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Printed in Germany

Dear Owner,

We would like to thank you for your purchase of a Porsche Cayenne.

Judging by the car you have chosen, you are a motorist of a special breed, and you are probably no novice when it comes to automobiles.

Remember however, as with any vehicle, you should take time to familiarize yourself with your Porsche and its performance characteristics. Always drive within your own unique capabilities as a driver and your level of experience with your Porsche. Ensure that anyone else driving your Porsche does the same. To prevent or minimize injury, always use your safety belts. Never consume alcohol or drugs before or during the operation of your vehicle.

This Owner's Manual contains a host of useful information. Please take the time to read this manual before you drive your new Porsche. Become familiar with the operation of your Porsche car for maximum safety and operating pleasure. The better you know your Porsche, the more pleasure you will experience driving your new car. Always keep your Owner's Manual in the car, and give it to the new owner if you ever sell your Porsche.

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 either call the Auto Safety Hotline toll-free at 1-(800)-424-9393 (or 366-0123 in Washington, D.C. area) or write to: NHTSA, U.S. Department of Transportation, Washington, D.C. 20590. You can also obtain other information about motor vehicle safety from the Hotline.

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.

Any alteration of the vehicle may negate or interfere with those safety features built into the vehicle.

Your Porsche is intended to be used in a safe manner obeying the local 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. Any alteration or misuse of the vehicle can lead to accidents and severe or fatal personal injuries.

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.

Important!

For your own protection and longer service life of your car, please heed all operating instructions and special warnings. These special warnings use the safety alert symbol, followed by the words **Danger, Warning and Caution**. 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, physical injury, or death.

- f Do not alter your Porsche. Any alteration could create dangerous conditions or defeat safety engineering features built into your car.
- f Do not misuse your Porsche. Use it safely, and consistently with the law, according to the driving conditions, and the instructions in this manual.

Alteration or misuse of your Porsche could cause accidents and severe or fatal personal injuries.

Note to owners

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

Note aux propriétaires

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

Porsche Cars Canada, Ltd.
Automobiles Porsche Canada, LTEE

5045 Orbitor Drive
Building #8, Suite 200
Mississauga, Ontario
Canada L4W 4Y4

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

Porsche and the Environment

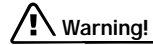
Environmental guidelines

We develop and produce exclusive vehicles with sophisticated environmental and safety technology and a great ability to fascinate.

Our environmental policy is based on the following principles:

- The maximum possible use of environmental and safety technology that is economically justifiable.
- Economical usage of energy and resources.
- Involvement of our business partners and contractors in our efforts to protect the environment.
- Open dialogue with all social groups.

California Proposition 65 Warning



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.

Production

Whether in production or repair, Porsche always relies on environmentally friendly technology. An example of this is the water-based paint used in our paint shops.

Water-based paints and new painting methods reduce solvent emissions by 70 per cent. The water used in the paint shop is recirculated. Waste water leaves the Porsche factory only after being appropriately treated.

A waste-management scheme has been introduced to reduce the amount of waste while simultaneously increasing the recycling quota.

Environmentally friendly vehicles

Modern environmental technology ensures compliance with all emission laws applicable worldwide.

It has the following advantages:

- Rapid “operational readiness” of the catalytic converters ensures low emissions, even in short-trip operation.
 - Reliable operation and good emission control over a long useful life.
- f Please observe the chapter “FUEL ECONOMY” on Page 276.

Recycling – for a Porsche, this is virtually an academic question

More than two-thirds of all Porsches ever built are still running.

But, just in case recycling is ever necessary, we take the following precautionary measures:

- Utilisation-friendly design.
- Identification of materials.
- Use of recyclable materials.
- Reusable components designed for simple removal.

Emission control is built in

Innovative engine technology combines high engine performance and environmental compatibility.

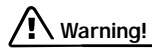
The engine diagnosis system electronically monitors the components and systems that affect exhaust gases.

This continuous monitoring and fault storage enables swift, reliable diagnosis and fault detection.

Faults are indicated to the driver by the “Emission control” warning light and display.

- f Please observe the chapter “EMISSION CONTROL” on Page 91.

Setting and operating vehicle components when driving

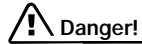


There is a danger of accident if you set or operate the on-board computer, radio, navigation system, telephone or other equipment when driving.

This could distract you from the traffic and cause you to lose control of the vehicle.

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

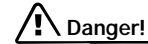
Portable Fuel Containers



Portable fuel containers, full or partially empty, may leak, causing an explosion, or result in fire in case of an accident.

- f Never carry additional fuel in portable containers in your vehicle.

Engine Exhaust



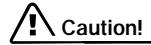
Engine exhaust is dangerous if inhaled.

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.

- f 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.

Vehicles with SportDesign package



Risk of damage. On vehicles with Sport-Design package, front, rear, and side member trim are painted and located lower on the vehicle. Off-road driving can seriously damage these trim parts.

- f When driving off-road, make sure these parts are not damaged.
 - f Make sure there is sufficient clearance between obstacles and the underside of the vehicle.
 - f Avoid driving through water.
 - f Do not use side member trim as a running board.
-

Fuel Quality

Your engine is designed to provide optimum performance and fuel economy using **unleaded premium fuel with an octane rating of 98 RON (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 (90 CLC or AKI)**, since the engine's "Electronic Oktane™ knock control" will adapt the ignition timing, if necessary.

Fuels containing alcohol and ether

Some areas of the U.S. require oxygenated fuels during certain portions of the year. Oxygenated fuels are fuels which contain alcohols (such as methanol or ethanol) or ether (such as MTBE).

Under normal conditions, the amount of these compounds in the fuel will not affect driveability.

You may use oxygenated fuels in your Porsche, provided the octane requirements for your vehicle are met. We recommend, however, to change to a different fuel or station if any of the following problems occur with your vehicle:

- Deterioration of driveability and performance.
- Substantially reduced fuel economy.
- Vapor lock and non-start problems, especially at high altitude or at high temperature.
- Engine malfunction or stalling.

Fuels containing MMT

Some North American fuels contain an octane enhancing additive called methylcyclopentadienyl manganese tricarbonyl (MMT). If such fuels are used, your emission control system performance may be negatively affected.

