to be stored automatically on the car key when locking the vehicle.

- 1. Main menu "Vehicle"
  - > "Settings"
    - > "Locking"
- 2. Select
  - "Auto Memory".
- 3. Confirm your selection.
  - Auto Memory is activated.
  - Auto Memory is deactivated.

For further information on storing and retrieving personal settings:

Please see the chapter "STORING PERSONAL SETTINGS" on page 143.

#### Folding exterior mirrors in and out automatically

You can configure the exterior mirrors to fold in automatically when the vehicle is locked.

- 1. Main menu: Select "Vehicle"
  - > "Settings"
    - > "Locking"
- 2. Select "Mirror retract".
- **3.** Confirm your selection.
  - Exterior mirrors are folded in.
  - Exterior mirrors are not folded in.

#### **Setting air conditioning**

The automatic air conditioning can be changed individually.

- 1. Main menu "Vehicle"
  - > "Settings"
    - > "Air conditioning" and confirm.

#### Adjusting air flow

The strength of the air flow and the air quantity can be adjusted.

- 1. Main menu "Vehicle"
  - > "Settings"
  - > "Air conditioning"
- 2. "Climate style"

and confirm.

3. Select the desired setting and confirm.

Available setting options:

- "Soft"
- "Normal"
- "Strong"

## Switching extended ventilation panel on

The extended ventilation panel on top of the dashboard can be switched on or off.

- 1. Main menu "Vehicle"
  - > "Settings"
  - > "Air conditioning"
- 2. Select "Vent. panel". in the main menu.
- 3. Confirm your selection.
  - Ventilation panel is activated.
  - Ventilation panel is deactivated.

#### Switching automatic air-recirculation mode on/off

You can configure the fresh air supply to adjust automatically to the air quality.

- 1. Main menu "Vehicle"
  - > "Settings"
  - > "Air conditioning"
- 2. Select "Automatic air circ.". in the main menu.
- 3. Confirm your selection.
  - Automatic air-recirculation mode is activated
  - Automatic air-recirculation mode is deactivated

#### **Setting date and time**

The date and time displays on the vehicle can be adjusted individually.



#### Information

On vehicles with Porsche Communication Management (PCM), the date and time are set and synchronized automatically by satellite navigation signals (GPS).

Some setting options may be temporarily unavailable, depending on satellite signal reception.

- 1. Main menu "Vehicle"
  - > "Settings"
  - > "Date & Time" and confirm.

#### Setting the time

The time, time format and time zone can be set in the "Time" menu.

- 1. Main menu "Vehicle"
  - > "Settings"
    - > "Date & Time"
      - > "Time" and confirm.

#### **Displaying GPS time**

The time can be synchronized via the GPS signal and displayed.

- 1. Main menu "Vehicle"
  - > "Settings"
    - > "Date & Time"
      - > "Time"
- 2. Select "GPS time".
- 3. Confirm your selection.
  - Time synchronized with GPS. Time not synchronized with GPS.

#### Setting the time format

The time can be displayed in 12-hour or 24-hour format.

- 1. Main menu "Vehicle"
  - > "Settings"
    - > "Date & Time"
    - > "Time"
- 2. "Format"

and confirm.

3. Select the desired setting and confirm.

Available setting options:

- "12h"
- "24h"

#### Setting current time

On vehicles without Porsche Communication Management (PCM), the hours and minutes can be set separately when setting the time.

- 1. Main menu "Vehicle"
  - > "Settings"
    - > "Date & Time"
      - > "Time"
- 2. Select "Hour/Minute".

in the main menu.

3. Set the desired time and confirm the setting.

#### Setting time zone

The time zone of the vehicle clock can be set individually on vehicles with Porsche Communication Management (PCM).

- 1. Main menu "Vehicle"
  - > "Settings"
    - > "Date & Time"
      - > "Time"
- 2. Select "Zone" and confirm.
- 3. Set the desired time zone and confirm.

#### Setting the date

The date and date format can be changed in the "Date" menu.

- 1. Main menu "Vehicle"
  - > "Settings"
    - > "Date & Time"
      - > "Date"
        - and confirm.

#### Setting the date format

The date format can be adjusted.

- 1. Main menu "Vehicle"
  - > "Settings"
    - > "Date & Time"
      - > "Date"
- 2. "Format"

and confirm.

**3.** Select the desired setting and confirm.

Available setting options:

- "DD.MM.YYYY"
- "MM/DD/YYYY"
- "YYYY/MM/DD"

#### Setting the current date

The day, month and year can be set individually on vehicles without the navigation module.

- 1. Main menu "Vehicle"
  - > "Settings"
    - > "Date & Time"
      - > "Date"
        - and confirm.
- 2. "Date".

in the main menu.

3. Set the desired date and confirm the setting.

#### **Setting Daylight Saving Time**

The vehicle clock can be configured to change to Daylight Saving Time.

- 1. Main menu "Vehicle"
  - > "Settings"
  - > "Date & Time"
- 2. Select

"DST (+01:00)"

- **3.** Confirm your selection.

**☑** Daylight Saving Time is activated.

Daylight Saving Time is deactivated.

## Displaying time in stopwatch on dashboard

You can configure the stopwatch on the dashboard to display the time.

- 1. Main menu "Vehicle"
  - > "Settings"
    - > "Date & Time"
- 2. Select "Time Chrono" in the main menu.
- **3.** Confirm your selection.
  - Time is displayed.
  - Time is not displayed.

#### **Setting units**

You can select the units of measurement for vehicle displays such as the speed on the digital speedometer in the instrument panel, the temperature gauge in the air-conditioning displays and the tire pressure display on the multi-function display.

- 1. Main menu "Vehicle"
  - > "Settings"
    - > "Units"

and confirm.

#### Setting speedometer units

The units of the speed and distance information on the speedometer can be adjusted.

- 1. Main menu "Vehicle"
  - > "Settings"
    - > "Units"
- 2. "Speedometer".

in the main menu.

3. Select the desired setting and confirm.

Available setting options:

- "km / km/h"
- "Miles / mph"

#### Setting unit for temperature gages

The measurement unit for temperature gages can be changed.

- 1. Main menu "Vehicle"
  - > "Settings"
  - > "Units"
- 2. "Temperature"

in the main menu.

3. Select the desired setting and confirm.

Available setting options:

- "°C"
- "°F"

#### **Setting unit for Tire Pressure Monitoring** display

The measurement unit for the Tire Pressure Monitoring display can be changed.

- 1. Main menu "Vehicle"
  - > "Settings"
  - > "Units"
- 2. Select "Tire pressure". in the main menu.
- 3. Select the desired setting and confirm.

Available setting options:

- "bar"
- "psi"

#### Setting unit for fuel consumption display

The unit can be set for the fuel consumption display.

- 1. Main menu "Vehicle"
  - > "Settings"
  - > "Units"
- 2. Select "Consumption".

in the main menu.

3. Select the desired setting and confirm.

Available setting options:

- "l/100km"
- "MPG (US)"
- "MPG (UK)"
- "km/l"

### **Changing the language**

The language of the display text on the multifunction display can be changed.

- 1. Main menu "Vehicle"
  - > "Settings"
  - > "Language"
- 2. Select the desired language and confirm.

#### Adjusting volume of warning and information tones

The volume of the warning tones and ParkAssist information tones can be adjusted.

#### Adjusting ParkAssist volume

The volume of the ParkAssist information tones can be adjusted.

- 1. Main menu "Vehicle"
  - > "Settings"
  - > "Volume"
- 2. Select "ParkAssist". in the main menu.
- **3.** Select the desired setting and confirm.

Available setting options:

- "Loud"
- "Medium"
- "Low"

#### Adjusting volume of warning tones

The volume of the warning tones can be adjusted individually.

- 1. Main menu "Vehicle"
  - > "Settings"
    - > "Volume"
- 2. Select "Warn. tones". in the main menu.
- 3. Select the desired setting and confirm.

Available setting options:

- "Loud"
- "Medium"
- "Low"

#### **Changing button assignment on** multi-function steering wheel

The assignment of the ◊ button on the multi-function display can be changed individually. Functions from the multi-function display or PCM/CDR can be assigned to the ◊ button.

- 1. Main menu "Vehicle"
  - > "Settings"
  - > "Steering wheel op."
- 2. Select "O button" and confirm.
- 3. Select "PCM function" or "Inst. clus. fun." and confirm.
- **4.** Select the desired function assignment and confirm.

Available PCM functions:

- "Source change"
- Change audio source. "Voice control"
  - Activate voice control.
  - "Dri. instr. (Rep)"
- Repeat voice instruction from the navigation system.
- "Station/track <" Previous radio station/title.
- "Station/track >" Next radio station/track.
- "Map"

Display navigation map in PCM.

"Menu change" Change main menu area. Available instrument cluster functions:

- "Start/Stop Chr." Start/stop timing.
- "Vehicle menu" Display vehicle menu.
- "Trip menu" Display trip menu.
- "TPMS menu" Display TPMS menu.
- "Chrono menu" Display Chrono menu.
- "Audio menu" Display audio menu.
- "Phone menu" Display telephone menu.
- "Navi menu" Display navigation menu.
- "Map menu"

Display navigation map on the multi-function display.

#### **Assistance systems**

#### Active Safe (PAS)

The Porsche "Active Safe" functions can be completely or partly disabled.

The settings remain stored when the ignition is switched on and off.

- 1. Select "Vehicle"
  - > "Settings"
    - > "Assist. systems"
      - > "Active Safe (PAS)"

and confirm.

#### System on

All Porsche "Active Safe" functions can be enabled/disabled using "System on".

- 1. Select "Vehicle"
  - > "Settings"
    - > "Assist. systems"
      - > "Active Safe (PAS)"
- 2. Select "System on".
- 3. Confirm selection.
  - Active Safe is switched on.
  - Active Safe is switched off.



When all Porsche "Active Safe" functions are switched off, the gray symbol appears at the bottom of the multifunction display.

#### Prewarning on

The latent and prewarning functions are switched off by default. The acute warning function is

Latent and advance warnings can be activated under "Prewarning on".

- 1. Select "Vehicle"
  - > "Settings"
    - > "Assist. systems"
      - > "Active Safe (PAS)"
- 2. Select "Prewarning on".
- 3. Confirm selection.
  - Prewarning is switched on.

Prewarning is switched off.

## **Overview of Warning and Information Messages**

If a warning message appears, always refer to the corresponding sections in this Owner's Manual.

Warning messages are issued only if all measurement prerequisites are met.

Therefore, check all fluid levels regularly – in particular, always check the engine oil level before refueling.

## Warning and information message categories

#### Red System failure or warning

▶ Visit or consult an authorized Porsche dealer immediately.

## Yellow fault or system failure warning

▶ Visit an authorized Porsche dealer at the next opportunity.

#### White Information/message

▶ Visit an authorized Porsche dealer at the next opportunity or remedy yourself.

Light in instrument panel	Warning and information message on the multi-function display	Meaning/Action required	
	Oil press. too low Park vehicle safely	Stop immediately in a suitable place and switch engine off. Do not continue driving.  Select "Oil measurement" on the multi-function display. Add engine oil if necessary.  Do not continue driving if the warning message is displayed despite the oil level being correct.  Have the fault corrected at an authorized Porsche dealer.	
	Oil pressure measurement fault Driving permitted Consult a workshop	Have the fault corrected at an authorized Porsche dealer.	
	Oil temperature too high Reduce load	Switch engine off and let it cool. Check oil level and, if necessary, add oil.	
	Oil temperature indicator fault Consult a workshop Driving permitted	Have the fault corrected at an authorized Porsche dealer.	
	Oil level measurement fault Consult a workshop Driving permitted	Have the fault corrected at an authorized Porsche dealer.	
	No information about oil level available at present	The oil level can be checked after waiting for approx. 1 minute with the vehicle parked on a level surface and the engine at operating temperature. If the rear luggage compartment lid is opened when the engine is cold (e.g. to top up engine oil), the oil level cannot be displayed for a certain time.	

Light in instrument panel		d information message on inction display	Meaning/Action required
	<b></b>	Oil level minimum reached Refill oil	Top up engine oil immediately.
	<b>***</b> *********************************	Oil level below min. Refill oil at once Do not drive on	Top up engine oil immediately.
	AAAAAA	Oil level above maximum Consult a workshop Driving permitted	Visit an authorized Porsche dealer at the next opportunity and have the oil drained to the correct level.
Gauge moves to maximum mark		Engine too hot Park vehicle to cool down	Coolant or engine oil temperature is too high. Switch off engine and let it cool. Check coolant or engine oil level. If necessary, top up coolant / engine oil.
	<b></b>	Refill coolant Observe engine temperature	Check coolant level. Add coolant if necessary.
Gauge moves to maximum mark	<u></u>	Refill coolant immediately Do not drive on	Switch engine off and let it cool. Check coolant level. Add coolant if necessary.
		Cooling system fault Consult a workshop Service required	Have the fault corrected at an authorized Porsche dealer.
		Coolant temp indicator fault Driving permitted Consult a workshop	Have the fault corrected at an authorized Porsche dealer.
	#	Engine fan failure Avoid full load Driving permitted	Have the fault corrected at an authorized Porsche dealer.
		Generator fault Park vehicle safely	Stop in a suitable place and switch engine off. Do not continue driving. Have the fault corrected at an authorized Porsche dealer.
		Low battery Start the engine and run for extended period	Start the engine immediately so that the battery can be charged.

Light in instrument panel	Warning and information message on the multi-function display	Meaning/Action required	
	Low battery Consumption off	The power supply to various comfort features is deactivated to prevent the battery from discharging.	
	Battery protection was active during parking	The power supply to various features was deactivated during parking to prevent the battery from discharging.	
	Battery function restricted Consult a workshop	Consult an authorized Porsche dealer.	
l <b>a</b>	Reduced power Driving permitted Consult a workshop	Consult an authorized Porsche dealer.	
l <del>C</del> n	Engine control fault Consult a workshop Driving permitted	Have the fault corrected at an authorized Porsche dealer.	
	Please start engine manually	Start engine manually at the ignition.	
	Please switch off the ignition	To prevent the battery from discharging, switch off the ignition when leaving the vehicle after the engine was stopped automatically.	
Display of selector-lever position flashes	Engage gear selector properly	PDK transmission: Selector lever may be positioned between two settings. Engage selector lever properly.	
	Move gear lever to position P	PDK transmission: Move gear lever to position P before removing key from ignition lock or stopping and securing the vehicle.	
	Move gear lever to P or N	PDK transmission: Engine can only be started in selector-lever position P or N.	
	Activate brake	PDK transmission: Apply the footbrake when starting.	
Display of selector-lever position flashes	Transm. fault Poss. no R gear Possible to drive on	Restricted gearshift comfort, reverse gear not available. Have the fault corrected at an authorized Porsche dealer.	
Display of selector-lever position flashes	Transm. failure Park vehicle safely	No selector-lever position is displayed on the instrument panel.  Vehicle can be driven only until it comes to a stop.  It is not possible to continue driving. Stop the vehicle immediately in a suitable place.  Read the instructions in the section "Towing". Have the fault corrected at an authorized Porsche dealer.	

Light in instrument panel	Warning and information message on the multi-function display		Meaning/Action required	
	NO.	Drive temperature too high Reduce load	"Warning jerks" can be felt when driving off and the engine power may be restricted.  Do not use the accelerator to hold the vehicle, e.g. on a hill. Hold the vehicle with the brake.  Reduce engine load. Stop the vehicle in a suitable place if possible.  Allow the engine to run in selector-lever position P or N until the warning disappears.	
	to to	Transmission overheated Park vehicle to cooling	Transmission temperature too high. Stop the vehicle at a suitable place, switch off engine and allow it to cool down. Have the fault corrected at an authorized Porsche dealer.	
	A	Press clutch	Manual transmission: Depress clutch pedal when starting.	
BRAKE	BRAKE FLUID	Brake fluid level Park vehicle safely	Stop immediately in a suitable place. Do not continue driving. Have the fault corrected at an authorized Porsche dealer.	
BRAKE	BRAKE FLUID	Brake distribution fault Park vehicle safely	Stop immediately in a suitable place. Do not continue driving. Have the fault corrected at an authorized Porsche dealer.	
BRAKE	(①)	Brake cooling faulty	Brake temperature too high. Stop the vehicle at a suitable place, switch off engine and allow the brake to cool down. Have the fault corrected at an authorized Porsche dealer.	
ABS	ABS (ABS)	ABS/PSM failure Adapted driving permitted	Have the fault corrected at an authorized Porsche dealer.	
	BRAKE WEAR	Wear limit Change brake pads Driving permitted	Have brake pads replaced immediately. Consult an authorized Porsche dealer.	
BRAKE  (1)  flashes	PARK (P)	Release parking brake	Pull the electric parking brake switch.	
BRAKE	PARK (P)	Press brake pedal	Press the brake pedal before releasing the electric parking brake.	

Light in instrument panel	Warning and information message on the multi-function display	Meaning/Action required	
<b>(P)</b>	Fault parking brake	Have the fault corrected at an authorized Porsche dealer.	
	Electric parking brake in service mode	Have the fault corrected at an authorized Porsche dealer.	
BRAKE	Emergency braking	Emergency braking function of the electric parking brake active.	
<b>(!)</b>	(P)		
flashes			
BRAKE ABS	PSM system error Park vehicle safely	Stop the vehicle in a suitable place. Do not continue driving. Have the fault corrected immediately at an authorized Porsche dealer.	
	,	ĺ	
25			
22	PSM failure Consult a workshop Adapted driving permitted	Have the fault corrected at an authorized Porsche dealer.	
OFF OFF	PSM off	Porsche Stability Management was switched off.	
	PSM on	Porsche Stability Management was switched on.	
BRAKE ABS	PSM in diagnosis	Porsche Stability Management is in diagnostic test mode.	
<b>(!)</b>			
flashes			
	Spoiler loss Reduce speed	Driving stability is impaired. Reduce speed and adjust driving style. Have the fault corrected at an authorized Porsche dealer.	

Light in instrument panel		d information message on inction display	Meaning/Action required
Fuel gauge warning light on	T)	Mind remaining distance	Refuel at the next opportunity.
	A	Fault tank display service necessary	Have the fault corrected at an authorized Porsche dealer.
l 🗀	A	Check gas cap	Position tank cap correctly and screw on until it locks securely.
	<b>**</b>	Refill washer fluid	
<del>*</del>	ķ	Fasten seat belt	All vehicle occupants must fasten their safety belts.
	*	Loss of airbag Pilot lamp Service required	Have the fault corrected at an authorized Porsche dealer.
	*	Passenger airbag on/off	The passenger airbag is switched on/off.
	<b>⊕</b>	Power steering fail. Increased effort Driving permitted	Have the fault corrected at an authorized Porsche dealer.
	<b>⊕</b>	Power steering restricted Consult a workshop Driving permitted	Steering assistance is temporarily reduced. Consult an authorized Porsche dealer.
	( <del>[ [</del> ])	Rear-wh steering failure. Careful continuation possible	Have the fault corrected at an authorized Porsche dealer.
	(E-1)	Rear-wh steering fault Adapted driving permitted	Have the fault corrected at an authorized Porsche dealer.
		Remove key from ignition	
		Remove key from trunk	
		Key not found / Key malfunction Change key position	Make sure that you have the driver's key with you.

Light in instrument panel	Warning and information message on the multi-function display		Meaning/Action required
		Replace ignition key battery	Replace the battery in the driver's key.
		Fault of Porsche Entry&Drive	Have the fault corrected at an authorized Porsche dealer.
		Multiple keys recognized in vehicle	Information message: Several driver's keys in the vehicle, e.g. in the possession of a passenger.
		Close doors to lock vehicle	Close all doors and luggage compartment lids before locking the vehicle.
	<b>(</b>	Operating device: turn left, pull off, insert key	No key detected in the vehicle, ignition cannot be switched on or engine cannot be started. Turn control unit back to ignition lock position <b>0</b> and remove it from the ignition lock. Switch the ignition on with the ignition key (not emergency key).
	A	PADM deactivated Service required Driving permitted	Have the fault corrected at an authorized Porsche dealer.
	7	Chassis system fault Adapted driving permitted	Vehicle handling may be affected. Adapt your speed to the changed conditions.  Have the fault corrected at an authorized Porsche dealer.
	Ĥ	Chassis system failure	Stop immediately in a suitable place. Do not drive off or continue driving. Have the fault corrected at an authorized Porsche dealer.
	<u>ā</u>	Chassis system fault Adapted driving permitted	Vehicle handling may be affected. Adapt your speed to the changed conditions. Have the fault corrected at an authorized Porsche dealer.
	<u>ā</u>	Suspension system fault Adapted driving permitted	The lateral inclination of the vehicle is significantly greater when cornering.  Drive carefully at an appropriate speed to the nearest authorized Porsche dealer.
	Д	No all-wheel sys. Only rear-wh drive Adapted driving permitted	Temporary failure of Porsche Traction Management. Reduce load.
	1-1-1	All-wheel system temperature limit Reduce load	Porsche Traction Management is overloaded. Reduce load.

Light in instrument panel	Warning and information message on the multi-function display	Meaning/Action required
	All-wheel overload Only rear-wh drive Reduce load Driving permitted	Temporary failure of Porsche Traction Management. Reduce load.
	All-wheel function restricted Adapted driving permitted	Have the fault corrected at an authorized Porsche dealer.
	All-wheel drive system fault Adapted driving permitted	Have the fault corrected at an authorized Porsche dealer.
	Fault differential lock Possible to drive on	Have the fault corrected at an authorized Porsche dealer.
<u>(!</u> )	Check tires	Tire Pressure Monitoring System detects a pressure loss of more than 20% below the required pressure or more than 7 psi (0.5 bar) at a speed of less than 100 mph (160 km/h), more than 6 psi (0.4 bar) at a speed greater than 100 mph (160 km/h) and more than 4 psi (0.3 bar) at a speed greater than 165 mph (270 km/h).  Stop in a suitable place and check the tires indicated for damage. If necessary, fill in tire sealant and set the correct tire pressure.
(!)	Top off air	Tire Pressure Monitoring System detects a pressure loss of more than 4 psi (0.3 bar). Correct the tire pressure at the next opportunity.
<u>(!)</u>	(!) Restricted monitoring	Fault on one or both wheel transmitters. Have the fault corrected at an authorized Porsche dealer.
<u>(!)</u>	No tire pressure monitorin System is learning	Tire Pressure Monitoring System requires a certain amount of time to learn the wheels. During this time, the current tire pressures are not available on the multi-function display.
<u>(!)</u>	Tire pressure monitoring fault Service required	Fault in Tire Pressure Monitoring System. Tire pressure is not monitored. Have the fault corrected at an authorized Porsche dealer.
<u>(!)</u>	Tire pressure monitoring temporarily deactivated	Temporary fault in the Tire Pressure Monitoring System. Tire pressure is not monitored.

Light in instrument panel	Warning and information message on the multi-function display  Tire change? Update settings		Meaning/Action required
<u>(!)</u>			The tire settings on the multi-function display must be updated after changing a wheel.
<u>(i)</u>	165	Tire pressure Reduce speed	Speed too high for actual pressure. Inflate tire to the required pressure.
(!)	165	Comfort pressure Reduce speed	Top speed for the preset comfort pressure exceeded.
	- <b>þ</b> :	Signal light switched on	Driving light/side light on.
	<b>.</b> ∳:	Parking light on	Left/right parking light on.
	<b>-</b> ∳-	Example: Check front left indicator	The reported light is faulty. Check bulb. Have the fault corrected at an authorized Porsche dealer.
flashes	<b>→</b>       <b>→</b>	Adaptive headlight control defective Service required	Have the fault corrected at an authorized Porsche dealer.
ights up	<i>← IIIII →</i>	Driving light control defec- tive Service required	Have the fault corrected at an authorized Porsche dealer.
	- <b>\</b>	Headlight range regulation defective Service required	Adjust your speed and driving style. Have the fault corrected at an authorized Porsche dealer.
	<u> </u>	High beam assistant not available	Have the fault corrected at an authorized Porsche dealer.
	A	Rain/light sensor defective Service required	Switch on wipers/light manually. Have the fault corrected at an authorized Porsche dealer.
flashes	- <b>ķ</b> -	Headlight control defective Service required	Have the fault corrected at an authorized Porsche dealer.
	A	High beam assis unavailable Operate full beam manually	Have the fault corrected at an authorized Porsche dealer.

Light in instrument panel		d information message on nction display	Meaning/Action required	
	A	High beam assistant off No camera view Clean if necessary	Have the fault corrected at an authorized Porsche dealer.	
	A	PDLS+ currently restricted, no camera view Clean sensor?	PDLS+ temporarily unavailable due to camera fault.	
	A	PDLS+ fault Operate high beam manually Service required	Have the fault corrected at an authorized Porsche dealer.	
	A	Assistance sys camera unavailable Service required	Have the fault corrected at an authorized Porsche dealer.	
	A	Front view camera restricted Clean screen?	Assistance systems/camera temporarily unavailable due to weather conditions or dirt on the windscreen. Clean windshield if necessary.	
	A	Wiper defective Consult a workshop	Have the fault corrected at an authorized Porsche dealer.	
	Example	Doors/lids open	Close door/lid indicated.	
	A	Launch Control activated	Launch Control is activated.	
	£	System fault Driving permitted Consult a workshop	One or more electrical systems may have failed. Adjust your speed and driving style. Have the fault corrected at an authorized Porsche dealer.	
	A	Instrument cluster/ Front Park Assist audio fault Service required	Turn signals tones, acoustic warnings and distance signals (e.g. for ParkAssist) are not available. Please remember this, e.g. when parking. Have the fault corrected at an authorized Porsche dealer.	
	A	Parking Assistant audio fault Service required	Acoustic warning and distance signals for ParkAssist are not available. Please remember this, e.g. when parking. Have the fault corrected at an authorized Porsche dealer.	
	A	Fault ParkAssist	Have the fault corrected at an authorized Porsche dealer.	

Light in instrument panel	Warning and inform the multi-function of		Meaning/Action required
	<b>A</b>	Distance Please brake	Insufficient distance from vehicle in front.
	P. P.	CC/PAS unavailable Service required	Adaptive cruise control (ACC): Sensor at the front of the vehicle may be adversely affected by dirt, snow, ice or adverse weather conditions. Adjust your speed and driving style. Have the adaptive cruise control (ACC) or Porsche "Active Safe" fault rectified at an authorized Porsche dealer.
	50	Limit 1/2 exceeded	Selected speed limit 1 or 2 exceeded.
Warning light on the coolant temperature gauge flashes	<b>f</b>	Fault of the engine control system	Have the fault corrected at an authorized Porsche dealer.
	**	Outside temp. display defective Service required	Have the fault corrected at an authorized Porsche dealer.
	A	Aerodynamic rear spoiler Close sunroof	Close the sunroof.
	A	Close sunroof completely	
	and the same of th	Decrease speed Move roof cover to end position	Open or close convertible top fully.
		Top is opening/closing	Message goes out in limit position.
	-	Roof cover in service position Car not ready	
		Roof control fault Service required	Have the fault corrected at an authorized Porsche dealer.
	<b>~~</b>	Place down wind deflector	Message goes out in limit position.

Light in instrument panel	Warning and the multi-fund	information message on ction display	Meaning/Action required
	-	Wind deflector is put up/placed down	Message goes out in limit position.
	F	Example: Service in xxx km	Service reminder. Bring the vehicle in for service no later than after the distance/time shown has elapsed. The intervals in the "Maintenance" booklet are decisive however.

# **Personal Settings**

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## **Brief Overview – Personal Settings**

This brief overview does not replace the information provided under "PERSONAL SETTINGS".

Warnings, in particular, are not replaced by this brief overview.



Storing settings automatically on the key (with "**Auto Memory**" function activated)



Storing settings manually on the buttons in the driver's door

Where can I store/ retrieve the settings?	Which settings can I store/retrieve with the memory package?
Automatic when locking/unlocking the vehicle door via the car key.	Ergonomic settings  — Driver's seat, exterior mirrors, electric steering column  Comfort settings  — Air conditioning, multi-function display and Porsche Communication Management (PCM)  Prerequisite: The "Auto Memory" function must be activated in the multi-function display.  ▷ Please see the chapter "SWITCHING AUTO MEMORY ON AND OFF" on page 123.  Notice: If the "Auto Memory" function is activated, the settings stored on the key or on key button are overwritten each time the vehicle is locked.
Manually, using buttons 1 and 2.	Ergonomic settings  - Driver's seat, exterior mirrors, passenger's seat, electric steering column
Manually, using key button — in the driver's door.	Ergonomic settings  - Driver's seat, exterior mirrors, electric steering column  Comfort settings  - Air conditioning, multi-function display and Porsche Communication Management (PCM)  The settings are stored on key button  in the driver's door and on the car key.



Driver's door memory buttons (comfort memory)

# **Storing personal settings**

In conjunction with the fully-electric sports seat or the adaptive sports seat plus, a memory package is available. With the memory package, personal settings can be stored on the car key or on the memory buttons in the driver's door.

# **Memory package**

The memory package includes storage of ergonomic settings for

- driver's seat
- electric steering column and
- exterior mirrors as well as

# comfort settings for

- air conditioning
- multi-function display and
- Porsche Communication Management (PCM).

# **A** CAUTION

Retrieving automatic settings for seats. mirrors and electric steering column

Parts of the body may be pinched or crushed if the settings are activated in an uncontrolled manner.

- ▶ Automatic retrieval of the settings can be cancelled by pressing a memory button or any seat adjustment button.
- Do not leave children in the vehicle unattended.



#### Information

If the automatic storage function is activated on the multi-function display, the settings will be automatically stored on the car key when the vehicle is locked.

For information on switching the automatic storage function on and off:

Please see the chapter "SWITCHING AUTO MEMORY ON AND OFF" on page 123.

Regardless of whether the automatic storage function is activated on the multi-function display, the settings can be stored on the car key (by pressing key button - ) and the memory buttons 1 or 2 and retrieved from there.

# **Storing the settings on the car key**

Ergonomic and comfort settings can be individually assigned to the car keys.



#### Information

Individual memory information can be stored on a total of 4 car keys. In the case of further car keys, the memory information from key 4 is adopted.

#### Automatic storage through locking of the vehicle.

This function must be activated on the multifunction display.

- ▶ Please see the chapter "SWITCHING AUTO MEMORY ON AND OFF" on page 123.
- The settings are stored on the car key being used when the vehicle is locked.
- On vehicles with Porsche Entry & Drive, settings are stored by pressing the locking button on the door handle.

# In what situation is it useful to activate the "Auto Memory" function?

Each driver uses his or her own key. When locking the vehicle, the last selected settings are stored on the key. When changing drivers, the personal settings can be retrieved via the respective keys.



# Information

If the "Auto Memory" function is activated, the settings stored manually on the key are overwritten each time the vehicle is locked.

#### Storage by pressing key button - in the driver's door

- ▶ The ignition must be switched on.
- 1. Press the **SET** button. The LED in the button
- 2. Press key button within 10 seconds.
- 3. The ergonomic and comfort settings (keyspecific) are stored. Storage is acknowledged acoustically and the LED in the SET button goes out.

# In what situation is it useful to store the settings on key button - ?

You would like to store/retrieve some of the settings when stationary or during driving and not only when locking/unlocking the vehicle. Ensure that the "Auto Memory" function is deactivated. Otherwise, the settings will be overwritten when locking the vehicle.

# Retrieving the settings from the car key

Ergonomic and comfort settings can be individually retrieved from the car key.

# Automatic retrieval through unlocking of the

The settings are retrieved from the car key being used when the vehicle is unlocked and the driver's door is opened.

# By pressing key button - in the driver's door

- ▶ Press and hold key button until all settings are retrieved
- ▶ With the driver's door open and the ignition switched off, **briefly** press key button - . The settings are automatically retrieved.

# Why do the settings on key button - not correspond to the ones I have stored?

If the "Auto Memory" function is activated in the multi-function display, all the ergonomic and comfort settings are stored on the key when locking the vehicle. Settings stored on key button — are overwritten in the process.

# Storing settings on buttons 1 and 2

Ergonomic settings can be individually assigned to buttons 1 and 2 in the driver's door.

- The ignition must be switched on.
- 1. Press the **SET** button. The LED in the button lights up.
- 2. Press button 1 or 2 or within 10 seconds.
- 3. The ergonomic settings are stored on the relevant button. Storage is acknowledged acoustically and the LED in the SET button goes out.

# Retrieving settings with buttons 1 or 2

Retrieve ergonomic settings with buttons 1 or 2 in the driver's door.

- ▶ Press and hold button 1 or 2 until all settings are retrieved
- ▶ With the driver's door open and the ignition switched off, briefly press button 1 or 2. The settings are automatically retrieved or

# Preventing automatic storage of settings on car key when locking

This function must be deactivated on the multifunction display.

For information on switching the automatic storage function on and off:

▶ Please see the chapter "SWITCHING AUTO MEMORY ON AND OFF" on page 123.

# **Driving and Driving Safety**

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# **Diagnostic Socket**

**WARNING** 

Improper interventions in the vehicle electrical system

External equipment or devices (e.g. navigation units, head-up displays, etc.) connected to the diagnostic socket can impair the function of the vehicle systems.

▷ Do not connect any equipment or devices to the diagnostic socket.

WARNING

Loose equipment/ devices or hanging cables in the driver's footwell

Loose equipment/devices or hanging cables in the driver's footwell can obstruct clearance around the pedals or become caught between the pedals when braking or changing direction.

Do not place any equipment/devices or cables in the driver's footwell.

#### NOTICE

The diagnostic socket is for connecting diagnostic equipment in qualified specialist workshops. Operating external equipment or devices (e.g. navigation units, head-up displays, etc.) from the diagnostic socket when the ignition is switched off will run down the battery. If the vehicle is parked for an extended period, the battery can discharge fully and be damaged (exhaustive discharge).

▷ Do not connect any equipment or devices to the diagnostic socket.

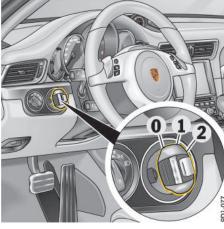


# **Ignition Lock**

The ignition key is inserted into the ignition lock to the right of the light switch at the left of the steering wheel.

On vehicles with Porsche Entry & Drive, you no longer have to insert the key into the ignition lock, but merely keep it with you. The ignition key is replaced by a control unit in the ignition lock, which always remains in the ignition lock, unless the vehicle is being towed.

The ignition lock has three key positions.



Key positions

- O Initial position
- 1 Ignition on
- 2 Start engine



# Information

The vehicle battery discharges if the ignition key is left inserted.

If the vehicle battery is dead, the key can only be removed from the ignition lock if the emergency operation is performed:

▶ Please see the chapter "EMERGENCY OPERATION - UNLOCKING THE IGNITION KEY/ CONTROL UNIT" on page 28.

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# Ignition lock position 0 - Ignition off (initial position)

The engine and ignition are off in ignition lock position **0**. The ignition key can be removed in this position.

# Ignition lock position 1 - Ignition on

▶ Turn ignition key to position **1**.

All electrical equipment can be switched on. The warning lights on the instrument panel light up for a lamp check.

Please see the chapter "INSTRUMENT PANEL USA MODELS" on page 90.

If a load is not switched on for 10 minutes after switching on the ignition, the ignition must be switched on again.

Turn the ignition key to ignition lock position 0 (initial position) first.

The ignition key cannot be removed when the ignition is switched on or when the engine has been started.

To remove the ignition key:

- Stop the vehicle.
- Move PDK selector lever to position **P**.
- Switch ignition off.
- Remove the ignition key.

# Ignition lock position 2 - Start engine

▶ Turn ignition key to ignition lock position 2. The key is reset automatically from position 2 to position 1 when you start the engine.

# **Emergency operation with Porsche Entry & Drive**

Interference in radio transmission between the vehicle and ignition lock or a discharged ignition lock battery can disable the Porsche Entry & Drive comfort function.

If this happens, the control unit can be removed from the ignition lock and the vehicle can be started using the ignition key.

For information on removing the control unit from the ignition lock:

Please see the chapter "EMERGENCY OPERATION - UNLOCKING THE IGNITION KEY/ CONTROL UNIT" on page 28.

# **Starting and Stopping the Engine**

The immobilizer can be deactivated and the engine started only using an authorized ignition key.

▶ Please see the chapter "IMMOBILIZER" on page 217.



**Exhaust Gas** 

Exhaust gas contains colorless and odorless carbon monoxide (CO), which is toxic even in low concentrations. Carbon monoxide can cause unconsciousness and even death if inhaled.

Never start or let the engine running in an enclosed, unventilated area. It is not recommended to sit in your car for prolonged periods with the engine on and the car not moving.

#### **WARNING**

**Exhaust System Fire** Hazard

Exhaust fumes and the exhaust system are very hot when the engine is running. The exhaust system remains hot for some time after the engine is turned off.

- ▷ Do not park or drive your vehicle where combustible materials, such as dry grass or leaves, can come into contact with the hot exhaust system.
- If your car catches on fire for any reason, call the fire department. Do not endanger your life by attempting to put out the fire.

#### NOTICE

An unattended vehicle with a running engine is potentially hazardous. If warning lights come on to indicate improper operation, no one would be present to observe the light and turn off the engine.

▶ Never leave the engine idling unattended.

### Starting the vehicle

- ▷ Operate the footbrake.
- Move PDK selector lever to the P or N position.
- Do not press the accelerator pedal.
   The engine control unit will provide the correct starting mixture.
- Turn the ignition key or control unit (Porsche Entry & Drive) to ignition lock position 2.
   The starting process is carried out and completed automatically as soon as ignition lock position 2 (start engine) is reached.
   The ignition key or control unit is reset automatically to ignition lock position 1 (ignition on).
- Do not operate the starter for more than approx. 10 seconds. If necessary, repeat the starting procedure after a pause of approx. 10 seconds. Turn the ignition key back to ignition lock position **0** (initial position) first. The first operation of the starter is ended automatically when the engine starts. If the engine does not start, subsequent starter operations will not be ended automatically.
- Do not warm up the engine when stationary. Drive off immediately. Avoid high revs and full throttle until the engine has reached operating temperature.

▶ If the vehicle battery power is too weak, the engine can be started with jump leads.

For information on jump-lead starting:

 Please see the chapter "EXTERNAL POWER SUPPLY, EMERGENCY STARTING WITH JUMPER CABLES" on page 273.



#### Information

To ensure a good battery charge condition, thereby ensuring that the battery will start the engine, all electrical loads that are not required should be switched off when the ignition is switched on and when engine revs are low (in traffic jams, in city traffic or in lines).

#### **Stopping**

- Only remove the ignition key when the vehicle is stationary.
- Only switch the ignition off when the vehicle is stationary, as there is no power steering and brake booster assistance when the engine is switched off.
- When leaving the vehicle, always remove the ignition key, apply the electric parking brake and engage selector-lever position P. The control unit always remains in the ignition lock on vehicles with Porsche Entry & Drive.



Hot Engine Parts

Engine components become very hot when the engine is running.

 Before working on any part in the engine compartment, turn the engine off and let it cool down sufficiently.

### **WARNING**

Hot Exhaust Tailpipe

The exhaust pipe is hot when the engine is running and remains hot for some time after the vehicle is turned off.

To prevent injury, make a point of noting where your vehicle's exhaust pipe is, avoid placing your legs near the exhaust pipe when loading and unloading cargo in the rear, and closely supervise children around the vehicle during time when the exhaust pipe could be hot. A hot exhaust pipe can cause painful skin burns.

#### Radiator fan

# **WARNING**

Radiator Fan

The fan can start running depending on the temperature, even with the engine switched off.

- Exercise extreme care that parts of the body, articles of clothing or jewelry do not get caught in the radiator fan.
- Exercise extreme caution when working in the area of the radiator fans.

For information on radiator fans:

Please see the chapter "RADIATOR FAN, ENGINE COMPARTMENT BLOWERS" on page 221.

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# **Auto Start Stop function**

The engine stops automatically when the vehicle is stopped, e.g. at traffic lights or in a traffic jam, if all the preconditions for stopping the engine automatically are met. The engine can also stop automatically

during a stop at walking pace. The Auto Start Stop function thus helps to save fuel.

The ignition stays on even when the engine switches off automatically. All safety functions are still available.

# Preconditions for stopping the engine automatically

- Auto Start Stop function switched on.
- Engine compartment lid closed.
- Brake pedal pressed
- Move PDK selector lever to the **D**, **N** or P position, or to a manually selected transmission range 1 or 2.
- Engine, transmission and air conditioning are at operating temperature.
- Battery has reached its target voltage.
- Vehicle was driven at a speed of more than approx. 1 mph (2 km/h) for at least 1.5 seconds since the engine last stopped automatically.



#### Information

When the ignition is on, the battery is discharged. If the vehicle is parked for an extended period, the battery can discharge fully and be damaged (exhaustive discharge).

# Stopping the engine

The Auto Start Stop function stops the engine once the vehicle stops moving or during the stopping process.

- 1. Use the footbrake to stop the vehicle.
- **2.** Keep the footbrake pressed.

Move PDK selector lever to position P.



# Information

- The engine can also be stopped subsequently (not immediately after the vehicle comes to a stop) if the exceptions are set aside and the preconditions for stopping the engine automatically continue to be met.
- Please see the chapter "EXCEPTIONS FOR THE AUTO START STOP FUNCTION" on page 150.
- When adaptive cruise control is switched on, the engine stops automatically when the vehicle is stationary if the vehicle in front also comes to a stop.

# **Starting the engine**

The Auto Start Stop function starts the engine:

▶ In PDK selector-lever position **D**, **N** or manually selected transmission range 1 or 2: Release the footbrake.

Press the accelerator.

Move the steering wheel.

Move PDK selector lever to position R.

You can drive off normally.



#### Information

When adaptive cruise control is switched on, the engine starts automatically if the following preconditions are met:

The vehicle in front drives off.

The accelerator is pressed.

Speed and distance control is resumed using the control stalk (position 4, RESUME).

- Please see the chapter "INTERRUPTING AND RESUMING CRUISE CONTROL AND DISTANCE CONTROL" on page 164.
- Switching off adaptive cruise control starts the engine automatically and the vehicle moves (crawls) when in gear.



# Information

The engine will start automatically in certain situations, e.g. if the vehicle starts rolling, if air conditioning causes reduced comfort, or if the brake vacuum is reduced.

The engine is stopped again automatically if the preconditions for stopping the engine automatically are then met again.

# **Exceptions for the Auto Start Stop** function

The Auto Start Stop function is deactivated e.g.:

- When Sport mode is activated.
- When PSM is off.
- In maneuvering mode.
- When A/C MAX mode is activated.
- When the "Windshield defrost" function is active.
- At altitudes above approx. 9,843 ft. (3,000 meters)

For information on switching on and off the Auto Start Stop function:

Please see the chapter "SWITCHING AUTO START STOP FUNCTION AND COASTING MODE ON AND OFF" on page 150.

The Auto Start Stop function is available **with limited functionality** in the following situations, e.g.:

- If the air conditioning or passenger compartment heating is operated at a high setting or if the defrost function is run for long time periods.
- If the battery charging condition is low.
- On upward or downward slopes.
- During internal vehicle test procedures, e.g. automatic engine checks.



#### Information

If one of these situations arises after the engine has stopped automatically, the engine can be restarted automatically.

# Reaction after leaving the vehicle (selector-lever position D or N selected)

If the vehicle is left after an automatic stop when PDK selector-lever position **D** or **N** is engaged, an **automatic** engine start is executed to remind the driver that the Auto Start Stop function is still active.

In selector-lever position **D**, the electric parking brake is additionally engaged.

The brake warning light on the instrument panel and the indicator light on the switch (P) light up.

Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.

# Reaction after leaving the vehicle (selector-lever position P selected)

If the vehicle is left after an automatic stop when PDK selector-lever position **P** is engaged, in order to open the garage door, for example, **no** automatic engine start is executed. Auto Start Stop mode is resumed if the driver closes the driver's door and presses the brake within 30 seconds of leaving the vehicle. If one of these requirements is not met, the engine has to be started **manually**. The message **"Please start engine manually"** will appear on the multi-function display in the

Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.

instrument panel.



# Switching Auto Start Stop function and coasting mode on and off

# Switching off

Press button (A).
 The indicator light on the button lights up.
 Automatic stopping of the engine is suppressed and gliding mode is switched off.

# Switching on

▶ Press button (a).
 The indicator light on the button goes out.
 The engine is automatically stopped when the vehicle stops and gliding mode is switched on.

Please see the chapter "DRIVING IN COASTING MODE" on page 174.

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**Driving and Driving Safety** 

# **Auto Start Stop function display**



#### Automatic engine stop and restart readiness

If the engine was stopped automatically by the Auto Start Stop function, the indicator light on the multi-function display in the instrument panel will light up green.



# No engine stop or restart readiness

If the Auto Stop function is not available or if no driver is detected in the vehicle after the engine has stopped automatically (driver's seat belt not fastened or driver's door open), the indicator light on the multi-function display in the instrument panel will light up yellow when the vehicle is stationary.

The Auto Start Stop system has detected that:

- At least one precondition for stopping the engine automatically is not met.

- There is at least one exception for the Auto Start Stop function.
- Please see the chapter "PRECONDITIONS FOR STOPPING THE ENGINE AUTOMATICALLY" on page 149.
- Please see the chapter "EXCEPTIONS FOR THE AUTO START STOP FUNCTION" on page 150.



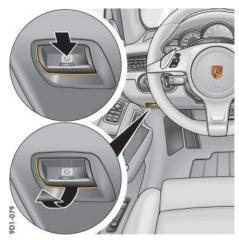
#### Information

If the indicator light in the multi-function display continuously lights up yellow when the vehicle is stopped and if the engine does not stop regularly when the vehicle is stopped despite the fact that the preconditions for stopping the engine automatically are met, have the Auto Start Stop system checked the next time you visit the workshop.

#### Fault reporting

If there is a fault, the warning message "Start/ Stop operation deactivated" will appear on the multi-function display in the instrument panel.

Have the fault corrected at an authorized Porsche dealer.



# **Electric Parking Brake**

The electric parking brake acts on the rear wheels and serves to secure the vehicle while parked.

# Applying the parking brake

▶ Press switch (P). The brake warning light on the instrument panel lights up.

For information on indicator lights and warning lights on the instrument panel:

Please see the chapter "INSTRUMENT PANEL USA MODELS" on page 90.

# Releasing the parking brake

The electric parking brake can only be released when the ignition is switched on.

- 1. Press the brake pedal.
- 2. Pull switch (P).

The brake warning light on the instrument panel goes out.

# Automatic electric parking brake release when driver's intention to drive off is detected

If the engine is running, the driver's door is closed and the driver's safety belt is fastened, it is still possible to drive off normally even though the parking brake is on.

The electric parking brake detects the driver's intention to drive off and releases automatically. The warning light on the instrument panel goes out.

If the driver's door is not closed or the driver's safety belt is not fastened, the electric parking brake will not be released automatically when the driver attempts to drive off.

The message "Release parking brake" appears on the multi-function display in the instrument panel. The brake warning light on the instrument panel and the indicator light on the switch (P) start to flash.

For information on warning messages on the multi-function display:

▶ Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.

# Engaging the electric parking brake automatically

The electric parking brake engages if PDK selector-lever position **D**, **R** or **M** is selected when the vehicle is stationary and the driver's door is opened. The brake warning light on the instrument panel and the indicator light on the switch (P)

For information on warning messages on the multifunction display:

Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.

# **Emergency braking function**

If the vehicle cannot be stopped by conventional braking, you can decelerate sharply and stop the vehicle using the electric parking brake.

Press switch (P) and keep it pressed. The message "Emergency braking" appears on the multi-function display in the instrument panel. The brake warning light on the instrument panel and the indicator light on the switch (P) start to flash.

The emergency braking function is deactivated when you release the switch.

**WARNING** 

Severe deceleration

Emergency braking takes place with very high braking power. The following traffic may be endangered.

- Only use the emergency braking function in an emergency situation.
- Do not use the emergency braking function to stop the vehicle when driving normally.

# **BRAKE Brake warning light USA**

# **Brake warning light Canada**

If the electric parking brake could not be applied fully when the vehicle is stopped, the brake warning light on the instrument panel starts to flash

For information on warning messages on the multifunction display:

Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.

### **Brakes**

Make it a habit to check the operation of your brakes before driving.

Keep in mind that the braking distance increases very rapidly as the speed increases. At 60 mph (100 km/h), for example, it is not twice but four times longer than 30 mph (50 km/h). Tire traction is also less effective when the roads are wet or slippery.

▶ Therefore, always maintain a safe distance from the car in front of you.

# **Vehicles without Porsche Ceramic Composite Brake (PCCB)**

Even though the brake disks consist of alloyed gray cast iron, they will unavoidably start to corrode if your car is parked for an extended period. The brakes will tend to "rub" as a result. The nature, extent and effects of corrosion depend on the amount of time the vehicle was parked, whether road salt or grit was spread and whether grease-dissolving agents were used in car washes.

If the braking comfort is noticeably impaired, we recommend having the brake system checked by experts at an authorized Porsche dealer.

# **Brake system function**

Your Porsche is equipped with a power assisted hydraulic dual circuit brake system with disk brakes at the front and rear.

Both circuits function independently. One brake circuit operates the front left and rear right wheel and the other operates the front right and rear left wheel

If one brake circuit has failed, the other will still operate. However, you will notice an increased pedal travel when you apply the brakes. Failure of one brake circuit will cause the stopping distance to increase.

#### **WARNING**

Brake Hydraulic Failure Recovery

Your vehicle is equipped with an emergency function in the extreme event of a complete hydraulic failure of the brake system. If your brake pedal goes all the way to the floor, do not pump the brakes.

- Push the brake pedal down firmly and hold it in that position. A mechanical linkage activates the second circuit, and you will be able to bring the vehicle to a stop.
- After bringing your vehicle to a complete stop. avoid driving the vehicle and instead have it towed to the nearest authorized Porsche dealer for repair.

# Brake system warning light

You can check the functionality of the brake system warning light by switching the ignition to the "On" position (position 1) and verifying that the warning light illuminates.

# BRAKE Brake warning light USA

# **Brake warning light Canada**

The warning light in the instrument panel lights up. A message will be displayed on the multi-purpose display of the instrument panel if the brake fluid level is too low, or (if the brake pedal travel has increased) one of the two brake circuits has failed. A greater braking pressure will be required, stopping distances will be longer and the braking behavior will change, particularly in curves.

With correctly adjusted brakes and a correctly working brake system, the pedal travel to the point of brake application should be 1-3/16 in. to 1-9/16 in. (30 to 40 mm). Whenever the brake pedal travel exceeds this value, have the brake system checked.

# **Brake pedal**

#### **WARNING**

Obstruction of Brake Pedal

Unsuitable or incorrectly fixed floor mats or objects can reduce the travel of the brake pedal or prevent you applying the brake pedal.

- ▷ Always check the movement of the brake pedal before driving and make sure that it is not obstructed by a floor mat or any other object.
- Secure the floor mat to prevent it from sliding into positions that could interfere with the safe operation of your vehicle. Your authorized Porsche dealer will be glad to offer you floor mats of the correct size

# 1 Information

In case one of the two brake circuits fails, increased pedal travel is required to bring your vehicle to a full stop.

including a securing possibility.

# **WARNING**

Riding the Brakes

- ▷ Before descending a steep grade, reduce speed and shift the transmission into a lower gear to control speed.
- Do not "ride the brakes" by resting your foot on the pedal when not intending to apply brake pressure.
- Do not hold the pedal down too long or too often. This could cause the brakes to overheat and lose braking power.

#### **Brake booster**

# The brake booster assists braking only when the engine is running.

When the car is moving while the engine is not running, or if the brake booster is defective, more pressure on the brake pedal is required to bring the car to a stop.

Moisture, road salt or grit on brakes affects braking.

Brakes will dry after a few cautious brake applications.

#### **WARNING**

Wet Brakes

Driving through water may reduce the traction. Moisture on brakes from road water, car wash, or a coating of road salt or grit may affect braking efficiency.

Cautiously apply brakes to test and dry the brakes after exposure to road water, etc.

#### **WARNING**

Loss of Braking Power

The brake booster is ready for operation only while the engine is running.

If the engine is switched off or there is a defect in the brake booster, much greater force has to be applied to the pedal when braking.

Vehicles with defective brakes must not be towed and must be transported on a flat

For information on towing:

▶ Please see the chapter "TOWING" on page 278.

#### **Brake wear**

Your car has excellent brakes, but they are still subject to wear. The rate at which they wear depends on how the brakes are used.

intervals recommended in your Maintenance Booklet.

#### Brake system warning light

You can check the functionality of the brake system warning light by switching the ignition to the "On" position (position 1) and verifying that the warning light illuminates.



#### Brake wear warning message USA

#### Brake wear warning message Canada

A warning message will be displayed on the multipurpose display of the instrument panel if the brake pads are worn, excessively.

▷ Do not continue to operate the vehicle. Have your authorized Porsche dealer inspect or replace the brake pads.

For information on warning messages on the multi-purpose display:

Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.

### Brake pads and brake disks

Wear on the brake pads and brake disks depends to a great extent on the driving style and the conditions of use and therefore cannot be expressed in actual miles on the road.

The high-performance brake system is designed for optimal braking effect at all speeds and temperatures.

Certain speeds, braking forces and ambient conditions (e.g. temperature and humidity) can therefore cause the brakes to "squeal".

# **WARNING**

**Obstructed Brake Pedal** 

Unsuitable or incorrectly installed floor mats or objects can obstruct the movement of the brake pedal or prevent application of the brake pedal.

▷ Do not obstruct the pedal travel with floor mats or other objects.

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# **WARNING**

Wet Brakes

In heavy rain, while driving through water or after leaving a car wash, the braking action may be delayed and increased pressure may be required.

For this reason, keep further back from the vehicle in front and "dry" the brakes by applying them at intervals. Make sure that the traffic behind you is not affected.

# WARNING

Reduced Braking Efficiency

After a long drive over salted or gritted roads, a coating may form on the brake disks and pads that significantly reduces friction and therefore also braking effect.

Even though the brake disks consist of alloyed gray cast iron, they will unavoidably start to corrode if your vehicle is parked for an extended period. The brakes will tend to "rub" as a result.

The nature, extent and effects of corrosion depend on the amount of time the vehicle was parked, whether road salt or grit was spread and whether grease-dissolving agents were used in car washes (not on vehicles with Porsche Ceramic Composite Brake). To prevent corrosion of the brake disks, "brake them dry" before parking the vehicle (not on vehicles with Porsche Ceramic Composite Brake).

If braking comfort is noticeably impaired, we recommend that you have the brake system checked by experts at an authorized Porsche dealer.

To relieve the brake system on downhill stretches, change down to a lower gear in good time (engine braking).

If engine braking is insufficient on steep stretches, operate the footbrake at intervals. Avoid continuous braking as it overheats the brakes and reduces the braking effect.

For information on brake fluid and checking the brake fluid level:

Please see the chapter "BRAKE FLUID" on page 243.

#### New brake pads or linings

New brake pads have to be "broken in", and therefore only attain optimal friction when the car has covered several hundred miles or km. The slightly reduced braking ability must be compensated for by pressing the brake pedal harder. This applies whenever the brake pads and/or brake disks are replaced.



- A Switch cruise control on/off
- 1 Set/increase desired speed
- 2 Reduce desired speed
- 3 Interrupt (OFF)
- 4 Return to set speed (RESUME)

# **Cruise Control**

Cruise control maintains any selected speed between approx. 20-150 mph (30-240 km/h) without you having to use the accelerator. Cruise control is operated using the control stalk at the bottom left of the steering wheel. Downshifts are carried out to help maintain the pre-selected speed (especially when driving downhill).

# **WARNING**

Misuse of Cruise Control

If the current traffic situation does not allow you to drive safely at a constant speed and with sufficient distance to the vehicle in front, using the cruise control can cause accidents.

- Do not use the cruise control in heavy traffic, in city traffic, on twisting roads or under unfavorable road conditions (e.g. wintry or wet conditions, varying road surfaces).
- Observe all local and national speed limits.
- Do not reach through the steering-wheel spokes while driving.

# Switching cruise control readiness on

▶ Press button A on the control stalk.



# Cruise control readiness

The grey symbol on the multi-function display in the instrument panel indicates readiness.

#### **Maintaining and storing speed**

- 1. Accelerate or decelerate to the desired speed using the accelerator pedal.
- 2. Push the control stalk on the steering wheel forward (position 1).

The current driving speed is now stored as the desired speed, which will be maintained automatically.



# **Desired speed**

The desired speed that was stored is displayed under the cruise control symbol, which has now turned orange.

# Accelerating (e.g. to overtake)

#### Variant 1

▷ Increase the speed as usual with the accelerator pedal. When you ease off the accelerator, the previously stored value is set again.

#### Variant 2

Push the control stalk on the steering wheel forward (position 1).

The desired speed is increased in steps of 1 mph (1 km/h).

Press the control stalk on the steering wheel forward and keep it pressed (position 1). The desired speed is increased in steps of 5 mph (10 km/h).

The new desired speed is displayed on the multifunction display in the instrument panel.

#### **Decelerating**

▷ Briefly pull the control stalk on the steering wheel towards the steering wheel (position 2). The desired speed is decreased in steps of 1 mph (1 km/h).

#### or

Pull the control stalk on the steering wheel towards the steering wheel and keep it pulled

The desired speed is decreased in steps of 5 mph (10 km/h).

The new desired speed is displayed on the multifunction display in the instrument panel. Downshifts are carried out to help maintain the pre-selected speed (especially when driving downhill).

# Interrupting cruise control operation - OFF

The speed driven before the interruption remains stored in the memory and can be reactivated by pressing the control stalk.

- Please see the chapter "RESUMING THE STORED SPEED - RESUME" on page 157.
- Press the control stalk down (position 3).

Operate brake pedal or move PDK selector lever to N position.

## Cruise control operation is interrupted automatically:

- If the set vehicle speed is exceeded by more than approx. 16 mph (25 km/h) for longer than 20 seconds.
- If Porsche Stability Management (PSM) intervenes for longer than 0.5 seconds.

# **Resuming the stored speed – RESUME**

Press the control stalk up (position 4). Cruise control accelerates/decelerates the vehicle to the stored speed.



#### Information

The stored speed should only be recalled if traffic and road conditions are conducive to driving at that speed.

# Switching cruise control readiness off

Press button A on the control stalk. The memory is cleared and the readiness symbol disappears.

The stored desired speed is cleared when the ignition is switched off when the vehicle is parked.

# **Adaptive Cruise Control**

Adaptive cruise control maintains any selected speed between approx. 20-100 mph (30–160 km/h) when driving on open roads without you having to use the accelerator. If a vehicle traveling ahead of you in the same lane is detected as driving slower than the selected speed, adaptive cruise control will automatically maintain a set distance from the vehicle in front. Adaptive cruise control slows your vehicle down if the distance to the vehicle ahead becomes too short and accelerates your vehicle if the distance increases.



Misuse of Adaptive Cruise Control

If the current traffic situation does not allow you to drive safely at a constant speed and with sufficient distance to the vehicle in front, using the adaptive cruise control can cause accidents.

- ▷ Do not use the adaptive cruise control in heavy traffic, in construction traffic, in city traffic, on twisting roads or under unfavorable road conditions (e.g. wintry or wet conditions, varying road surfaces).
- Brake the vehicle immediately with the footbrake if the deceleration of the adaptive cruise control is not sufficient.
- Make sure that it is possible to take over control of the vehicle at all times.
- Observe all local and national speed limits.

# **▲** WARNING

Adaptive Cruise Control Limits.

Adaptive cruise control will not detect stationary or slowly moving vehicles, pedestrians, objects on the road, oncoming vehicles in the same lane or cross traffic.

- You must pay attention to your vehicle's position in relation to other objects and intervene as needed to ensure safe driving.
- Always keep the direction of travel in your field of view.



#### Radar sensor

Adaptive cruise control uses a radar sensor located in the center of the front apron (arrow).



# Information

- ▷ Always keep the radar sensor clean and free of ice and snow to ensure that it is fully functional. For car care instructions:
- Please see the chapter "CAR CARE INSTRUCTIONS" on page 231.

### **WARNING**

Radiofrequency Radiation Exposure

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 8 in. (20 cm) between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

# **WARNING**

Weather Impairment of Radar Sensor

Radar sensor vision can be impaired by rain, snow, ice or heavy spray. Vehicles in front will not be detected properly or may not be detected at all.

 $\triangleright$ Do not use adaptive cruise control under these conditions.

### Warning message

Adaptive cruise control can be deactivated automatically if the radar sensor is very dirty or is covered in ice or by an obstacle, in unfavorable weather conditions (heavy rain) or when driving through tunnels.

The message "ACC/PAS unavailable Service required" will appear on the multi-function display in the instrument panel.

For information on warning messages on the multifunction display:

Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.

#### Information

This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interfe-
- 2. this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications made to this equipment not expressly approved by Porsche may void the FCC authorization to operate this equipment. This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This Class A digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

# Operating principle of adaptive cruise control

### No vehicle detected in front - open road driving

Adaptive cruise control operates like a cruise control system. The desired speed that was set is maintained constantly.

# Vehicle detected in front - driving in traffic

If a vehicle traveling ahead of you in the same lane is detected as driving slower than the selected desired speed, adaptive cruise control will automatically maintain a set distance from the vehicle in front.

If the vehicle in front stops, adaptive cruise control will slow your vehicle down to a stop provided this is possible within the control limits of the system. Adaptive cruise control actively keeps your vehicle at a standstill.

If the vehicle in front drives off, automatic speed control and distance control can be resumed.

#### Speed exceeded

The speed of the vehicle can be increased at any time by pressing the accelerator.

If the vehicle is traveling faster than the speed set by adaptive cruise control (ACC), adaptive cruise control is deactivated.

The message "ACC passive" appears on the multi-function display in the instrument panel. The desired speed that was stored is retained. After releasing the accelerator pedal, the ACC accelerates to the desired speed if there is no vehicle in front and controls the distance if there is a vehicle in front.

For information on the "ACC passive" status:

Please see the chapter "OPERATING STATES WHEN ADAPTIVE CRUISE CONTROL IS SWITCHED ON" on page 161.



- R Switch adaptive cruise control on/off
- 1 Set/increase desired speed
- 2 Reduce desired speed
- 3 Interrupt (OFF)
- -Operational readiness on/return to set speed (RESUME)

# Using adaptive cruise control

Adaptive cruise control is operated using the control stalk at the bottom left of the steering wheel.



# 1 Information

You can intervene manually at any time by pressing the brake or accelerator.



- A Desired distance from vehicle in front
- **B** Status display and desired speed
- C Vehicle detected in front
- **D** Current distance from vehicle in front
- **E** Current speed of vehicle in front
- Progress bar showing speed control range (0 100 mph (0 160 km/h))
- $\boldsymbol{\mathsf{G}}$  Current speed

### Adaptive cruise control display

All important information, messages and warnings are displayed on the multi-function display in the instrument panel.

#### "ACC" main menu

The adaptive cruise control display on the multifunction display can be selected permanently using the buttons on the multi-function steering wheel or the control stalk at the bottom right of the steering wheel.

For information on using the multi-function display: ▶ Please see the chapter "OPERATING THE MULTI-FUNCTION DISPLAY ON THE INSTRUMENT PANEL" on page 96.

1. Main menu: Select "ACC" on the display



# Status display

When adaptive cruise control is switched on, the status display **B** appears at the bottom left of the multi-function display (illustration).

The status display **B** turns orange when adaptive cruise control is active.

The status display **B** is grey when adaptive cruise control is inactive.

#### **Examples:**



If adaptive cruise control is switched on, and no desired speed is stored, the cruise control symbol appears but the desired speed field remains blank.



If a desired speed is stored and no vehicle was detected in front, the cruise control symbol and the desired speed are displayed.



If a desired speed is stored and a vehicle was detected in front, a vehicle symbol and the desired speed are displayed.

# Switching adaptive cruise control on and

# Switching adaptive cruise control on

▶ Press button **R** on the control stalk. The grey status display appears on the multifunction display.

Adaptive cruise control is ready.

# Switching adaptive cruise control off

Press button **R** on the control stalk. "ACC off" appears on the multi-function display.

The desired speed that was stored is deleted. The desired distance is set to the default value.

# Operating states when adaptive cruise control is switched on

There are three possible operating states when adaptive cruise control is switched on.

# Adaptive cruise control active

Adaptive cruise control automatically regulates the speed and distance from the vehicle in front. The status display **B** turns orange.

# Adaptive cruise control is ready

Cruise control and distance control is inactive after pressing the brakes or interrupting by pressing the control stalk downwards (position 3, OFF).

The desired speed that was stored and the desired distance that was set are retained. The status display **B** turns grey.

For information on resuming cruise control and distance control:

▶ Please see the chapter "RESUMING CRUISE CONTROL AND DISTANCE CONTROL -RESUME" on page 164.

### Adaptive cruise control passive

Cruise control and distance control is inactive after pressing the accelerator.

"ACC passive" appears on the multi-function display.

The desired speed that was stored and the desired distance that was set are retained. The status display **B** turns grey.

Adaptive cruise control is active again after you release the accelerator.

# Setting and changing the desired speed **Preconditions**

- Adaptive cruise control is switched on.
- Vehicle is moving.
- No stationary objects are detected in front.

# Setting the desired speed

1. Press the control stalk on the steering wheel forward (position 1).

The current driving speed is stored as the desired speed, which will be maintained automatically (within the control range of 20 to 100 mph (30 to 160 km/h)) and appears orange in the status display B.

The red triangle **G** under the progress bar for the speed control range shows the speed of your vehicle.

2. Release the accelerator pedal.

The desired speed is maintained automatically unless a vehicle traveling in front is detected as driving slower than the desired speed.



#### Information

If a stationary object was detected in front, the message "ACC not possible Stationary object ahead" appears on the multi-function display.

# Increasing the desired speed

▶ Press the control stalk on the steering wheel forward (position 1).

The desired speed is increased in steps of 1 mph (1 km/h).

#### or

Press the control stalk on the steering wheel forward and keep it pressed (position 1). The desired speed is increased in steps of 5 mph (10 km/h).

The status display **B** shows the new desired speed.

The red triangle G under the progress bar for the speed control range shows the speed of your vehicle.

# Reducing the desired speed

Briefly pull the control stalk on the steering wheel towards the steering wheel (position 2). The desired speed is decreased in steps of 1 mph (1 km/h).

#### or

Pull the control stalk on the steering wheel towards the steering wheel and keep it pulled (position 2).

The desired speed is decreased in steps of 5 mph (10 km/h).

The status display **B** shows the new desired speed.

The red triangle **G** under the progress bar for the speed control range shows the speed of your vehicle.



# Information

If your vehicle is stationary, the message "ACC not possible while stationary" appears on the multi-function display when you press the control stalk forward (position 1).



### **Setting the desired distance**

The desired distance from the vehicle in front can be set in four stages.



# Information

When you are setting the desired distance, the "ACC" main menu for adaptive cruise control is displayed temporarily on the multi-function display.

When you first actuate the rocker switch **Z**, the "ACC" main menu appears without changing the desired distance.



#### Information

The distance depends on the driving speed. The slower the vehicle is traveling, the shorter the distance and the faster the vehicle is traveling, the longer the distance.

#### Increasing the desired distance

▶ Press the rocker switch **Z** upwards. The desired distance is increased. More orange segments are shown in the desired distance display A.

#### Reducing the desired distance

Press the rocker switch **Z** downwards. The desired distance is reduced. Fewer orange segments are shown in the desired distance display A.

#### Display showing distance from vehicle in front

If a vehicle is detected in front, the vehicle symbol C appears on the multi-function display and in the status display B.

The grey area **D** shows the current distance from the vehicle in front.

# Possible distance settings



Suitable for speedy driving in lines of traffic. The time gap is 1 second. This corresponds to approx. 36 yd. (33 meters) at a speed of 75 mph (120 km/h).



Suitable for steady driving in lines of traffic. The time gap is 1.3 seconds. This corresponds to approx. 47 yd. (43 meters) at a speed of 75 mph (120 km/h).



# Preset distance

Corresponds to the general recommendation of the road traffic safety regulation ("two seconds time headway"). The time gap is 1.8 seconds. This corresponds to approx. 66 yd. (60 meters) at a speed of 75 mph (120 km/h).



Suitable for driving on country roads. The time gap is 2.3 seconds. This corresponds to approx. 63 yd. (58 meters) at a speed of 55 mph (90 km/h).

# **Automatic braking to a standstill**

If the vehicle in front stops, your vehicle will slow down and come to a stop within the control limits of the system if adaptive cruise control is active. The indicator light HOLD lights up on the instrument panel.

The vehicle is actively held at a stop.

For information on the HOLD function:

▶ Please see the chapter "HOLD FUNCTION: DRIVE-OFF ASSISTANT, STANDSTILL MANAGEMENT" on page 184.



#### Information

- Depending on the traffic flow, e.g. slow moving traffic, stopping is initiated by a slow crawling phase, which brings the vehicle to a standstill.
- When adaptive cruise control is operating normally or when the HOLD function is active, the brake pedal may feel different and you may hear hydraulic noises.

This behavior is normal for the system. It is not a fault.

#### **Driving off again**

The vehicle can be driven off again after being stopped and speed and distance control will be resumed, depending on the operating state of the adaptive cruise control system.

## Adaptive cruise control active

- 1. Press the control stalk on the steering wheel upwards (position 4, RESUME).
- 2. Press the accelerator pedal briefly. Your vehicle drives off again automatically.



#### Information

Your vehicle will not drive off if the vehicle detected in front is stationary.

#### Adaptive cruise control is ready

Automatic speed and distance control can only be resumed when your vehicle is moving.

- **1.** Drive off normally.
- 2. Press the control stalk on the steering wheel upwards (position 4, RESUME).

Set or change the desired speed.

# Interrupting and resuming cruise control and distance control

#### Interrupting cruise control and distance control - OFF

▶ Press the brake pedal.

Press the control stalk on the steering wheel downwards (position 3, OFF). Adaptive cruise control is inactive. The desired speed that was stored and the desired distance are retained.

#### Resuming cruise control and distance control - RESUME

Press the control stalk on the steering wheel upwards (position 4, RESUME).

The vehicle accelerates to the desired speed that was stored unless a vehicle traveling in front is detected as driving slower than the desired speed and the distance from this vehicle is less than the desired distance that was set.

The status display **B** changes from grey to orange.

or

stored.

Press the control stalk on the steering wheel upwards and keep it pressed (position 4. RESUME).

The vehicle accelerates in a more sporty driving style to the desired speed that was



#### Information

If speed and distance control was interrupted by moving the control stalk to position 3 (OFF), it can only be resumed again when the vehicle is moving and no stationary objects are detected in front.

# Messages on the multi-function display

If adaptive cruise control was deactivated automatically or if an action cannot be performed. a message to this effect in blue appears on the multi-function display.

- "ACC not available" Adaptive cruise control is not available, e.g. when maneuvering.
- "ACC not possible ABS/PSM intervention" Adaptive cruise control was deactivated because ABS or PSM intervened as a control mechanism.
- "Release parking brake" Adaptive cruise control was deactivated because the electric parking brake was activated.
- "ACC not possible Move gear lever to D/M" Adaptive cruise control was deactivated

because the PDK selector lever is not in position **D** or manual position **M**.

- "ACC not possible while stationary" The required action is not possible because your vehicle is stationary, e.g. when setting a desired speed.
- "ACC not possible Revs too high" Adaptive cruise control was deactivated because the engine-speed limit was reached in manual position **M** of the PDK selector lever/ shift paddles.
- "ACC not possible Gradient too steep" The desired distance or the desired speed cannot be set because the incline of the road is too steep.
- "ACC not possible Stationary object

The action is not possible because a stationary object was detected ahead.

- "ACC not possible Switch on PSM" Adaptive cruise control is not available because PSM was switched off. For information on Porsche Stability Management (PSM):
- PLEASE SEE THE CHAPTER "PORSCHE STABILITY MANAGEMENT (PSM)" on page 181.
- "ACC off" Adaptive cruise control was deactivated.
- "ACC not possible Steering lock too large" The steering is turned too far.

### **General information**

# "Sport" and "Sport Plus" Mode

Adaptive cruise control regulates your driving more dynamically in "Sport" and "Sport Plus" mode.

# **Exceptions for adaptive cruise control**

Adaptive cruise control is not available in the following situations:

- If the ignition is switched off.
- When PSM is off.
- If the driver's door is opened and the driver's safety belt is not fastened.
- When parking or maneuvering in very tight
- When the electric parking brake is activated.
- If the PDK selector lever is in position N, R or P.
- On upward or downward slopes of more than 15 %.

If one of these exception situations occurs when adaptive cruise control is switched on, adaptive cruise control will be switched off.

A message to this effect appears on the multifunction display.



# **Warning messages**

# Overtake request when adaptive cruise control is active (ACC active)

If adaptive cruise control detects that braking assistance is required on the part of the driver, a warning signal sounds and the warning message "Distance Please brake" appears on the multifunction display.



Inadequate braking power during automatic braking by the adaptive cruise control.

In this case, the braking power of the adaptive cruise control is not sufficient to prevent a collision.

Brake immediately.

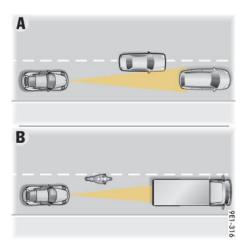
# Traffic situations in which vehicles cannot be reliably detected

The radar sensor for adaptive cruise control scans a narrow, cone-shaped area in front of your vehicle.

Detection can be limited or unreliable, depending on the traffic situation and the size of the vehicle in front. The system may brake too late or unexpectedly.

Stationary vehicles are not detected. The system cannot respond to stationary vehicles.

- ▷ Drive with extreme care.
- ▷ Slow down if necessary.

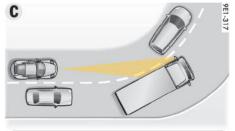


# A - Vehicles changing lanes/cutting in

If a vehicle is changing lanes or cutting in ahead of you in the same lane, the vehicle will only be detected when it has moved completely into your

### B - Vehicles with a small cross-section/ narrow vehicles

Narrow or small vehicles will not be detected or will be detected too late.





# C - Driving into and out of corners

When driving into and out of corners, vehicles will not be detected or will be detected too late, or adaptive cruise control will react to vehicles in adjacent lanes.

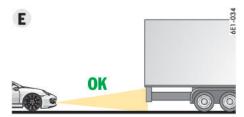
#### D - Stationary vehicles

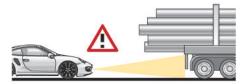
A stationary vehicle that appears suddenly in the detection field of the radar sensor, e.g. after a vehicle in front changes lanes, will not be detected by adaptive cruise control.



Stationary vehicles are not detected by the radar sensor of the adaptive cruise control.

- Drive with extreme care.
- ▷ Slow down if necessary.





#### E - Vehicles with large overhangs

The tail of the vehicle will not be detected correctly on vehicles with large overhangs, e.g. timber lorries.



If there is a vehicle in front with a long overhang, the radar sensor of the adaptive cruise control is not able to detect the end of the vehicle or detects it incorrectly.

- ▷ Drive with extreme care.
- ▷ Slow down if necessary.

# Active Safety - Porsche "Active Safe"

The adaptive cruise control sensor is used for the Porsche "Active Safe" functions.

These include:

# Brake system prefilling

Prefilling of the brake system if the radar sensor detects that the vehicle is coming critically close to a moving obstacle in order to bridge the air gaps and improve braking response.

#### **Brake Assist**

Reduction of the activation threshold of the Brake Assist function if the sensor detects that the vehicle is coming critically close to a moving obstacle.

The activation threshold of the Brake Assist function is reduced in three stages, depending on how critical the danger situation is.

#### Target braking

If the radar sensor detects that the vehicle is coming critically close to a moving obstacle and, at the same time, braking power is inadequate, brake pressure can be increased in accordance with the situation, through to full braking if required.



# 1 Information

All Porsche "Active Safe" functions are active for speeds of more than 20 mph (30 km/h).



#### Latent warning (visual)

If the vehicle is driving too close to the vehicle in front for a long time, to avoid a collision if the vehicle in front brakes, a latent warning appears on the multi-function display to warn the driver.

Stay further back from the vehicle in front if necessary.