The check engine warning lights on your instrument panel may turn on. If this occurs, Porsche recommends you stop using fuels containing MMT.

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Dear Porsche Owner

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

the safe driver...

- who knows 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

- f Turn the engine off before you attempt any checks or repairs on the vehicle.
- f Be sure the tires are inflated correctly. Check tires for damage and tire wear.
- f See that wheel bolts are properly tightened and not loose or missing.
- f Check engine oil level, add if necessary. Make it a habit to have engine oil checked with every fuel filling.
- f Check all fluid levels such as windshield washer and brake fluid levels.
- f Be sure the vehicle battery is well charged and cranks the engine properly.
- f Check all doors and lids for proper operation and latch them properly.
- f Check and if necessary replace worn or cracked wiper blades.
- f See that all windows are clear and unobstructed.
- f Check air intake slots and area between engine compartment lid and windshield are free of snow and ice, so the heater and the windshield wipers work properly.

- f If a child will be riding in the vehicle, check child seat/child seat restraint system to ensure that restraints are properly adjusted.
- f Check all exterior and interior lights for operation and that the lenses are clean.
- f Check the headlights for proper aim, and if necessary, have them adjusted.
- f Check under the vehicle for leaks.
- f 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...

- f Check operation of the horn.
- f Position seat for easy reach of foot pedals and controls. To reduce the possibility of injury from the airbag deployment, you should always sit back as far from the steering wheel as is practical, while still maintaining full vehicle control.
- f Adjust the inside and outside rear view mirrors.
- f Buckle your safety belts.
- f Check operation of the foot and parking brake.
- f Check all warning and indicator lights with ignition on and engine not running.
- f Start engine and check all warning displays for warning symbols.
- f Never leave an idling car unattended.
- f 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...

- f Never drive after you have consumed alcohol or drugs.
- f Always have your safety belt fastened.
- f Always drive defensively. Expect the unexpected.
- f Use signals to indicate turns and lane changes.
- f Turn on headlights at dusk or when the driving conditions warrant it.
- f Always keep a safe distance from the vehicle in front of you, depending on traffic, road and weather conditions.
- f 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.
- f Always observe speed limits and obey road signs and traffic laws.
- f 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 observe the chapter "ENGINE EXHAUST" on Page 6.

- f When parked, always put the handbrake on **and** put the gearshift lever in neutral or the selector lever in position **P**.
On hills also turn the front wheels toward the curb.
- f 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, fuel spill or other flammable material.
- f Make it a habit to have the engine oil checked with every fuel filling.

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, it cannot be completely avoided that the moving parts have to wear in with each other. This wearing-in occurs mainly in the first 2,000 miles (3,000 km).

Therefore:

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

- f 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 or other controls during the break-in period which will gradually disappear.

Break in brake pads

New brake pads and discs 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 discs are replaced.

New tires

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

- f 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.

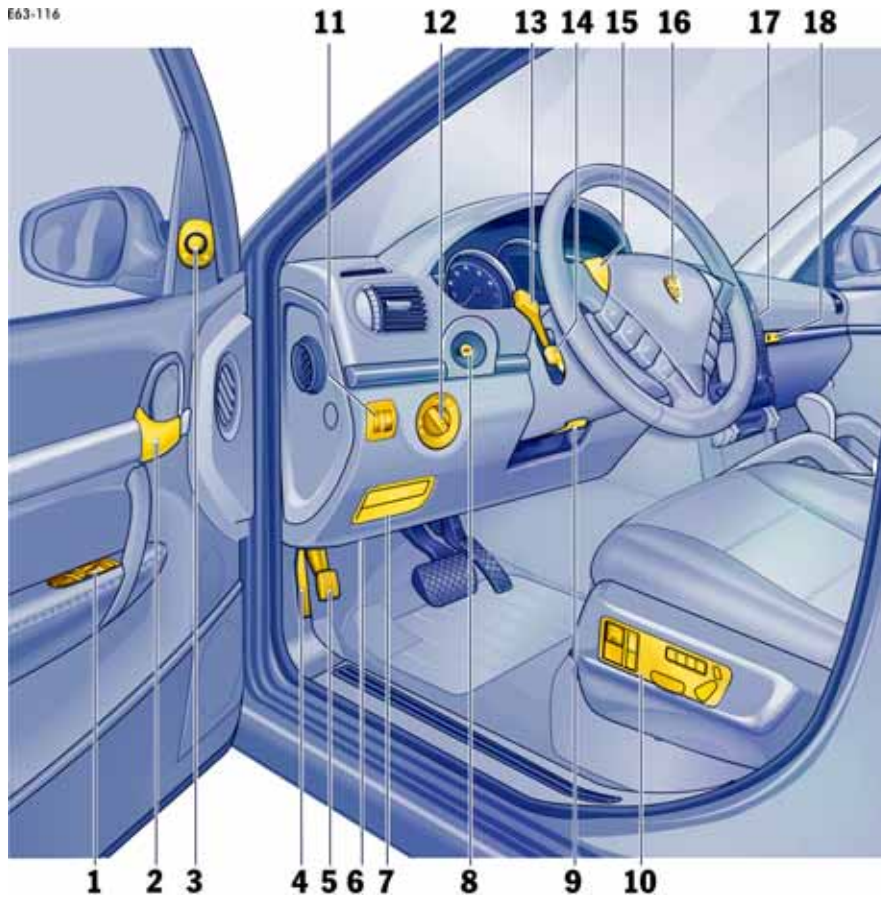
Engine oil and fuel consumption

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.

- f Make a habit of checking engine oil with every fuel filling, add if necessary.
- f Please observe the chapter "ENGINE DATA" on Page 380.

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- 1 Power windows
- 2 Inner door handle
- 3 Door mirror adjustment
- 4 Engine compartment lid release
- 5 Parking brake
- 6 Diagnostic socket (OBD)
- 7 Parking brake release
- 8 Ignition lock/steering lock
- 9 Steering wheel adjustment
- 10 Seat adjustment
- 11 Instrument lighting knob
- 12 Light switch
- 13 Turn signal/high, low beam/headlight flasher stalk
- 14 Operating lever for cruise control
- 15 Rocker switches for Tiptronic
- 16 Horn
- 17 Emergency flasher switch
- 18 Glove compartment

Never invite car theft!