#### Prewarning (acoustic and visual)

If the radar sensor detects that the vehicle is coming critically close to and is very likely to collide with a moving obstacle in front, an acoustic and visual prewarning is issued.

This warns the driver and still allows a collision to be prevented if the driver reacts accordingly.



Insufficient distance

Risk of collision with the vehicle in front. ▶ Brake immediately.



# Acute warning (acoustic, visual and tangible)

If the driver does not react to the prewarning by braking, this is quickly followed by an acute warning, which involves a braking jolt as well as the acoustic and visual warning.

A braking jolt is felt in the vehicle as a result of a very quick build-up of brake pressure. This alerts the driver to the traffic situation.

The driver can still prevent a collision by reacting accordingly in this dangerous situation.

# **WARNING**

Insufficient distance

Risk of collision with the vehicle in front. Brake immediately.

#### Information

The situations described below lead to the assumption that the driver is driving carefully and the prewarning and acute warning functions are disabled:

- The driver drives around tight corners.
- The driver is braking.
- If the driver accelerates sharply, this action is interpreted as an active driving request (e.g. indicating the driver's intention to overtake).

# Switching Porsche "Active Safe" warnings on/off

The latent warning and prewarning functions are switched off by default. The acute warning function is active.

Latent warnings and prewarnings can be activated under "Prewarning on" on the multi-function display.

The settings remain stored when the ignition is switched on and off.

▶ PLEASE SEE THE CHAPTER "ACTIVE SAFETY – PORSCHE "ACTIVE SAFE"" on page 167.

# **Car Audio Operation/Tips**

For radio operation see your radio manual which is included with your on-board literature.

### FM reception

A vehicle is not an ideal place to listen to a radio. Because the vehicle moves, reception conditions are constantly changing.

Buildings, terrain, signal distance and noise from other vehicles are all working against good

Some conditions affecting FM may appear to be problems when they are not.

The following characteristics are completely normal for a given reception area, and they do not indicate any problem with the radio itself.



#### Information

Electronic accessories should only be installed by your authorized Porsche dealer.

Equipment which has not been tested and approved by Porsche may impair radio reception.

### Fading and drifting

FM range is limited to about 25 miles (40 km), except for some high power stations.

If a vehicle is moving away from the desired station's transmitter, the signal will tend to fade and/or drift. This condition is more prevalent with FM than AM, and is often accompanied by

Fading and drifting can be minimized to a certain degree by careful attention to fine tuning or selection of a stronger signal.

#### Static and fluttering

When the line-of-sight link between a transmitter and vehicle is blocked by large buildings or mountains, the radio sound may be accompanied with static or fluttering because of the characteristic of FM.

In a similar effect, a fluttering noise is sometimes heard when driving along a tree-lined road. This static and fluttering can be reduced by adjusting the tone control for greater bass response until the disturbance has passed.

# Multipath

Because of the reflecting characteristics of FM, direct and reflected signals may reach the antenna at the same time (multipath) and cancel each other out. As a vehicle moves through these electronic dead spots, the listener may hear a momentary flutter or loss of reception.

# Station swapping

When two FM stations are close to each other, and an electronic dead spot, such as static or multipath area, interrupts the original signal, sometimes the stronger second signal will be selected automatically until the original one returns. This swapping can also occur as you drive away from the selected station and approach another station of a stronger signal.



# Compact disk player

# NOTICE

To avoid damage to compact disk player and disks.

Use only compact disks labeled as shown. having no dirt, damage or warpage.

- ▶ Never attempt to disassemble or oil any part of the player unit. Do not insert any object other than a disk into the slot. Remember there are no user-serviceable parts inside the compact disk player.
- Do not allow the disk to sustain any fingerprints, scrapes or stickers on the surfaces. This may cause poor sound quality. Hold the disk only on the edge or center hole.
- When not in use, take the disk out of the player, put the disk back into its case and store it away from dust, heat, damp and direct sunlight.
  - Leaving the disk on the dashboard in the sun can damage the disk.
- If the disk gets dirty, clean the disk by wiping the surfaces from the center to the outside in a radial direction with a soft cloth. Do not use a conventional record cleaner or anti-static record preservative. Disk cleaners are available in audio stores.

# **Car Telephone and Aftermarket Alarms** Important legal and safety information regarding the use of cellular telephones

Some jurisdictions may prohibit the use of cellular telephones while driving a vehicle. Check the laws and regulations on the use of cellular telephones in the areas where you drive.

#### **A** DANGER

Cell Phone Use

Looking away from the road or turning your attention away from your driving to operate a cell phone will sooner or later cause an accident.

Do not attempt to operate a hand-held cell phone while you are driving. Safety is more important than a phone call.

▶ Learn to operate the hands-free phone, if it is available, before you start driving. Then make use of the hands-free phone at all times.

# It is essential to observe the telephone manufacturer's instructions before operating the telephone.

Any portable telephone or radio transmitter which is used in a Porsche must be properly installed in accordance with the technical requirements of Porsche.

### The transmission power must not exceed 10 W.

The devices must possess a type approval for your vehicle and have an "e" symbol.

If you should require equipment with transmission power values greater than 10 W, please consult your authorized Porsche dealer for this purpose. They are familiar with the technical requirements for installing devices of this kind.

The antennas for all radios and telephones with a transmitting antenna must be externally mounted. The improper installation of radios or telephones or use of a radio or telephone with a transmitting antenna inside the car may cause the warning lights to come on.

Improper installation of such equipment can create a discharged battery or excessive current draw from added equipment.

If aftermarket systems are installed by nondealership technicians or outside the selling dealer, problems may result. Installation of aftermarket equipment is not covered under the New Car Warranty.

▶ Consult your authorized Porsche dealer about the installation of non-Porsche approved equipment.

# Reception quality

The reception quality of your car telephone will change constantly when you are driving. Interference caused by buildings, landscape and weather is unavoidable. It may become particularly difficult to hear when using the hands-free function due to external noise such as engine and wind noise.

#### Automatic car-wash

▶ Unscrew external antennas before using an automatic car-wash.

# Porsche Communication **Management (PCM)**

**WARNING** 

Operation of On-Board Systems

Setting or operating the multi-function display, radio, navigation system, telephone or other equipment when driving could distract you from the traffic. You could lose control of the vehicle.

- Operate the components while driving only if the traffic situation allows you to do so safely.
- Carry out any complicated operating or setting procedures only with the vehicle stationary.
- If it is necessary to operate these components while the vehicle is in motion, use the function keys on the multi-functional steering wheel.
- ▶ Refer to the separate operating instructions before putting the PCM into operation.

When put into operation for the first time, a distance of approx. 3 miles (5 km) must be driven in order for the navigation system to complete the process of fine calibration. The same applies when the tires are changed (e.g. summer/snow tires) or new tires fitted. Full location accuracy is not yet achieved during the fine-calibration process.

If the vehicle has been transported (e.g. ferry, car train), the system may take a few minutes after being switched on before it determines the current location.

Serious tire slip (e.g. spinning wheels on snow) may result in temporarily inaccurate navigation. When the battery has been disconnected, it may take up to 15 minutes before the navigation system is operational once more.

#### Satellite radio

You must have the satellite radio activated before you can put it into operation. You will need a contract with a provider in order to use this radio.

Refer to the separate radio operating instructions before putting into operation.



# **USB/iPod<sup>®</sup> and AUX**

The USB/iPod® and AUX interfaces are located in the glove box.

Please refer to the chapter "EXTERNAL AUDIO SOURCE" in the separate PCM operating instructions.



# Information

Do not leave your iPod®, USB storage device or an external audio source in the vehicle for extended periods of time because extreme ambient conditions (temperature fluctuations, humidity) can occur in the vehicle.



# **Voice Control**

Porsche Communication Management (PCM) can be operated by spoken commands using the voice control system.

▶ Please refer to the chapter "VOICE CONTROL" in the separate PCM operating instructions.

# **Activating voice control**

Press button (√Q).

An acoustic signal sounds and help text for using the five most important voice commands appears on the multi-function display in the instrument panel.

Simply say the command.

For information on switching the help text on and off on the multi-function display:

▶ Please see the chapter "DISPLAYING PCM INFORMATION ON THE MULTI-FUNCTION DISPLAY" on page 119.

# **Porsche Doppelkupplung (PDK)**

Porsche Doppelkupplung (PDK) is a seven-speed transmission with an automatic and a manual selection mode.

In automatic selection mode (selector-lever position **D**), gear changing is automatic. You can change temporarily from automatic to manual mode using the shift buttons on the steering wheel.

In manual selection mode (selector-lever position M), you change gear using the shift buttons or shift paddles on the steering wheel or with the PDK selector lever.

You can change between selector-lever positions **D** and **M** as you wish while driving.



#### Information

Take care not to operate the shift buttons on the steering wheel inadvertently in either automatic or manual mode, thereby triggering undesired gear changes.



# Changing selector-lever position

The selector lever is blocked in the **P** position when the ignition is switched off.

When the ignition is switched on, the selector lever can be moved from position **P** and **N** only when the release button is pressed, and when the brake pedal is pressed.

#### Release button

The release button (arrow) in the selector lever prevents the gear from being changed unintentionally.

The release button must be pressed when shifting to position R or P.

#### Starting

The engine can be started only if the brake pedal is depressed and the selector lever is in position P or N.

# **Driving off**

- Only select the desired position for driving off (D, M or R) when the engine is idling and the brake pedal is pressed.
- Since the vehicle crawls when in gear, do not release the brake until you are ready to drive

#### Driving off on hills

The Drive-Off Assistant assists the driver when driving off on hills. The vehicle is held on the slope for a short time during the change from the brake pedal to the accelerator to facilitate driving off immediately after the brake is released.

▶ Please see the chapter "HOLD FUNCTION: DRIVE-OFF ASSISTANT, STANDSTILL MANAGEMENT" on page 184.

# **Stopping**

- ▶ For a brief stop, e.g. at traffic lights, leave the selector lever in drive position and hold the vehicle with the brake pedal.
- ▷ Do not hold the vehicle on a slope using the accelerator. Use the brake pedal or the electric parking brake instead.
- Before leaving the vehicle, always apply the electric parking brake and move the selector lever to position P.

# **Parking**

- Go easy on the accelerator!
- When parking or maneuvering in a small space, control the speed by careful use of the footbrake.



# Indicator for selector-lever position and engaged gear

When the engine is running, the display shows the selector-lever position and engaged gear.

# If the selector lever is between two positions Effects:

The corresponding selector-lever position in the instrument panel flashes and the warning "Activate brake" or "Engage gear selector **properly**" appears on the multi-function display.

# Action required:

Operate the footbrake and engage the selector lever properly.

If the selector lever is inadvertently moved from P or N into a gear (due to a fault or improper use) without pressing the brake, this gear will also flash on the display and no power transmission will occur.

To drive off, press the brake and move the selector lever from  ${\bf P}$  or  ${\bf N}$  into the required gear again.

# Selector-lever position R or D flashes in the instrument panel

No power transmission occurs.

#### Effects:

- The selector lever was engaged without the footbrake being depressed.
- The selector lever was moved to R above the permissible limit speed.

#### Action required:

- Press the footbrake and engage the required selector-lever position again from P or N. If reverse gear fails:
- Please see the chapter "LIMP-HOME MODE" on page 178.

# Failure of the selector lever display on the instrument panel

Transm. failure Park vehicle safely

The warning "Transm, failure Park vehicle safely" is displayed in red on the multi-function display.

#### Effect:

No selector-lever position is displayed on the instrument panel. Vehicle can be driven only until it comes to a stop.

#### Action required:

▷ It is not possible to continue driving. Stop the vehicle immediately in a suitable place. Have the fault corrected at an authorized Porsche dealer. If the vehicle has to be towed: Please see the chapter "TOWING" on page 278.

# If there is a fault in the transmission:

The warning "Transm. fault Poss. no R gear Drive on poss." or "Drive temperature too high Reduce load" appears on the multi-function display.

- Please see the chapter "LIMP-HOME MODE" on page 178.
- Have the fault corrected immediately at an authorized Porsche dealer.

#### **Selector-lever Positions**

# P - Parking lock

- ▶ Engage parking lock only when the vehicle is stationary.
  - If selector-lever position **P** is flashing in the instrument panel, the parking lock is not engaged. The vehicle can roll away. Shift again from selector-lever position R to P.
- Activate the electric parking brake and then engage the parking lock. If selector-lever position **P** is flashing in the instrument panel, the parking lock is not engaged. The vehicle can roll away. Shift again from selector-lever position R to P.

Vehicles without Porsche Entry & Drive: The ignition key can only be removed in selectorlever position **P**.

#### R – Reverse gear

Select only if the vehicle is stationary and the brake is applied.

### N - Neutral

Selector-lever position N must be selected for towing or in car washes, for example,

Only select the desired position for driving off (D, M or R) when the engine is idling and the brake pedal is pressed.

# **D** – Automatic selection mode

Select position **D** for "normal" driving. The gears are shifted automatically according to the accelerator position and speed.

Depending on the way the vehicle is driven (economical, comfortable or sporty driving style) and on the resistance (e.g. uphill), the gearchanging points are shifted towards higher or lower engine-speed ranges.

The accelerator position, driving speed, engine speed, longitudinal and lateral acceleration and the road profile all have an influence on the gearchanging characteristic.

Unwanted upshifts, e.g. when entering bends, are prevented by swiftly releasing the accelerator

Depending on lateral acceleration, upshifts on bends are not made until the engine-speed limit is

When you brake, and depending on the amount of deceleration, the PDK transmission changes down

For subsequent cornering, the correct gear is engaged when pressure is applied to the brakes before the bend. The bend is taken in the right gear, and when you accelerate out of the bend you do not have to change down.

With a sporty driving style, downshifts are already initiated when the brake pedal is touched lightly. This further enhances a dynamic driving style. The PDK transmission temporarily changes to the sportiest gear-changing map, i.e. to the highest possible gear-changing points, if the accelerator pedal is pressed quickly. The transmission accordingly shifts down immediately by one or two gears (temporary downshift).

The transmission no longer selects 7th gear at very high driving speeds.

However, if necessary, the gear can be selected manually.

Upshifts and downshifts are avoided as far as possible when PSM is active. In the case of high wheel slip when PSM is switched off, upshifts are prevented until slip is no longer detected.

# **Driving in coasting mode**

Through attentive driving, fuel can be saved in coasting mode. The vehicle rolls with the engine disengaged and at idle speed without engine braking effect.

#### Preconditions for automatic coasting mode

- Driving in selector lever position **D**
- Coasting mode is switched on. Indicator light on the button (A) is off.
- Sport and Sport Plus modes are switched off
- PSM is active
- Cruise control is not active
- Engine, transmission and battery are at operating temperature
- Calm/economic driving style
- Slight uphill or slight downhill gradients
- ▷ Slowly take your foot off the accelerator.

The engine is disengaged and runs at idle speed. The vehicle rolls with no engine braking effect. Coasting mode is recognizable by the idle speed indicated on the tachometer.



#### Information

In the case of a sporty driving or when swiftly releasing the accelerator pedal, coasting mode is suppressed to allow targeted use of the engine braking effect. On more pronounced uphill gradients, "coasting" is also prevented as the coasting phases are very short due to the gradient and no significant fuel savings can be achieved. On more pronounced downhill gradients, coasting is suppressed because here, the vehicle does not slow down, despite the engine overrun torque and no fuel is consumed in this driving situation due to utilization of the overrun shut-off.

### Ending coasting mode/utilizing engine braking effect

▶ Press the accelerator or brake pedal

Operate a shift paddle or a shift button or Shift gear using the selector lever.

#### Initiating coasting mode manually

Driving in selector lever position **D** or driving in selector lever position M

When coasting mode is suppressed, e.g. in the case of sporty driving, sudden release of the accelerator pedal or excessively low engine temperature, coasting mode can be initiated manually.

▶ Take your foot off the accelerator pedal and shift past the highest possible gear with the shift paddle, one of the shift buttons, or with the selector lever.

# Switching coasting mode on and off using the Auto Start Stop button

#### Switching off

Press button (A). The indicator light on the button lights up. Coasting mode is switched off and automatic stopping of the engine is suppressed.

#### Switching on

Press button (A). The indicator light on the button goes out. Coasting mode is switched on and the engine is automatically stopped when the vehicle stops.

# "Sport" mode activated

The PDK transmission switches to a sporty gearchanging map and shortens the shifting times. A sporty driving style is recognized more quickly and the gear-changing speeds are adapted to driving performance.

Braking downshifts are initiated earlier. Downshifts occur for small decelerations, even at higher revs.

#### "Sport Plus" mode activated

In "Sport Plus" mode, the PDK transmission changes to a shift program designed for driving on race circuits. 7th gear is not selected. The gear-changing performance is enhanced significantly again compared with "Sport" mode.

Please see the chapter ""SPORT" AND "SPORT PLUS" MODE" on page 188.

# **Driving off with Launch Control**

Launch Control allows you to achieve maximum acceleration from standstill.



**Endangering Other Road** Users

Launch Control is designed to be used in a controlled environment on closed circuit driving courses where no vehicle cross traffic or pedestrian traffic is present.

- Use Launch Control only if conditions permit it to be applied in a safe manner.
- Do not use Launch Control if there is a possibility it could endanger other persons. Such a possibility exists if you cannot see that you have a clear road with no possibility of cross traffic in your intended direction of driving.



# Information

Stress on components increases dramatically when starting with maximum acceleration in comparison with normal driving off.

#### Preconditions:

- Launch Control should only be used when the engine has reached operating temperature.
- "Sport Plus" mode must be switched on (indicator light on the button comes on and SPORT PLUS appears on the digital speedometer or on the steering wheel).
- 1. Press the brake with your left foot.
- 2. Quickly press the accelerator down fully (kickdown activated) and hold it. The engine speed will level off at around 5,500 rpm.

"Launch Control activated" is displayed on the multi-function display. Depending on equipment, the "LAUNCH CONTROL" logo appears on the steering

3. Release the brake within a few seconds. Remaining stationary for a long time with LAUNCH CONTROL can lead to overloading of the transmission.

To protect the transmission, the engine power is then reduced and the LAUNCH CONTROL process is cancelled.

In order to drive off, the accelerator must first be fully released.

# Shifting gears on the steering wheel

With the shift buttons on the steering wheel, you can change temporarily from automatic selection mode **D** to manual mode **M**.

For example:

- Shifting down before bends and on entering built-up areas.
- Shifting down on downward slopes (engine braking).
- Shifting down for brief spurts of acceleration.

The manual selection mode remains engaged:

- For cornering (depending on the lateral acceleration) and overrunning.
- When the vehicle is stationary (e.g. at a junction).

The system leaves manual selection mode:

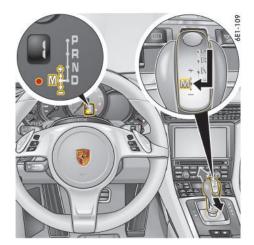
- automatically after around 6 seconds (unless cornering or overrunning),
- after driving off.

#### Kickdown

The kickdown function is active in selector-lever positions **D** and **M**.

For optimum acceleration, e.g. when overtaking, press the accelerator pedal beyond the full-throttle point (kickdown).

The transmission shifts down depending on the speed of travel and engine speed. Upshifts occur at the highest possible engine speeds.



PDK selector lever

# M - Manual selection mode

The currently engaged gear is retained when you change from **D** to **M**.

If you change from **M** to **D**, the gear-changing map suitable for your current driving style is selected and the appropriate gear is selected.

The selector lever and the two shift buttons in the upper steering wheel spokes or the shift paddles behind these spokes permit comfortable and safe selection of the seven forward gears.



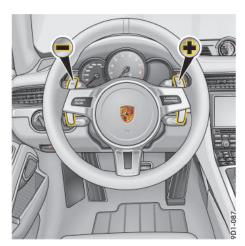
Steering wheel with shift buttons

#### Shifting up using the selector lever or the shift buttons

▶ Press the PDK selector lever or shift button on the steering wheel forward.

# Shifting down with selector lever or shift **buttons**

▶ Pull the PDK selector lever or shift button on the steering wheel back.



Steering wheel with shift paddles

# Shifting up with selector lever or right "+" shift paddle

▶ Press the PDK selector lever forward or pull the right shift paddle on the steering wheel back.

# Shifting down with selector lever or left "-" shift paddle

Pull the PDK selector lever or left shift paddle on the steering wheel back.

# Shift to N - Neutral using the shift paddles

▶ Pull both shift paddles simultaneously and release them again immediately. Transmission in N - Neutral.

The vehicle rolls with the engine disengaged and at idle speed without engine braking effect. The number in the gear indicator goes out and the selector lever position flashes.

Power transmission can be re-established by pulling one of the shift paddles or by actuating the selector lever.

At low speeds approaching standstill, the brake must be actuated in order to establish power transmission.

# Fast gear shifting by repeated operation of the selector lever, shift buttons or shift paddles.

You can shift up or down by the corresponding number of gears by quickly operating the selector lever, the shift buttons or the shift paddles several times in succession.

Gear changes that would exceed the upper or lower engine-speed limit are not executed by the

There is no automatic upshift at the upper enginespeed limit in selector-lever position M. Upshift suppression can be cancelled by kickdown operation. If, for example, the engine-speed limit is reached during overtaking and an automatic upshift does not occur, the transmission shifts up in this case as a result of kickdown operation.

Select an appropriately low gear on upward and downward slopes.

This will ensure optimum use of engine power and engine braking.



# **Upshift prompt for fuel-economy**optimized driving

The consumption-oriented upshift indicator **A** in the tachometer at the right beside the digital speed display helps you to develop a fuel-saving driving style.

The upshift indicator lights up – prompting you to shift up to the next-higher gear - depending on the selected gear, engine speed and accelerator pedal position.

 Change to the next-higher gear when the upshift indicator lights up.

# **Limp-home mode**

Failure of the selector display in the tachometer



Transm. failure Park vehicle safely

The warning "Transm. failure Park vehicle safely" appears on the multi-function display.

- Effect:
  - No selector-lever position is displayed in the tachometer.
  - Vehicle can be driven only until it comes to a stop.
  - Action required:

It is not possible to continue driving. Stop the vehicle immediately in a suitable place. Have the fault corrected at an authorized Porsche dealer. If the vehicle has to be towed: Please see the chapter "TOWING" on page 278.

#### If there is a fault in the transmission

- Depending on priority, either the "Transm. failure Park vehicle safely", "Transm. fault Poss. no R gear Drive on poss." warning or the warning "Drive temperature too high Reduce load" will appear on the multi-function display.



# Transm. fault Poss. no R gear Drive on poss.

- Effects:
  - Restricted gearshift comfort, reverse gear may not function. Action required:
  - Have the fault corrected immediately at an authorized Porsche dealer.



# Transm. failure Park vehicle safely

- Effect:
  - Vehicle can be driven only until it comes to a stop.
  - Action required:
  - It is not possible to continue driving. Stop the vehicle immediately in a suitable place. Have the fault corrected at an authorized Porsche dealer. If the vehicle has to be towed:
  - Please see the chapter "TOWING" on page 278.

# Warning "Drive temperature too high Reduce load"

- Effects:
  - "Warning jerks" can be felt when driving off and the engine power may be restricted. Action required:
  - Do not hold the vehicle with the accelerator on a hill, for example. Hold the vehicle with the brake. Reduce engine load. Stop the vehicle in a suitable place if possible. Allow the engine to run in selector-lever position P or N until the warning disappears.

# **Transmission and Chassis Control Systems**

Your Porsche sports car features a complex integrated system made up of all control systems acting in power transmission and in the chassis. All control systems are networked with the aim of combining the best possible driving performance with maximum safety. The following systems are involved, depending on equipment:

System/designation	Scope
<b>PTM</b> Porsche Traction Management	<ul> <li>Active allwheel drive with electronically regulated map-controlled multi-plate clutch</li> </ul>
PSM Porsche Stability Management	<ul> <li>Driving stability control</li> <li>Anti-lock brake system (ABS)</li> <li>Brake system prefilling</li> <li>Brake booster (Hydraulic Brake Assist)</li> <li>Automatic brake differential (ABD)</li> <li>Anti-slip control (ASR)</li> <li>Engine drag torque control (MSR)</li> <li>Steering torque recommendation</li> <li>HOLD function: Standstill management</li> </ul>
PASM Porsche Active Suspension Management	Shock absorber system with adaptive, continuous shock absorber control
PDCC Porsche Dynamic Chassis Control	Active chassis control system to stabilize roll tendency of vehicle body when driving
PTV Plus Porsche Torque Vectoring Plus	<ul> <li>Laterally dynamic braking intervention for more agile cornering</li> <li>Fully-variable electronically controlled rear differential lock</li> </ul>

# **WARNING**

**Driver Responsibility** 

Despite the advantages of transmission and chassis control systems, it is still the driver's responsibility to adapt his driving style and maneuvers in line with road and weather conditions, as well as the traffic situation.

The increased safety that is provided should not induce you to take greater risks with your safety. The limits set by the physics of driving cannot be overcome.

These systems cannot reduce the risk of accidents due to inappropriate speed.

Adapt your driving style, maneuvers and speed to the road and weather conditions, as well as the traffic situation.

# **Porsche Traction Management** (PTM)

Porsche Traction Management is an active allwheel control system designed to influence longitudinal and lateral dynamics. It is closely linked with the Porsche Stability Management (PSM) system.

The permanently driven rear axle enhances the vehicle's sporty features. Drive power is distributed fully variably to the front axle, depending on the driving situation.

In conjunction with PSM, the PTM system ensures perfect distribution of power among all four wheels in every driving situation. This improves traction and driving stability and ensures the same high level of agility and dynamic response.

# **▲** WARNING

Loss of control over the vehicle

In spite of the advantages of PTM and four-wheel drive, it is still the driver's responsibility to adapt his driving style and maneuvers in line with road and weather conditions, as well as the traffic situation.

The increased safety that is provided should not induce you to take greater risks with your safety. The limits set by the physics of driving cannot be overcome, even with PTM or four-wheel drive. Risk of accidents due to inappropriate speed cannot be reduced by PTM or four-wheel drive.

#### **Advantages of PTM**

- Clearly perceptible improvement in traction, driving stability and steering ability of the vehicle.
- Vehicle is more manageable when driven at its performance limits.
- Improved straight-ahead tracking and greater
- More sporty vehicle setup while making full use of all the advantages of four-wheel drive.
- ASR, ABD and PTV Plus further enhance traction for all wheels.

For information on ASR and ABD:

Please see the chapter "PORSCHE STABILITY MANAGEMENT (PSM)" on page 181.

For information on current torque distribution between front and rear wheels in the multi-function display:

▶ Please see the chapter "ALLWHEEL MENU" on page 114.

# **Porsche Stability Management** (PSM)

PSM is an active control system for stabilization of the vehicle during extreme driving maneuvers. PSM makes use of both the automatic brake differential (ABD) and anti-slip regulation (ASR) systems, as well as the functions of the anti-lock brake system (ABS) and engine drag torque control system (MSR).

# **WARNING**

Loss of control over the vehicle

In spite of the advantages of PSM, it is still the driver's responsibility to adapt his driving style and maneuvers in line with road and weather conditions, as well as the traffic situation.

The increased safety that is provided should not induce you to take greater risks with your safety. The limits set by the physics of driving cannot be overcome, even with PSM.

Risk of accidents due to inappropriate speed cannot be reduced by PSM.

#### **Advantages of PSM**

- Best possible traction and lane-holding ability in all driving situations – even on road surfaces with varying friction.
- The system compensates for undesired vehicle reactions (Ferraria effect) when the driver releases the accelerator pedal or brakes on bends. This compensation functions up to the maximum lateral acceleration.
- PSM actively helps to stabilize the vehicle if necessary during dynamic driving maneuvers (e.g. rapid steering movements, during lane changes, or on alternating bends).

- Improved braking stability on bends and on different or varying road surfaces.
- Improved brake function and shorter stopping distance in the event of emergency braking.

#### Readiness for operation

PSM is switched on automatically every time you start the engine.

#### **Function**

Sensors at the wheels, brakes, steering system and engine continuously measure:

- Speed
- Direction of travel (steering angle)
- Lateral acceleration
- Axial acceleration
- Rate of turn about the vertical axis

PSM uses these values to determine the direction of travel desired by the driver.

PSM intervenes and corrects the course if the actual direction of motion deviates from the desired course (steering-wheel position): It brakes individual wheels as required. If necessary, PSM also influences the engine power or the gear-changing characteristic of Porsche Doppelkupplung (PDK) in order to stabilize the vehicle.

The events below inform the driver of PSM control operations and warn him to adapt his driving style to the road conditions:

- PSM warning light on the instrument panel flashes.
- Hydraulic noises can be heard.
- The vehicle decelerates and steering-wheel forces are altered as PSM controls the brakes.
- Reduced engine power.
- The brake pedal pulsates and its position is changed during braking. In order to achieve full vehicle deceleration, foot pressure must be increased after the brake pedal has begun vibrating.

# **Examples of PSM control operations**

- If the "front wheels of the vehicle drift" on a bend, the engine power is reduced and the rear wheel on the inside of the bend is braked if necessary.
- If the rear of the vehicle swings out on a bend, the front wheel on the outside of the bend is braked
- Brake system prefilling:
  - The brake system is prepared for possible subsequent emergency braking if the accelerator pedal is released suddenly and quickly. The brake system is prefilled and the brake pads are already applied gently to the brake disks.
- Brake booster (Hydraulic Brake Assist): In the event of an emergency braking operation where the pedal force is insufficient, a brake booster provides the braking pressure necessary for maximum deceleration at all 4 wheels.

#### Combined operation of PSM and PTV Plus

In order to ensure optimum stabilization of the vehicle, the center differential lock is influenced when PSM interventions occur on vehicles with PTV Plus.

#### Combined operation of PSM and PTM

In order to ensure optimum stabilization of the vehicle, torque distribution between the front and rear wheels is adapted and the differential lock is influenced when PSM interventions occur on vehicles with PTV Plus.

In the event of a PTM fault, PSM cannot be switched off.

If PSM is switched off, it is switched on again automatically.

#### Automatic brake differential (ABD)

The ABD system controls the front and rear axles separately. If one wheel of an axle starts to spin, it is braked so that the other wheel on the same axle can be driven.

ABD recognizes different driving states, and it features control strategies adapted to these states. In situations in which little propulsive power is required, such as when the vehicle moves off on a level gravel surface, traction control already becomes active at low engine speeds. If a large amount of propulsive power is required, e.g. when driving off on an uphill slope or for rapid acceleration, the ABD system is adapted accordingly.

# Anti-slip control (ASR)

The anti-slip control system prevents the wheels from spinning by adjusting the engine power, thereby ensuring good lane-holding ability and stable handling.

#### Engine drag torque control (MSR)

In conditions of excessive slip, the engine drag torque control system prevents all driven wheels from locking up when the vehicle is overrunning. This is also the case for downshifts on a slippery road.

#### Steering torque pulse

The steering torque pulse provides the driver with steering assistance when braking on road surfaces with differing friction values. Additional steering forces also assist the driver during counter steering.



## Switching off PSM

▶ Press button \$\frac{3}{2}\$ for at least 1 second. PSM is switched off after a short delay. The indicator light on the button and the PSM OFF warning light on the instrument panel light up.

The warning "**PSM off**" appears on the multi-function display in the instrument panel.

When you brake in the ABS control range, the vehicle is stabilized even when PSM is switched off.

**One-sided spinning** of the wheels is prevented, even with PSM switched off.

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# **WARNING**

No PSM assistance

When PSM is switched off, PSM support is no longer provided in critical driving situations outside the ABS control range.

PSM should always be switched on during "normal" driving.

However, it may be a good idea to switch off PSM temporarily in exceptional situations:

- On a loose surface and in deep snow.
- When "rocking the vehicle free".



#### Information

The vehicle retains its enhanced braking readiness through prefilling of the brake system even when PSM is switched off.

When PSM is switched off, wheel-specific brake interventions and the anti-slip control system (ASR) are also switched off.

The automatic brake differential (ABD) remains on.

# Switching PSM back on

Press button \( \bar{z} \).

PSM is active immediately.

The indicator light on the button and the PSM OFF warning light on the instrument panel go out.

The message "PSM on" appears on the multi-function display in the instrument panel.

## "Sport Plus" mode

A sportier setup is obtained when "Sport Plus" mode is switched on.

PSM interventions occur later than in Normal mode. The vehicle can be maneuvered with greater agility at its performance limits, without having to dispense with the assistance of PSM in emergency situations. This helps to achieve optimal lap times, particularly on race circuits and on a dry road surface.



#### 🥦 PSM warning light

- The PSM warning light on the instrument panel lights up for a lamp check when the ignition is switched on.
- The light indicates a control operation, even when PSM is switched off, e.g. brake control in the event of one-sided wheel spin.
- The light in conjunction with the multi-function display - indicates a fault. The warning message "PSM failure Consult

a workshop Adapted driving permitted" appears on the multi-function display in the instrument panel.

For information on warning messages on the multi-function display:

- Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.
- ▷ Adapt your driving style according to the changed conditions.
- ▶ Contact an authorized Porsche dealer.

For information on towing:

▶ Please see the chapter "TOWING" on page 278.

# **HOLD function: Drive-Off Assistant, Standstill Management**

The HOLD function, as an assistance function, assists the driver when stopping and driving off on upward slopes.

The vehicle is automatically prevented from rolling back away from the desired direction of travel. When the HOLD function is active, the indicator light HOLD on the instrument panel comes on. The vehicle is stopped and prevented from rolling back away from the desired direction of travel even without pressing the brake.



#### Information

The HOLD function is not available if the PDK selector lever is in position P and N.

If the PDK selector lever is moved while the HOLD function is active, the HOLD function is deactivated.

If the driver's safety belt is unfastened and the driver's door is opened while the HOLD function is active, the electric parking brake is activated automatically.

For information on the electric parking brake:

Please see the chapter "ELECTRIC PARKING BRAKE" on page 151.

# **WARNING**

#### Limits of HOLD Function

The limits set by the physics of driving cannot be overcome, even with the HOLD function. Responsibility for driving off on upward slopes is still the driver's, despite the HOLD function. Assistance by the HOLD function is not always guaranteed when stopping and driving off on a slippery surface (e.g. on icy or loose surfaces). In this case, the vehicle can slip.

▷ Always adjust your driving style to the driving conditions and vehicle load. Use the footbrake if necessary.

# **CAUTION**

**Drive-Off Assistant Not** Working

If the Drive-Off Assistant is not functioning, the driver cannot be assisted when driving off on hills. ▶ Hold the vehicle with the footbrake.

#### **A** CAUTION

Vehicle Roll-back

If the vehicle comes to a standstill on a steep uphill gradient without operation of the footbrake by the driver, this may result in a certain roll-back before the vehicle is held by the HOLD function. In this situation, the roll-back can be reduced by pressing the footbrake.

Assist holding of the vehicle by increasing the braking force with the footbrake.

# 1

#### Information

When the HOLD function is active, the brake pedal may feel different and you may hear hydraulic noises.

This behavior is normal for the system. It is not a fault.

# ABS Brake System (Anti-lock Brake System)

# **WARNING**

Loss of control over the vehicle

In spite of the advantages of ABS, it is still the driver's responsibility to adapt his driving style and maneuvers in line with road and weather conditions, as well as the traffic situation.

The increased safety that is provided should not induce you to take greater risks with your safety. The limits set by the physics of driving cannot be overcome, even with ABS.

Risk of accidents due to inappropriate speed cannot be reduced by ABS.

#### ABS helps provide:

- **Full steering control** The vehicle remains steerable
- Good driving stability No skidding due to locked wheels
- Optimum braking distance Shorter stopping distance in most cases
- Prevention of wheel locking No flat spots on the tires

#### **Function**

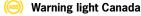
The decisive advantage of ABS lies in the driving stability and maneuverability of the vehicle in hazardous situations.

ABS prevents locking of the wheels during full braking, on almost all road surfaces, until just before the vehicle stops.

ABS begins to control the braking process as soon as a wheel shows a tendency to lock. This controlled braking process is comparable with extremely rapid cadence braking. The pulsating brake pedal and a "juddering noise" warn the driver to adapt his driving speed to the road conditions.

If full braking is necessary, press the brake pedal fully during the whole braking operation, even though the pedal is pulsating. Do not reduce brake pressure.

## ABS Warning light USA



If the ABS warning light lights up on the instrument panel while the engine is running, the ABS has switched off because of a fault.

The warning message "ABS/PSM failure Adapted driving permitted" appears on the multi-function display in the instrument panel. For information on warning messages on the multifunction display:

Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.

In this case, the braking system will operate without lock prevention, as in vehicles without ABS.

▷ Adapt your driving style to the changed braking behavior.

The ABS must be checked by your authorized Porsche dealer in order to prevent the occurrence of further faults with unpredictable consequences.

Please contact an authorized Porsche dealer. The ABS control unit is adjusted for the approved tire dimensions.

The use of tires with non-approved dimensions can lead to different wheel speeds, causing ABS to switch off.

# **Porsche Active Suspension Management (PASM)**

The PASM system actively adjusts the shock absorbers. The adjustable damper system selects the appropriate damping level for each wheel according to the driving situation and driving conditions. Driving safety, agility and comfort are

Two different chassis setups can be selected at the push of a button:

- "Chassis Normal"
- "Chassis Sport"

In Normal mode the vehicle is in a sporty and comfortable setup.

Sport mode offers very sporty shock absorber tuning (e.g. for driving on the race circuit). In addition to manual mode selection, PASM also adjusts shock absorber tuning for either sporty or comfort driving, depending on the driving situation.



# **Selecting the PASM mode**

- 1. Switch on ignition.
- 2. Press button (repeatedly).

On the button:

- No indicator light comes on when "Chassis Normal selected" is selected (default
- An indicator light comes on when "Chassis Sport selected" is selected.

In addition, the selected chassis setup is shown on the multi-function display in the instrument panel for approx. 4 seconds.



#### Information

The last selected chassis setup is stored in the memory after the ignition is switched off.

## **Warning message**

The system automatically detects PASM faults and displays them on the multi-function display in the instrument panel.

For information on warning messages on the multi-function display:

- ▶ Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.
- Adapt your driving style according to the changed conditions.
- Contact an authorized Porsche dealer in order to correct the fault.