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

A steering wheel lock and a **gong alarm** are 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.

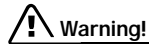


Warning!

Any uncontrolled movement of the vehicle may result in serious personal injury and property damage.

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.

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



Warning!

Risk of a serious accident.

The steering column will lock when you remove the key while you are driving or as the car is rolling to a stop. You will not be able to steer the car.

- f Never remove the key from the steering lock while you are driving.

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

- f Close windows.
- f Close sliding/lifting roof or Panorama Roof System.
- f Remove ignition key (switch ignition off in vehicles that have Porsche Entry & Drive).
- f Engage steering lock.
- f Lock storage tray between the front seats and glove compartment.
- f Remove valuables (e.g. car documents, radio control module, telephone, house keys) from the car.
- f Lock doors.
- f Lock the glove compartment.
- f Close oddment trays.
- f Cover luggage compartment with the luggage compartment cover.
- f Close rear lid and rear window.



A - Car key
B - Release button for key bit

Keys

Two car keys with integrated remote control are supplied with your Porsche. The car keys are designed as folding keys.

These keys operate all the locks on your vehicle.

- f Be careful with your car keys: do not part with them except under exceptional circumstances.

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- f Inform your insurance company of any loss or theft of car keys or if extra or replacement keys have been made.

- f Remove the ignition key, even if leaving the vehicle only briefly.

Folding out the key bit

- f Press release button **B**.
The key bit folds out.

Folding in the key bit

- f Press release button **B** and fold in the key bit.

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 on your person. Keep it in a safe place, but under no circumstances in or on the vehicle.

The key codes of new keys have to be "reported" to the vehicle control module by your authorized Porsche dealer. All keys belonging to the vehicle must also be reported again.

Note

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

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Panic button

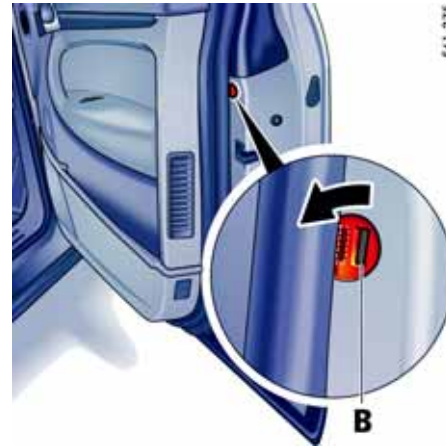
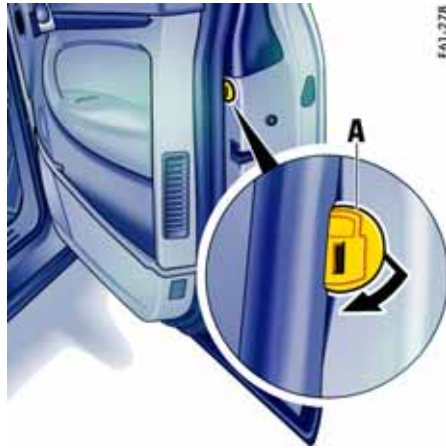
In dangerous situations or when one's own safety is threatened, it is possible to draw attention to the situation by triggering an alarm.

To trigger an alarm

- f Press button.
The horn sounds and the emergency flashers flash.

To stop the alarm

- f Press button again.
The horn becomes silent and the emergency flashers go out.

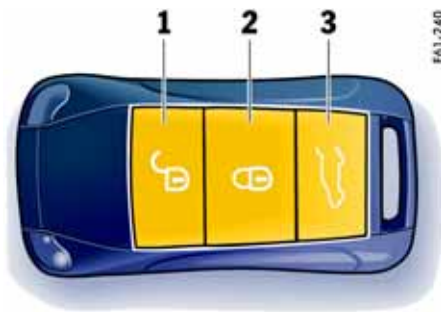


Emergency operation – locking the doors

If the central locking system fails, the doors can only be locked if the emergency operation is performed.

1. Open the passenger's door.
2. Remove cover **A**.

3. Using the key bit, press red slide control **B** in the direction indicated by the arrow.
4. Fit cover **A** again.
5. Repeat procedure on the passenger's **and** the rear doors.
6. Close all doors.
7. Lock the driver's door with the key at the door lock.



Remote Control

In the multi-purpose display of the instrument panel, you can set different variants of locking and unlocking the doors and the rear lid as well as the check-back signal when locking and unlocking the vehicle and save them on the respective remote control.

f Please observe the chapter "COMFORT" on Page 118.

The air conditioner settings are stored on the respective remote control when switching off the ignition and locking the vehicle. The "Air flow OFF" setting is stored for approx. 60 minutes and the "Recirculated air" setting is stored for approx. 20 minutes.

Unlocking vehicle doors

Unlocking the driver's door

- f Briefly press button **1** on the remote control **once**.
Emergency flasher flashes once.
The alarm system, passenger compartment monitoring and inclination sensor are switched off automatically.

Unlocking all vehicle doors

- f Briefly press button **1** on the remote control **twice** within 2 seconds.
All vehicle doors and the rear lid are unlocked.
Emergency flasher flashes once.
The alarm system, passenger compartment monitoring and inclination sensor are switched off automatically.

Unlocking rear lid, rear window and spare wheel bracket

- f Briefly press button **3**.
Emergency flasher flashes once.
The rear lid, rear window and spare wheel bracket can be opened with the appropriate unlocking button.
The rear window and spare wheel bracket are always unlocked if the rear lid is unlocked.
- f Please observe the chapter "REAR LID" on Page 199.
- f Please observe the chapter "SPARE WHEEL" on Page 331.

Note on operation

The vehicle doors remain locked after unlocking the rear lid.

If the rear window is not opened, both the rear lid and rear window will lock automatically after 60 seconds.

Opening the rear window

- f Press button **3** for approx. two seconds.
The rear window pops open.

Locking vehicle doors

- f Briefly press button **2** on the remote control. The emergency flasher flashes **twice** and an acoustic signal will sound **twice**. The indication by the emergency flasher and by the acoustic signal will be provided after all doors and lids are closed. All vehicle doors, the rear lid and the rear window cannot be opened from the outside. The alarm system, passenger compartment monitoring system and inclination sensor are switched on.

Temporarily switching off passenger compartment monitoring system and inclination sensor

If people or animals are remaining in the locked vehicle or the vehicle is being transported on a passenger train or ship, for example, the passenger compartment monitoring system and inclination sensor must be deactivated.

To switch off passenger compartment monitoring system and inclination sensor:

- f Please observe the chapter "TEMPORARILY DEACTIVATING PASSENGER COMPARTMENT MONITORING SYSTEM AND INCLINATION SENSOR" on Page 29.

If the passenger compartment monitoring system and inclination sensor are temporarily switched off the emergency flasher flashes **twice** and an acoustic signal will sound **twice** when the vehicle is locked.

All vehicle doors, the rear lid and the rear window cannot be opened from the outside.

Malfunction of the remote control

The remote control may not function correctly due to local radio waves. The vehicle will then not lock properly.

This can be identified by the missing locking sound and the missing check-back signal of the hazard warning lights.

If this should occur:

- f Lock the vehicle with the key in the door lock.

Switching off the alarm system if it is triggered

- f Unlock vehicle doors **or**
- f Switch ignition on.

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 only using an authorized ignition key.

Switching off the immobilizer

- f Insert the ignition key into the ignition lock.

Switching on the immobilizer

- f Withdraw the ignition key.



Porsche Entry & Drive

Porsche Entry & Drive facilitates keyless unlocking and locking of vehicle doors, rear lid and rear window. To use this facility, you need to have only the car key with remote control with you.

- f Do not expose the car key to a high level of electromagnetic radiation, as this could adversely affect Porsche Entry & Drive.



Caution!

Risk of being locked out of vehicles with Porsche Entry & Drive.

- f If the vehicle is locked and access is gained through the rear lid or rear window, do not leave the key in the vehicle.
The vehicle is automatically locked within approx. 30 seconds after the rear lid or rear window is closed.
The vehicle can then be unlocked only with the second key.

In the multi-purpose display of the instrument panel, you can set different variants of locking and unlocking the doors and the rear lid as well as the check-back signal when locking and unlocking the vehicle and save them on the respective remote control.

- f Please observe the chapter "COMFORT" on Page 118.

The air conditioner settings are stored on the respective remote control when switching off the ignition and locking the vehicle.
The "Air flow OFF" setting is stored for approx. 60 minutes and the "Recirculated air" setting is stored for approx. 20 minutes.

Unlocking vehicle doors

- f Grip door handle fully.
The alarm system, passenger compartment monitoring and inclination sensor are switched off automatically.

Unlocking rear lid, rear window and spare wheel bracket

- f If you are at the rear section of the vehicle with the car key, the rear lid, rear window and spare wheel bracket are unlocked and can be opened.

Locking rear lid, rear window and spare wheel bracket

- f Close rear lid, rear window and spare wheel bracket.
If the car key with remote control is out of range, rear lid, rear window and spare wheel bracket cannot be opened.

Locking vehicle doors

- f Briefly press button **A** in the door handle. Emergency flasher flashes **twice** and an acoustic signal will sound **twice**. The indication by the emergency flasher and by the acoustic signal will be provided after all doors and lids are closed. If the car key with remote control is out of range, all vehicle doors, the rear lid and the rear window cannot be opened from the outside. The alarm system, passenger compartment monitoring system and inclination sensor are switched on.

Note on operation

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

Temporarily switching off passenger compartment monitoring system and inclination sensor

If people or animals are remaining in the locked vehicle or the vehicle is being transported on a passenger train or ship, for example, the passenger compartment monitoring system and inclination sensor must be deactivated.

To switch off passenger compartment monitoring system and inclination sensor:

- f Please observe the chapter “TEMPORARILY DEACTIVATING PASSENGER COMPARTMENT MONITORING SYSTEM AND INCLINATION SENSOR” on Page 29.

If the passenger compartment monitoring system and inclination sensor are temporarily switched off the emergency flasher flashes **twice** and an acoustic signal will sound **twice** when the vehicle is locked.

If the car key with remote control is out of range, all vehicle doors, the rear lid and the rear window cannot be opened from the outside.

Porsche Entry & Drive malfunction

Porsche Entry & Drive may not function correctly due to local radio waves. The vehicle will then not lock properly.

This can be identified by the missing locking sound and the missing check-back signal of the hazard warning lights. If this should occur:

- f Lock the vehicle with the key in the door lock.

Switching off the alarm system if it is triggered

- f Unlock vehicle doors with the remote control **or**
- f Switch ignition on.

Immobilizer

Switching off the immobilizer

- f Switch ignition on.

Switching on the immobilizer

- f Switch ignition off and move control unit to the left for 2 seconds.
- f Please observe the chapter “LOCKING THE STEERING COLUMN” on Page 71.

Switching off readiness for operation

If the vehicle is not unlocked within **3 days** the Porsche Entry & Drive readiness for operation is switched off.

- f Pull the door handle **once**, to reactivate the system.
- f Pull the door handle **again**, to open the door.

Central Locking System

USA: KR5KESSY

Canada: CAN 267 104 139

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

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

- It may not cause harmful interference, and
- it must accept any interference received including interference that may cause undesired operation.

Note

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.



Warning!

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

f Please observe the chapter "POWER WINDOWS" on Page 33.

f Please observe the chapter "SLIDING/LIFTING ROOF" on Page 169.

The vehicle doors, the rear lid and the filler flap can be centrally unlocked or locked with the remote control.

All doors are locked or unlocked if central locking button **A** is activated in the relevant armrest.

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/lid is not locked:

- vehicle doors
- rear lid
- rear window
- engine compartment lid

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

If you unlock the vehicle with the key at the door lock, only the driver's door is opened. In order to prevent the alarm system from being triggered, you must switch the ignition on within 15 seconds of opening the door.

Switching off the alarm system if it is triggered

f Unlock vehicle doors with the remote control
or

f Switch ignition on.

Automatic relocking

If the vehicle is unlocked and none of the vehicle doors is opened within approximately 60 seconds, automatic relocking takes place.

Note on operation

If the passenger compartment monitoring system and the inclination sensor have been deactivated (theft protection is limited), the doors can be opened after automatic relocking by pulling the inner door handle twice.