# **Porsche Torque Vectoring** (PTV Plus)

## **Functional Description**

**WARNING** 

Loss of control over the vehicle

Despite the advantages of PTV, it is still the driver's responsibility to adapt his/her driving style and maneuvers in line with road and weather conditions, as well as the traffic situation.

The increased safety that is provided should not induce you to take greater risks with your safety. The limits set by the physics of driving cannot be overcome, even with PTV.

Risk of accidents due to inappropriate speed cannot be reduced by PTV.

PTV Plus consists of a control system that performs braking interventions based on driving dynamics to achieve variable drive torque distribution on the rear axle and of an electronically controlled rear differential lock. PTV Plus improves steering response and precision through gentle braking interventions on the inside rear wheel. This braking action cannot be felt by the driver. The vehicle follows the steering angle of the front wheels more precisely. Understeer is largely prevented in the limit range. This increases the lateral acceleration potential and higher cornering speeds are possible. The electronically controlled rear differential lock continuously monitors the driving condition of the vehicle and distributes the drive torque to the rear axle as required.

This has the following advantages:

- Improved traction.
- Reduced load change responses when cornering at speed.
- Improved driving stability at higher speeds. PTV Plus changes to a more dynamic map when "Sport Plus" is switched on.

# **Porsche Dynamic Chassis Control** (PDCC)

**WARNING** 

Loss of control over the vehicle

In spite of the advantages of PDCC, it is still the driver's responsibility to adapt his driving style and maneuvers in line with road and weather conditions, as well as the traffic situation.

The increased safety that is provided should not induce you to take greater risks with your safety. The limits set by the physics of driving cannot be overcome, even with PDCC.

Risk of accidents due to inappropriate speed cannot be reduced by PDCC and PTV Plus.

Porsche Dynamic Chassis Control (PDCC) is a system for roll stabilization of the vehicle body when driving.

Driving comfort and driving safety are improved by active intervention of the anti-roll bars on the front and rear axles. Vehicle balance and agility are optimized.

No separate controls are available for the PDCC system.

When you select a chassis setup in Porsche Active Suspension Management (PASM) the PDCC system automatically activates the corresponding on-road driving program.

For information on selecting a chassis setup:

Please see the chapter "PORSCHE ACTIVE SUSPENSION MANAGEMENT (PASM)" on page 185.

#### **Warning message**

The warning message "Fault of the PDCC stabiliser" appears on the multi-function display in the instrument panel if there is a system fault. For information on warning messages on the multi-function display:

- ▶ Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.
- Adapt your driving style according to the changed conditions.
- Contact an authorized Porsche dealer.

## **Checking hydraulic fluid**

The hydraulic fluid is checked and changed regularly as part of servicing.

For information on maintenance:

▶ Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.

# **Dynamic Engine Mounting (PADM)** On vehicles with Sport Chrono package

Dynamic Engine Mounting with variable damping is a system designed to enhance both driving dynamics and driving comfort. Depending on the driving situation, the ideal mounting rigidity and damping is automatically set in the range between an rigid engine-to-body connection (increase in driving dynamics) and decoupling of the engine from the body (increase in driving comfort).

# "Sport" mode

When "Sport" mode is switched on, a more rigid engine-to-body connection is achieved for a sporty driving style.

# "Sport Plus" mode

When "Sport Plus" mode is switched on, an optimal engine-to-body connection is achieved for driving on race circuits.

#### Warning message

Dynamic engine mounting faults are indicated by a warning message on the multi-function display.

Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.

# "Sport" and "Sport Plus" mode

The selectable chassis settings mean that the vehicle can offer various modes for a sportier overall setup.

The "Sport" mode pushes the control systems more in the direction of greater emotionality and performance during every day driving.

In "Sport Plus" mode, maximum performance is set for race-circuit-like driving:

- In "Sport Plus" mode: PASM (Porsche Active Suspension Management) is automatically changed to "Chassis Normal" or "Chassis Sport" mode.
- In "Sport Plus" mode: Like PASM, PDCC is switched to the corresponding "Sport" mode, whereby the rolling movements of the vehicle are reduced further, depending on the selected mode.
- The PDK transmission switches to a sporty gear-changing map and shortens the gear shifting times when Sport mode is activated. Gear changes take place faster.
- The electronic accelerator pedal reacts sooner, and the engine is more responsive to throttle inputs. When Sport mode is switched on and the vehicle is traveling at a speed of less than 40 km/h (25 mph), this function is activated only after the driver has floored the accelerator pedal or released it briefly.
- The rpm limiter characteristic is "harder". In other words: the engine is immediately throttled when the performance limits are reached (only in manual selection mode on vehicles with PDK).

- PSM (Porsche Stability Management) control is more sporty in "Sport Plus" mode. PSM interventions are later than in Normal mode. The driver can maneuver the vehicle with greater agility at its performance limits, without having to dispense with the assistance of PSM in emergency situations. This helps to achieve optimal lap times, particularly on race circuits with a dry road surface.
- PADM changes to more sporty maps for the dynamic engine mountings to achieve a stiffer engine-to-body connection.
  - In "Sport" for a sporty driving style, in "Sport Plus" mode for race-circuit-like driving.
  - PTV Plus changes to a more dynamic map when "Sport Plus" is switched on.
- The dynamic cornering light reacts more spontaneously to steering angle changes.
- The sports exhaust system is be switched to a sound-optimized mode, but can be switched off separately via the DD button. The Auto Start Stop function and coasting mode are deactivated.
- ▶ Please read the relevant chapters.

#### Overboost function

# On vehicles with Sport Chrono package

When "Sport" or "Sport Plus" mode is switched on and the accelerator is fully pressed, the boost pressure is temporarily increased by approx. 2 psi (0.15 bar) in the medium engine-speed range and the maximum torque increases.

For information on the torque display:

Please see the chapter "PERFORMANCE MENU" on page 116.



# Switching "Sport" mode on and off

▶ Press button SPORT.

When "Sport" mode is switched on, the indicator light on the button lights up. The word "SPORT" appears on the digital speedometer or on the steering wheel, depending on vehicle equipment.

A sporty gear-changing map is enabled and the gear shifting times are shorter for the PDK transmission.

A sporty driving style is recognized more quickly and the gear-changing speeds are adapted to driving performance.

Braking downshifts are initiated earlier. Downshifts occur for small decelerations, even at higher revs.



# Switching "Sport Plus" mode on and off

Press button PLUS .
When "Sport Plus" mode is switched on, the indicator light on the button lights up. The words "SPORT PLUS" appear on the digital speedometer or on the steering wheel, depending on vehicle equipment.

In "Sport Plus" mode, the PDK transmission changes to a shift program designed for driving on race circuits. 7th gear is not selected.

# "Sport Plus" and "PASM Chassis Sport" modes

Switching "Sport Plus" mode on and off simultaneously activates and deactivates the "PASM Sport" mode.

Switching "Sport" mode has no influence on the PASM mode.

The PASM mode can be switched manually if you want to use the characteristics of "Sport" or "Sport Plus" mode, but prefer a more comfortable chassis setup.

- Press button ₱ (repeatedly). The indicator light for the selected chassis setup on the button lights up.
- Please see the chapter "PORSCHE ACTIVE SUSPENSION MANAGEMENT (PASM)" on page 185.

#### Warning messages

The warning message "Sport mode not available" appears on the multi-function display in the instrument panel in the event of a fault. For information on warning messages on the multi-function display:

▶ Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.



#### Information

After the ignition is switched off, Sport mode is automatically reset to Normal mode.

- ▶ Please see the chapter "PORSCHE ACTIVE SUSPENSION MANAGEMENT (PASM)" on page 185.
- Please see the chapter "PORSCHE DYNAMIC CHASSIS CONTROL (PDCC)" on page 187.

# **Extending Front and Rear Spoilers**

The extending spoilers improve driving stability at high speeds.

#### **NOTICE**

Spoilers extended manually or as a result of selecting Sport Plus mode do not retract when the vehicle stops.

Please remember, for example when parking or in multi-storey car parks, that the ground clearance is limited.

#### **Automatic mode**

Depending on the vehicle speed and the position of the sun roof, the spoilers extend automatically above approx. 75 mph (120 km/h) and retract again below approx. 50 mph (80 km/h).

If the automatic control system fails, the warning message "Spoiler loss Reduce speed" appears on the multi-function display.

▶ Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.

# **WARNING**

Failure of the extending spoilers

Display of the warning message "Spoiler loss Reduce speed" indicates failure of the extending spoilers. Driving stability will be adversely affected, for example through increased rear axle lift at higher speeds.

- ▷ Adapt your driving style and speed to the changed driving behavior.
- Have the fault corrected at an authorized Porsche dealer.



#### Manual mode

When the ignition is on, the spoilers can be extended and retracted manually using the button in the center console.

When the spoilers are in manual mode or extended as a result of selecting Sport Plus mode, the indicator light on the button lights up.



# 1 Information

Please note the additional information on the multifunction display.

# Moving manually at 0-9 mph (0-15 km/h):

▶ Press and hold button to extend and retract the spoilers.

The indicator light on the button flashes. The indicator light comes on (extended) or goes out (retracted) when the end position is reached.

# Moving manually above 9 mph (15 km/h):

- ▶ Press button ♣ briefly to extend the spoilers.
  - The indicator light on the button comes on and stays on.
- Press button briefly to retract the spoilers.
  - The indicator light goes out. The spoilers enter automatic mode.

# **Coupling with Sport Plus Mode**

In Sport Plus mode, the spoilers are extended to their end position at speeds above 15 km/h (9 mph).

The indicator light on the button comes on. The spoilers are not retracted automatically.

# Moving manually at 0-9 mph (0-15 km/h):

Press and hold button to extend and retract the spoilers. The indicator light on the button flashes. The indicator light comes on (extended) or goes out (retracted) when the end position is reached.

#### Moving manually above 9 mph (15 km/h):

- ▶ Press button briefly to extend the spoilers.
  - The indicator light on the button comes on and stays on.
- Press button briefly to retract the spoilers.

The indicator light goes out. The spoilers enter automatic mode.

# **Rear Axle Steering**

Rear axle steering increases maneuverability and agility with greater vehicle stability and reduces the turning circle of the vehicle by approx. 23.6 in. (0.6 m) compared to a vehicle without rear axle steering.

The following techniques are used, depending on the speed:

- Up to approx. 30 mph (50 km/h): "opposite-direction steering motion" for greater agility (virtual shortening of wheelbase).
- Above approx. 50 mph (80 km/h): "same-direction steering motion" for greater stability (virtual extension of wheelbase).

# **Storage, Luggage Compartment and Roof Transport System**

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# **Storage**



Unsecured or incorrectly positioned objects or loads

An unsecured or incorrectly positioned load can slip out of place or endanger the vehicle occupants as a result of braking, direction changes or in accidents.

- Do not transport items of luggage or objects unsecured in the passenger compartment.
- Do not transport any heavy objects in open oddments trays.
- Always keep the covers of the oddments trays closed while driving.
- Do not exceed the maximum gross weight and the axle load. This information can be found under

"Technical data" in this Owner's Manual: Please see the chapter "WEIGHTS" on page 288.

Adapt the tire pressure to the load. If you change the tire pressure, you must also update the setting for Tire Pressure Monitoring.

Information on tire pressures for partially and fully loaded vehicles can be found under "Technical data" in this Owner's Manual: Please see the chapter "TIRE PRESSURE FOR COLD TIRES (68 °F/ 20 °C)" on page 287.

# **Storage options**

There are various storage options available, depending on the vehicle equipment:

- Drinks holder/cupholder,
- in the doors,
- in the door sill next to the passenger's seat,
- in the center console, front and rear,
- storage net in the passenger's footwell,

#### **NOTICE**

Heavy and bulky objects can damage the storage net.

- ▷ Do not place any heavy and bulky objects in the storage net.
- behind the rear seat backrests (only with the convertible top closed on the Cabriolet; when opening the convertible top there should not be any objects in the area behind the rear seats - risk of damage),
- oddments tray between the seats,
- glove box with pen holder,
- clothes hooks on back of front seat backrests (depending on vehicle equipment) and on the
- enlarged storage space by folding the rear seat backrests forward.



#### **Glove box**

**WARNING** 

Open Glove Compartment

An open glove box may cause injury during an accident.

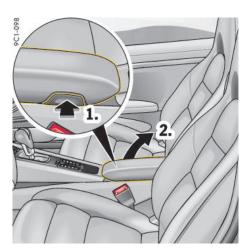
▶ Keep the glove box closed while driving.

On the inside of the glove box lid, there is a clip for holding a pen.

#### Opening

▶ Pull the latch handle (arrow) and open the lid.

▷ Always lock the latch handle with the emergency key to secure the contents from unauthorized access.



# Oddments tray in the armrest between the front seats

# **Opening**

▶ Press the button (arrow) on the passenger's side of the armrest. The lid pops up automatically.

# **Drinks Holder/Cupholder**

You can place drinks in the cupholder.

# **WARNING**

Hot Drink Spills

Hot drinks can cause scalding, if spilled, causing potential loss of vehicle control.

- Only use containers that fit.
- Never put overfull containers in the cupholder.
- Do not use hot drinks.

# NOTICE

Risk of damage due to drinks being spilt.

- ▷ Only use containers that fit.
- Never put overfull containers in the cupholder.



# **Opening the cupholder**

There are two folding cupholders behind the panel above the glove box.



# Information

- ▶ Keep the cupholders closed while driving.
- 1. Press the cupholder panel. The panel opens.

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- 2. Press the symbol for the left or right cupholder.
  - The cupholder folds out.
- 3. Close the panel in the middle so that the cupholder does not move while driving.

The cupholders can be pulled out in order to fit larger containers.



# **Pulling cupholder out**

- 1. Pull out the holder (arrow).
- 2. Insert a cup/container.
- 3. Carefully slide the holder inwards to adjust it to the size of the cup/container.

# Folding cupholder in

- 1. Push cupholder drawer in.
- 2. Open the panel in the middle.
- 3. Fold the cupholder in and engage it.
- 4. Close the panel in the middle.



# **Ashtray**

**WARNING** 

Ashtray Fire Risk

Never use ashtray for waste paper disposal, as it could pose a fire hazard.

# Opening

1. Press briefly on the ashtray lid. The lid opens automatically.

## **Emptying**

- 2. To unlock, press ashtray insert forwards at the top right until it is felt to disengage.
- 3. Pull the ashtray insert upwards to remove it.
- ▷ After emptying the ashtray insert, replace it and push it downwards until it is felt to engage.



# **Cigarette Lighter**

**WARNING** 

Cigarette Lighter Burns

The tip of the cigarette lighter becomes very hot in use.

- Do not leave children in the vehicle unattended.
- Never touch the heating element or sides of the lighter.
- Only hold the heated lighter by the knob.

# Using the cigarette lighter

The cigarette lighter is ready for use regardless of ignition lock position.

- For information on using charging adapters in the cigarette lighter: Please see the chapter "USING CHARGING ADAPTER FOR 12 VOLT SOCKET/CIGARETTE LIGHTER" on page 197.
- 1. Press briefly on the ashtray lid.
- 2. Press the lighter into the receptacle. When the element is red hot, the lighter will jump back to its initial position.



Sockets in the glove box and passenger footwell

# Sockets

Electrical accessories can be connected to the 12 V sockets.

Depending on the vehicle equipment, these sockets are located in the glove box, the passenger footwell and in the oddments tray in the center console.

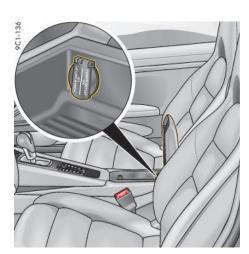
▶ For information on using charging adapters in 12 volt sockets: Please see the chapter "USING CHARGING ADAPTER FOR 12 VOLT SOCKET/CIGARETTE LIGHTER" on page 197.



# Information

The maximum electrical load of a socket is 20 A, but only if no other loads are switched on. Do not exceed 10 A per socket if several loads are operating simultaneously.

 $196 \ \ \text{Storage, Luggage Compartment and Roof Transport System}$ 

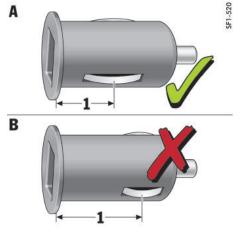


Socket in the oddments tray between the front seats



# 1 Information

The sockets and thus the connected electrical accessories function even if the ignition is switched off or the ignition key is removed. If the engine is not running and the accessories are switched on, the vehicle battery will be discharged. The power supply is interrupted after 30 minutes to protect the vehicle battery. If the load is to be switched on again, the ignition must be switched on once.



- **A** Suitable charging adapter **B** Unsuitable charging adapter
- Using charging adapter for 12 volt socket/cigarette lighter

#### NOTICE

Risk of damage to the electrical system.

Only use a suitable charging adapter (A) that meets the following requirements: The distance **1** between the ground connection and the upper edge of the charging adapter must be **less than** approx. 0.63 in. (16 mm).

Unsuitable charging adapters (B) with a larger distance 1 than 0.63 in. (16 mm) between the ground connection and the upper edge can destroy the sockets.

# **Luggage Compartment**

▶ Please see the chapter "OPENING AND CLOSING THE LUGGAGE COMPARTMENT LID AND ENGINE COVER" on page 24.

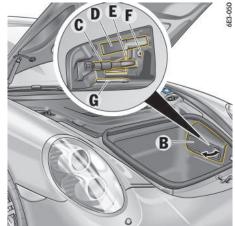


# Tire sealant

The tire sealant is located in plastic box A.

- Grasp plastic box A at the handle recess and
- To insert the plastic box, first insert the tab at the rear.

Engage the box at the front.



- C Towing lug D Tool kit
- **E** Crank for emergency operation of sliding roof
- F Adapter for security wheel bolts
- G Plastic wedge for emergency operation of PDK selector lever

#### **Tools**

The tools are located in plastic box **B**.

- ▷ Grasp plastic box **B** at the handle recess and remove.
- To insert the plastic box, first insert the tab at the rear.

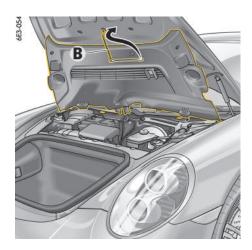
Engage the box at the front.



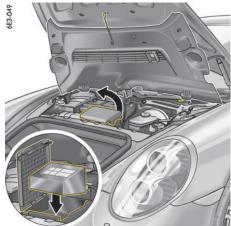
# **Tire filling compressor**

# Removing the tire filling compressor

- 1. Lift plastic cover A at the handle recesses (arrows) until the clips are heard to disengage and pull forwards slightly.
- 2. Lift the plastic cover at front.



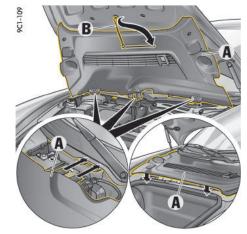
**3.** Unclip retaining strap **B** on the underside of the plastic cover and attach to the luggage compartment lid.



- **4.** Open the cover of the storage compartment for the tire filling compressor.
- **5.** Remove the tire filling compressor from the storage compartment.

# Stowing the tire filling compressor

- 1. The tire filling compressor is wedge-shaped. Insert the tire filling compressor in the storage compartment so that the narrower side faces forwards (illustration).
- 2. Close the cover of the storage compartment for the tire filling compressor.



- 3. Detach retaining strap B and clip onto the plastic cover.
- 4. Insert plastic cover A with the guides at the rear edge and lay it on the yellow holder. Lower the plastic cover at the front.
- **5.** Ensure that the centering pins on the underside of the cover engage in the guide. Press the cover downwards at the handle recesses until the clips are heard to engage.

# **Roof Transport System**

A roof transport system can be fitted on the vehicle for transporting various sports and hobby equipment.

Various objects can be transported safely and securely using the roof transport system and additional attachments, e.g. ski rack, bicycle rack, surfboard rack, roof box or snowboard holder.

Only use roof transport systems that have been tested and approved by Porsche. It is **not** possible to fit commercially available roof rack systems.

#### **WARNING**

Roof Load Instability

- Install individual load-carrying devices, such as ski rack or roof box as centrally as possible with respect to the supports.
- Do not exceed the permissible roof load, permissible gross weight and permissible axle loads.
  - Details of these weights and loads can be found under "Technical data" in this Owner's Manual:
  - Please see the chapter "WEIGHTS" on page 288.
- Distribute load evenly, with heavy items as low as possible. Items of luggage must not project beyond the side of the load area.
- Fix and secure every item to the basic carrier with a rope or lashing strap (do not use elastic rubber tensioners).
- Before every trip, and at regular intervals during long trips, check that the Roof Transport System and load are secure. Retighten if necessary and secure further by locking. Tighten all fastening screws again.

When the Roof Transport System is loaded, the maximum speeds depends on the nature, size and weight of the load being carried.

- Driving, braking and steering behavior change due to the higher center of gravity and the greater wind resistance. You should adapt your driving style accordingly.
  - Nevertheless, Porsche recommends that you do not exceed the posted speed limit.
- Never drive faster than 80 mph (130 km/h) when the Roof Transport System is fitted and loaded.
- With the basic carrier fitted and no load, do not exceed a maximum speed of 110 mph (180 km/h).

## NOTICE

Washing the vehicle in a car wash or failure to observe the overall vehicle height or the maximum permitted gross weight can damage the vehicle or roof transport system.

- ▶ Remove the complete roof transport system before washing the vehicle in a car wash.
- Check the overall vehicle height with the roof transport system fitted before driving into multi-storey car parks, garages, underground garages and tunnels.
- Do not exceed the permissible roof load, permissible gross weight and permissible axle loads.

Details of these weights and loads can be found under "Technical data" in this Owner's Manual:

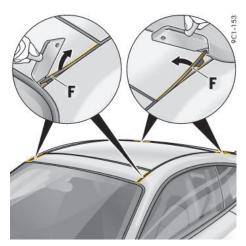
Please see the chapter "WEIGHTS" on page 288.



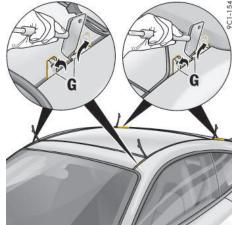
- A Front carrier (long)
- B Rear carrier (short)
- C Cover trims
- **D** Torque wrench
- E Key

## Fitting the roof transport system

When fitting the roof transport system for the first time, the front and rear carrier must be adjusted according to the width of the vehicle.



1. Lift seals  ${\bf F}$  on the roof rail using the hook of the torque wrench and pull them out.



2. Fold out all eight rotary holders  ${\bf G}$  using the hook of the torque wrench.



- $\textbf{3.} \ \ \textbf{Unlock cover flaps } \textbf{H} \ \textbf{using the key and fold}$ upwards as far as possible.
- **4.** Ensure that the carriers are fitted in accordance with the stickers on the underside of the carriers.



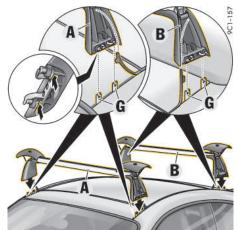
# 5. When fitting for the first time:

Remove the handle from the torque wrench. Loosen screws on the underside of the carriers using the short side of the torque wrench.



# 1 Information

It is only necessary to loosen the screws on one underside section of the relevant carrier.



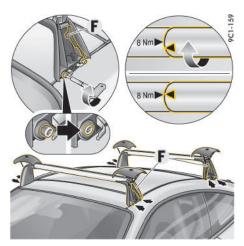
Place long carrier  ${\bf A}$  at the front and short carrier **B** at the rear on the rotary holders **G** and, at the same time, adapt to the vehicle width by means of the moveable carrier supports.

Tighten the screws on the underside sections of the carriers slightly.



Remove the carriers and retighten the screws on the underside sections of the carriers using the short side of the torque wrench.

6. Refit the handle of the torque wrench.

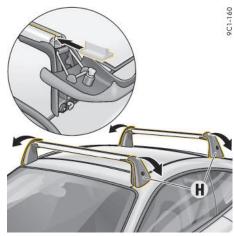


7. Place the carriers on rotary holders G.

## NOTICE

Risk of damage to the seals through unintentional pinching between roof and supports. Insert seals **F** in the supports.

8. First, screw in all eight carrier fastening screws using torque wrench  $\boldsymbol{\mathsf{D}}$  until flush with the surface. Then tighten all eight screws until the arrow markings on the torque wrench are exactly aligned.



**9.** Fold the cover flaps **H** of the carriers fully downwards and push the desired load-carrying device (e.g. ski box, bicycle carrier) into the carrier.



- 10. Cut the cover trims C to size and push them sideways into the carriers or press them into the carriers from above to protect against moisture and dirt as well as to prevent wind noise.
- 11. Fold up and lock the cover flaps.



# information

▷ After driving 30 miles (50 km), retighten all screws on the carriers and load-carrying devices.

# **Loading Information**

#### **Definitions**

The rear-axle load is the vehicle weight on the rear axle plus the weight of the transported load. The Curb weight - actual weight of your vehicle vehicle weight including standard and optional equipment, fluids, and emergency tools. This weight does not include passengers and cargo.

The Gross Vehicle Weight is the sum of the curb weight and the weight of passengers and cargo combined.

The Gross Vehicle Weight Rating is the maximum total weight of vehicle, passengers, luggage and optional equipment.

The Gross Axle Weight Rating is the maximum load limit for the front or the rear axle. This information is located on the safety compliance sticker located in the driver's side door aperture area.

For determining the compatibility of the tire and vehicle load capabilities:

▶ Please see the chapter "TIRES AND WHEELS" on page 244.

The load capacity coefficient (e.g. "106") is a minimum requirement. For more information:

Please see the chapter "INSCRIPTION ON RADIAL TIRE" on page 252.

The Gross Combined Weight Rating is the maximum total weight rating of vehicle, passengers and cargo.

The Vehicle Capacity Weight - Load Limit - is the maximum total weight limit specified of the load (passengers and cargo) for the vehicle. This is the maximum weight of passengers and cargo that can be loaded into the vehicle. This information can be found on the tire pressure plate.

The maximum loaded vehicle weight is the sum of curb weight, accessory weight, vehicle capacity weight and production options weight.

The load rating is the maximum load that a tire is rated to carry for a given inflation pressure.

The maximum load rating is the load rating for a tire at the maximum permissible inflation pressure.

The cargo capacity is the permissible weight of cargo, the subtracted weight of passengers from the load limit.

▶ Never exceed the permissible limits.

**A** DANGER

Riding in a Cargo Area

Injuries are much more likely in an accident if persons ride in the cargo area.

- Persons must ride only on the seats provided for this purpose.
- Make sure that everybody fastens their safety belts.

**DANGER** 

Overloading Vehicle

Overloading will lead to dangerous vehicle reactions and long braking distances.

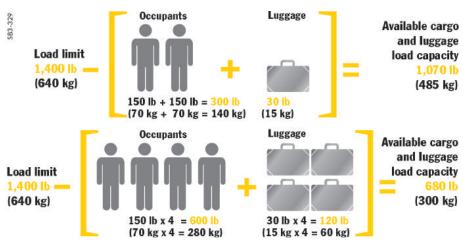
Never exceed the specified axle loads.

#### **NOTICE**

Risk of damage to the vehicle if the vehicle is overloaded.

Overloading can shorten the service life of the tires and car. Damage due to overloading is not covered by the vehicle warranty.

▶ Never exceed the specified axle loads.



- in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs. [1400 - $600 (4 \times 150) = 800 \text{ lbs.}$ ].
- 5. Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.

Example for determining the combined weight of occupants and cargo

#### **Vehicle Load Capacity**

- The combined weight of occupants and cargo should never exceed the weight shown on the tire plate in the vehicle.
  - Please see the chapter "TIRE PRESSURE PLATE" on page 284.
- Never exceed the number of passengers shown on the tire pressure plate in the vehicle.

## Determining the combined weight of occupants and cargo:

▶ Add the weight of all occupants and then add the total luggage weight (figure).

# Steps for determining correct load limit

- 1. Locate the statement "The combined weight of occupants and cargo should never exceed XXX pounds" on your vehicle's placard (depending on the date of manufacture).
- 2. Determine the combined weight of the driver and passengers that will be riding in your vehicle.
- 3. Subtract the combined weight of the driver and passengers from XXX kilograms or XXX
- **4.** The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the "XXX" amount equals 1400 lbs. and there will be four - 150 lb passengers

# **Parking**

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Swivelling Down Mirror Glass as Parking Aid	.210
Garage Door Opener HomeLink <sup>®</sup>	
(Universal Remote Control)	211

# **ParkAssist**

When the driver is parking and maneuvering the vehicle, ParkAssist indicates the distance between the vehicle and a large obstacle by means of signal tones.

On vehicles with front and rear sensors: For information on the ParkAssist visual display, please refer also to the section "PARKASSIST" in the operating instructions for the Porsche Communication Systems PCM/CDR.

ParkAssist is activated automatically when reverse gear is selected and the ignition is on. If the vehicle has front ParkAssist, this also issues an automatic warning when the distance between the vehicle and an obstacle in front is less

- than approx. 40 in./100 cm (acoustically) and approx. 32 in./80 cm (visually).

A warning signal sounds when

 the distance between the vehicle and an obstacle at the rear is less than approx. 71 in./180 cm.
 The ParkAssist visual display appears on the central screen of the Porsche communication system.

Front and rear ParkAssist is **not** activated:

- At a speed of more than approx. 9 mph (15 km/h).
- When the electric parking brake is activated.
- When the ParkAssist has been switched off with button A in the overhead console with the ignition switched on.

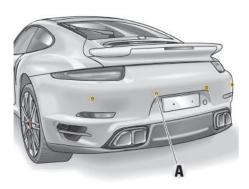
The indicator light in button **A** lights up.

#### **WARNING**

ParkAssist Limits

Responsibility for parking and for assessing the risk to persons, children, pets, and small objects around the vehicle lies completely with the driver.

- Make sure that no persons (especially small children), animals or obstacles are within the maneuvering area.
- ▶ If the continuous tone sounds, stop and do not move your vehicle further in that direction.



Ultrasound sensors

#### **Sensors**

The ultrasound sensors  $\bf A$  in the rear bumper and the sensors  $\bf A$  in the front bumper (depending on vehicle equipment) measure the distance to the closest obstacle:

- Range behind the vehicle: approx. 71 in. (180 cm)
- Range at the side of the vehicle: approx. 24 in. (60 cm)
- Range in front of the vehicle: approx. 47 in. (120 cm)

Obstacles cannot be detected in the "blind" sensor area (above and below the sensors, e.g. objects hanging down or close to the ground).



Ultrasound sensors

#### **Maintenance notes**

- The sensors must always be kept free of dust, ice and snow in order to ensure that they are fully functional.
- Do not damage sensors by abrasion or scratching.
- Maintain sufficient distance when cleaning with high-pressure cleaning equipment.
   The sensors will be damaged if the pressure is too high.

#### Signal tones/function

When reverse gear is selected, ParkAssist confirms that it is switched on by issuing a **short signal tone**.

If the vehicle has front ParkAssist, **no** signal tone will be issued when reverse gear is selected. Instead, the ParkAssist visual display will appear on the central screen of the Porsche communication system.

A detected obstacle is signaled by an **intermittent tone**. The intervals decrease as the obstacle is approached.

If the distance drops to less than approx. 12 in. (30 cm), a **continuous tone** sounds.

> Set the radio volume so that the signal tones are not drowned out.

The volume of the signal tones can be changed individually.

For information on changing the signal tone volume:

▶ Please see the chapter "ADJUSTING PARKASSIST VOLUME" on page 126.



Care Required Parking

Even when using ParkAssist, the driver is still responsible for taking due care when parking and when assessing obstacles.

A continuous tone sounds when there is a risk of collision.

Do not drive rearward any further once a continuous tone sounds.

#### Limits of ultrasonic measurement

- ParkAssist cannot detect sound-absorbing obstacles (e.g. winter driving, powder snow, clothing made from fabric or fur),
- sound-reflecting obstacles (such as glass surfaces and flat painted surfaces),
- and very thin obstacles (e.g. thin posts).

Other ultrasound sources (e.g. pneumatic brakes of other vehicles, sweeping machines and jack hammers) can interfere with the detection of obstacles.



# **Deactivating ParkAssist**

On vehicles with front and rear ParkAssist, the ParkAssist function can be deactivated manually.

Press button **A** on the overhead operating console.

The indicator light in the button lights up. ParkAssist is switched off.

## Display due to environmental factors

Correct operation is no longer guaranteed if there is a temporary fault (e.g. caused by ice formation or heavy soiling on the sensors).

Depending on the environmental factor, it is possible that a stop warning with acoustic warning or a warning triangle without acoustic warning is displayed on the central screen of the Porsche communication system.

ParkAssist is ready for operation again when the interference has been eliminated.

In the event of a **permanent fault** in ParkAssist, a continuous tone sounds for three seconds after reverse gear has been selected.

On vehicles with front and rear sensors only: In the case of a sensor problem, a warning triangle appears in the monitoring area for the relevant bumper and a continuous tone sounds for three seconds.

Possible cause:

- Defect or system fault.
- ► Have the fault corrected. Please contact an authorized Porsche dealer.



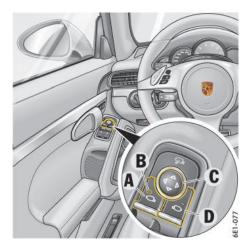
# **Reversing Camera**

The reversing camera is located between the number plate lights in the bumper (**illustration**).

- Please refer to the chapter "REVERSING CAMERA" in the separate PCM/CDR operating instructions.
- Always keep the reversing camera clean and free of ice and snow so that vision is not impaired.

For car care instructions:

Please see the chapter "CAR CARE INSTRUCTIONS" on page 231.



# **Swivelling Down Mirror Glass as Parking Aid**

When reverse gear is engaged, the mirror on the **passenger's side** swivels down slightly to show the curb area.

## **Preconditions**

- The ignition must be switched on.
- The function must be activated on the multi-function display.

For further information on setting the parking aid:

▶ Please see the chapter "ADJUSTING REVERSING OPTIONS" on page 122.

#### Swivelling down mirror glass manually

If the function was deactivated on the multi-function display, the exterior mirror on the passenger's side can also be swiveled down manually.

- Engage reverse gear.
   The indicator light B on the selection button A for adjusting the exterior mirror on the driver's side lights up.
- 2. Press the selection button **D** for adjusting the exterior mirror on the passenger's side. The mirror on the passenger's side swivels down.



# Information

The position of the automatically lowered mirror glass can be changed as required using the adjustment button **C**. On vehicles with memory package, the setting is stored on the car key or the person buttons on the driver's side.

# Moving mirror to its initial position

The mirror swivels back to its initial position:

- after a certain time delay, if the vehicle is shifted out of reverse gear, or
- immediately, if the vehicle reaches a speed of more than 9 mph (15 km/h).

The exterior mirror on the passenger's side can also be moved to its initial position manually.

Press the selection button A for the exterior mirror on the driver's side.



# Garage Door Opener HomeLink<sup>®</sup> (Universal Remote Control)

With the HomeLink® of your Porsche, a wide range of remote-controlled equipment (e.g. garage door/gate to your property, security systems, house lights) can be activated from inside the vehicle.

The HomeLink® system replaces up to three different original remote controls. The signal for a remote control can be assigned to one of the three memory buttons **I**, **II** and **III** on the overhead operating console keypad. The respective equipment can then be operated using the programmed memory button.

Transmission of the signal is indicated by the indicator light in the button  ${\bf II}$ .



# Information

- Please read the instructions for the original remote control.
- ▷ Information on the compatibility of your vehicle's HomeLink<sup>®</sup> system with the original remote control can be obtained from your authorized Porsche dealer, on the HomeLink<sup>®</sup> website (www.homelink.com) or by calling the free HomeLink<sup>®</sup> hotline (1-800-355-3515).

# **WARNING**

Garage Door Opener Use

When opening and closing the equipment being operated, parts of the body could become trapped or crushed.

- When using the garage door opener, make sure that no persons or animals are within the range of movement of the equipment that is being operated.
- Observe the safety notes for the original remote control.



## Information

- When the button is pressed, the transmitter unit sends the signal forward in direction of travel.
  - Always align the vehicle with the receiver.

    Otherwise, range restrictions cannot be ruled out
- Before selling the vehicle, delete the programmed signals for the garage door opener on the keypad.
- If the equipment cannot be operated after the initial programming, check whether the original remote control has fixed or changeable code. To find this out, read the instructions for the original remote control.

# Operating the garage door opener

The ignition must be switched on.

Press and hold the corresponding HomeLink<sup>®</sup> button on the overhead operating console keypad.

The indicator light **A** lights up during signal transmission.

# Programming garage door opener: Deleting and storing signals

The HomeLink® system is programmed on the overhead operating console and in direct proximity to the vehicle's radiator grille.

## **Preconditions**

In order to delete programmed signals and store garage door opener signals,

- the ignition must be switched on,
- the turn signals must be off and
- the engine must be off.

When using the garage door opener, the vehicle must be within the range of the receiver.



# Deleting programmed signals from the buttons

This process clears all of the HomeLink  $^{\circledR}$  programming. It is not possible to individually clear the programmed buttons.

Do not repeat this process if you want to assign additional signals to the buttons.

- Keep the two outer buttons I and III on the overhead operating console keypad pressed for approx. 20 seconds until the indicator light A on button II starts to flash quickly.
- ▶ Release the buttons.

The  $\mathsf{HomeLink}^{\mathbb{B}}$  buttons are cleared and can be reprogrammed.

# Assigning garage door opener signal to key with fixed code system

## On the overhead operating console:

- 1. Switch on ignition.
- 2. The standard factory-set codes must be deleted before programming for the **first time**.
- Press and hold the desired button on the overhead operating console keypad until the indicator light A on button II starts to flash slowly.
  - You now have 5 minutes to teach the button.
- Stand in front of the vehicle with the original remote control of the system to be programmed.



#### In front of the vehicle:

5. Hold the original remote control approx. 8 in. (20 cm) away from the marked position (illustration) and press and hold the transmit button (for more than approx. 1 minute in some cases) until the vehicle's turn signal lights flash on and off three times or the indicator light A on the overhead operating console starts flashing quickly.

The turn signal lights flash three times and the indicator light **A** flashes quickly to confirm that the new signal has been programmed successfully.

Several attempts with different distances between the vehicle and the original remote control may be necessary.

With some systems, the transmit button on the original remote control may need to be pressed again when the indicator light on the original remote control goes out.