When locked again, the passenger compartment monitoring and inclination sensor are activated again.

Indication by the emergency flashers and acoustic sound

If the vehicle doors are unlocked or locked, a response is provided by the emergency flashers and acoustic sound (only when locking):

Unlocking with the remote control

- The hazard warning lights flash once.

Unlocking by pressing the button in the door handle on vehicles with Porsche Entry & Drive

- The hazard warning lights do not flash.

Locking

- The hazard warning lights flash twice.
- An acoustic signal will sound twice.

In the multi-purpose display of the instrument panel, you can set the check-back signal when locking and unlocking the vehicle and save it on the respective remote control.

- f Please observe the chapter "SIGNAL" on Page 121.

Central locking button

Central locking buttons **A** in the armrests let you lock and unlock the vehicle electrically.

Locking

- f Press the button **A** symbol.
All vehicle doors will be locked.
Each door can be opened by pulling the inner door handle twice.

Unlocking

- f Press the button **A** symbol.
If activated on the rear doors, **only** the relevant door will be unlocked.

Note on operation

If the vehicle was locked with the key or by remote control, it cannot be unlocked with the central locking button.
Each door can be opened by pulling the inner door handle twice.



Safety button

The power windows, the central locking buttons on the rear doors and the rear control panel for the air conditioning can be disabled using the safety button **B** in the armrest of the driver's door.

Switching off

- f Press safety button **B**.
The symbol in the safety button lights up.

Switching on

- f Press safety button **B** again.
The symbol in the safety button goes out.

Emergency operation of the central locking system

- f Lock the vehicle with the key at the door lock.

If there is a defect in the central locking system, operating the lock barrel in the driver's door will lock all functioning elements of the central locking system.

- f The fault should be remedied immediately at an authorized Porsche dealer.

Note on operation

The alarm system, passenger compartment monitoring system and inclination sensor are switched on.

In order to prevent the alarm system from being triggered, you must switch the ignition on within 15 seconds of opening the door.

Switching off the alarm system if it is triggered

- f Unlock vehicle doors **or**
- f Switch ignition on.

Automatic door locking and automatic door unlocking

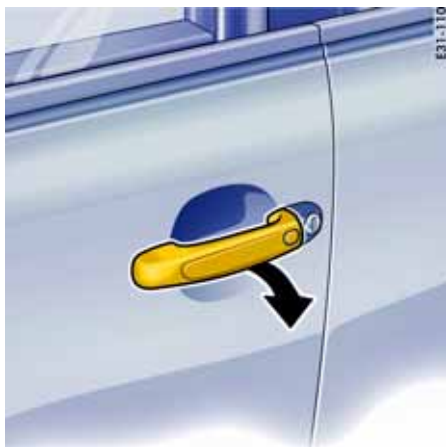


In an emergency situation where you need to exit the car through an automatically locked door, remember the following procedure to open the door.

- f Unlock the doors by pressing the central locking button **or**
- f pull the inside door handle **twice** 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 (AUTO LOCK) and automatic door unlocking (AUTO UNLOCK).

- f Please observe the chapter "DOOR OPENING" on Page 119.



Doors

Opening unlocked doors from outside

- f Pull door handle.



Opening unlocked doors from inside

- f Pull inner door handle.

Opening locked doors from inside

- f Pull inner door handle twice.



Childproof rear door locks

Childproof locks are fitted to the rear doors. The doors cannot be opened from inside once these locks are engaged.

Locking (Active)

- f Turn safety catch to position **A**.

Unlocking (Inactive)

- f Turn safety catch to position **B**.

Alarm System, Passenger Compartment Monitoring, Inclination Sensor

USA: KR5KESSY

Canada: CAN 267 104 139

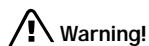
This device complies with:
Part 15 of the FCC Rules
RSS-210 of Industry Canada.

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

- It may not cause harmful interference, and
- it must accept any interference received including interference that may cause undesired operation.

Note

- f 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.



Warning!

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

Avoiding false alarms

- f Always close the sliding/lifting roof or the Panorama roof system, and all door windows.
- f Do not leave a mobile phone switched on in the glasses case of the roof console.
- f Always turn off the alarm system before you attach a trailer. The inclination sensor could trigger the alarm unintentionally.

Switching off the alarm system if it is triggered

- f Unlock vehicle doors **or**
- f Switch ignition on.

The following alarm contacts are monitored

- Doors
- Engine compartment lid
- Rear lid
- Rear window
- Passenger compartment
- Vehicle inclination
- f If one of these alarm contacts is interrupted, the alarm horn sounds for approx. 30 seconds and the emergency flashers flash. After 5 seconds of interruption the alarm is triggered again. This cycle is repeated ten times.

Switching on

- f Lock the vehicle.
The alarm system, passenger compartment monitoring system and inclination sensor are switched on.
- f Please observe the chapter "CENTRAL LOCKING SYSTEM" on Page 24.

Switching off

- f Unlock the vehicle.
The alarm system, passenger compartment monitoring system and inclination sensor are switched off automatically.

Note on operation

If you unlock the vehicle with the key at 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 rocker switch to switch off the inclination sensor and the passenger compartment monitoring system is located next to the driver's seat under the seat belt height adjustment.

Note on operation

You can also temporarily deactivate the passenger compartment monitoring system and inclination sensor separately on the multi-purpose display in the instrument panel:

- f Please observe the chapter "ALARM" on Page 118.

f f f

Temporarily deactivating passenger compartment monitoring system and inclination sensor

If people or animals are remaining in the locked vehicle or the vehicle is being transported on a passenger train or ship, for example, the passenger compartment monitoring system and inclination sensor must be deactivated.

When locked again, the passenger compartment monitoring and inclination sensor are activated again.



A, D - Switch for reading lights
B - Button for dimming the comfort lighting
C - Switch for interior light



Deactivating passenger compartment monitoring

1. Apply the parking brake.
2. Switch on interior lighting by moving switch C to the left.
3. Remove ignition key.
On vehicles **with** Porsche Entry & Drive:
Switch off the ignition.
4. Open the driver's door.
The symbol on the top half of the rocker switch flashes.