- **6.** The turn signal lights will flash once when the 5 minute teaching readiness period has elapsed.
  - Repeat steps 3 to 5.
- **7.** Repeat steps 3 to 5 to assign further signals to the remaining buttons.

# Assigning garage door opener signal to button with changeable code system

With some systems, a changeable code also needs to be programmed for the HomeLink® system. A second person makes programming easier.

#### Identifying the changeable code

Press and hold the previously programmed HomeLink<sup>®</sup> button.

If the indicator light **A** on button **II** in the overhead operating console starts to flash quickly and lights up continuously after approx. 2 seconds, it means that the equipment has a changeable code system.

Information on synchronization can also be found in the operating instructions for the system to be programmed.

# Assigning garage door opener signal to key

Park the vehicle within the range of the remotecontrolled equipment.

#### On the overhead operating console:

- 1. Switch on ignition.
- **2.** The standard factory-set codes must be deleted before programming for the **first** time.

For information on deleting the factory-set codes:

- ▶ Please see the chapter "PROGRAMMING GARAGE DOOR OPENER: DELETING AND STORING SIGNALS" on page 212.
- Press and hold the desired button on the overhead operating console keypad until the indicator light A on button II starts to flash slowly.
  - You now have 5 minutes to teach the button.
- Stand in front of the vehicle with the original remote control of the system to be programmed.

#### In front of the vehicle:

5. Hold the original remote control approx. 12 in. (30 cm) away from the marked position (illustration) and press and hold the transmit button (for more than approx. 1 minute in some cases) until the vehicle's turn signal lights flash on and off three times or the indicator light A on the overhead operating console starts flashing quickly.

The turn signal lights flash three times and the indicator light **A** flashes quickly to confirm that the new signal has been programmed successfully.

Several attempts with different distances between the vehicle and the original remote control may be necessary.

With some systems, the transmit button on the original remote control may need to be pressed again when the indicator light on the original remote control goes out.

- The turn signal lights will flash once when the 5 minute teaching readiness period has elapsed.
  - Repeat steps 3 to 5.
- **7.** Repeat steps 3 to 5 to assign further signals to the remaining buttons.
- Locate the programming button on the receiver of the equipment to be programmed, e.g. on the motor unit of the garage door opener.

#### Synchronizing the system

#### 9. Activating the motor unit:

Press the programming button on the receiver of the garage door opener.

You then usually have approx. 30 seconds to initiate step 10 (a setting indicator is usually activated on the motor unit).

# 10. Programming on the overhead operating console:

Press the button you selected in step 3 three times on the overhead operating console keypad (you must press the button on the keypad several times to complete the setting process for some devices).

- **11.** Repeat steps 3 to 10 to assign signals to the other buttons.
- 12. After completing programming on the overhead operating console, the system should recognize the HomeLink® signal and launch as soon as the memory button is pressed when the ignition is switched on.

# Reprogramming an individual button on the keypad

A HomeLink  $^{\circledR}$  button can be individually reprogrammed without deleting the rest of the button assignments.

#### On the overhead operating console:

- 1. Switch on ignition.
- Press and hold the button to be programmed on the overhead operating console keypad (approx. 20 seconds), until indicator light A on button II flashes slowly.
- You now have 5 minutes to teach the button.
- Stand in front of the vehicle with the original remote control of the system to be programmed.

#### In front of the vehicle:

4. Hold the original remote control approx. 12 in. (30 cm) away from the marked position (illustration) and press and hold the transmit button (for more than approx. 1 minute in some cases) until the vehicle's turn signal lights flash on and off three times or the indicator light A in the overhead operating console starts to flash quickly.

The turn signal lights flash three times and the indicator light **A** flashes quickly to confirm that the new signal has been programmed successfully.

Several attempts with different distances between the vehicle and the original remote control may be necessary.

With some systems, the transmit button on the original remote control may need to be pressed again when the indicator light on the original remote control goes out.

- The turn signal lights will flash once when the 5-minute teaching readiness period has elapsed.
   Repeat steps 1 to 4.
- **6.** Repeat steps 1 to 4 to assign further signals to the other buttons.

# i

# Information

- Please consult an authorized Porsche dealer if you have not been able to successfully assign signals to the buttons even though you have carefully followed the instructions in this section and the operating instructions for the original remote control. Your authorized Porsche dealer has a list of all garage door opener signals that can be adapted.
- Make sure that the battery in the remote control for the garage door opener is new. If the battery voltage is inadequate, faults may occur in signal transmission. The system in the vehicle then learns the wrong code, which will not be recognized reliably by the garage door opening mechanism.

# **Alarm System and Theft Protection**

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## **Alarm System and Passenger Compartment Monitoring**

**FCC Numbers:** 

KR55WK50138 Canada: 7812D-5WK50138

This device complies with Part 15 of the FCC Rules and RSS-210 of Industry Canada. Operation of this device is subject to the following two conditions:

- 1. This device may not cause harmful interference, and
- 2. this device must accept any interference received including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment.

Such modification could void the user's authority to operate the equipment.

The alarm system monitors the following alarm

- Alarm contacts in doors, luggage compartment lid, engine compartment lid and headlights.
- Interior surveillance: Movement in the interior when the vehicle is locked, e.g. attempted theft after breaking a window.
- Inclination sensor country-specific equipment: inclination of the vehicle (e.g. when attempting to tow).

If one of these alarm contacts is interrupted, the alarm horn sounds for approx. 30 seconds and the emergency flasher flashes.

After 5 seconds of interruption, the alarm is triggered again. This cycle is repeated up to ten times.

### Switching on

▶ The alarm system is activated when the vehicle is locked.

#### Switching off

The alarm system is deactivated when the vehicle is unlocked.



#### Information

▶ If you unlock the vehicle with the emergency key in the door lock, you must switch the ignition on (ignition lock position 1) within 10 seconds of opening the door in order to prevent the alarm system from being triggered.



#### Information

If button of on the car key is pressed and a door or the luggage compartment lid is not opened, the vehicle is locked again automatically after 30 seconds.

#### Switching off the alarm system if it is triggered

Unlock vehicle or switch on ignition.

#### Switching off interior surveillance and inclination sensor

If people or animals are remaining in the locked vehicle or the vehicle is being transported on, e.g. a train or ship, the interior surveillance system and inclination sensor must be switched off temporarily.

▶ Inform any persons remaining in the vehicle that the alarm system will be triggered if the door is opened.

#### Using the car key

 Quickly press button on the car key twice within 2 seconds.

The emergency flasher flashes slowly once. The doors are locked, but can be opened from inside.

#### On vehicles with Porsche Entry & Drive

○ Quickly press button **A** in the door handle **twice** within 2 seconds.

The emergency flasher flashes slowly once. The doors are locked, but can be opened from inside.



## 1 Information

The interior surveillance system and inclination sensor remain switched off if:

The interior surveillance system and inclination sensor were switched off when you last locked the vehicle

#### and

If button A ( ) was pressed and a door or the luggage compartment lid was not opened.

#### **Function indication**

On vehicles without Porsche Entry & Drive. the locking condition of the vehicle is indicated by the indicator lights in the central locking button flashing at different frequencies.

The indicator lights go out when the vehicle is unlocked.

On vehicles with Porsche Entry & Drive, the locking condition of the vehicle is indicated by the indicator lights in the doors flashing at different frequencies.

## Alarm system is activated

The indicator lights flash quickly twice when the vehicle is being locked, then flash normally.

#### Alarm system is activated, interior surveillance and inclination sensor are switched off

The indicator lights flash quickly while you are locking the vehicle, go out for 10 seconds and then flash normally.

#### Faults in the central locking system and alarm system

The indicator lights come on for 10 seconds, flash at double speed for 20 seconds and then flash normally.

## **Avoiding false alarms**

- ▶ If people or animals are remaining in the locked vehicle or the vehicle is being transported on a train or ship, for example, the interior surveillance system and inclination sensor must be switched off temporarily.
- ▶ Always close the sunroof and all door windows.

## **Immobilizer**

There is a transponder (an electronic component), containing a stored code, in each key. Before the ignition is switched on, the ignition lock checks the code.

The immobilizer can be deactivated and the engine started using an authorized ignition key only.

## Theft Protection

When leaving the vehicle, always:

- ▷ Close the windows.
- Close the sunroof.
- Close the Convertible top (Cabriolet).
- Activate the electric parking brake.
- Remove the ignition key (or switch ignition off on vehicles with Porsche Entry & Drive).
- Close the glove box.
- Close all storage compartments.
- Remove valuables, vehicle registration documents, telephone and house keys from the vehicle.
- Close the luggage compartment lid.
- Close the engine compartment lid.
- ▷ Lock the doors.

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## Exercise Extreme Caution when **Working on your vehicle**

The engine compartment of any motor vehicle is a potentially hazardous area. If you are not fully familiar with proper repair procedures, do not attempt the adjustments described on the following pages.

This caution applies to the entire vehicle.

#### **A** DANGER

Fire and Explosion Hazards

Many vehicle fluids are highly flammable, e. g. fuel, engine and transmission oil. Fuel vapors can cause an explosion. When a battery is being charged, highly explosive gases can develop.

- Do not smoke or allow an open flame around the battery or fuel.
  - Pay attention to sparks, e. g. when coming into contact with cables.
  - Keep a fire extinguisher close at hand.
- Ensure that there are no open flames in the area of your vehicle at any time when fuel fumes might be present. Be especially cautious of devices such as hot water heaters which ignite a flame intermittently.
- Only work on your vehicle outdoors or in a well ventilated area.

#### **WARNING**

Fluid Health Hazards

Refill fluids, e. g. engine oil, brake fluid or coolant are hazardous to health (poisonous, irritant, caustic).

- Keep these fluids out of children's reach and dispose of them in accordance with the appropriate State, Local and Federal regulations.
- Only work on your vehicle outdoors or in a well ventilated area.

#### **WARNING**

**Exhaust Gas Inhalation** 

Engine exhaust is dangerous if inhaled. Engine exhaust fumes have many components which you can smell. They also contain carbon monoxide (CO), which is a colorless and odorless gas.

Carbon monoxide can cause unconsciousness and even death if inhaled.

Only work on your vehicle outdoors or in a well ventilated area.

## **WARNING**

Hot Engine Parts, Exhaust System and Fluids

The engine and surrounding components, exhaust system and coolant become very hot when the engine is running.

The coolant reservoir is pressurized. Careless opening of the coolant reservoir can lead to hot coolant suddenly spraying out.

- Take care when working near hot parts of the vehicle, in particular engine parts and parts of the exhaust system.
- Before working in the engine compartment, always switch the engine off and let it cool sufficiently.
- Allow the engine to cool down before opening the cap of the coolant reservoir and protect your hands, arms and face from any possible escape of hot coolant.

#### **WARNING**

Moving Engine Parts

Take great care to ensure that hands, fingers, articles of clothing (e. g. ties, sleeves, etc.), necklaces or long hair cannot be caught up by the radiator fans, drive belt or other moving parts. The radiator fans in the front of the vehicle may be operating or unexpectedly start operating when the engine is switched on.

- Exercise extreme care that parts of the body, articles of clothing or jewelry do not get caught in the radiator fan, drive belt or other moving parts.
- Carry out work in these areas only with the engine off and exercise extreme caution.

#### **▲** WARNING

Electric Shock from Ignition System

When the ignition is on, all cables and wires of the ignition system carry a high voltage.

Exercise special care when working on the ignition system.

## **WARNING**

Failure to Secure Vehicle

If the vehicle is not secured, or incorrectly secured, during repair work, it could move unexpectedly or fall from the car jack or car lift.

- Be alert and cautious around the engine at all times while it is running.
  If you have to work on the engine while it is running, always apply the electric parking brake and put the PDK selector lever in position P or N.
- Always support your car with safety stands if it is necessary to work under the car. The jack supplied with the car is not adequate for this purpose.
  - Switch off level control of air suspension and height adjustment.
  - Please see the chapter "RAISING THE VEHICLE WITH A LIFTING PLATFORM, TROLLEY JACK OR STANDARD JACK" on page 254.
- Jack up the vehicle only at the specified jacking points on the underside of the vehicle.
- Never start the engine when the vehicle is jacked or lifted up. Vibration from the engine could cause the vehicle to fall.
- When working under the car without safety stands but with the wheels on the ground, make sure the car is on level ground, the wheels are blocked, and that the engine cannot be started.
  - Withdraw ignition keys (switch ignition off in vehicles that have Porsche Entry & Drive).



#### Information

coverage.

- Incomplete or improper servicing may cause problems in the operation of the car. If in doubt about any servicing, have it done by your authorized Porsche dealer.
   Improper maintenance during the warranty period may affect your Porsche warranty
- Some countries require additional tools and special spare parts to be carried in your vehicle. Please make enquiries before driving abroad.

#### **Technical Modifications**

Modifications may be carried out on your vehicle only if approved by Porsche. This ensures that your Porsche will remain reliable and safe to drive, and that it will not be damaged as a result of the modifications. Your authorized Porsche dealer will be pleased to advise you.



#### Information

Only use genuine Porsche spare parts for your vehicle or spare parts of similar quality which have been manufactured according to the specifications and production requirements of Porsche. These parts are available from your authorized Porsche dealer. Safety-related accessories should only be used if they are from the Porsche Tequipment range or are tested and approved by Porsche. Your authorized Porsche dealer will be pleased to advise you and answer any questions you may have.

However, the use of other parts or accessories may adversely affect the safety of your vehicle, and Porsche can take no responsibility for any loss or damage caused by their use.

Even if the supplier of other accessories or parts is a recognized supplier, the safety of your vehicle may still be affected if such items are installed.

Due to the large variety of products offered in the accessory market, it is not possible for Porsche to inspect and approve every one.

- In addition, please note that the use of replacement parts that are not genuine Porsche parts or approved parts, or the use of accessories not approved by Porsche may also detrimentally affect your vehicle warranty.
- Check your vehicle regularly for signs of damage. Damaged or missing aerodynamic components, such as spoilers or underbody panels, impair vehicle handling and must therefore be replaced immediately.

#### Radiator fan, engine compartment blowers

## **WARNING**

Radiator Fans, Engine Compartment Blowers

The engine-compartment blowers are mounted under the engine compartment lid.

After the engine is switched off, the engine compartment temperature is monitored for approx. 30 minutes.

During this period, and depending on temperature, the engine-compartment blowers may continue to run or start to run.

Carry out work in this area only with the engine off and exercise extreme caution.

The radiators and radiator fans are in the front of the vehicle

The radiator fans in the front of the vehicle may be operating or unexpectedly start operating when the engine is switched on.

- Carry out work in these areas only with the engine switched off.
- Take great care to ensure that parts of the body, items of clothing or jewelery cannot be drawn in by the radiator fan, enginecompartment blower, drive belt or other moving parts.

#### **Measurements on test stands**

#### Performance test

Performance tests on roller-type test stands are not approved by Porsche.

#### Brake tests

Brake tests must be performed only on roller-type test stands.

The following limit values must not be exceeded on roller-type test stands:

- Test speed 4.7 mph (7.5 km/h)
- Test duration 20 seconds

#### Testing the electric parking brake

Electric parking brake tests on the brake test stand must only be performed with the ignition switched on and with the Porsche Doppelkupplung selector lever in position N.

The vehicle switches automatically to brake test stand mode, in which the electric parking brake can be tested.

The message "Electric parking brake in service mode" appears on the multi-function display in the instrument panel.

#### Balancing wheels on the vehicle

During finish balancing of the wheels, the entire vehicle must be lifted and the wheels must be free to turn.

## **Engine Oil**

It is important to perform oil changes regularly in accordance with the intervals specified in your Maintenance Schedule.

#### **Engine oil consumption**

It is normal for your engine to consume oil. The rate of oil consumption depends on the quality and viscosity of oil, the speed at which the engine is operated, the climate, road conditions as well

as the amount of dilution and oxidation of the

If the vehicle is used for repeated short trips, and consumes a normal amount of oil, the engine oil measurement may not show any drop in the oil level at all, even after 600 miles (1000 km) or more. This is because the oil is gradually becoming diluted with fuel or moisture, making it appear that the oil level has not changed. The diluting ingredients evaporate out when the vehicle is driven at high speeds, as on an expressway, making it then appear that oil is excessively consumed after driving at high speeds.

If the conditions you drive your vehicle in are dusty, humid, or hot, the frequency of the oil change intervals should be greater.

If the vehicle is driven at a high rate of speed, climatic conditions are warm, and the load is high, the oil should be checked more frequently, as driving conditions will determine the rate of oil consumption.

- The engine in your vehicle depends on oil to lubricate and cool all of its moving parts. Therefore, the engine oil should be checked regularly and kept at the required level.
- Make it a habit to have the engine oil level checked with every refueling.
- The oil pressure warning light is not an oil level indicator.

The oil pressure warning light indicates serious engine damage may be occurring when lit, if engine rpm is above idle speed.

## **Checking Engine Oil Level**

- Check the oil level on the multi-function display at regular intervals before refueling.
- Please see the chapter "DISPLAY AND MEASUREMENT OF THE ENGINE OIL LEVEL" on page 101.



Swallowing Engine Oil

Engine oil is hazardous to your health and may be fatal if swallowed.

▶ Keep engine oil out of children's reach.

## **WARNING**

**Engine Oil Cancer Risk** 

Used engine oil contains chemicals that have caused cancer in laboratory animals.

Always protect your skin by washing thoroughly with soap and water.

If you suspect an oil leak in the engine have your authorized Porsche dealer check it out immediately.

#### Top-up quantity

The difference between the minimum and maximum marks on the segment display is approx. 1.8 quarts (1.7 liters).

Never add more engine oil than required to reach the maximum mark.

## \*\*\*\*

#### **Oil-level warning**



If the oil level is too low, this is indicated by the oil-warning light on the multi-function display.

- Add engine oil immediately.
- Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.

# Measuring the oil level after topping up engine oil or opening the engine compartment lid

The oil level can be checked after waiting for approx. 1 minute with the vehicle parked on a level surface and the engine at operating temperature. If the engine compartment lid (Cabriolet convertible-top compartment lid) is opened when the engine is cold (e.g. in order to top up engine oil), the oil level cannot be displayed for a certain time.

The message "No information about oil level available at present" appears on the multi-function display.

 Engine oil should therefore only be topped up with the engine at operating temperature.
 This ensures short waiting times for the soonest possible oil level display.

## **M** WARNING

approx. 30 minutes.

Engine-compartment blowers or other moving parts in the area of the engine

Hands, fingers, items of clothing (ties, sleeves, etc.), necklaces or long hair can be drawn in by moving parts, e.g. the engine-compartment blowers, drive belt, etc., when working in the engine compartment.

The engine-compartment blowers are mounted under the engine compartment lid.

After the engine is switched off, the engine compartment temperature is monitored for

During this period, and depending on temperature, the engine-compartment blowers may continue to run or start to run.

Carry out work in this area only with the engine off and exercise extreme caution.

#### **WARNING**

Hot Engine Parts

Risk of burns from hot parts in the engine compartment.

- Exercise extreme caution when working in the engine compartment.
- Please see the chapter "MEASUREMENTS ON TEST STANDS" on page 221.

## i

## Information

The "Check Engine" warning light may come on if the cap of the oil filler opening is opened while the engine is running.

## **Topping Up Engine Oil**

Porsche recommends Mobil 11.

The right oil for your vehicle:

$approval^{1)}$	Viscosity class <sup>2)</sup>
Porsche A40	SAE 0W - 40 <sup>3)</sup> SAE 5W - 40 <sup>4)</sup> SAE 5W - 50 <sup>4)</sup>

1) Generally, you can find details on the manufacturer approvals on the oil containers or as a notice displayed by the retailer.

The current approval status is also available from your authorized Porsche dealer.

<sup>2)</sup> SAE viscosity class – Example: SAE 0W - 40 Specification 0W = Viscosity specification for low temperatures (winter).

Specification 40 = Viscosity specification for high temperatures.

- 3) For all temperature ranges.
- $^{4)}$  For the temperature range above -13 °F (-25 °C).

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#### Always observe the following points:

- Use engine oils approved by Porsche only. This is a precondition for optimum and problem-free
- Regular oil changes are part of servicing. It is important that the service intervals, particularly the oil change intervals, are observed in accordance with the specifications in the "Maintenance" booklet.
- Oils approved by Porsche can be mixed with each other.
- Porsche engines are designed so that no oil additives may be used.
- A label is located in the engine compartment, which provides you with information on suitable oil for your engine.

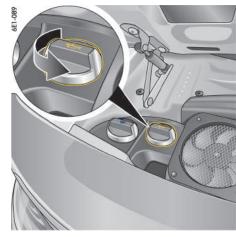
Your authorized Porsche dealer will be pleased to advise you.

#### **WARNING**

Engine Oil Fire Hazard

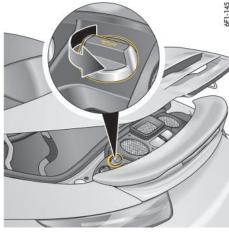
Fire hazard if engine oil comes into contact with hot engine parts.

- Exercise extreme caution when topping up engine oil.
- Top up engine oil only with the engine stopped and ignition switched off.



#### Coupé

- 1. Before opening the engine compartment lid (Cabriolet convertible-top compartment lid), read off the engine oil level on the multifunction display.
- Please see the chapter "DISPLAY AND MEASUREMENT OF THE ENGINE OIL LEVEL" on page 101.
- 2. Park the vehicle on a level surface.
- **3.** Switch off engine (at operating temperature).
- **4.** Open the engine compartment lid (Cabriolet: convertible-top compartment lid).
- 5. Unscrew cap on oil filler opening (illustration).
- 6. Top up engine oil according to the gauge on the multi-function display.
- 7. Carefully close cap on the oil filler opening.



Cabriolet



## 1 Information

After opening the engine compartment lid (Cabriolet convertible-top compartment lid), the oil level can only be measured after a certain waiting time.



## **Washer Fluid windshield**

Observe the following points:

Depending on the season, mix the water with the appropriate additives (window cleaner concentrate, antifreeze) in the correct mixture ratio.

**Summer filling** with water + window cleaner concentrate in the mixture ratio specified on the container.

Winter filling with water + antifreeze + window cleaner concentrate in the mixture ratio specified on the container.

Always follow all the instructions on the containers of the additives used.

- Only use window cleaner concentrate that meets the following requirements:
- Dilutability 1:100,
- Phosphate-free,
- Suitable for plastic headlight lenses.

We recommend window cleaner concentrates approved by Porsche. Your authorized Porsche dealer will be pleased to advise you. The washer fluid reservoir for windshield and

The washer fluid reservoir for windshield and headlights is located in the rear left of the luggage compartment (driving direction).

## **\*\*\*\***

## Warning message

A warning message appears on the multi-function display if the washer fluid level is too low.

▶ Add washer fluid at the next opportunity. The maximum filling capacity is approx. 6.3 US quarts (6 liters).

#### Adding washer fluid

- 1. Open cap on washer fluid reservoir.
- 2. Add washer fluid.
- 3. Close cap carefully.

## **Wiper Blades**

#### Maintenance notes

#### NOTICE

Risk of damage if wiper blades are not cleaned properly. The graphite coating on the wiper blades may be damaged.

Do not clean the wiper blades using a cloth or sponge, but rinse with clean water.

#### **NOTICE**

Risk of damage due to unintentional folding back of wiper arm and frozen wiper blades.

- Always hold the wiper arm securely when replacing the wiper blade.
- Thaw the wiper blades before lifting them from the window.

Wiper blades that are in perfect condition are vital for a clear view.

- Have the wiper blades replaced twice per year (before and after the cold season) or if wiper performance deteriorates or the blades are damaged.
- After switching off the ignition, press the wiper stalk down once **4**.
  - The wipers move upwards by approx. 45°.
- Clean the windshield regularly with window cleaner, especially after washing the vehicle in a car wash.
  - We recommend Porsche window cleaner. If they are very dirty (e.g. soiled with insect remains), they can be cleaned with a sponge or cloth.

If the wiper blades judder or squeak, this may be due to the following:

 If the vehicle is washed in an automatic car wash, wax residues may adhere to the

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Maintenance and Car Care

- windshield. These wax residues can be removed only by using window cleaner concentrate.
- The wiper blades may be damaged or worn.
- Have damaged wiper blades replaced immediately.
- Please see the chapter "WASHER FLUID WINDSHIELD" on page 224.

## Replacing wiper blades

- After switching off the ignition, press the wiper stalk down once. The wipers move upwards to an angle of approx. 45°.
- Please read the separate instructions provided by the wiper blade manufacturer.
- We recommend that you get your authorized Porsche dealer to replace the wiper blades.

#### **NOTICE**

Risk of damage. If the wiper blades are not changed properly, they can come loose when the car is moving.

Check that the wiper blades are seated securely.

The wiper blades must engage properly in the wiper arm.

## **Emission Control System** In the interest of clean air

Pollution of our environment has become a problem that is of increasing concern to all of us. We urge you to join us in our efforts for cleaner air in controlling the pollutants emitted from the automobile.

Porsche has developed an emission control system that controls or reduces those parts of emissions that can be harmful to our environment. Your Porsche is equipped with such a system. Porsche warrants the Emission Control System in your new car under the terms and conditions set forth in the Warranty Booklet.

You, as the owner of the vehicle, have the responsibility to provide regular maintenance service for the vehicle and to keep a record of all maintenance work performed. To facilitate record keeping, have services performed by authorized Porsche dealers. They have Porsche trained technicians and special tools to provide fast and efficient service.

## To assure efficient operation of the Emission **Control System:**

Have your vehicle maintained properly and in accordance with the recommendations described in your Maintenance Booklet. Lack of proper maintenance, as well as improper use of the vehicle, will impair the function of the emission control system and could lead to damage.

- ▷ Do not alter or remove any component of the emission control system.
- Do not alter or remove any device, such as heat shields, switches, ignition wires, valves, etc., which are designed to protect your vehicle's emission control system. In addition to serious engine damage, this can result in a fire if excess raw fuel reaches the exhaust system.
- Do not continue to operate your vehicle if you detect engine misfire or other unusual operating conditions.

### **Parking**

**WARNING** 

Fire Risk When Parking

The exhaust system becomes very hot when the engine is running and remains hot for some time after the vehicle is turned off. Flammable material close to the exhaust system could ignite.

- Do not park or operate your vehicle in areas where the hot exhaust system may come in contact with dry grass, brush, fuel spill or other flammable materials.
- If your car catches on fire for any reason, call the fire department. Do not endanger your life by attempting to put out the fire.

## **Undercoating**

**▲** WARNING

AfterMarket Undercoating

Additional undercoating or rust protection agents on or near the exhaust system can become too hot when driving and ignite, causing a fire.

Do not apply additional undercoating or rust protection agent on or near the exhaust manifolds, exhaust pipes, catalytic converters or heat shields. During driving the substance used for undercoating could overheat and ignite.

#### **How Emission Control Works**

When an automobile engine is running, it uses energy generated through the combustion of a mixture of air and fuel. Depending on whether a car is driven fast or slowly or whether the engine is cold or hot, some of the fuel (hydrocarbons) may not be burned completely, but may be discharged into the engine crankcase or exhaust system. Additional hydrocarbons may enter the atmosphere through evaporation of fuel from the fuel tank. These hydrocarbons (HC), when released into the air, contribute to undesirable pollution.

In addition, carbon monoxide (CO) and oxides of nitrogen (NOx) contribute to engine emissions. They, too, are formed during the combustion process and discharged into the exhaust system. To reduce these pollutants, your Porsche is equipped with a precisely calibrated fuel injection system to assure a finely balanced air/fuel mixture under all operating conditions.

#### Oxygen sensor

The oxygen sensor, installed in the exhaust pipe continuously senses the oxygen content of the exhaust and signals the information to an electronic control unit. The control unit corrects the air/fuel ratio, so the engine always receives an accurately metered air/fuel mixture.

#### **Crankcase ventilation**

Through crankcase ventilation, undesirable emissions from the engine crankcase are not permitted to reach the outside atmosphere. These emissions are recirculated from the crankcase to the air intake system. From here the emissions mix with the intake air and are later burned in the

## **Catalytic converters**

The catalytic converters are efficient "clean-up" devices built into the exhaust system of the vehicle. The catalytic converters burn the undesirable pollutants in the exhaust gas before it is released into the atmosphere.

The exclusive use of unleaded fuel is critically important for the life of the catalytic converters. Therefore, only unleaded fuel must be used.

## The catalytic converters will be damaged by:

- Push or tow starting the vehicle,
- Misfiring of the engine,
- Turning off the ignition while the vehicle is moving,
- Driving until the fuel tank is completely empty,
- By other unusual operating conditions.
- Do not continue to operate your vehicle under these conditions, since raw fuel might reach the catalytic converters. This could result in overheating of the converters. Federal law prohibits use of leaded fuel in this car.

## Fuel Economy

Fuel economy will vary depending on where, when and how you drive, optional equipment installed, and the general condition of your

A car tuned to specifications and correctly maintained, will help you to achieve optimal fuel economy.

- ▶ Have your vehicle tuned to specifications. Air cleaner should be dirt free to allow proper engine "breathing".
  - Battery should be fully charged. Wheels should be properly aligned. Tires should be inflated to the correct pressure.

- Always monitor your fuel consumption.
- Drive smoothly, avoid abrupt changes in speed as much as possible.
- Avoid jack rabbit starts and sudden stops.
- Do not drive longer than necessary in the lower gears. Shifting into a higher gear early without lugging the engine will help save fuel.
- Prolonged "warm up" idling wastes gas. Start the vehicle just before you are ready to drive. Accelerate slowly and smoothly.
- Switch off the engine if stationary for longer periods.
- Any additional weight carried in the vehicle reduces fuel economy. Always keep cargo to a minimum and remove all unnecessary items.
- Organize your trips to take in several errands in one trip.
- All electrical accessories contribute to increased fuel consumption.
- Only switch on the air conditioning when necessary.
- Do not drive with the Roof Transport System mounted unless you need it.

The EPA estimated miles per gallon (mpg) is to be used for comparison purposes, actual mileage may be different from the estimated mpg, depending on your driving speed, weather conditions and trip length. Your actual highway mileage may be less than the estimated mpg.

▶ Please observe all local and national speed limits.

## **Operating Your Porsche in other Countries**

Government regulations in the United States and Canada require that automobiles meet specific emission regulations and safety standards.

Therefore, cars built for the U.S. and Canada differ from vehicles sold in other countries.

If you plan to take your Porsche outside the continental limits of the United States or Canada, there is the possibility that:

- Unleaded fuel may not be available,
- Unleaded fuel may have a considerably lower octane rating. Excessive engine knock and serious damage to both engine and catalytic converters could result.
- Service may be inadequate due to lack of proper service facilities, tools or diagnostic
- Replacement parts may not be available or very difficult to get.

## Porsche cannot be responsible for the mechanical damage that could result because of inadequate fuel, service or parts availability.

If you purchased your Porsche abroad and want to bring it back home, be sure to find out about shipping and forwarding requirements, as well as current import and customs regulations.

#### Fuel

When the ignition is on, the fuel level is displayed on the instrument panel.

▶ Please see the chapter "FUEL GAUGE" on page 90.

#### **A** DANGER

Refueling Fire Risk

▶ Fire, open flame and smoking are prohibited when handling fuel.

#### **WARNING**

Fuel Vapors and Skin Contact

Fuel and fuel vapors are hazardous to health.

- Avoid contact with skin or clothing, since injury to your skin may occur.
- Do not inhale fuel vapors, since they may make you ill and possibly cause death if inhalation is prolonged and occurs in a closed space.

#### NOTICE

To prevent damage to the emission control system and engine:

- Never drive the tank dry.
- Avoid high cornering speeds after the warning lights have come on.
- ▶ Please see the chapter "FUEL ECONOMY" on page 226.

## Check engine warning light

If the warning lights in the instrument panel come on and remain on while driving, it suggests:

- a potential engine control problem and the need for system service or
- an improperly fastened tank cap or refueling with engine running.



## Information

It is important that the service intervals, particularly the oil change intervals, are observed in accordance with the specifications in the "Maintenance" booklet.

#### Refueling

## **A** DANGER

Refueling Fires / Cellphones

The RF energy from a cellphone can cause a sparking on bare metal, much like aluminum foil in a microwave oven. The spark could ignite gasoline fumes present while refueling.

▷ Do not use a cellphone while pumping gas.

## **A** DANGER

Refueling Fires / Static Electricity

Static discharge from your body can ignite gasoline fumes present when you get back out of the vehicle and touch the fuel nozzle.

▷ Do not re-enter the vehicle while pumping gas.



- 1. Stop the engine and switch off the ignition.
- 2. Open the filler flap by pressing on the rear part of the filler flap (arrow).

The vehicle must be unlocked.



- 3. Slowly open and remove the tank cap. Put the tank cap into the holder (arrow).
- **4.** Insert the pump nozzle fully into the filler neck. The handle of the pump nozzle must point downwards.

## Total capacity

approx. 18.0 US gallons (68 liters), including approx. 3.17 US gallons (12 liters) reserve

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- 5. Operate the pump nozzle and refuel the
  - Do not add further fuel once the correctly operated automatic pump nozzle has switched off. Fuel could spray back or could flow over when heated.
- **6.** Replace the tank cap immediately after refueling and close it until you hear and feel it locking.
- **7.** Close the filler flap and press on the rear of the filler flap until it engages securely.



#### Information

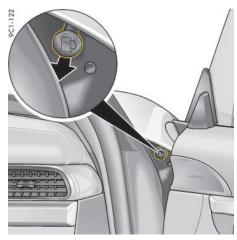
If you lose the tank filler cap, you must replace it only with an original part.

## NOTICE

#### Risk of damage to decorative foils.

Decorative foils may fade if they come into contact with fuel.

▶ Wipe off any spilled fuel immediately.



## Emergency unlocking of the filler flap

If the electrical release mechanism is faulty, the filler flap can be opened as follows:

- Open the passenger's door.
- Pull the button in the right-hand door aperture (arrow).

The filler flap pops open.

## **Portable Fuel Container**

**A** DANGER

Transporting Filled Fuel Containers

If the portable fuel container is damaged in an accident and fuel escapes, it could ignite or explode.

- ▷ Do not carry a portable fuel container on journeys.
- Observe the relevant laws which prohibit fuel transport.

**WARNING** 

Portable Fuel Container Vapor Hazard

Vapors from the fuel are hazardous to health.

Do not carry a portable fuel container in the occupant compartment.

#### **Fuel Recommendations**

Your Porsche is equipped with catalytic converters and must use **UNLEADED FUEL WITHOUT METALLIC ADDITIVES ONLY**.

Your engine is designed to provide optimum performance and fuel economy using unleaded premium fuel with an octane rating of **98 RON/88 MON (93 CLC or AKI)**. Porsche therefore recommends the use of these fuels in your vehicle.

Porsche also recognizes that these fuels may not always be available. Be assured that your vehicle will operate properly on unleaded premium fuels with octane numbers of at least **95 RON/ 85MON (90 CLC or AKI)**, since the engine's "Electronic Octane™ knock control" will adapt the ignition timing, if necessary.

If fuels of less than **95 RON/85 MON (90 CLC or AKI)** are used however, this could reduce performance and increase fuel consumption.

Pavoid driving at full throttle.

It is important to observe the regular service intervals, and particularly the oil change intervals, specified in the "Maintenance" booklet.

The use of UNLEADED FUEL WITHOUT METALLIC ADDITIVES ONLY is critically important to the life of the catalytic converters. Deposits from leaded fuels or metallic additives will ruin the converters and make them ineffective as an emission control device. Metallic additives can cause serious engine damage.

Cars with catalytic converters have a smaller fuel tank opening, and gas station pumps that dispense unleaded fuel have smaller nozzles. This will prevent accidental pumping of leaded fuel into cars with catalytic converters.

Unleaded fuels may not be available outside the continental U.S. and Canada. Therefore, we recommend you do not take your car to areas or countries where unleaded fuel may not be available.



#### Information

In some countries the available fuel quality may not meet the requirements of your Porsche vehicle and can result in coking inside or around the injector bores or other serious damage to the engine, fuel system or exhaust system. In this case, the fuel may be mixed only with the additive sold and recommended by Porsche after consulting your authorized Porsche dealer. Porsche part number 000 043 206 89.

Observe the instructions and mixture ratios stated on the container.

It is important that the service intervals, particularly the oil change intervals, are observed in accordance with the specifications in the "Maintenance" booklet.

#### NOTICE

Risk of destruction of the engine, fuel system or exhaust system if non-approved additives are used.

Use only additives approved by Porsche. The use of other additives can result in destruction of the engine, fuel system or exhaust system of your vehicle.

#### Octane ratings

Octane rating indicates a fuel's ability to resist detonation. Therefore, buying the correct octane gas is important to prevent engine "damage". The RON octane rating is based on the research method. The CLC (U.S. Cost of Living Council octane rating) or AKI (antiknock index) octane rating usually displayed on U.S. fuel pumps is calculated as research octane number plus motor octane number, divided by 2, that is written as:

$$\frac{\text{RON+MON}}{2}$$
 or  $\frac{R}{2}$ 

The CLC or AKI octane rating is usually lower than the RON rating:

For example: 95 RON equals 90 CLC or AKI.

## **Fuels containing ethanol**

Do not use any fuels containing more than 15 percent ethanol by volume.

We recommend, however, to change to a different fuel or station if any of the following problems occur with your vehicle:

- Deterioration of drivability and performance.
- Substantially reduced fuel economy.
- Vapor lock and non-start problems, especially at high altitude or at high temperature.
- Engine malfunction or stalling.

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## **Fuel Evaporation Control**

## **Fuel tank venting**

The evaporation chamber and the carbon canister prevent fuel vapors from escaping to the atmosphere at extreme high outside temperatures, when driving abruptly around curves and when the car is parked at an incline or in any other non level position.

#### Vapor control system and storage

When the fuel tank is filled, vapors are collected in the evaporation chamber by a vent line leading the vapors to the carbon canister where they are stored as long as the engine does not run.

## **Purge system**

When the engine is running, the fuel vapors from the canister will be mixed with fresh air from the ambient air of the canister. This mixture will be directed to the intake air housing by the tank vent line, mixed with the intake air and burned during normal combustion.

## **Car Care Instructions**

Please see the chapter "MEASUREMENTS ON TEST STANDS" on page 221.