5. Press the flashing top half of rocker switch until the upper symbol lights permanently.

6. Lock the vehicle.

Emergency flasher flashes **twice and an acoustic signal will sound twice.**

The vehicle doors, the rear lid and the rear window are locked but the doors can be opened from the inside by pulling the inner door handle twice.

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

Note on operation

If the ignition is switched on after pressing the rocker switch, the passenger compartment monitoring system is activated again. The symbols on the rocker switch will flash.



Deactivating inclination sensor

1. Apply the parking brake.
2. Switch on interior lighting by moving switch C to the left.
3. Remove ignition key.
On vehicles **with** Porsche Entry & Drive:
Switch off the ignition.
4. Open the driver's door.
The symbol on the top half of the rocker switch flashes.
5. Press the bottom half of rocker switch until the lower symbol lights permanently.
6. Lock the vehicle.

Emergency flasher flashes **twice and an acoustic signal will sound twice.**

The vehicle doors, the rear lid and the rear window are locked but the doors can be opened from the inside by pulling the inner door handle twice.

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

Note on operation

If the ignition is switched on after pressing the rocker switch, the inclination sensor is activated again. The symbols on the rocker switch will flash.

Deactivating passenger compartment monitoring system and inclination sensor

1. Apply the parking brake.
2. Switch on interior lighting by moving switch **C** to the left.
3. Remove ignition key.
On vehicles **with** Porsche Entry & Drive:
Switch off the ignition.
4. Open the driver's door.
The symbol on the top half of the rocker switch flashes.
5. Press the bottom half of rocker switch until the bottom symbol lights permanently.
6. Press the flashing top half of rocker switch until the upper symbol lights permanently.
7. Lock the vehicle.

Emergency flasher flashes **twice and an acoustic signal will sound twice**.

The vehicle doors, the rear lid and the rear window are locked but the doors can be opened from the inside by pulling the inner door handle twice.

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

Note on operation

If the ignition is switched on after pressing the rocker switch, the passenger compartment monitoring system and the inclination sensor are activated again. The symbols on the rocker switch will flash.

Activating the alarm system, the passenger compartment monitoring system and inclination sensor

- f Unlock the vehicle and lock it again.

Fault indication

If the monitoring system and the inclination sensor could not be deactivated the symbols on the rocker switch will flash (e.g. the rocker switch is pressed with the ignition on).

For deactivating the passenger compartment monitoring and inclination sensor:

- f Switch on interior lighting.
- f Switch off ignition.
- f Press the rocker switch.
- f Lock the vehicle.



A - Light-emitting diode for alarm system

Function indication

The locking condition of the vehicle is indicated by a rapid flashing of the light-emitting diodes **A** in the front doors.

The light-emitting diodes go out when the vehicle is unlocked.

The passenger compartment monitoring and inclination sensor are switched on

- The light-emitting diodes flash for 2 seconds, rapidly, then slowly.

The passenger compartment monitoring and inclination sensor are switched off

- The light-emitting diodes flash for 2 seconds, rapidly, then slowly.

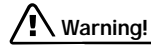
The passenger compartment monitoring and inclination sensor are switched off in the multi-purpose display in the instrument panel

- The light-emitting diodes flash rapidly for 2 seconds, go out for 28 seconds and then flash slowly.

Faults of the central locking system and the alarm system

- The light-emitting diodes flash rapidly for 2 seconds, shine for 28 seconds and then flash slowly.

Power Windows



Warning!

Risk of injury when the door windows close. This applies especially if the windows are closed with the comfort function. When this function is in operation the window goes up automatically.

- f Make sure nobody can be injured when the windows close.
- f Remove the ignition key or switch ignition off in vehicles that have Porsche Entry & Drive to shut off power to the window switches when the vehicle is not attended by a responsible person. Always take the ignition key with you when leaving the vehicle. Uninformed persons could injure themselves by operating the power windows.
- f In case of danger, immediately release the car key or the button in the door handle in vehicles that have Porsche Entry & Drive.
- f Do not leave children in the car unattended.

Risk of an accident.

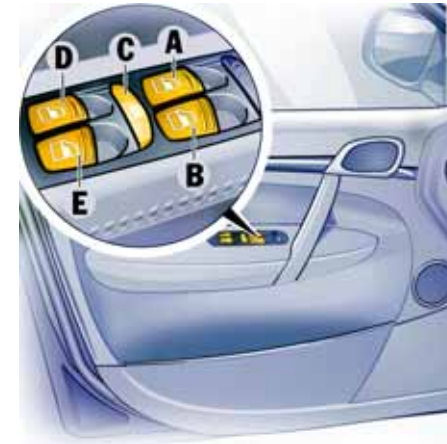
- f Do not put anything on or near the windows that may interfere with the driver's vision.

Note on operation

- f Always keep the side windows closed while driving off-road.

Readiness for operation of power windows

- With ignition switched on **or**
- A maximum of 10 minutes with door closed and ignition key withdrawn, but only until driver's or passenger door is first opened. The one-touch operation for closing the door windows is available only when the ignition is switched on.



- A - Power window in driver's door
- B - Power window in passenger's door
- C - Safety button
- D - Left rear power window
- E - Right rear power window

Opening/closing windows

Opening window with the rocker switch

- f Press rocker switch until the window has reached the desired position.

Closing window with the rocker switch

- f Pull rocker switch until the window has reached the desired position.

f f f



Power windows in passenger's door and rear doors

Note on operation

Rocker switches **A** and **B** in the driver's door have a two-stage function:

- If the switch in question is pressed or pulled to the first level, the front window is opened or closed manually.
- If the switch is completely pressed or pulled to the second level, the front window is opened or closed automatically (one-touch operation).

One-touch operation for front windows

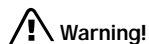
- f Pull or press rocker switch to its final position in the driver's door.
Window moves to its final position.
Press or pull again to stop the window in the desired position.

Note on operation

If a door window is blocked during closing, it will stop and open again by several inches. However, this is **not** the case if:

- The rocker switch is pressed again within 10 seconds of the window being blocked **and**
- The windows are closed using the car key in the door lock (comfort function).

The windows close with their full closing force.



Danger of injury. If the rocker switch is pressed again within 10 seconds of the window being blocked, the window will close with its full closing force.

- f Take care to ensure that nobody can be injured when the windows close.

The one-touch operation is disabled for 10 seconds after blockage of the door window.