Regular Maintenance and correct care helps to maintain the value of your car and is also a requirement for maintaining the manufacturers vehicle warranties.

Your authorized Porsche dealer has specially developed car-care products from the Porsche program available either singly or as complete car-care sets. They will be pleased to help you select suitable products. Whether you use Porsche products or other commercially available cleaning agents first make sure of their correct application.

A Porsche that is well-cared for can look like new for years. It all depends on the amount of care the owner is willing to give the car.

#### **WARNING**

**Chemical Cleaners** 

Cleaning agents may be hazardous to your health. Most chemical cleaners are concentrates which require dilution. High concentrations might cause problems ranging from irritation to serious injury.

- Keep cleaning agents out of reach from children.
- Observe all caution labels.
- Always read directions on the container before using any product. These directions may contain information necessary to avoid personal injury.
- Do not use fuel, kerosene, naphtha, nail polish remover or other volatile cleaning fluids. They may be toxic, flammable or hazardous in other ways. Only use spot removing fluids in a well vented area.
- Do not clean the underside of chassis, fenders, wheel covers, etc., without protecting your hands and arms as you may cut yourself on sharp-edged metal parts.

#### **NOTICE**

Risk of damage to the vehicle or property from cleaning agents.

▷ Observe all caution labels.



#### Information

Moisture and road salt on brakes may affect braking efficiency.

▶ Test the brakes after each vehicle washing.

## High-pressure cleaning equipment, steam cleaners

#### **NOTICE**

Risk of damage as a result of using high-pressure cleaning equipment, steam cleaners or similar. High-pressure cleaning equipment, steam cleaners or similar can damage the following components:

- Convertible top
- Tires
- Logos, emblems
- Painted surfaces
- Alternator
- Electrical components and plug connections in the engine compartment
- ParkAssist sensors
- Radar sensor for adaptive cruise control
- Reversing camera
- Always read the operating instructions provided by the equipment manufacturer.
- Always cover the lid of the brake fluid reservoir prior to cleaning. Never point the cleaning jet directly at the lid.
- When cleaning with a flat-jet nozzle or a so-called "dirt blaster", maintain a minimum distance of 20 in. (50 cm).
- Never use high-pressure cleaning equipment or steam cleaners with a round-jet nozzle. A high-pressure cleaning device or steam cleaner fitted with a round nozzle will damage your vehicle. The tires are particularly susceptible to damage.
- Do not point the cleaning jet directly at any of the aforementioned components.

#### **Decorative film**

#### NOTICE

Risk of damage due to separation of the decorative film when using high-pressure cleaning equipment, steam cleaners or similar cleaning equipment.

Do not use high-pressure cleaning equipment, steam cleaners, etc. to clean decorative films.

#### Care of door lock

To prevent the door lock from freezing during the cold season, cover the lock barrel with suitable adhesive tape while washing the vehicle.

If the lock still freezes, use an ordinary de-icer. In many cases, a well warmed key can help.

▶ Never use excessive force.

## **Car washing**

The best protection for the vehicle from the damaging effects of the environment is frequent washing and preservation.

The longer road salt, road dust, industrial dust, insect remains, bird excrement, and tree exudations (e.g. resin, pollen), etc. are allowed to remain on the bodywork, the more harmful their effect.

Observe the following points in order to ensure that the vehicle is washed thoroughly without damaging the paintwork:

- The underside of the vehicle should also be thoroughly washed at the end of the gritting season at the latest.
- Wash your vehicle only at sites provided for this purpose to prevent soot, grease, oil and heavy metals from entering the environment.

- ▶ New cars should be washed carefully with plenty of clear water to protect the new paint work. Dark paint finishes show up the smallest of surface damage (e.g., scratches) more readily than lighter colors.
  - Dark colors are slightly more susceptible to scratching and require particularly careful paint care.
  - Dark paints make even the smallest surface blemishes (scratches) more conspicuous than lighter colors.
- Do not wash your Porsche in direct sunlight or when its body is hot.
- When washing by hand, use a car shampoo, plenty of water, and a soft sponge or washing brush.
  - We recommend Porsche car shampoo.
- Start washing the vehicle by thoroughly wetting the paintwork and rinsing the heavy dirt off.
- After washing the vehicle, rinse it thoroughly with water and rub it dry with chamois-leather. Do not use the same chamois for rubbing dry as you use for cleaning the windshield and windows.

## **WARNING**

Wet Brakes

Reduced or uneven braking action may be caused by wet brakes.

After washing the vehicle, test the brakes and steering and briefly brake the disks dry. When doing so, make sure that vehicles traveling behind you are not affected.

#### Cleaning in car washes

Optional add-on parts or parts that project beyond the contours of the vehicle may be damaged by design features of car washes.

The following parts are particularly at risk:

- Convertible top (hot wax treatment must not be used, as the wax attacks the convertible top material).
- Windshield wipers and rear wiper (always switch them off – wiper stalk in position **0** – to prevent them wiping unintentionally in intermittent or sensor operation).
- Exterior mirrors (always fold in).
- External antenna (always unscrew).
- Roof transport system (always remove completely).
- Spoilers.
- Wheels (the wider the rim and the lower the tire height, the greater the risk of damage).
- High-gloss or silk-gloss wheels (to prevent these from getting scratched, do not clean with the wheel-cleaning brushes of the car wash).
- ▶ Please consult the operator before using automatic car washes.
- All parts not reached by a car wash, such as door and lid seams or door sills, must be washed and polished by hand.



## Information

Automatic car washes spray water at odd angles and high pressures, which are not seen in normal driving. Therefore, water can sometimes find its way into the passengers compartment during or shortly after the car wash.

## Convertible top

The service life and appearance of the convertible top depend largely on expert care and operation. Incorrect care and operation can damage the convertible top or cause it to leak.

Never remove snow and ice with sharp-edged objects.

#### Cleaning the convertible top

Risk of damage to the convertible top due to the cleaning jet of the high-pressure cleaning equipment or hot wax treatment.

- Do not clean the convertible top with highpressure cleaning equipment.
- Do not use hot wax treatment.

Do not wash the convertible top every time you wash the vehicle.

Normally, rinsing the convertible top with clean water is sufficient.

- Brush dust off the convertible top in the direction of the weave using a soft brush.
- Only in the case of heavy soiling, wet the convertible top with lukewarm water and a wash-shampoo & convertible-top cleaner and rub gently using a sponge or soft brush. Rinse off wash-shampoo & convertible-top cleaner thoroughly from the convertible top with clean water.
  - We recommend Porsche wash-shampoo.
- After washing, treat the convertible top at least once a year with a convertible-top care product.

Do not allow the convertible-top care product to come into contact with paint or glass. If it does, remove immediately.

- ▷ In the case of leakage in the convertible-top covering or at its seams and folds, use a convertible-top care product.
- Please observe the information on the containers.
  - We recommend Porsche convertible-top care product.
- Remove bird excrement immediately. The acid this contains makes the rubber swell and the convertible top will leak.
- Open the convertible top only when completely dry, otherwise damp stains and abrasion marks may occur which cannot be removed.
- Attempt to remove spots from the convertibletop covering by rubbing carefully with a soft rubber sponge.

#### **Paint care**

In order to protect the paint on your vehicle in the best possible way against mechanical and chemical damage, you should

- preserve it regularly,
- polish it if necessary,
- remove spots and stains, and
- repair damaged paintwork.
- Do not apply care products containing silicone to the windows.



#### Information

- Never rub a dusty vehicle with a dry cloth, because the grains of dirt will damage the paintwork.
- Do not treat matt-painted components with preservatives or polishes as these remove the matt effect.

#### Preservation

The paint surface becomes dull over time due to weathering.

- ▶ Preserve paint regularly.
- Apply paint preservative after washing the vehicle and polish it smooth to preserve the paintwork.

This keeps the paint shiny and elastic. Dirt is prevented from adhering to the paint surface and industrial dust is prevented from penetrating the paint.

#### **Polishing**

Only when the original shine can no longer be obtained using preservatives should paint polish be used to clean the paint.

We recommend Porsche paint polish.

#### Removing spots and stains

- Remove tar spatters, traces of oil, insects etc. as soon as possible using an insect remover, as they discolor the paint if left to work on it over time.
- ▶ Wash the treated areas carefully afterwards.

#### Repairing minor paint damage

 Have minor paint damage (cracks, scratches or stone damage) repaired immediately before corrosion begins.

Please contact an authorized Porsche dealer. If traces of corrosion have already formed, these must be thoroughly removed. An anti-corrosion primer must then be applied to these spots, followed by top-coat paint.

Paint data can be found on the vehicle data carrier.

▶ Please see the chapter "VEHICLE IDENTIFICATION NUMBER" on page 284.

## **Cleaning windows**

- ▷ Clean all windows regularly, inside and out, with window cleaner.
  - We recommend Porsche window cleaner.
- Do not use the same chamois for painted surfaces and for drying the windows.
   Preservative residues could reduce transparency.
- ▶ Remove insect residues with insect remover.



#### Information

The door windows have a water-repellent (hydrophobic) coating, which prevents soiling of the windows.

This coating is subject to natural wear and can be renewed.

Please contact an authorized Porsche dealer.

#### Care of windshield wiper blades

Windshield wiper blades that are in perfect condition are vital for a clear view.

Please see the chapter "WIPER BLADES" on page 224.

## Repairing the underbody protection

The underside of your car is durably protected against chemical and mechanical influences. As it is not possible to exclude the risk of damage to this protective coating in day to day driving, it is advisable to have the underside of the car inspected at certain intervals - preferably before the start of winter and again in spring - and the undercoating restored as necessary.

Your authorized Porsche dealer is familiar with the bodyseal treatment procedures and has the necessary equipment for applying factory approved materials. We recommend that you entrust them with such work and inspections. Unlike conventional spray oils, undercoating and rust-proofing compounds based on bitumen or wax do not attack the sound-proofing materials applied at the factory.

#### **WARNING**

**Exhaust System Fire** 

The exhaust system becomes very hot when the engine is running. Flammable material close to the exhaust system could ignite. Additional undercoating or rust protection agents on or near the exhaust system can become too hot when driving and ignite.

- Do not apply additional undercoating or rustproofing on or near the exhaust manifold, exhaust pipes, catalytic converters or heat shields. During driving the substance used for undercoating could overheat and ignite.
- Before applying fresh underseal, carefully remove deposits or dirt and grease. Once it has dried, the new undercoating compound forms a tough protective coating which provides efficient rust-proofing of the floor panels and components.

▷ Always apply a fresh coating of suitable preservative to unprotect areas after cleaning the underside of the body, the transmission, the engine or carrying out repairs to underbody, engine or transmission components.

Effective rust-proofing is particularly important during the cold weather season. If your car is driven frequently in areas where salt has been spread on the roads, the whole engine compartment should be cleaned thoroughly after the winter to prevent salt from causing any lasting damage. A full under-body wash should also be performed at the same time.

### Cleaning headlights, lights, interior and exterior plastic components, adhesive foils, reversing camera and radar sensor for adaptive cruise control

Observe the following points:

- Use only clean water and a little dishwashing liquid or interior window cleaner to clean headlights, lights, plastic components and
- Use a soft sponge or a soft, lint-free cloth. Do not spray water or interior window cleaner directly onto the plastic components in the passenger compartment, but first onto a sponge or cloth. Cleaning agents may, for example, enter controls or switches and cause damage.

## 1 Information

An interior window cleaner can also be used to clean plastic surfaces (always read the cleaning instructions on the container).

We recommend Porsche interior window cleaner.

- Gently wipe the surface without applying too much pressure.
- Do not clean when dry.

- Never use other chemical cleaners or
- Rinse cleaned surfaces with clear water.

#### Alloy wheels

Metal particles (e.g. brass or copper in brake dust) must not remain too long on alloy wheels. Contact corrosion can cause pitting.



#### Information

Cleaners with an oxide-removing effect or wrong pH value, as are commonly used for other metals, as well as mechanical tools and products, will damage the oxide layer and are therefore unsuitable.

- ▶ Use only cleaners for alloy wheels (pH value 9.5). Products with the wrong pH value can destroy the protective layer on the wheels.
  - We recommend Porsche cleaner for alloy rims.
- ▶ If possible, wash the wheels every two weeks with a sponge or washing brush. If the wheels are exposed to road salt, grit or industrial dust, weekly cleaning is necessary.
- ▷ Every three months, after cleaning, grease the wheels with car wax or an acid-free grease (e.g. Vaseline).
  - Rub the grease in well with a soft cloth.
- Please see the chapter "CLEANING IN CAR WASHES" on page 233.

#### **WARNING**

Cleaning Agents on Brake Disks

If cleaning agents (e.g. wheel cleaning agents) come into contact with the brake disks, the resulting film on the brake disks can impair braking performance.

- Make sure that no cleaning agent comes into contact with the brake disks.
- If cleaning agent has come into contact with the brake disks, clean the brake disks thoroughly with a strong jet of water.
- Paving attention to any road users behind you. dry the brake disks by applying the brakes.

#### Stainless steel tailpipes

Stainless steel tailpipes can discolor due to soiling, strong heat and combustion residues. The original shine can be achieved again using commercially available metal luster paste or metal polish.

#### Cleaning door, roof, lid and window seals

#### NOTICE

The lubricant coating on the inner door seals may be damaged by unsuitable cleaning and care agents.

- Do not use any chemical cleaning agents or
- Do not use any preservative agents.
- Wash dirt (e.g. abrasion, dust, road salts) from all seals regularly using warm soapy water.
- If there is a risk of frost, protect the outer door seals and the lid and flap seals against freezing into place with a suitable care product.

#### **Leather care**

The natural surface markings of leather, e.g. creases, healed scars, insect sting marks, structural differences and slight variations in shade and grain add to the attractiveness of the high-quality natural leather product.

Observe the following care instructions:

#### NOTICE

The leather will be damaged by the use of unsuitable cleaning and care agents and by inappropriate treatment.

- Do not use caustic cleaners or hard cleaning
- Make sure that perforated leather does not get wet on its reverse side.
- Remove water drops from the leather without
- Clean all types of leather regularly to remove fine dust using a soft, damp, white woolen cloth or a commercially available microfiber cloth.
- Remove heavy contamination (not water or moisture stains) with a leather cleaner. Always read the instructions for use given on
- We recommend Porsche leather care liquid. Treat cleaned leather only with a leather care product.
  - We recommend Porsche leather care liquid.

#### Seats with seat ventilation

#### Care instructions for water or moisture stains.

Rain water or moisture can stain the perforated

## Removing water and moisture stains Preconditions:

- Seat heating and seat ventilation must be switched off.
- No direct sunlight.
- Do not use leather cleaners or care products to remove water and moisture stains.
- Blot the entire seat or backrest surface using a clean, absorbent sponge and distilled water. Make sure that the perforated leather does not get wet on its reverse side.
- Allow the seat covering to dry completely at room temperature out of direct sunlight. Do not dry the seat covering by switching on the seat heating and seat ventilation.
- ▷ Once dry, wipe the seat covering with a dry, lint-free cloth.

## Cleaning carpet, floor mats

- Use a vacuum cleaner or a brush (not too soft) for cleaning.
- Heavy dirt and stains can be removed with a stain remover.
  - We recommend Porsche stain remover.

To protect carpets, the Porsche range of accessories includes mats of the correct size and with the appropriate fastening.

#### **WARNING**

**Obstructed Pedals** 

Improperly secured floor mats can obstruct pedal travel.

- Always check the movement of the pedals before driving and make sure that they are not obstructed by a floor mat or any other object.
- Secure the floor mat to prevent it from sliding into positions that could interfere with the safe operation of your vehicle - do not lay them loosely in the vehicle.

Your authorized Porsche dealer will be glad to offer you floor mats of correct size including a securing possibility.

## **Cleaning airbag covers**

**A** DANGER

Vehicle Interior Modifications

Incorrect modifications may damage the airbag system. The airbag may not deploy properly in the event of an accident.

- ▷ Do not make any modifications whatsoever to individual components, such as the padded covers on the steering wheel, the instrument panel, the underside of the instrument panel, front seats and door panels.
- Have your authorized Porsche dealer to clean these components.

#### **Cleaning fabric linings**

Fabric linings on pillars, roofliner and sun blinds, etc. must be cleaned only using suitable cleaning agents or a suitable dry foam and a soft brush.

## Alcantara® care

Do not use leather care products to clean Alcantara<sup>®</sup>. Alcantara<sup>®</sup> is a manufactured product. It is not genuine leather or suede. For regular care, it is sufficient to clean the cover with a soft brush.

Strong abrasion or rubbing when cleaning will produce a lasting change to the surface.

#### Cleaning when lightly soiled

Wet a soft cloth with water or a neutral soap solution and wipe off the dirt.

#### Cleaning when heavily soiled

Wet a soft cloth with lukewarm water or thinned white spirit and dab the dirt from the outside in.

#### **Cleaning the safety belts**

- Use mild detergent to clean soiled belts.
- When drying, avoid direct sunlight.
- Only use suitable cleaning agents.
- Do not tint or bleach the belts. The belt fabric could be weakened, thus affecting safety.

## **Storing your Porsche**

If you intend to store your Porsche for a prolonged period, please consult your authorized Porsche dealer. The staff will be glad to advise you on the most suitable and necessary methods.

- ▷ Clean your vehicle thoroughly inside and outside
  - The under carriage and chassis components should be free of dirt and salt deposits.
- Fill up the fuel tank.
- Change the oil and oil filter, and run the engine for several minutes.
- Increase the tire pressure to 50 psi/3.5 bar/ 350 kPa.

It is not recommended to lift the vehicle, due to the possibility of corrosion on shock absorber piston shafts.

The vehicle should be moved slightly, approximately every four weeks, to prevent flat spot on the tires.

## Climate control

The air conditioning system should be in good working condition and fully charged.

#### Windshield/Headlight washer

▷ Check and correct antifreeze/cleaning solution level as necessary.

## **Electrical system**

- ▶ Remove the battery from the vehicle and store it in a cool dry place, not on a cement floor. When the battery is disconnected, the alarm system is deactivated.
- ▶ Recharge the battery every 3 months. If the battery remains in the vehicle with the cables connected, it is necessary to check, remove and recharge the battery every 2-3 weeks. Do not fast charge the battery.
- ▶ Please see the chapter "BATTERY (12 VOLT)" on page 271.

## **Vehicle interior**

The interior must be dry, especially in the area of the floor carpets. The use of drying agents (Silica-Gel) is recommended in vehicles with leather interior and in areas with high humidity. The recommended amount is 3 fabric bags of 1.1 lbs. (500 grams) each placed on the floor carpets. Windows, doors and lids must be closed. The air vents should be opened.

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# **Exercise Extreme Caution when Working on your vehicle**

The engine compartment of any motor vehicle is a potentially hazardous area. If you are not fully familiar with proper repair procedures, do not attempt the adjustments described on the following pages.

This caution applies to the entire vehicle.

## **A** DANGER

Fire and Explosion Hazards

Many vehicle fluids are highly flammable, e. g. fuel, engine and transmission oil. Fuel vapors can cause an explosion. When a battery is being charged, highly explosive gases can develop.

- Do not smoke or allow an open flame around the battery or fuel.
  - Pay attention to sparks, e. g. when coming into contact with cables.
  - Keep a fire extinguisher close at hand.
- Ensure that there are no open flames in the area of your vehicle at any time when fuel fumes might be present. Be especially cautious of devices such as hot water heaters which ignite a flame intermittently.
- Only work on your vehicle outdoors or in a well ventilated area.

#### **WARNING**

Fluid Health Hazards

Refill fluids, e. g. engine oil, brake fluid or coolant are hazardous to health (poisonous, irritant, caustic).

- Keep these fluids out of children's reach and dispose of them in accordance with the appropriate regulations.
- Only work on your vehicle outdoors or in a well ventilated area.

## **WARNING**

**Exhaust Gas Inhalation** 

Engine exhaust is dangerous if inhaled. Engine exhaust fumes have many components which you can smell. They also contain carbon monoxide (CO), which is a colorless and odorless gas.

Carbon monoxide can cause unconsciousness and even death if inhaled.

Only work on your vehicle outdoors or in a well ventilated area.

#### **WARNING**

Hot Engine Parts, Exhaust System and Fluids

The engine and surroundings components, the exhaust system and coolant become very hot when the engine is running.

The coolant reservoir is pressurized. Careless opening of the coolant reservoir can lead to hot coolant suddenly spraying out.

- Take care when working near hot parts of the vehicle, in particular engine parts and parts of the exhaust system.
- Before working in the engine compartment, always switch the engine off and let it cool sufficiently.
- Allow the engine to cool down before opening the cap of the coolant reservoir and protect your hands, arms and face from any possible escape of hot coolant.

#### **WARNING**

Moving Engine Parts

Take great care to ensure that hands, fingers, articles of clothing (e. g. ties, sleeves, etc.), necklaces or long hair cannot be caught up by the radiator fans, drive belt or other moving parts. The radiator fans in the front of the vehicle may be operating or unexpectedly start operating when the engine is switched on.

- Exercise extreme care that parts of the body, articles of clothing or jewelry do not get caught in the radiator fan, drive belt or other moving parts.
- Carry out work in these areas only with the engine off and exercise extreme caution.

## **MARNING**

Electric Shock from Ignition System

When the ignition is on, all cables and wires of the ignition system carry a high voltage.

Exercise special care when working on the ignition system.

## **WARNING**

Failure to Secure Vehicle

If the vehicle is not secured, or incorrectly secured, during repair work, it could move unexpectedly or fall from the car jack or car lift.

- Be alert and cautious around the engine at all times while it is running. If you have to work on the engine while it is running, always apply the electric parking brake and put the PDK selector lever in position P or N.
- Always support your car with safety stands if it is necessary to work under the car. The jack supplied with the car is not adequate for this purpose.
  - Switch off level control of air suspension and height adjustment.
  - Please see the chapter "RAISING THE VEHICLE WITH A LIFTING PLATFORM, TROLLEY JACK OR STANDARD JACK" on page 254.
- Jack up the vehicle only at the specified jacking points on the underside of the vehicle.
- Never start the engine when the vehicle is jacked or lifted up. Vibration from the engine could cause the vehicle to fall.
- When working under the car without safety stands but with the wheels on the ground, make sure the car is on level ground, the wheels are blocked, and that the engine cannot be started.
  - Withdraw ignition keys (switch ignition off in vehicles that have Porsche Entry & Drive).

## Information

- ▷ Incomplete or improper servicing may cause problems in the operation of the car. If in doubt about any servicing, have it done by your authorized Porsche dealer.
  - Improper maintenance during the warranty period may affect your Porsche warranty coverage.
- Some countries require additional tools and special spare parts to be carried in your vehicle. Please make enquiries before driving abroad.

## **WARNING**

Radiator Fans, Engine Compartment Blowers

The engine-compartment blowers are mounted under the engine compartment lid.

After the engine is switched off, the engine compartment temperature is monitored for approx. 30 minutes.

During this period, and depending on temperature, the engine-compartment blowers may continue to run or start to run.

Carry out work in this area only with the engine off and exercise extreme caution.

The radiators and radiator fans are in the front of the vehicle.

The radiator fans in the front of the vehicle may be operating or unexpectedly start operating when the engine is switched on.

- Carry out work in these areas only with the engine switched off.
- Take great care to ensure that parts of the body, items of clothing or jewelery cannot be drawn in by the radiator fan, enginecompartment blower, drive belt or other moving parts.

#### **Measurements on test stands**

#### Performance test

Performance tests on roller-type test stands are not approved by Porsche.

#### **Brake tests**

Brake tests must be performed only on roller-type test stands.

The following limit values must not be exceeded on roller-type test stands:

- Test speed 4.7 mph (7.5 km/h)
- Test duration 20 seconds

#### Testing the electric parking brake

Electric parking brake tests on the brake test stand must only be performed with the ignition switched on and the Porsche Doppelkupplung selector lever in position N.

The vehicle switches automatically to brake test stand mode, in which the electric parking brake can be tested.

The message "Electric parking brake in service mode" appears on the multi-function display in the instrument panel.

#### Balancing wheels on the vehicle

During finish balancing of the wheels, the entire vehicle must be lifted and the wheels must be free to turn.



## Information

The tools required for changing a wheel (e.g. jack, wheel bolt wrench, assembly aids) are not supplied as standard with the vehicle. Your authorized Porsche dealer will be pleased to advise you.

## **Checking the Coolant Level and Adding Coolant**

The coolant provides year-round protection from corrosion and freezing down to -31 °F (-35 °C) (-40 °F (-40 °C) in Nordic countries). Regular checking of the coolant level is part of servicing. The coolant level only needs to be checked when a warning message appears on the multi-function display in the instrument panel.

- Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.
- Use only antifreeze authorized by Porsche.

#### **DANGER**

Swallowing Engine Coolant

Coolant is hazardous to health. Coolant can be deadly to children or pets if consumed.

- Keep coolant out of children's reach.
- ▷ Also, keep coolant away from your pets. They can be attracted to it should there be a spill, or to used coolant left in an open container.

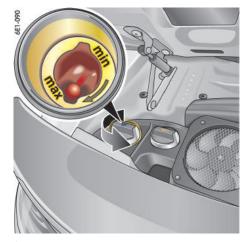
### **WARNING**

Hot Engine Coolant

The coolant becomes very hot when the engine is running and can burn you.

The coolant reservoir is pressurized. Careless opening of the coolant reservoir can lead to hot coolant suddenly spraying out.

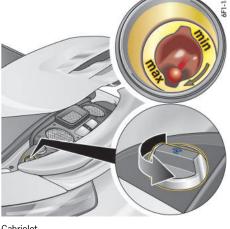
- ▷ Do not open the cap on the reservoir when the engine is hot.
- Allow the engine to cool down before opening the cap and protect your hands, arms and face from any possible escape of hot coolant.



#### Coupé

Checking the coolant level when a warning message appears on the multi-function display in the instrument panel:

- 1. If the engine is hot, cover the reservoir cap with a cloth.
  - Open cap carefully and allow any overpressure to escape.
  - Then unscrew cap completely.
- 2. Read off the engine coolant level. When the engine is cold and the vehicle is level, the red display (ball) must be within the area of the arrow between the min and max markings.



#### Cabriolet

3. Top up with coolant if necessary. Only add a mixture of antifreeze and distilled water in equal parts.

## Antifreeze in coolant:

50 % provides antifreeze protection down to -31 °F (-35 °C).

The maximum fill level is reached when the red display is at the max marking. Do not exceed the Max marking.

- **4.** Screw the cap on the reservoir closed until it locks securely.
- 5. Have the cooling system checked. Please contact an authorized Porsche dealer.



## 1 Information

If pure water is added in an emergency, the mixing ratio will have to be corrected.

A significant loss of coolant indicates a leak in the cooling system.

The cause must be eliminated without delay. Please contact an authorized Porsche dealer.

#### **WARNING**

**Engine-compartment** blowers or other moving parts in the area of the engine

Hands, fingers, items of clothing (ties, sleeves, etc.), necklaces or long hair can be drawn in by moving parts, e.g. the engine-compartment blowers, drive belt, etc., when working in the engine compartment.

The engine-compartment blowers are mounted under the engine compartment lid.

After the engine is switched off, the engine compartment temperature is monitored for approx. 30 minutes.

During this period, and depending on temperature, the engine-compartment blowers may continue to run or start to run.

Carry out work in this area only with the engine off and exercise extreme caution.

## **WARNING**

Hot engine parts

The engine and adjacent components become very hot when the engine is running.

Exercise extreme caution when working in the engine compartment.



## **Brake Fluid**

Regular checking of the brake fluid is part of servicing.

The fluid level should always be between the MIN and MAX markings.

A slight decrease in the fluid level due to wear and automatic readjustment of the disk brakes is normal.

However, if the fluid level falls significantly or goes below the MIN marking, the brake system may have developed a leak.

▶ Have the brake system checked immediately. Please contact an authorized Porsche dealer.

#### **A** DANGER

Swallowing Brake Fluid

Brake fluid is hazardous to your health, and may be fatal if swallowed.

- Keep brake fluid out of children's reach.
- If brake fluid gets into your eye, immediately rinse with clean water for a few minutes. Then see a doctor immediately.
- Please note all the information on the refill container of the brake fluid.

#### **NOTICE**

Brake fluid attacks and can damage paintwork.

Immediately rinse off spilled brake fluid with clean water.

## **Changing brake fluid**

Brake fluid absorbs moisture from the air over time. The absorbed water can impair braking efficiency.

- It is important therefore to have the brake fluid changed in accordance with the change intervals specified in the "Maintenance"
- Use only brake fluid authorized by Porsche.

#### **BRAKE Brake warning light USA**

#### (1)**Brake warning light Canada**

The warning light on the instrument panel and the warning message on the multi-function display alert you to the fact that the brake fluid level is too low and could indicate brake circuit failure if the pedal travel is greater than normal.



## Information

If the warning light and warning message appear when driving:

- ▷ Stop immediately in a suitable place.
- ▷ Do not continue driving.

Please contact an authorized Porsche dealer. For information on warning messages on the multifunction display:

Please see the chapter "OVERVIEW OF WARNING AND INFORMATION MESSAGES" on page 129.

## **Electromechanical Power Steering**



No Power Steering Assist

When the engine is stopped (e.g. when on tow), no power steering assistance is available. Increased force is required for steering.

- Exercise extreme care when your vehicle is being towed.
- Have the fault corrected. Please contact an authorized Porsche dealer.

## **Changing Air Cleaner**

Regular replacement of the filter element is part of servicing.

- ▷ In dusty conditions, clean the filter element more frequently and replace it if necessary.
- ▶ Please see the chapter "MEASUREMENTS ON TEST STANDS" on page 241.

## **Changing Particle Filters**

Regular replacement of the filters is part of servicing.

Dirty filters can be the cause of reduced air throughput, e.g. the windows can mist up.

Have the filters replaced.
 Please contact an authorized Porsche dealer.



#### Information

The particle filters ensure that the fresh air entering the passenger compartment is virtually free of dust and pollen.

▶ If the outside air is polluted by exhaust fumes, press the recirculated-air button.

## **Tires and Wheels**

The original equipment tires and wheel rims on your Porsche comply with all applicable Federal Motor Vehicle Safety Standards.



#### Information

The summer tires of your Sports Car have been specially developed and adapted for high performance.

The tire characteristics change at low outside temperatures (below  $15\ ^{\circ}$ C).

This can result in noises when parking or maneuvering at low outside temperatures.

### For your safety remember the following:

- Wheel rims and wheel bolts are matched to fit your Porsche.
- If you intend to use other than original equipment wheels, be sure that they conform to Porsche specifications for your model. Only tires with the same make and with the same specification code (e.g. "N0", "N1"...) can be mounted.
- The use of wheel rims and wheel bolts that do not meet specifications of the original factory installed equipment will affect the safe operation of your vehicle and affect warranty coverage.
- Before you plan on exchanging wheels, or snow tires already mounted on the wheel rims, consult your authorized Porsche dealer.
   Your dealer has the technical information necessary to advise you which wheel rims and wheel bolts are compatible with the original factory installations.

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#### **A** DANGER

Tire Damage While Driving

Driving with damaged tires could cause you to lose control of the vehicle.

- ▷ If while driving, your vehicle experiences a sudden vibration or ride disturbance, and/or you suspect that possible damage to your tires or vehicle has occurred, you should immediately reduce your speed without excessive use of the brakes.
- Stop the vehicle as soon as possible, and inspect the tires. If you cannot determine the cause for the disturbance, have your vehicle towed to the nearest Porsche or tire dealer to have your vehicle or tire(s) inspected.
- Continuing to operate the vehicle without correction could result in a loss of control.



Example

## **Uniform Tire Quality Grading**

Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width.

All passenger car tires must conform to Federal Safety Requirements in addition to these grades.

#### Treadwear

The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specific government test course. For example, a tire graded 150 would wear one and a half (1-1/2) times as well on the government course as a tire graded 100. The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices and differences in road characteristics and climate.

#### Traction AA, A, B, C

The traction grades, from highest to lowest, are AA, A, B, and C and they represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.



#### Information

The traction grade assigned to this is based on braking (straight-ahead) traction tests and does not include cornering (turned) traction, acceleration, hydroplaning or peak traction characteristics.

#### Temperature A, B, C

The temperature grades are A (the highest). B and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel. Sustained high temperatures can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure.

The grade C corresponds to a level of performance which all passenger car tires must meet under the Federal Motor Vehicle Safety Standard No. 109.

Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.

### **WARNING**

Tire Abuse

The temperature grade for this tire is established for a tire that is properly inflated and not overloaded. Excessive speed, underinflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure.

- Do not exceed the permitted maximum speed for the tires fitted to the vehicle.
- Ensure that the tires are set to the correct inflation pressure.
- Observe the maximum load for the vehicle.

#### Tire pressures

## A DANGER

Low Tire Pressure

Driving the vehicle with low tire pressure increases risk of a tire failure and resulting loss of control. Furthermore, low tire pressure increases rate of wear of the affected tires and causes damage.

- Always use an accurate tire pressure gauge when checking inflation pressures.
- Do not exceed the maximum tire pressure listed on the tire sidewall. (Also refer to "Technical data").
- Please see the chapter "TIRE PRESSURE PLATE" on page 247.
- Cold tire inflation pressure means: all tires must be cold, ambient temperature maximum 68 °F (20 °C), when adjusting the inflation pressure. Avoid sunlight striking the tires before measuring cold pressures, since the pressures would rise from temperature influence.
- Valve caps protect the valve from dust and dirt, and thus from leakage. Always screw caps tightly down. Replace missing caps immediately.

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- ▶ Use only plastic valve caps.
- ▶ For safety reasons, don't use tire inflating bottles.

▶ Please see the chapter "TIRE PRESSURE FOR COLD TIRES (68 °F/20 °C)" on page 287.
Each tire, including the spare (if provided), should be checked monthly when cold and inflated to the inflation pressure recommended by the vehicle manufacturer on the vehicle placard or tire inflation pressure label. (If your vehicle has tires of a different size than the size indicated on the vehicle placard or tire inflation pressure label, you should determine the proper tire inflation pressure for those tires.)

As an added safety feature, your vehicle has been equipped with a Tire Pressure Monitoring System (TPMS) that illuminates a low tire pressure telltale when one or more of your tires is significantly under-inflated. Accordingly, when the low tire pressure telltale illuminates, you should stop and check your tires as soon as possible, and inflate them to the proper pressure. Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure. Under-inflation also reduces fuel efficiency and tire tread life, and may affect the vehicle's handling and stopping ability.

Please note that the TPMS is not a substitute for proper tire maintenance, and it is the driver's responsibility to maintain correct tire pressure, even if under-inflation has not reached the level to trigger illumination of the TPMS low tire pressure tell-tale.

For further information on the tire pressure monitoring:

Please see the chapter "TIRE PRESSURE MENU (TIRE PRESSURE MONITORING SYSTEM, TPMS)" on page 105.

When tires are warm, the tire pressure is increased.

Never let air out of hot tires. This could cause the tire pressure to fall below the prescribed value.

Insufficient tire pressure can cause tires to overheat and thus be damaged – even invisibly. Hidden tire damage is not eliminated by subsequently correcting the tire pressure.

#### Overloading

**DANGER** 

Overloading Tires

Overloading can lead to dangerous vehicle reactions and long braking distances.

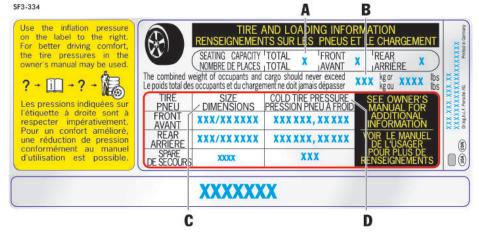
- Do not overload your vehicle. Be careful about the roof load.
- If you plan to load the vehicle, first correct the tire pressure. Tire pressure for loaded vehicle can be found on the tire pressure plate and in the chapter technical data.
- ▶ Never exceed the specified axle load.

#### NOTICE

Risk of damage to the vehicle and to the tires. Damage due to overloading is not covered by the vehicle warranty.

Tire damage may also be caused by overloading, and this damage is not covered by your tire warranty.

- Do not overload your vehicle. Be careful about the roof load.
- If you plan to load the vehicle, first correct the tire pressure. Tire pressure for loaded vehicle can be found on the tire pressure plate and in the chapter technical data.
- ▶ Never exceed the specified axle load.
- Please see the chapter "LOADING INFORMATION" on page 204.



Example of a tire pressure plate

## **Tire Pressure plate**

## Information on the tire pressure plate

#### A Seating capacity

Maximum number of vehicle occupants, including the driver.

#### **B** Vehicle load limit

Is the maximum total weight limit specified of the load (passengers and cargo) for the vehicle. This is the maximum weight of passengers and cargo that can be loaded into the vehicle.

Please see the chapter "LOADING INFORMATION" on page 204.

## C Original tire size

Size of tires mounted at the factory.

D Recommended cold tire inflation pressure

These values are for cold tires (68  $^{\circ}\text{F}/20$   $^{\circ}\text{C}).$ 

## **Tire traction**



When driving on wet or slushy roads, a wedge of water may build up between the tires and the road. This phenomenon is known as "hydroplane" and may cause partial or complete loss of traction, vehicle control or stopping ability.

▶ Reduce speed on wet surfaces.

#### Tire life

Tire life depends on various factors, i.e., road surfaces, traffic and weather conditions, driving habits, type of tires and tire care.

Inspect your tires for wear and damage before driving off. If you notice uneven or substantial wear, wheels might need alignment or tires should be balanced or replaced.

#### Tire wear

The original equipment tires on your Porsche have built-in tire wear indicators. They are molded into the bottom of the tread grooves and will appear as approximately 1/2 in. (12 mm) bands when the tire tread depth is down to 1/16 of an in (1.6 mm). When the indicators appear in two or more adjacent grooves, it is time to replace the tires. We recommend, however, that you do not let the tires wear down to this extent.

Worn tires cannot grip the road surface properly and are even less effective on wet roads.

In the United States, state laws may govern the minimum tread depth permissible. Follow all such laws.

#### **A** DANGER

**Excessively-worn Tires** 

Driving on worn tires can result in loss of control of the vehicle and could cause serious personal injuries or death.

- Do not drive with worn tires or tires showing cuts or bruises as they may lead to sudden deflation and loss of control which could cause severe personal injury.
- Specialized high performance tires on high performance sports cars exhibit more wear than those on a family sedan, or even a high performance sedan.