Comfort function for vehicles without Porsche Entry & Drive

Opening and closing windows

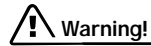


Danger of injury. The window will close with its full closing force.

- f Take care to ensure that nobody can be injured when the windows close.
- f Hold the car key in the door lock in the unlocking or locking position until the windows have reached the desired position.

If you unlock the vehicle with the key at the door lock, only the driver's door is unlocked. In order to prevent the alarm system from being triggered, you must switch the ignition on within 15 seconds of opening the door.

Comfort function for vehicles with Porsche Entry & Drive



Warning!

Danger of injury. The window will close with its full closing force.

- f Take care to ensure that nobody can be injured when the windows close.

Opening and closing windows

- f Hold the car key in the door lock in the unlocking or locking position until the windows have reached the desired position.

If you unlock the vehicle with the key at the door lock, only the driver's door is unlocked. In order to prevent the alarm system from being triggered, you must switch the ignition on within 15 seconds of opening the door.

Closing windows

- f Hold the button in the door handle when locking the vehicle until the windows and the Panorama roof system have reached the desired position.

Note on operation

The comfort function remains available for approx. 30 seconds after the vehicle has been locked.

Storing final position of the door windows

The end positions of the door windows are lost when the battery is disconnected and reconnected. The one-touch operation of the windows is disabled.

Perform these procedures for all windows:

1. Close window completely once by pulling rocker switch.
2. Open window completely **again** by pressing rocker switch.



Safety button

The power windows, the central locking buttons on the rear doors and the rear control panel for the air conditioning can be disabled using the safety button **C** in the armrest of the driver's door.

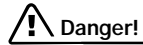
Switching off

- f Press safety button **C**.
The symbol in the safety button lights up.

Switching on

- f Press safety button **C** again.
The symbol in the safety button goes out.

Front seats



Danger!

The seat may move unexpectedly if you attempt to adjust while driving. This could cause sudden loss of control or personal injury.

- f 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.

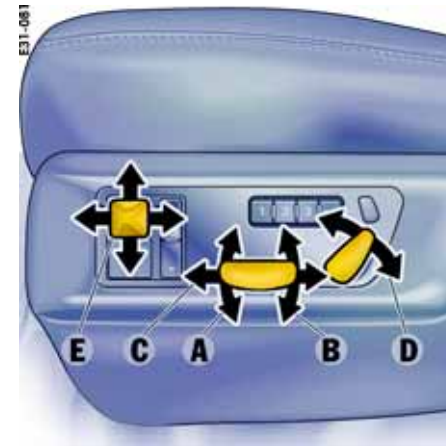
Safety belts only offer protection when the backrest is upright and the belts are properly positioned on the body. Improperly positioned safety belts can cause serious personal injury or death in an accident.

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

Seat position

A 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.
2. Adjust the seat until, with the accelerator pedal fully depressed, your leg is straight but your entire foot still rests on the accelerator pedal.
3. Grip the top half of the steering wheel. Set the backrest angle and steering wheel position so that your arms are almost outstretched. However, your shoulders must still rest on the backrest.
4. If necessary, correct the seat fore-and-aft adjustment.
5. Adjust the height of the headrest so that the upper edge is at eye level or higher.



Adjusting the seat

- A Front seat height adjustment.
- B Rear seat height adjustment.
- C Fore and aft adjustment.
- D Backrest angle adjustment.
- E Lumbar support adjustment.

To permit a relaxed sitting posture, the backrest curvature is infinitely adjustable in vertical and horizontal directions for individual pelvis and spinal column support.

- f Press the switch in the direction indicated by the **arrows** until the desired setting is reached.



Front seat with memory

Personal seat, door mirror, steering wheel and safety belt height adjustments can be stored and recalled on the person buttons **A** and car keys.

Warning!

Risk of crushing due to uncontrolled recall of settings.

- f Cancel automatic adjustment by pressing any of the seat adjustment buttons.
- f Do not leave children in the car unattended.

Memory options

- Seat adjustment
- Door mirror adjustment

Comfort memory options

- Seat adjustment
- Door mirror adjustment
- Steering wheel and safety belt height adjustment

Recalling the settings using the vehicle key or in vehicles that have Porsche Entry & Drive

- f Open the driver's door.
The stored settings of the driver's seat are recalled automatically.

Cancelling setting

Automatic settings can be cancelled immediately by pressing any driver's seat setting button.

Recalling the settings with person buttons 1 - 3 (driver's and passenger's seat)

1. Unlock vehicle and open the driver's door.
2. Press the relevant person button until the stored positions have been reached
or
Briefly touch the person button if the ignition key is inserted or if the ignition is switched on (in vehicles that have Porsche Entry & Drive).
The stored positions for each seat are recalled automatically.

Cancelling setting

Automatic settings can be cancelled immediately by pressing any seat adjustment button.

Storing driver's seat settings

Storing settings on a person button and a car key

1. Apply the parking brake.
2. Switch ignition on.
3. Close doors.
4. Make the required adjustments to the seat, mirror, steering wheel and safety belt.
5. Briefly press the **SET** memory button and, within 10 seconds, hold down one of the person buttons (**1**, **2** or **3**) until an acknowledge tone is obtained.
The settings are now stored on the desired person button.
6. Withdraw car key or switch ignition off in vehicles that have Porsche Entry & Drive.
7. Press the **SET** memory button within 10 seconds and keep the button depressed until an acknowledge tone is obtained.
The settings are now assigned to the car key.



A - Control switch for door mirror adjustment
C - Passenger mirror setting

Storing passenger mirror setting as a parking aid

If the passenger's mirror is supposed to swivel downwards when reversing, this can also be stored in the driver's seat setting.