Therefore, it is important to check your tire

pressure and condition at least every two weeks.

► If you notice that tires are wearing unevenly, consult your authorized Porsche dealer.

Uneven wear may not always be due to improper wheel alignment. It can be the result of individual driving habits such as cornering at high speeds. If the tire pressure is not checked and adjusted regularly, abnormal tire wear can also occur.

#### Tire care

- Avoid damaging tires and wheel rims.
- If you must drive over a curb or other obstacle, drive slowly and at an obtuse angle.
- Check tires for uneven wear and damage before driving off.
- ▶ Remove embedded material.
- ▶ Replace worn or damaged tires immediately.
- ▶ Keep oil, fuel, brake fluid, etc. away from tires.
- Replace missing valve stem caps.
- ▶ Keep tires inflated correctly.
- ▶ Wash tires when washing the vehicle. Also clean inner side of wheels.
- Do not use abrasive cleaners when washing the wheels.
- ▷ Check wheel rims for corrosion.
- ▶ Remove road salt, if driving in winter.

#### Tire damage, puncture

Please see the chapter "HIGH-PRESSURE CLEANING EQUIPMENT, STEAM CLEANERS" on page 232.

#### **DANGER**

Damaged Tire Check

Driving the vehicle with low tire pressure increases risk of a tire failure and resulting loss of control. Furthermore, low tire pressure increases the rate of wear of the affected tires.

- Check tires including sidewalls regularly for foreign bodies, nicks, cuts, cracks and bulges.
- After driving off road, examine tires for signs of damage such as cuts, tears, bulges or foreign objects stuck in the tread. Replace a damaged tire if necessary.
- Cross curb edges slowly and at right angles if possible.
  - Avoid driving over steep or sharp curbs.
- In cases of doubt, have the wheel (particularly the inner side) checked by an authorized Porsche dealer.

In case of tire damage, where it is uncertain whether there is a break in the ply with all its consequences or tire damage caused by thermal or mechanical overloading due to loss of pressure or any other prior damage, we recommend that the tire be replaced for safety reasons.

If one faulty tire is replaced it should be noted that the difference in tread depth on one axle must not exceed 30%. Handling inconsistencies may result.

- Recommendation: Replace both tires on one axle so that no handling inconsistencies may result due to different tread depths.
- Perform a visual inspection if necessary.

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#### **Tire replacements**

▶ Use only tire makes and types tested by Porsche.

If you do not use a Porsche recommended replacement tire, make sure that you purchase your new tires from a reputable tire dealer and that the dealer complies with all manufacturers warnings for those tires. Only tires with the same manufacturer and with the same specification code (e.g. "NO", "N1"...) should be mounted on the vehicle. Before mounting new tires, check with your Porsche dealer about the current release status.

Use tires with "ZR" quality standards. There are currently no standards concerning tire strength at speeds above 150 mph (240 km/h). Tires should be replaced no less than on one axle at the time. Only tires of the same make and type must be used. Mixed tires are not permissible and will affect vehicle performance, safety, and can affect vehicle warranty.

Porsche dealers can recommend the most current replacement tire options for your vehicle. Initially, new tires do not have their full traction. You should therefore drive at moderate speeds during the first 60 - 120 miles (100 - 200 km).

#### Tires must always remain on the same side of the vehicle.

When wheels are removed, the direction of rotation and position of each wheel should be marked.

If new tires are installed only on one axle, a noticeable change in handling occurs due to the different tread depth of the other tires. This happens especially if only rear tires are replaced. However, this condition disappears as the new tires are broken in.

Please adjust your driving style accordingly. Installation of new tires should only be done by a qualified tire technician.

- ▶ Use only plastic valve caps.
- Please read the fitting and replacement instructions regarding metal valves.
- Use original Porsche metal valves only.
- Valve inserts with valve caps protect against

Soiled valve inserts can cause a gradual loss of air.

## Parking at the curb



Curb Impact / Tire Damage

Hard impacts against curbs (or traffic islands) are dangerous and may cause hidden tire damage which is not noticeable until later. Such damage can result in accidents at high speeds. Depending on the force of impact, the edge of the rim can also be damaged.

- After such an impact, have the wheel checked by an expert.
- If you must drive over a curb or other obstacle, drive slowly and at an obtuse angle. Exercise care when parking along curbs.



#### Information

Tire repairs are not permissible under any circumstances.

## Wheel alignment, wheel balancing

As a precaution, have wheels with summer tires balanced in the spring, and those with mud and snow tires before winter. Unbalanced wheels may affect car handling and tire life.

Only the specified weights may be used for wheel balancing.

Self-adhesive weights must not come into contact with cleaning agents, since they could drop off. Uneven tread wear indicates wheel imbalance. In this event, the vehicle should be checked at an authorized Porsche dealer.

#### **A** DANGER

High-Speed tire Vibration

If, during a trip, uneven running or vibrations occur that could be caused by damage to tires or the car, the speed must be reduced immediately, but without braking sharply. If you continue your trip without having the cause of the fault remedied, you might lose control of your vehicle.

- Stop the vehicle and check the tires.
- ▷ If no cause for the fault can be found, drive carefully to the nearest authorized Porsche dealer.

The summer tires of your Sports Car have been specially developed and adapted for high performance. At low outside temperatures (<15°C (60°F)), the tire characteristics change. This can result in noises occurring when parking or maneuvering at low outside temperatures.

## Wheels with Tire Pressure Monitoring System (TPMS) sensors

Before changing wheels, make sure that the wheels are compatible with your vehicle's TPMS.

Check this with your authorized Porsche dealer.

## **Removing and storing tires**

- After changing, adjust tire pressure and torque wheel bolts diagonally. Please see the chapter "CHANGING WHEELS"
  - on page 254.
- Store tires in a cool and dry place. Rotate periodically to avoid flat spots.
- Do not store summer tires or park vehicles fitted with summer tires at ambient temperatures below 5 °F (-15 °C).
- Avoid contact with fuel, oil and grease.

#### Tires must always remain on the same side of the vehicle.

When wheels are removed, the direction of rotation and position of each wheel should be marked.

#### Example

FR (front right), FL, RR and RL.

Wheels must always be fitted in accordance with their marking.

The perception that tire durability and performance are not affected by storage and age is unfounded.

Chemical additives, which make the rubber elastic, lose their effectiveness over the course of time and the rubber becomes brittle and cracks.

#### Therefore, the tires should be inspected from time to time.



#### Information

Under no circumstances should tires older than 6 years be used on your Porsche.

The age of the tire can be obtained from the "DOT" code number. If, for example, the last four numbers read 1213, then the tire was produced in the 12th week of 2013.

#### **Snow tires**

The installation of Porsche approved snow tires is recommended.

Use Porsche approved snow tires for grip on snow and ice. Summer performance tires are not suitable for usage in cold, snowy, or icy conditions

Check with your local Motor Vehicle Bureau for possible restrictions.

### **WARNING**

Snow Tire Use

The standard tires profile and rubber mixture are optimized for wet and dry driving conditions, and may not prove favorable for snow conditions.

Install snow tires before driving in such conditions.

#### NOTICE

Risk of insufficient road grip leading to loss of control and damage to the vehicle.

The standard tires profile and rubber mixture are optimized for wet and dry driving conditions, and may not prove favorable for snow conditions.

Install snow tires before driving in such conditions.

Before mounting snow tires, consult with your Porsche dealer. They have the technical information necessary to advise you on wheel and tire compatibility.

Snow tires should have the same load capacity as original equipment tires and should be mounted on all four wheels.

#### **DANGER**

Tire Hazards

Driving the vehicle with low tire pressure increases risk of a tire failure and resulting loss of control. Furthermore, low tire pressure increases the rate of wear of the affected tires and causes damage. Tires with badly worn treads are very dangerous and could cause accidents.

- Make sure they are replaced immediately.
- Do not exceed the snow tire speed rating.

Snow tires do not have the same degree of traction on dry, wet or snowfree roads as normal tires. Furthermore, snow tires wear rapidly under these conditions.



#### Information

We recommend that you fit snow tires on the vehicle at temperatures below 45 °F (7 °C) since the driving performance of summer tires is reduced at low temperatures and a lower level of comfort can also be expected. For example, juddering noises caused by the tires can occur while maneuvering the vehicle or accelerating out of bends on both dry and wet road surfaces. Extremely low temperatures of below 5 °F (-15 °C) can cause permanent damage to summer tires. Snow tires lose their suitability when their tread depth falls below 5/32 in. (4 mm).

Comply with all state and local laws governing snow tire and tread depth requirements.

**DANGER** 

**Excessive Speed for** Tires

Exceeding the maximum permitted speed for the tires fitted could cause tire failure.

- Always check the maximum speed rating on the tire sidewall on any tire on the vehicle.
- Never exceed the maximum speed rating of the tires.

#### Wheel change

- ▶ When wheels are removed, mark the direction of rotation and position of each wheel. Example: FR (front right), FL, RR and RL.
- ▷ Always fit the wheels in accordance with the markings.

#### **Snow chains**

#### NOTICE

Risk of damage to body, axle or brake components.

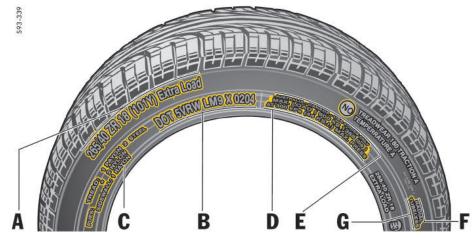
- ▶ Fit snow chains only to the rear wheels, and only with the tire/rim combination listed in the Technical Data.
- Use only the fine-link snow chains recommended and authorized by Porsche so that sufficient clearance between the wheel well and the chain is assured.
- Please see the chapter "WHEELS, TIRES" on page 286.
- Follow instructions issued by the supplier of the chains.

#### Fitting snow chains

- ▷ Before fitting chains, remove accumulated ice and snow from the wheel well.
- Vehicles with snow chains must not be driven faster than 30 mph (50 km/h).

Different states and countries have varying statutory requirements regarding maximum speed.

- ▷ Check with local authorities for possible
- Remove chains as soon as the roads are free of ice and snow.



Example of Inscription

### Inscription on radial tire

#### A - Tire size

#### Example: P 265/40ZR18 (101Y)

- **P** The tire is designed for Passenger vehicle. This information is not included on all tires.
- 265 Indication of tire width in mm
- 40 Indication of tire height to tire width ratio in percent
- **ZR** Belt type code letter for radial
- 18 Indication of rim diameter in inches
- 101 Load capacity coefficient

- Y Speed code letter
- XL (Extra Load) Tire with increased load

### **B - TIN (Tire Identification Number)**

Example: DOT xx xx xxxx xxxx

DOT

The DOT symbol indicates that the tires comply with the requirements of the US Department of Transportation and provides information about:

- first two-digit code means manufacture's identification mark.
- second two-digit code means tire size.

- third four-digit code means tire type code.
- fourth four-digit code means date of manufacture.
  - If, for example, the last four numbers read 0211, the tire was produced in the 2nd week of 2011.

#### C - Tire ply composition and material

The number of layers in the tread and sidewalls and their material composition.

#### D - Maximum permissible inflation pressure

The maximum permissible cold inflation pressure to which a tire can be inflated.

Do not exceed the permissible inflation pressure.

### E - Maximum Load rating

The maximum load in kilograms and pounds can be carried by the tire. If you replace tires always use a tire that has the same maximum load rating as the factory installed tire.

#### F - Radial

The identification indicates if the tire has radial structure.

#### G - Term of tubeless or tube tire

Identification for tubeless tires.

#### Speed code letters

The speed code letter Y indicates the maximum permitted speed for the tire.

This code letter is shown on the tire sidewall.

Т up to 118 mph (190 km/h)

Н up to 131 mph (210 km/h)

٧ up to 150 mph (240 km/h)

W up to 167 mph (270 km/h)

Υ up to 186 mph (300 km/h)

up to 186 mph (300 km/h) as for Y tires. (Y) Speeds of more than 185 mph (300 km/h) are also possible at a maximum tire load capacity of 85 % (confirmation from tire manufacturer required for speeds of more than 185 mph (300 km/h)).



#### Information

Tires with a maximum speed rating that is lower than the specified maximum vehicle speed may be mounted only if they bear an M+S identification on the tire sidewall.

- Please note that in addition to snow tires. all-season tires are also subject to speed limits and bear this identification.
- Never drive faster than the speed rating of the tires, and obey all speed and traffic laws.



- G Rim width in inches
- Rim-flange contour code letter
- Symbol for drop-center rim
- Rim diameter in inches
- K Double hump
- L Rim offset in mm

#### Inscription on alloy wheels

The information is provided on the rear of the spokes. The rim width in inches **A** and the rim offset **F** are visible from the outside. This information can be found near the tire valve.



Jacking point for lifting platform and jack at the front

# Raising the vehicle with a lifting platform, trolley jack or standard jack

Before driving the vehicle onto a lifting platform, make sure that there is sufficient space between the lifting platform and the vehicle.



Jacking point for lifting platform and jack at the rear

#### NOTICE

Risk of serious damage to the engine or vehicle if you lift the vehicle improperly.

- ▶ Lift only at the jacking points provided.
- Before driving the vehicle onto a lifting platform, make sure that there is sufficient space between the lifting platform and the vehicle.
- To avoid serious damage, never jack up the vehicle at the engine, transmission or at the axles.
- Use only level anti-slip rubber pads on a lifting platform.
- Do not damage any sensitive components in the vicinity of the jacking points.

## **Changing Wheels**

**A** DANGER

**Unsafe Stopping** 

Other vehicles could collide with your vehicle if you are parked in a dangerous position.

- If you have a flat tire, move a safe distance off the road. Turn the emergency flasher on and use other warning devices to alert other motorists.
- Do not remain in the car. Someone approaching from the rear may not realize your vehicle is stopped and cause a collision.



Stopping Over Nearby Flammable Matter

Exhaust fumes and the exhaust system are very hot when the engine is running. The exhaust system remains hot for some time after the vehicle is turned off.

Do not park your vehicle in areas where the hot exhaust system may come in contact with dry grass, brush, fuel spill or other flammable material.

#### **WARNING**

Jacking Risks

If the vehicle is not secured, or incorrectly secured, during a wheel change, it could move unexpectedly or fall from the car jack.

Passengers must not be in the vehicle when it is jacked up.

- Before you change a wheel, be sure the ground is level and firm. If necessary, use a board under the jack to ensure that the jack does not sink into the ground.
- Set the electric parking brake and block the wheels opposite the flat tire on the other side of the vehicle.
- The jack is only to be used for changing a wheel. Do not use it as a support to work under
- The car must be jacked up only at the illustrated jacking points. Lifting at any other place may result in personal injury.

#### NOTICE

Risk of damage to the engine or vehicle if you lift the vehicle improperly.

- The car must be jacked up only at the illustrated jacking points. Lifting at any other place may result in damage to the vehicle.
- Never jack up the car by the body, bumpers, engine, transmission or at the axles.
- Do not damage any sensitive components in the vicinity of the jacking points.
- For safety reasons do not use tire inflating bottles. Do not use commercially available sealant bottles. Use only the tire inflating bottle located in the luggage compartment.



#### Information

The tools required for changing a wheel (e.g. jack, wheel bolt wrench, assembly aids) are not supplied as standard with the vehicle. Your authorized Porsche dealer will be pleased to advise you.



#### Information

The tire and wheel sizes on both axles are different.

- Do not fit the wrong wheels on the wrong axle.
- Only use wheels/tires with approved dimensions for the relevant axle.

#### Sequence of operation

**WARNING** 

Working Under Vehicle

The jack must be used only to raise the car for wheel changing. The jack must never be used as a support to work underneath the vehicle. If the jack is accidentally dislodged, you or bystanders could suffer severe personal injury.

- Never jack up other vehicles or other loads with the jack.
- Always place the car on stable supports if you have to work under it. When working under the vehicle, always use safety stands specifically designed for this purpose.
- Please use a suitable knee rest to protect your clothing against soiling.
- 1. Activate the electric parking brake and move the PDK selector lever to position P. Remove the ignition key or control unit on vehicles with Porsche Entry & Drive.
- 2. Switch on the emergency flasher if necessary.

- 3. Secure the vehicle to prevent it from rolling away, e.g. by means of wedges under the wheels on the opposite side.
  - This is particularly important on slopes.
- 4. Slightly loosen the wheel bolts on the wheel to be changed.
- 5. Lift the vehicle only at the specified jacking points.
- 6. Raise the vehicle until the wheel lifts off the ground.
- Please see the chapter "RAISING THE VEHICLE WITH A LIFTING PLATFORM, TROLLEY JACK OR STANDARD JACK" on page 254.
- 7. Remove 1 or 2 wheel bolts (see corresponding figure).



Screw in one assembly aid on vehicles without PCCB

8. Screw in assembly aids instead of wheel bolts.

#### NOTICE

Risk of damage to brake disks.

- Always screw in both assembly aids when changing a wheel.
- 9. Remove the remaining wheel bolts.
- 10. Take the wheel off and put a new wheel on.
- ▶ Please see the chapter "WHEEL BOLTS" on page 257.
- 11.Insert wheel bolts and tighten by hand.



Screw in two assembly aids on vehicles with PCCB

- 12. Remove assembly aids and screw in remaining
  - Initially tighten bolts only slightly in diagonally opposite sequence so that the wheel is centered.
- 13.Inflate the tire if necessary.
- Please see the chapter "TIRE PRESSURE FOR COLD TIRES (68 °F/20 °C)" on page 287.
- **14.**Lower the vehicle fully and remove the jack.

- 15. Tighten wheel bolts in diagonally opposite
  - Immediately after changing a wheel, use a torque wrench to check the prescribed tightening torque of the wheel bolts (160 Nm/118 ftlb.).

#### Note on operation for vehicles with Tire **Pressure Monitoring**

- ▷ On vehicles with Tire Pressure Monitoring, the settings on the multi-function display must be updated after the wheel change.
- Please see the chapter "TIRE PRESSURE MENU (TIRE PRESSURE MONITORING SYSTEM, TPMS)" on page 105.

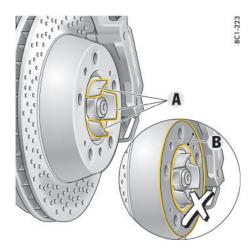
#### Checking tire pressure with a pressure gauge

- 1. Remove the valve stem cap from the tire.
- 2. Press the pressure gauge onto the valve stem.



#### Information

- sideways, or air will escape. If the sound of air escaping from the tire is heard, reposition the pressure gauge.
- 3. Read the tire pressure on the gauge stem and compare it to the permissible tire pressure. This information can be found on the tire pressure plate or in the chapter Technical Data.
- 4. Remove the pressure gauge.
- 5. Please see the chapter "TIRE PRESSURE MENU (TIRE PRESSURE MONITORING SYSTEM, TPMS)" on page 105.



Do  ${f not}$  grease wheel attachment face  ${f B}$ 

## **Wheel Attachment Faces**

### NOTICE

There is a risk of damage to the wheel and wheel attachment face.

- ► The wheel attachment face **B** on the brake disk and on the wheel itself must **not** be greased.
- Only the areas A may be greased. Grease these areas very thinly with Optimoly® TA.
   Do not use any other grease/paste.

## **Wheel Bolts**

- ▷ Always clean the wheel bolts before fitting.
- ▶ Wheel bolts must not be greased.
- Replace damaged wheel bolts. Only use genuine Porsche wheel bolts assigned especially to this model or wheel bolts of similar quality that have been manufactured according to Porsche specifications and production requirements.

#### **Tightening torque**

Tightening torque for wheel bolts: 160 Nm (118 ftlb.).



## **Security wheel bolts**

The adapter (wrench socket) for the security wheel bolts is stored in the tool box in the luggage compartment.

- If the wheels have to be removed at the workshop, do not forget to hand over the socket for the security wheel bolts along with the car key.
- To loosen or tighten the wheel bolt with antitheft protection, the adapter must be used between the wheel bolt and the wheel bolt wrench.
- When positioning the wrench socket, ensure that it engages fully in the teeth of the wheel holt

#### **Wheels with Central Lock**

Racing technology for the road.
Wheels with a central lock are perfectly normal in motor sport, but are not common on normal roads. Instead of the central lock nuts conventionally used in motor sport, the wheel has an encapsulated central bolt, which is used to fasten it to the wheel hub.

## Driving on a race circuit (e.g. sports driving school, club sport events)

Wheels are subjected to **significantly higher stresses** during extremely sporty driving – particularly when driving on race circuits – compared to driving on public roads. For this reason, all the instructions specified below must always be noted and followed for driving on race circuits.

Always make enquiries with your authorized Porsche dealer about any other driving and maintenance instructions before driving on race circuits.

The central lock, like all chassis components, requires greater attention while driving on race circuits.

- Check the tightening torque of the central bolts before, if necessary during and after driving on a race circuit.
- Whenever wheels are changed, apply some aluminum paste to the trapezoidal thread on the wheel hub or have a second set of greased screws on hand.
- ▶ Never drive the vehicle without a central lock bolt in the hub.
- All central wheel lock components, such as the central bolt, wheel, wheel hub, wheel hex and brake disk must always be checked for wear and replaced if necessary after driving on a race circuit.

**258** Minor Repairs

- Axis components subject to high loads must be replaced at intervals specified by Porsche. Always make enquiries with your authorized Porsche dealer about the current stipulations before driving on race circuits.
- Other parts such as ball joints, rubber mounts, etc., where wear may result in modified vehicle handling, must be checked and if applicable replaced without delay.



Deferred inspection, maintenance and replacement measures

Deferring inspection, maintenance and replacement measures can result in accidents. This is particularly true if **you are clocking up high mileage on race circuits**.

We recommend that you get an authorized Porsche dealer to carry out these measures.

**WARNING** 

Inadequate screw connections when using unapproved components and wheels

Components can break or become damaged. Unsuitable wheel sizes or incorrectly dimensioned components in the hub area of **accessory wheels**, the use of spacers, etc. can impair the overall function of the wheel mounting.

- Only use wheel/tire combinations approved by Porsche.
- Under no circumstances should spacers be used.

#### **Central Bolts**

The central bolt and central bolt lock are safetyrelated components. Always check them for signs of wear and damage.

- The conical surface, trapezoidal thread and inner toothing of the central bolt must not be scratched or cracked.
- Replace damaged central bolts.
   Only use the genuine Porsche central bolts allocated specifically to this vehicle model.
- ► The conical surface and trapezoidal thread on the central bolt must be perfectly clean.

Tightening torque for central bolts: 443 ftlb. (600 Nm).

### **Changing a Wheel**

Get an authorized Porsche dealer to change the wheel.



#### Information

The tools required for changing a wheel (e.g. jack, torque wrench) are not supplied as standard with the car. Your authorized Porsche dealer will be pleased to advise you.

If a wheel needs to be changed, the procedure described below must be adhered to exactly, as otherwise the wheel may loosen, resulting in damage. Porsche cannot be held liable if this happens.

To achieve the high tightening torque required for the central bolt, a suitable, commercially available 443 ftlb. (600 Nm) torque wrench must be used. Alternatively, a corresponding tool with torque multiplier (part no. 997.450.323.90) is available from Porsche Motorsport. When a torque multiplier is used, the torque must be reduced in accordance with the tool's operating instructions. When loosening and fastening the wheel, a second person is needed to prevent the wheel from turning by firmly braking it.

#### **WARNING**

Tipping or falling vehicle

The high mounting forces involved can cause the vehicle to roll away and slip off the jack.

Always use a lifting platform if there is one available.

#### **NOTICE**

Risk of damage due to vehicle tipping over or falling off lifting equipment or using the wrong

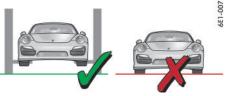
The high mounting forces involved can cause the vehicle to roll away and slip off the jack. An impact wrench can damage the central lock.

- Always use a lifting platform if there is one available.
- Do not use an impact wrench.

- 1. Apply the electric parking brake, move the PDK selector lever to position **P** and remove the key from the ignition.
- 2. Secure the vehicle carefully in both directions to prevent it from rolling away, e.g. using wedges at the wheels on the opposite side.

This is particularly important on slopes.

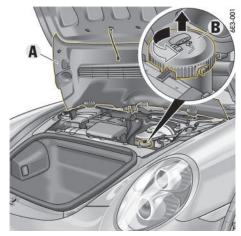
- 3. Raise the vehicle until the wheel lifts off the ground. Lift the vehicle only at the specified jacking points.
- Please see the chapter "RAISING THE VEHICLE WITH A LIFTING PLATFORM, TROLLEY JACK OR STANDARD JACK" on page 254.





#### Information

The vehicle must not be standing on the wheel to be secured during fitting.



4. Open the luggage compartment and lift the plastic cover A.

Please see the chapter "TIRE FILLING COMPRESSOR" on page 198.

Open the receptacle **B** and remove the polygon tool.

The central bolt must only be opened using this original polygon tool. Always leave the polygon tool in the luggage compartment to ensure that it is always available in the event of a breakdown.

#### NOTICE

Risk of damage from scratching.

Proceed with care when removing the wheelhub cap.



**5.** The polygon tool contains an auxiliary tool. Remove this from the square and replace it afterwards.

Use the auxiliary tool to carefully lever the wheel-hub cap out of its seating. For this purpose, insert the metal tongue of the auxiliary tool deep into the opening groove A on the central bolt and then swivel the handle back.



6. Position the polygon tool and insert it until it engages.

This opens the safety lock on the central bolt.



#### Information

A very high torque is required to loosen the central bolt, especially if it has not been opened in a long time.

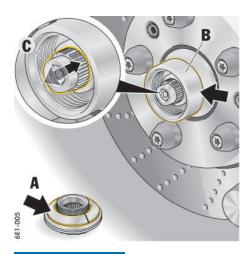


- Turn in the **correct direction**.
- Make sure there is sufficient clearance so that neither people nor vehicle parts will be harmed if the lever breaks away.
- The wheel should be prevented from turning by getting a second person to brake firmly using the brake pedal.
- ▶ Hold the **steering wheel** securely when loosening the front wheels.

## **NOTICE**

Risk of damage to the central bolt lock.

- ▶ When loosening the central bolt, make sure that the tool remains pushed on fully and does not slide out of position.
- **7.** Unscrew the central bolt and set it down in such a way that no dirt can enter the cone area or the thread.



#### NOTICE

There is a risk of damage to brake disks on vehicles with Porsche Ceramic Composite Brake (PCCB).

- Do not tilt the wheel when removing it.
- 8. Remove wheel carefully.
- **9.** Check that the toothed locking bolt **C** moves smoothly.

When you press the bolt into its element, it must return firmly to its original position without catching.

The toothing on the locking bolt **C** must not be damaged.

The cone ring  ${\bf A}$  must turn easily in the central bolt.

10. There must be a generous coating of grease on the thread of the central bolt and wheel hub. Whenever wheels are changed, apply some aluminium paste to the trapezoidal thread on the wheel hub. Always grease the **conical area A** (45° area) of the **central bolt** and the **cylindrical part B** of the wheel hub with a **light coating** of aluminum paste before fitting the central bolt. Make sure that no dirt sticks to the components.

All other parts must be free of grease.



Damaged, missing, soiled or incorrectly greased central wheel lock components

Deferring inspection, maintenance and replacement measures can result in accidents. Carry out a visual inspection of all parts before fitting the wheel.

The central bolt and central bolt lock are safetyrelated components. Always check them for signs of wear and damage.

- The affected parts must be replaced by your authorized Porsche dealer if they are damaged or if you suspect that they are not in perfect working order.
- ▶ There must be no scratches or cracks on the cone area, thread or inner teeth of the bolt.
- ► The cone ring must turn easily in the central bolt.
- There must be a generous coating of grease on the thread of the central bolt and wheel hub.
- Only brake disks that were approved for the central lock may be fitted.
- All contact surfaces on the wheel, wheel hub and brake disk as well as the thread in the wheel hub must be free of abrasion, sand, dust or shavings.

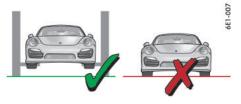


The central bolt lock C prevents the central bolt from being lost and must not therefore be removed from the wheel hub.

#### NOTICE

There is a risk of damage to brake disks on vehicles with Porsche Ceramic Composite Brake (PCCB).

- ▷ Do not tilt the wheel or place it against the brake disk when mounting it.
- 11. Fit the wheel carefully.



## Information

The vehicle must not be standing on the wheel to be secured during fitting.

- 12.Insert the central bolt into the polygon tool (until it engages), fit the central bolt at right angles to the wheel hub and screw it on without
- 13. Tighten the central bolt to 443 ftlb. (600 Nm) using a suitable torque wrench. Prevent the resultant turning of the wheel by getting a second person to firmly press the brake pedal. Hold the steering wheel securely when tightening the front wheels.

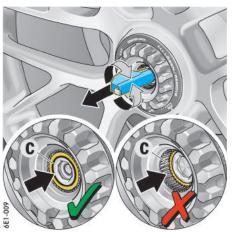


14.Loosen the central bolt again by 1/4 turn. 15. Tighten the central bolt again to 443 ftlb. (600 Nm).



#### Information

If you do not have a suitable torque wrench in a breakdown situation, the emergency procedure for fastening the central bolt must be performed. Please see the chapter "CENTRAL BOLT EMERGENCY FASTENING" on page 263.



16. Remove the polygon tool and check whether the locking pin C has already automatically engaged in the central bolt. The locking pin then completely covers the inner teeth of the central bolt. The locking pin is usually still in the rear

position and must be turned to the left and right slightly using the auxiliary tool until it engages with spring force in the central bolt.

#### **WARNING**

Central bolt lock not engaged

Deferring inspection measures can result in accidents.

▶ Never drive when the locking pin is not engaged.

#### NOTICE

Risk of damage due to central bolt lock not engaging.

▶ Never drive when the locking pin is not engaged.



17. Position the wheel-hub cap in the central bolt so that the positioning tab is facing the screw groove. Then press the cap into position.

**Do not drive without the wheel-hub cap in place.** Otherwise water and dirt can get into the central bolt and impair the function of the central bolt lock.

A little grease on the rubber ring makes fitting and subsequent removal easier.

18. The vehicle can now be lowered.

## **Rim Cleaner**

#### NOTICE

Using rim cleaners:

Rim cleaners can bleach the anodized surface of the central bolt.

Only use rim cleaners approved by Porsche and use these sparingly and in accordance with instructions for use.

## **Central Bolt Emergency Fastening**

If there is **no suitable torque wrench available** for tightening the central bolt to the high tightening torque of 443 ftlb. (600 Nm) in an emergency situation, the emergency fastening procedure must be used.

- The central bolt must always be fitted using the original tool (stored in the luggage compartment, see point 4).
- The vehicle must not be standing on the wheel to be secured during fitting.
- 1. Tighten the central bolt with great force using a long lever (3/4-inch adapter required) and loosen again by 1/4 turn.
- Tighten the central bolt using a commercially available torque wrench (3/4-inch adapter required) to exactly 74 ftlb. (100 Nm).



You will see the markings **Y** and **■** on the central bolt.

3. Draw a guide line on the wheel opposite the marking **V** using a pen.



**4.** Tighten the central bolt further using the long lever until the **STOP** marking covers the guide line.

The bolt is then securely tightened.

- **5.** Always complete steps 16 to 18.
- ▶ Please see the chapter "CHANGING A WHEEL" on page 258.
- You should have the central bolt loosened by a qualified specialist workshop again as soon as possible and then tightened to the specified tightening torque of 443 ftlb. (600 Nm) using a suitable torque wrench.

We recommend that you get an authorized Porsche dealer.

**WARNING** 

Loose central bolt

Driving without the central bolt tightened sufficiently can result in accidents.

Never use the emergency fastening method for driving on race circuits.

#### **Flat Tire**

- 1. Stop the vehicle as far away from the driving lane as possible.
  - The vehicle must be parked on a firm and flat surface offering adequate grip.
- **2.** Switch emergency flasher on.
- 3. Apply the parking brake.
- 4. Move the PDK selector lever to position P.
- **5.** Straighten the front wheels.
- **6.** Remove the ignition key, or the control unit on vehicles with Porsche Entry & Drive, in order to lock the steering and prevent the engine from being started.
- 7. Get all passengers to leave the vehicle.
- **8.** Set up the warning triangle at a suitable distance.

#### Filling in tire sealant

The tire sealant can be found in the right-hand box in the luggage compartment. The compressor is located under the cover in the luggage compartment.

The tire sealant can be used to seal small cuts, especially in the tire tread.

Sealing the tire with the tire sealant is only an emergency solution so you can drive to the nearest workshop. Even if the tire is air-tight, it may only be used for short journeys in an emergency.

The tire sealant set comprises:

- a filler bottle
- a filler hose
- a valve turner
- a spare valve insert
- a sticker with the maximum permitted speed
- a compressor
- operating instructions



Limits on Tire Sealant Use

Always observe the following points:

- Use the tire sealant only in the case of cuts or punctures no larger than 0.15 in. (4 mm).
- ▶ Never use the tire sealant if the rim is damaged.



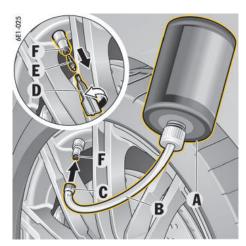
Tire Sealant Flammability

The sealant is highly flammable and harmful to health.

- Fire, naked flame and smoking are prohibited when handling tire sealant.
- Avoid contact with skin, eyes or clothing due to caustic chemical properties of the tire sealant.
- ▶ Keep tire sealant away from children.
- Do not inhale vapors, due to the consequent harm to personal health resulting in serious personal injury or death.

#### In the event of contact with sealant:

- If sealant gets on your skin or into your eyes, thoroughly rinse the affected part of your body immediately with plenty of water.
- Change soiled clothing immediately.
- See a doctor immediately in the event of an allergic reaction.
- If sealant is swallowed, thoroughly rinse out the mouth without delay and drink plenty of water. Do not induce vomiting. See a doctor immediately.



- A Filler bottle
- **B** Filler hose
- C Filler hose plug
- D Valve turner
- E Valve insert
- F Tire valve

### Filling in sealant

- 1. Leave the object that caused the puncture in the tire.
- 2. Remove sealant and the enclosed sticker from the luggage compartment.
- 3. Stick the sticker in the driver's field of vision.
- 4. Shake filler bottle A.

- **5.** Screw filler hose **B** onto the filler bottle. The filler bottle is now open.
- **6.** Unscrew valve cap from the tire valve **F**.
- 7. Remove valve insert **E** from the tire valve with valve turner **D**.
  - Keep the valve insert in a clean, dry place.
- 8. Remove plug C from the filler hose B. **9.** Push filler hose onto the tire valve.
- 10. Hold the filler bottle higher than the level of the tire valve and squeeze it forcefully until the bottle is completely emptied into the tire.
- 11. Pull filler hose off the tire valve.
- 12. Screw valve insert E securely into the tire valve with the valve turner **D**.
- 13. Connect the compressor to a socket in the vehicle and inflate the tire to at least 37 psi/ 2.5 bar/25 kPa.
  - If this tire pressure cannot be reached, the tire is too severely damaged.
  - Do not continue driving with this tire.
- 14. Screw valve cap onto the tire valve F.
- 15. Check the tire pressure after driving for around 10 minutes.

If the tire pressure is less than 22 psi/1.5 bar/ 15 kPa, do not continue driving. If a value of more than 22 psi/1.5 bar/15 kPa is indicated, correct the pressure to the prescribed value.

Please see the chapter "TIRE PRESSURE FOR COLD TIRES (68 °F/ 20 °C)" on page 287.

- 16. Please contact an authorized Porsche dealer.
- ▶ Also follow the separate operating instructions for the tire sealing compound.

### **WARNING**

Pressure Loss

A tire pressure sensor that is soiled with sealant cannot determine the tire pressure correctly.

When the defective tire is replaced, the tire pressure sensor must be replaced.

#### **DANGER**

**Damaged Tires** 

Damaged tires could burst causing loss of control of the vehicle.

- Have the tire replaced by a specialist workshop as soon as possible.
- Avoid hard acceleration and high cornering
- Observe maximum speed of 50 mph (80 km/h).
- Always observe the safety and operating instructions, which can be found in the separate operating instructions for the sealant and on the compressor.

## **Electrical System**

In order to avoid damage and faults in electrical or electronic systems, electrical accessories should be installed at an authorized Porsche dealer

▶ Use only accessories approved by Porsche.

#### **WARNING**

**Changing Fuses** 

Replacing fuses or relays with the engine running or the ignition on could cause electrical shock.

- Disconnect the negative terminal on the battery during all work on the electrical
- Please see the chapter "BATTERY (12 VOLT)" on page 271.

#### Relays

Relays should be checked or changed only at an authorized workshop.

#### **Changing fuses**

In order to prevent damage to the electrical system due to short circuits and overloads, the individual circuits are protected by fuses. The fuse boxes are located in the side walls of the driver's and passenger's footwell respectively.

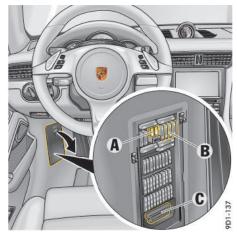
- 1. Switch off the load with the defective fuse.
- 2. Detach the appropriate plastic cover at the finger hole.
- 3. Remove the relevant fuse (see fuse assignment) from its slot using the yellow plastic gripper A (left fuse box) in order to
  - A blown fuse can be identified by the melted metal strip.
- **4.** Replace only with fuses of the same rating. Spare fuses can be found in the left-hand fuse box, next to the yellow plastic gripper. We recommend that you use genuine Porsche fuses for replacement.



## i Information

If a fuse blows repeatedly, the cause of the fault must be corrected immediately.

▶ Please contact an authorized Porsche dealer.



- A Plastic gripper
- **B** Spare fuses
- C Diagnostic socket

## **Fuses in left footwell**

#### Row A

No.	Designation	Α
1	Lower left:	40
	Air-conditioning fan	
2	Upper left:	40
	PSM control unit	
3	Lower right:	25
	Seat adjustment	
4	Upper right:	
	not used	

## Row B

No.	Designation	Α
1	Front lid light	40
	Front lid actuator	
	High beam, FL	
	Low beam, FL	
	Side marker light, FR	
	Turn signal lights, RL, FL	
2	Raised brake light, spoiler	15
	Rear lid actuator	
	Rear fog light, right	
	Reversing light, left	
	Brake light, left	
	Tail light, left	
	Daytime driving light, FL	
3	Alarm horn	15
4	Interior lighting	15
	Hall sensors	
	Orientation light	
	License plate light	
	Rear wiper electronics activation	
	Heated rear window relay	
	Central locking LED	
	Door panels LED	
	Ambient light	
	Raised brake light	
	Rear fog light, left	
	Brake light, right	
	Reversing light, right	
	Daytime driving light, FR	
E	Tail light, right	20
5	Fuel pump relay and control unit	20
6	Filler flap close/open	10
7	Washer pump, front/rear	20
/	Front spoiler control unit	30

Designation	A
Air conditioning control unit	7,5
Instrument cluster	10
Steering column	
stopwatch	
PCM	25
	Air conditioning control unit Instrument cluster Steering column stopwatch

## **Row C**

No.	Designation	
1	Center console button panel	15
	Gateway control unit	
	Diagnostic socket	
	Ignition lock	
	Passenger compartment monitoring	
	sensor	
	Light switch	
	Bluetooth phone charger	
2	Start-relevant loads	40
	Footwell lights	
	Electric ignition lock anti-removal	
	lock	
	Turn signal light indicator, FL/FR	
	Emergency flasher button LED	
	Electric ignition lock light	
	Side turn signal lights, FR/FL	
	High beam, FR	
	Low beam, FR	
	Turn signal light indicator, RR	
	Side marker light, FL	
3	Vehicle Tracking System control	5
	unit	
4	Horn	15

No.	Designation			
5	Cabriolet: Convertible-top lock	30		
	closing mechanism open/closed			
	Filler flap			
	Cabriolet: Convertible top storage			
	compartment catch open/close			
	Rear spoiler control extend/retract			
6	Power window control unit, FL	25		
7	Headlight cleaning system	30		
8	PSM control unit	25		
9	Alarm siren	5		
10	Not used			

## Row D

No.	Designation	Α
1	Rear wiper	15
2	HomeLink	5
3	Left headlight	5
4	PDC control unit	5
	AFS control unit	
	Front spoiler control unit	
	Front camera	
	Gateway/diagnostic socket	
	Air quality sensor	
5	PSM control unit	5
6	Steering column switching module	5
	Electronic steering gear	
	Refrigerant pressure sensor	
7	Selector lever control unit	5
8	Right headlight	5
9	Interior mirror	5
10	Seat ventilation, left	5



## Fuses in right footwell Row A

No.	Designation	Α
1	Lower left:	40
	DC/DC converter, infotainment	
2	Upper left:	40
	DC/DC converter roof console	
	power supply	
3	Lower right:	40
	Fresh-air blower motor	
	Blower regulator	
4	Upper right:	25
	Right seat control unit	
	Seat adjustment	

## Row B

No.	Designation		
1	Rain sensor	5	
2	Air conditioning control unit	25	
3	Not used		
4	PDCC control unit	10	
5	TPMS control unit	5	
6	TV tuner	5	
7	High-end subwoofer amplifier	40	
	Subwoofer amplifier	25	
8	Not used		
9	Allwheel control unit	10	
10	Reversing camera control unit	5	

## **Row C**

No.	Designation		
1	Not used		
2	Electric parking brake button	5	
3	Not used		
4	Cabriolet: Rear power window control unit	20	
5	Temperature sensor for DMTL tank leakage diagnosis	5	
6	Front wiper motor	30	
7	Power window control unit, FR	25	
8	Steering column adjustment	25	
9	Roof console	5	
10	Sound system amplifier	40	
		25	

#### **Row D**

No.	Designation	Α
1	Airbag control unit	5
2	Allwheel control unit	5
3	PDCC control unit	7,5
4	ACC control unit	5
5	Occupant sensing for the	5
	passenger's seat	
6	Seat ventilation, right	5
7	Control unit, DME, PDK, VTS	5
	BCM rear	
8	Footwell socket	20
9	Center console socket	20
	Cigarette lighter	
10	Socket in glove box	20

### **Emergency unlocking of luggage** compartment lid

If the battery is discharged, the luggage compartment lid can be opened only with the aid of a donor battery.

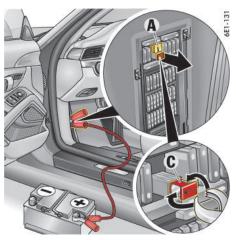


## Information

The engine **cannot** be started with this method. ▶ Please see the chapter "EXTERNAL POWER SUPPLY, EMERGENCY STARTING WITH JUMPER CABLES" on page 273.

#### **Unlocking lids**

- 1. Use the key to unlock the vehicle at the door lock.
- 2. Remove the plastic cover from the left-hand fuse box.
- 3. Pull out positive terminal  ${\bf C}$  (red) in the fuse box using the plastic gripper A (yellow).

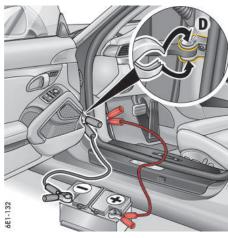


- A Plastic gripper (yellow)
- C Positive terminal (red)
- 4. Use the red jump lead to connect the positive terminal of the donor battery to the positive terminal **C** in the fuse box.



#### Information

If the vehicle was locked, the alarm horn will sound when the negative lead is connected.



- **5.** Use the black jump lead to connect the negative terminal of the donor battery to the door arrester **D**.
- **6.** Press button  $\Longrightarrow$  on the remote control for approx. 2 seconds to unlock the luggage compartment lid. The alarm system is switched off.
- 7. Disconnect the negative lead first, then the positive lead.
- 8. Push positive terminal C into the fuse box and fit the plastic fuse box cover.



## Battery (12 volt)

The battery is located under the cover in the luggage compartment.

For information on removing the cover:

- Please see the chapter "TIRE FILLING COMPRESSOR" on page 198.
- Have the battery removed and installed only by your authorized Porsche dealer.

#### A DANGER

Electric Shock

- Observe all warning notes on the battery.
- Disconnect the negative terminal on the battery during all work on the electrical system.
- Do not lay tools or other metal objects on the battery as they could cause a short circuit across the battery terminal.

#### **A** DANGER

**Battery Explosion** Hazard

- Charge battery in a well-ventilated area.
- Never charge a frozen battery. It may explode because of gas trapped in the ice. Allow a frozen battery to thaw out first.
- Do not expose the battery to an open flame, electrical spark or a lit cigarette, since they can ignite hydrogen gas from the battery.

#### **A** DANGER

Static Electricity

- Do not wipe the battery with a dry cloth.
- Before touching the battery, discharge any static electricity by touching the vehicle.

#### **WARNING**

Chemical Exposure

After handling battery, always protect your skin and remove surface chemicals by washing thoroughly with soap and water.

#### **WARNING**

Battery Acid and Electrolyte Exposure

- ▶ Wear eye protection.
- Do not allow battery acid to come in contact with your skin or eyes.
- If you get electrolyte, which is an acid, in your eyes or on your skin, immediately rinse with cold water for several minutes and call a doctor.

#### NOTICE

Risk of damage to the fabric, metal or paint from battery acid or electrolyte.

- Do not allow battery acid to come in contact with fabric or painted surfaces.
- Spilled electrolyte must be rinsed off at once with a solution of baking soda and water to neutralize the acid.

#### Charge state

A well-charged battery prevents starting problems and has a longer service life.

#### In order to avoid unintentional battery discharge:

- Switch off unnecessary electrical loads in city traffic, on short trips or in a line of traffic.
- Always remove the ignition key when leaving the vehicle or switch off the ignition on vehicles with Porsche Entry & Drive.
- Avoid using the Porsche Communication Management system and the audio system when the engine is not running.
- Please see the chapter "CHARGING THE BATTERY" on page 274.



#### Information

In the cold season in particular or if the vehicle is used primarily for short distances, it may be necessary to recharge the battery from time to time.

#### **Battery care**

- Ensure that battery is securely mounted.
- Keep battery surface clean and dry.
- Keep terminals and connections clean. Corrosion can be prevented by coating the terminals and connections with petroleum jelly or silicone spray.
- Ensure that terminal clamps and the vent hose are firmly secured.

#### Winter driving

The ability of the battery to deliver and store power decreases at low outside temperatures. Moreover, the battery is more heavily loaded in the winter months, e.g. by the heated rear window, the more frequent use of additional lights, the blower and the windshield wipers, etc.

▶ Have the battery checked before the start of winter.



## Information

Keep the battery fully charged to prevent it from freezing.

A discharged battery can already freeze at -5 °C, but a fully charged one only freezes at -40 °C.

If the battery is frozen, thaw it out before connecting jump leads.

#### Laying up the vehicle

If the vehicle is left for long periods in the garage or workshop, the doors and lids should be closed.

Remove the ignition key or disconnect the battery if necessary.



#### Information

When the battery is disconnected, the alarm system ceases to function.

If the vehicle was locked before the battery was disconnected, the alarm will be triggered when the battery is reconnected. To deactivate the alarm system:

Lock the vehicle and unlock it again.

#### Alarm system, central locking

▶ The status of the central locking and alarm system does not change when you disconnect the battery.



#### Information

Even if you put your vehicle out of operation, the battery still discharges.

- ▶ The battery must be charged, i.e. connected to a charger, approximately every 6 weeks in order to preserve battery function.
- Store a battery that has been removed in a dark, cool place that is not exposed to frost.

### Replacing the battery

The battery is subject to normal wear: its service life depends heavily on the care you give it, climatic conditions and the conditions of use (distances, loads).

It is not possible to use the details on the battery case to determine a comparable battery that meets all the specific requirements of Porsche.

- Have the battery removed and installed only by your authorized Porsche dealer.
- Only use an original Porsche battery, with the correct part number, as a replacement. Only this battery meets the specific requirements of the vehicle.

- After you install a new battery, it must be initialized in the control unit. Please contact your authorized Porsche
- Please observe the disposal instructions for batteries.

#### **Putting vehicle into operation**

After the battery is connected or after a fully discharged battery is charged, the PSM warning light lights up on the instrument panel and a message appears on the multi-function display in the instrument panel to indicate a fault. This fault can be corrected with a few simple steps:

- **1.** Start the engine. To do this, turn the ignition key or the control unit (on vehicles with Porsche Entry & Drive) to ignition lock position 2 twice.
- 2. With the vehicle stationary, perform a few steering movements to the left and right and then drive a short distance in a straight line until the PSM warning light goes out and the message is erased from the multi-function display in the instrument panel.
- **3.** If the warnings do **not** disappear, then: Drive carefully to the nearest authorized Porsche dealer. Have the fault corrected.
- **4.** After the warnings go out: Stop the vehicle in a suitable place.
- **5.** Store the end position for the power windows.

For information on storing the end positions for the power windows:

- Please see the chapter "STORING END POSITION OF THE WINDOWS AFTER CONNECTING THE VEHICLE BATTERY" on page 63.
- 6. Teach tires on vehicles with Tire Pressure Monitoring.

For information on teaching the Tire Pressure Monitoring System (TPMS):

- Please see the chapter "TIRE PRESSURE MENU (TIRE PRESSURE MONITORING SYSTEM, TPMS)" on page 105.
- **7.** Store end position on vehicles with a sunroof. For information on storing the end position for the sunroof:
- Please see the chapter "STORING END POSITION OF THE SUNROOF" on page 66.
- Please see the chapter "STORING END POSITION OF THE ROLL-UP SUNBLIND" on page 67.

## **External Power Supply, Emergency** starting with jumper cables

If the battery is flat, the battery of another vehicle can be used for starting or as an external power supply with the help of jump leads.

Both batteries must be 12 V batteries. The capacity (Ah) of the donor battery must not be substantially less than that of the flat battery. The flat battery must be connected correctly to the vehicle's electrical system.

#### **WARNING**

Jumper Cable Hazards

A short circuit may be caused if unsuitable jumper cables are used or if jumper cable starting is not performed properly. Such short circuits can cause a fire.

- ▶ Use only standard jumper cables with sufficient cross section and completely insulated alligator clips. Follow the instructions provided by the jumper cable manufacturer.
- Route the jumper cables so that they cannot be caught by moving parts in the engine compartment.
  - The jumper cables must be long enough so that neither vehicles nor cables touch another.
- The vehicles must not touch, otherwise current might flow as soon as the positive terminals are connected.
- ▶ Ensure that tools or conductive jewelry (rings, chains, watch straps) do not come into contact with the positive jumper cable, the positive battery post or live parts of the vehicle.
- Improper hook-up of jumper cables can ruin the alternator.

#### **WARNING**

Battery Acid Leakage

Do not lean over the battery due to danger of chemical burns from leaking acid.

#### **DANGER**

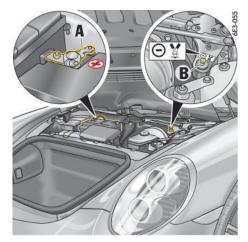
**Battery Charging and** Jumping Hazards

- Improper use of booster battery to start a vehicle may cause an explosion.
- Keep sources of ignition away from the battery, e.g. naked flame, burning cigarettes or sparks due to cable contact.
- Before connecting jumper cables, it is essential to thaw out a frozen battery.

#### NOTICE

Risk of damage due to short circuit.

Never connect jumper cables directly to the battery. Always connect jumper cables to the emergency starting terminals in the luggage compartment.



- + = Battery positive terminal A
- = Ground point for external power supply/emergency starting **B**

#### Supplying external power/ Performing emergency starting with jumper cables

Always observe the sequence below:

- 1. Remove cover in luggage compartment. To remove the cover: Please see the chapter "TIRE FILLING COMPRESSOR" on page 198.
- 2. Connect the positive lead (red) to the positive terminal A of the discharged battery first, then connect it to the positive terminal of the donor battery.
- **3.** Connect the negative lead (black) first to the negative terminal of the donor battery, then to the ground point B.
- 4. Leave the engine of the donor vehicle running at a higher engine speed.

**5.** Start the engine.

An attempted start using jump leads should not last more than 15 seconds. Then wait for at least one minute.

- **6.** With engine running:
  - Disconnect the negative lead from the ground point B first, then from the negative terminal of the donor battery.
- With engine running: Disconnect the positive lead from the positive terminal of the donor battery first, then from the positive terminal A of the discharged battery.

#### **Charging the battery**

Automotive batteries lose their efficiency when not in use. The charge available in your battery can be measured with a battery hydrometer. We recommend that the battery voltage be tested by your authorized Porsche dealer who has the appropriate equipment.

If the car is not driven for prolonged periods, the battery must be charged at least every 6 weeks. A discharged battery allows rapid formation of sulfates, leading to premature deterioration of the plates.

#### **A** DANGER

**Battery Explosion** Hazards

- ▷ Charge battery in a well-ventilated area due to hydrogen gas explosion risk.
- Never charge a frozen battery. It may explode because of gas trapped in the ice. Allow a frozen battery to thaw out first.

#### **A** CAUTION

Eye or Skin Contact

▷ If you get electrolyte, which is an acid, in your eyes or on your skin, immediately rinse with cold water for several minutes.

Your authorized Porsche dealer will be pleased to advise you about a suitable charger.

- Always observe the instructions provided by the charger manufacturer.
- If the battery is frozen, thaw it out first before charging it.
- When charging the battery, ensure adequate ventilation.
- 1. Connect the charger to the emergency starting terminals.
  - Only plug into the mains and switch the charger on when it is connected up correctly.
- 2. Switch on the charger.
- 3. After charging the battery, first switch off the charger and then disconnect it.
- Please see the chapter "PUTTING VEHICLE INTO OPERATION" on page 273.

## **Changing Car Key** (Remote Control) Battery



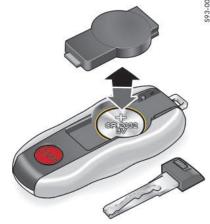
#### Information

Please observe the regulations for disposing of batteries.

#### Car key

If the battery in the remote control becomes too weak, the message "Replace ignition key battery" will appear on the multi-function display in the instrument panel.

The battery should be changed in this case.



## Changing the battery (CR 2032, 3V)

1. Remove the emergency key.

For information on the emergency key:

- ▶ Please see the chapter "EMERGENCY KEY" on page 17.
- 2. Lever off the cover on the back of the key housing using a small screwdriver.
- 3. Change the battery (check polarity).
- **4.** Re-fit cover and press together firmly.
- **5.** Insert the emergency key.

### **Replacing bulbs**

### **Replacing Light-Emitting Diodes and Long-Life Bulbs**

The vehicle lighting as well as the interior lights have light-emitting diodes and long-life bulbs. The LEDs cannot be replaced individually. Replacement of the long-life bulbs involves a greater amount of installation work.

Have defective LEDs and bulbs replaced at an authorized Porsche dealer.



Headlight High Voltage Hazard

The headlights are under high voltage when installed.

Exercise extreme care when working close to the headlights.

#### **NOTICE**

Risk of short circuit.

Always switch off the relevant load when changing bulbs.

#### **NOTICE**

Risk of damage.

Bulbs of a high wattage can damage the housing.



#### Information

Bulbs must be clean and free from grease.

- ▶ Never touch bulbs with your bare hands. Use a cloth or soft paper when replacing
- Always carry spare bulbs with you. In certain countries, it is mandatory to carry spare bulbs.

## **Headlights**

#### **NOTICE**

Risk of damage to headlights due to abrasion and excessive temperatures.

- Do not affix any coverings (e.g. "stone guards" or film) close to the headlights.
- Use soapy water only to clean light lenses and plastic headlight lenses. In no case may chemical cleaners or other volatile cleaning fluids be used.
- To prevent scratches, do not rub with a dry or merely moist cloth, tissue or insect sponges.



#### Information

The headlights and tail lights can mist up due to temperature and humidity.

To ensure optimum ventilation, do not cover the gap between light and body.



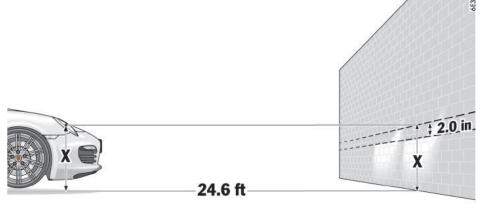
## **Headlight Adjustment**

- ▷ Check tire pressure and adjust if necessary.
- Please see the chapter "TIRE PRESSURE FOR COLD TIRES (68 °F/ 20 °C)" on page 287.
- ▶ Please see the chapter "REPLACING BULBS" on page 276.

#### **Adjustment**

The adjustment is made with the vehicle ready to drive and the fuel tank completely filled.

The driver's seat must be loaded by a person or a 165 lbs. (75 kg) weight and the tire pressures must meet the prescribed values. After being loaded, the car must be rolled a few meters so that the suspension can settle.



For checking the headlight adjustment, the vertical position of the cutoff of the low beam (see fig.) has to be projected on a vertical screen (wall) in distance of 24.6 ft. (7.5 m) from the front lens of the headlamp. The correct position of the cutoff is 2.0 in. (5 cm) at 24.6 ft. or 7.5 m (0.4°) below a horizontal line,  $\mathbf{x}$  cm from ground to the center of the headlamp lens.

Lateral adjustment of the headlights should be carried out at an authorized Porsche dealer.

#### Distance

Visual aim shall be performed at not less than 24.6 ft. (7.5 m) (this value is a rounded down conversion from the 25-foot distance typical of field aim using a screen). The 24.6 ft. (7.5 m) distance is measured from the headlamp lens to the viewing screen.

#### Floor

The surface upon which the vehicle rests is flat and approximately level.

#### Screen

The screen upon which headlamp beams are projected is perpendicular to the floor and the vehicle's longitudinal axis, flat, uniformly light in color, unobstructed, and wide and high enough to accommodate the vehicle beam patterns to be aimed.

The screen should be wide enough to provide at least 3.3 ft. (1 m) of space outboard of the vehicle's headlamp spacing.



A-Height adjustment

#### Height adjustment

- 1. Switch ignition on.
- 2. Switch on low beam.
- 3. Open luggage compartment lid.
- 4. Remove the relevant toolbox.
- **5.** Open up the cover **A** for the adjusting screw.
- 6. Place Allen wrench (5 mm) on adjusting screw.
- 7. Adjust low beam in the corresponding direction.

## **Towing**

Certain state statutes and local ordinances prohibit towing with a chain, rope or even a tow bar. In addition, damage to your vehicle may result from improper procedures. Consult your authorized Porsche dealer for details. Flatbed towing is the preferred type of towing to be used on Porsche vehicles.



#### Information

- Always observe the laws governing towing and tow-starting.
- Exercise extreme care when your vehicle is being towed.

**WARNING** 

Towed Vehicle Hazards

No power assistance is available on the towed vehicle when its engine is not running. Greater force is therefore required when braking and steering.

Exercise extreme care when your vehicle is being towed.

When the engine is not running, adequate lubrication of the transmission is not guaranteed. Observe the following points to avoid damage to the transmission.

#### Towing a vehicle on all four wheels

#### **NOTICE**

We urge that wherever possible, a car transporter or trailer be used to transport a 911 Turbo vehicle that cannot move under its own power. This is the safest way to transport a down vehicle.

For those instances where a car transporter or trailer is not available, the vehicle may be towed on all four wheels only, provided the following

conditions are strictly met. Failure to meet these conditions will result in serious and expensive damage to the PDK transmission.

If the vehicle's transmission or shifter is already damaged, serious damage will result if the vehicle is not towed with all four wheels off the ground.

Porsche cannot be held responsible for damage incurred in cases where a vehicle has been transported on one or both of its axles.

#### Towing a vehicle on all four wheels:

- ▶ The vehicle must not be towed if the PDK transmission is in emergency operation mode ("Transm. failure Park vehicle safely"). The vehicle must be transported with a car transporter or on a trailer.
- If a selector lever emergency release was performed, the vehicle must not be towed. The vehicle must be transported with a car transporter or on a trailer.
- Move PDK selector lever to position N To properly engage selector-lever position N on the display and at the selector lever, the engine must be started once before towing the vehicle.
  - The vehicle can be towed as soon as the selector lever is in position N and selectorlever position **N** appears on the display.
- The vehicle must always roll on all four wheels when towed.
  - The ignition must be switched on so that the brake lights and turn signal lights operate.
- Do not exceed a maximum speed of 30 mph (50 km/h).

Maximum towing distance 30 miles (50 km). If towing distances are greater, the vehicle must be transported with a car transporter or on a trailer.

#### Towing a vehicle on one axle:

Raising an axle, irrespective of whether at the front or rear, is only permissible if the drive shaft (cardan shaft) has been removed beforehand. The ignition must be switched off.

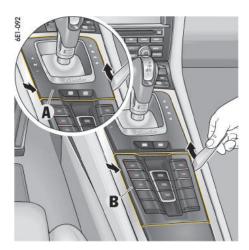
- The vehicle must not be towed if the PDK transmission is in emergency operation mode (yellow or red "Transm. failure Park vehicle safely" warning message). The vehicle must be transported with a car transporter or on a trailer.
- If a selector lever emergency release was performed, the vehicle must not be towed.
   The vehicle must be transported with a car transporter or on a trailer.
- Move PDK selector lever to position N. To properly engage selector-lever position N on the display and at the selector lever, the engine must be started once before towing the vehicle.
  - The vehicle can be towed as soon as the selector lever is in position **N** and selector-lever position **N** appears on the display.
- Switch ignition off.
   The ignition key must remain in the ignition lock so that the steering lock does not engage.
   The control unit must be removed from the ignition lock and the key inserted in vehicles with Porsche Entry & Drive.
- ▶ Please see the chapter "EMERGENCY OPERATION – UNLOCKING THE IGNITION KEY/ CONTROL UNIT" on page 28.
- Make sure that the vehicle is adequately illuminated.

Do not exceed a maximum speed of 30 mph (50 km/h).

Maximum towing distance 30 miles (50 km). If towing distances are greater, the vehicle must be transported with a car transporter or on a trailer.

## Pulling out a vehicle stuck in snow, sand, etc.

- Always pull out the stuck vehicle with the greatest care.
- Do not pull out the vehicle abruptly or at an angle.
- ▶ If possible, pull the vehicle out backwards in its own tracks.

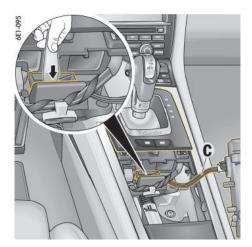


### **PDK** selector lever emergency release

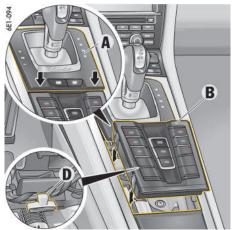
In the event of an electronics failure, emergency release of the selector lever must be performed in order to move the selector-lever to the  $\bf N$  position.

#### Releasing selector lever

- 1. Take the plastic wedge from the toolbox.
- Carefully lever out the rear part of the selector lever gate A on both sides (arrows) using the plastic wedge.
- Carefully lever out the front part of the switch panel B on both sides (arrow) using the plastic wedge.
- Remove the switch module B and place aside.
   The cable C of the switch panel must not be under tension.



5. Push the selector lever lock downwards and hold, then move the selector lever into the N position.



## Installing the switch panel and selector lever

- 1. Make sure that the cable clip **D** engages correctly in the selector support. Then engage the switch panel **B** into the front guides, fully insert the panel and press downwards until it engages securely.
- 2. Press down the selector lever gate A until it engages securely.



## **Towing lug**

The towing lug is stored in the left tool box in the luggage compartment.

#### NOTICE

- ▶ Use the towing lug only for an emergency to remove the vehicle off the road. The towing lug is to be used only to pull the vehicle onto the flat bed, tractor or towing apparatus if the vehicle will roll freely. Under no circumstances is the vehicle to be secured using the towing lug.
- Never use the towing lug to tow this or any other vehicle.
- Bear in mind the limited ground clearance of your car on uneven surfaces,

#### Fitting the towing lug

When fitting on the rear of the vehicle, the license plate must be removed.

- 1. Press the lower edge of the appropriate plastic cover into the bumper until the cover disengages.
- 2. Pull cover out of the bumper and let it hang by its thread.
- 3. Screw in towing lug A as far as it will go (left-hand thread) and tighten hand-tight.



Front towing lug

#### Removing the towing lug

- 1. Unscrew the towing lug A.
- 2. Insert plastic cover at the lower edge of the
- 3. Fold the cover up and press on its upper edge to engage it in the bumper.
- **4.** Store the towing lug in the tool box.



### **Pulling vehicle onto flat bed**

- 1. Position wooden ramps at the base of the flat bed to reduce the angle of the pull.
- 2. Reel in the hoist cable and check the underside of the vehicle for any interference.

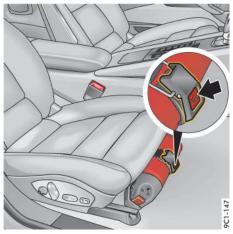


### Tying down vehicle on flat bed

- Carefully feed towing straps through the opening in the rear wheels.
   Make sure metal parts of straps do not damage rim.
   Make sure the strap is flat over the rim bead.
   Make sure brake backing plate is not damaged.
- 2. Secure straps to rear of flat bed.
- **3.** Reel in hoist cable only far enough to tension tie-down straps.

## Transporting the vehicle on car trains, ferries and car transporters

- ➤ Tie the vehicle down only at its wheels.
- Deactivate interior surveillance and the inclination sensor.
- Please see the chapter "ALARM SYSTEM AND PASSENGER COMPARTMENT MONITORING" on page 216.



## Fire extinguisher

In cars with a fire extinguisher, the extinguisher is located under the front passenger seat.

To remove the fire extinguisher in case of an emergency, hold the extinguisher with one hand and press the button **PRESS** on the fire extinguisher holder with the other hand (arrow).



#### Information

- Check the final inspection date on the fire extinguisher. If the fire extinguisher is used after its inspection interval has elapsed, it may not work properly.
- Always read the operating instructions on the fire extinguisher.
- Observe the fire extinguisher manufacturer's safety instructions on the label at the fire extinguisher handle.
- The fire extinguisher should be checked to ensure correct operation by a specialist workshop every 1-2 years.
- ▶ Have the fire extinguisher refilled after use.

**282** Minor Repairs

## **Tire Pressure and Technical Data**

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Vehicle identification number

### **Vehicle Identification Data**

When ordering spare parts or making inquiries, always quote the vehicle identification number.

#### Vehicle identification number

You will find the vehicle identification number at the bottom left behind the windshield and under the front passenger's seat.



Safety compliance sticker

## Safety compliance sticker

The safety compliance sticker is your assurance that your new Porsche complies with all applicable Federal Motor Vehicle Safety Standards which were in effect at the time the vehicle was manufactured.

The sticker also shows the month and year of production and the vehicle identification number of your car (perforations) as well as the **G**ross Vehicle Weight Rating and the Gross Axle Weight Rating.



Tire pressure plate

### Tire pressure plate

The plate is attached to the door aperture area on the driver's side.

#### Vehicle data carrier

You will find the vehicle data carrier in the "Maintenance" booklet.

It contains all important data about your vehicle. This data carrier cannot be re-ordered if it is lost or damaged.

## **Engine Data**

		I T
	911 Turbo	911 Turbo S
Number of cylinders	6	6
Displacement	231.9 cu. in. (3,800 cm <sup>3</sup> )	231.9 cu. in. (3,800 cm <sup>3</sup> )
Max. engine power as per 80/1269/EEC	520 hp (338 kW)	560 hp (412 kW)
At engine speed	6,000-6,500 rpm	6,500-6,750 rpm
Max. torque as per 80/1269/EEC	487 ftlb. (660 Nm) Overboost: 524 ftlb. (710 Nm)	553 ftlb. (700 Nm) Overboost: 553 ftlb. (750 Nm)
At engine speed	1,950-5,000 rpm Overboost: 2,100-4,250 rpm	2,100-4,250 rpm Overboost: 2,200-4,000 rpm
Maximum permitted engine speed	7,000 rpm	7,200 rpm

## **Driving Performance**

The specifications refer to a vehicle with DIN curb weight without performance-reducing additional equipment (e.g. special tires).

	Maximum track speed	Acceleration 0–100 km/h (62 mph) (values in brackets relate to "Sport Plus" mode)
911 Turbo Coupé	196 mph (315 km/h)	3.4 (3.2) seconds
911 Turbo S Coupé	198 mph (318 km/h)	(3.1) seconds
911 Turbo Cabriolet	196 mph (315 km/h)	3.5 (3.3) seconds
911 Turbo S Cabriolet	198 mph (318 km/h)	(3.2) seconds

## Wheels, Tires

- ▶ Approval of tire and wheel sizes is granted based on extensive testing. By fitting tires that have been approved by Porsche, you can be sure that you have the best possible tires for your Porsche. The load capacity coefficient (e.g. "91") and maximum speed code letter (e.g. "Y") for permitted top speed are minimum requirements. When fitting new tires or changing tires: Please see the chapter "TIRES AND WHEELS" on page 244.
- Snow chain clearance can only be guaranteed with the tires marked 1). Snow chains can only be fitted on the rear wheels. Observe state or provincespecific laws regarding maximum speeds with fitted snow chains. Only use Porsche approved fine-link cross-type or edge chains.
- Your Porsche dealer will be pleased to advise you about the current approval status for tires, wheels and snow chains.

<b>20-inch wheel</b> FA / RA 5 holes and central lock	8.5J x20, RO51 / 11J x20, RO56 <sup>1)</sup>	9J x20, R051 / 11.5J x20, R056
Summer tires FA / RA	245/35 ZR 20 (91Y) / 305/30 ZR 20 (103Y) XL	245/35 ZR 20 (91Y) / 305/30 ZR 20 (103Y) XL
Snow tires FA / RA	245/35 R 20 91V / 295/30 R 20 97V <sup>1)</sup>	
<b>20-inch wheel</b> FA / RA Winter wheel with central lock	8.5J x20, RO51 / 11J x20, RO59 <sup>1)</sup>	

<b>20-inch winter wheel</b> FA / RA, 5-hole not for Turbo S, not for vehicles with PCCB brake	8.5J x20, R051 / 11J x20, R052
Winter tires FA / RA	245/35 R 20 91V / 295/30 R 20 97V

FA = front axle, RA = rear axle

**A** DANGER

Improper Tire Size

Installation of sizes not authorized by Porsche may impair driving stability and could result in loss of control of the vehicle.

▷ Before mounting new tires check with your authorized Porsche dealer for a current list of approved tires.

**286** Tire Pressure and Technical Data

### Tire Pressure for Cold Tires (68 °F/ 20 °C)

These standard and comfort tire pressures apply only to the tire makes and types approved by Porsche.

#### **Standard tire pressure for summer tires**

The load condition of the vehicle must be set and comfort pressure/standard pressure selected on the multi-function display. The tire pressure must be changed according to the vehicle load. Please see the chapter "SELECTING LOAD IN THE TPMS MENU" on page 110.

	Part load		Full load	
	FA RA		FA RA	
911 Turbo, 911 Turbo S	34 psi/ 2.4 bar/ 240 kPa	43 psi/ 3.0 bar/ 300 kPa	37 psi/ 2.6 bar/ 260 kPa	47 psi/ 3.3 bar/ 330 kPa

#### **Standard tire pressure for snow tires**

▶ The load condition of the vehicle must be set on the multi-function display. The tire pressure must be changed according to the vehicle load. Please see the chapter "SELECTING LOAD IN THE TPMS MENU" on page 110.

	Part load		Full load	
	FA RA		FA	RA
	31 psi/	39 psi/	34 psi/	43 psi/
911 Turbo, 911 Turbo S	2.2 bar/	2.7 bar/	2.4 bar/	3.0 bar/
	220 kPa	270 kPa	240 kPa	300 kPa

### Comfort tire pressure for summer tires up to 165 mph (270 km/h)

The comfort tire pressure speed threshold permitted for your vehicle depends on the national type standardization and is displayed under "Comfort pressure" in the "Tire pressure" menu on the multi-function display.

Please see the chapter "SELECTING COMFORT/STANDARD PRESSURE IN THE TPMS MENU" on page 110.

	Part load		Full load	
	FA RA		FA	RA
	31 psi/	36 psi/	33 psi/	40 psi/
911 Turbo, 911 Turbo S	2.2 bar/	2.5 bar/	2.3 bar/	2.8 bar/
	220 kPa	250 kPa	230 kPa	280 kPa

FA = front axle, RA = rear axle

<sup>▶</sup> The load condition of the vehicle must be set on the multi-function display. The tire pressure must be changed according to the vehicle load. Please see the chapter "SELECTING LOAD IN THE TPMS MENU" on page 110.

## Weights

	911 Turbo Coupé	911 Turbo S Coupé	911 Turbo Cabriolet	911 Turbo S Cabriolet
Empty weight (depending on equipment) per DIN 70020	3,516 lbs. to 3,704 lbs. (1,595 kg to 1,680 kg)	3,538 lbs. to 3,704 lbs. (1,605 kg to 1,680 kg)	3,814 lbs. to 3,671 lbs. (1,665 kg to 1,730 kg)	3,814 lbs. to 3,693 lbs. (1,675 kg to 1,730 kg)
Empty weight (depending on equipment) per 70/156/EEC <sup>1)</sup>	3,682 lbs. to 3,869 lbs. (1,670 kg to 1,755 kg)	3,704 lbs. to 3,869 lbs. (1,680 kg to 1,755 kg)	3,836 lbs. to 3,979 lbs. (1,740 kg to 1,805 kg)	3,858 lbs. to 3,979 lbs. (1,750 kg to 1,805 kg)
Maximum axle load, front <sup>2)</sup>	1,764 lbs. (800 kg)	1,764 lbs. (800 kg)	1,786 lbs. (810 kg)	1,786 lbs. (810 kg)
Maximum axle load, rear <sup>2)</sup>	2,690 lbs. (1,220 kg)	2,690 lbs. (1,220 kg)	2,778 lbs. (1,260 kg)	2,778 lbs. (1,260 kg)
Maximum Gross vehicle weight <sup>2)</sup>	4,387 lbs. (1,990 kg)	4,387 lbs. (1,990 kg)	4,508 lbs. (2,045 kg)	4,508 lbs. (2,045 kg)
Maximum roof load <sup>3)</sup>	165 lbs. (75 kg)	165 lbs. (75 kg)	-	_

### **Dimensions**

	911 Turbo Coupé	911 Turbo S Coupé	911 Turbo Cabriolet	911 Turbo S Cabriolet
Length	177.4 in. (4,506 mm)			
Width without exterior mirrors	74.02 in. (1,880 mm)			
Width with exterior mirrors	77.87 in. (1,978 mm)			
Height at DIN curb weight	51.02 in. (1,296 mm)	51.02 in. (1,296 mm)	50,87 in. (1,292 mm)	50,87 in. (1,292 mm)
Wheelbase	96.46 in. (2,450 mm)			
Ground clearance at maximum gross weight	4.17 in. (106 mm)	4.09 in. (104 mm)	4.17 in. (106 mm)	4.09 in. (104 mm)
Turning circle	34.8 ft. (10.6 m)			

 $<sup>^{\</sup>rm 1)}$  Curb weight includes 165 lbs. (75 kg) driver and baggage share.  $^{\rm 2)}$  The maximum vehicle weight and maximum axle loads must not be exceeded. Notice: If additional accessories are installed, the maximum load will be correspondingly less.

<sup>3)</sup> Only use Roof Transport Systems from the Porsche Tequipment product range for your car or Roof Transport Systems that have been tested and approved by Porsche.

# **Filling Capacities**

Only use fluids and fuels approved by Porsche. Your Porsche dealer will be pleased to advise you.

Engine oil change quantity with oil filter	approx. 1.98 US gallons (7.5 liters)
Fuel tank	approx. 18.0 US gallons (68 liters), including approx. 3.17 US gallons (12 liters) reserve
Fuel octane rating	The engine is designed to provide optimum performance and fuel consumption if unleaded premium fuel with 98 RON/88 MON (93 CLC or AKI) is used.  If unleaded fuels with octane numbers of less than RON 98/MON 88 (93 CLC or AKI) are used, the engine's "Electronic Octane™ knock control" automatically adapts the ignition timing. Porsche recommends that you use fuel with at least 95 RON/85 MON (90 CLC or AKI) in your vehicle.
Windshield/headlight washer system	approx. 1.59 US gallons (6 liters)

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