1. Apply the parking brake.
2. Switch ignition on.
3. Press the relevant person button.
4. Engage reverse gear.

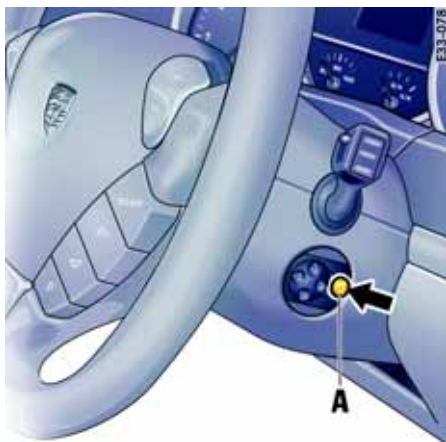
5. Set the control switch **A** for the mirror setting to the passenger's side **C**.
The passenger's mirror swivels downwards.
6. Adjust the passenger's mirror to the required setting.
7. Briefly press the **SET** memory button and, within 10 seconds, hold down the person button on which the setting is to be stored until an acknowledge tone is obtained.

Storing passenger seat settings

1. Apply the parking brake.
2. Switch ignition on.
3. Adjust seat position and belt height.
4. Briefly press the **SET** memory button and, within 10 seconds, hold down one of the person buttons (**1**, **2** or **3**) until an acknowledge tone is obtained.

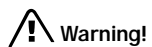
Automatic storage – driver's seat

If settings were changed after the driver's door was opened, these new settings are temporarily stored when the vehicle is locked. This storage is deleted if the vehicle is unlocked with a programmed key and the driver's door is opened. Then the settings of the key used is recalled.



Easy Entry Function

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



Warning!

Risk of crushing if persons are behind the driver's seat when settings are recalled.

Risk of damage if the rear seat bench is folded forward when settings are recalled.

- f Switch off the Easy Entry function if there are persons behind the driver's seat or if the rear seat bench is folded forward.

Switching Easy Entry function on and off

- f Press switch **A**.

Entering the vehicle

When the driver's door is opened, the driver's seat moves to the rear.

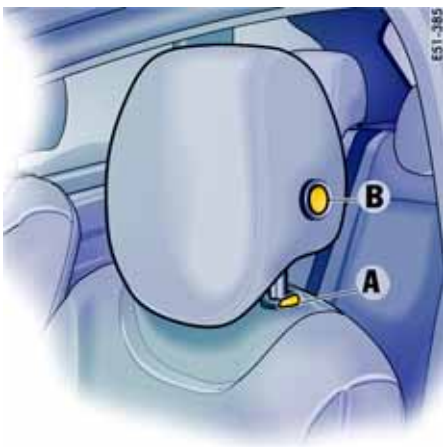
Once the driver's door is closed and the ignition key is inserted or, in the case of vehicles that have Porsche Entry & Drive, the ignition is switched on, the seat and steering wheel move into the stored position.

Exiting the vehicle

The steering wheel moves into the frontmost, top position.

- After the ignition key is removed **or**
- After the ignition is switched off and the driver's door is opened on vehicles equipped with Porsche Entry & Drive **or**
- When the steering column is locked.

When the driver's door is opened, the driver's seat moves to the rear.



Example: driver's seat

Headrests

Removing

Front seats

- f Press button **A** and, at the same time, completely remove headrest.

Rear seats

- f Press button **B** and push the headrest all the way down.
- f Press button **A** and, at the same time, pull the headrest completely out.

Installing

Note

The middle headrest of the rear seat bench must only be fitted to the middle seat of the rear seat backrest.

1. Insert the headrests into the guides.
2. Press button **B** and, at the same time, push the headrest downwards until the desired position is reached.
Install the middle headrest of the rear seat bench only on the middle seat and push it down fully.

Adjusting

The heights of the headrests for the front seats and the outer headrests for the rear seats can be adjusted.



Improperly positioned headrests can cause serious personal injury or death in an accident.

- f Adjust the headrest so that the upper edge of the headrest is at least at eye level or higher.
- f Do not drive the vehicle without the headrest in place and properly adjusted.

Raising

- f Push headrest upwards until the desired position is reached.
Additionally press button **B** on the rear seat headrests.

Lowering

- f Press button **B** and, at the same time, push the headrest downwards until the desired position is reached.

Rear Seats

The rear seats are divided and can be folded forward individually to make the loadspace bigger.



Caution!

Risk of damage to seat cushions, backrest, and seat belt if only the backrest is folded forward.

- f Always fold seat cushions and backrest forward.



Folding rear seats forward

If the luggage safety net is installed, first set up the left seat cushion in a vertical position and fold the left rear seat backrest forward.

On vehicles with automatically controlled four-zone air conditioning:



Safety button

- f Press the safety button in the driver's door armrest before folding the rear seats forward. The rear control panel for the air conditioning ceases to function. This prevents unintentional adjustment of the air conditioning. The symbol in the switch lights up.

1. Remove the headrests of the backrest to be folded forward.

Therefore:

Please observe the chapter "EXAMPLE: DRIVER'S SEAT" on Page 40.

2. Move front seats forward.
3. Pull seat cushion up at loop **A**.
4. Pull seat cushion forward (arrow **B**).

f f f



5. Raise seat cushion vertically.



6. Pull release lever **A** and fold the backrest forward.



7. Insert mounting hook on the seat cushion in the eyelet of the backrest (**arrow**).



8. Insert headrest **B** into the receiver in the seat cushion (**arrow**).



Positioning rear seats

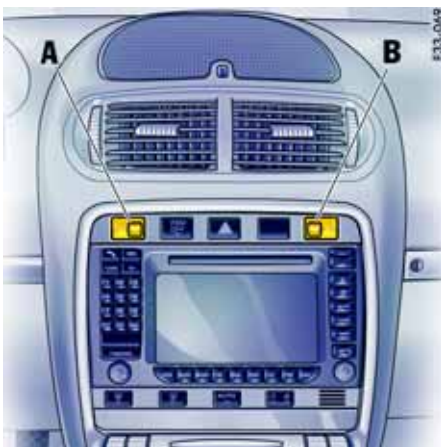
1. Remove the headrests from the seat cushion.
2. Make sure that the safety belts are not trapped.
Raise the backrest until it locks with an audible click.
The red "verification flag" **A** must be lowered completely.



3. Fold seat cushion forward.
4. Push seat cushion under the backrest.
5. Press seat cushion downward at the front.
Make sure that the buckles are accessible.
6. Insert the headrests into the backrest.

Therefore:

Please observe the chapter "EXAMPLE: DRIVER'S SEAT" on Page 40.



A - Front seat, left
B - Front seat, right



C - Rear seat, left
D - Rear seat, right

Heated Seats – Front and Rear

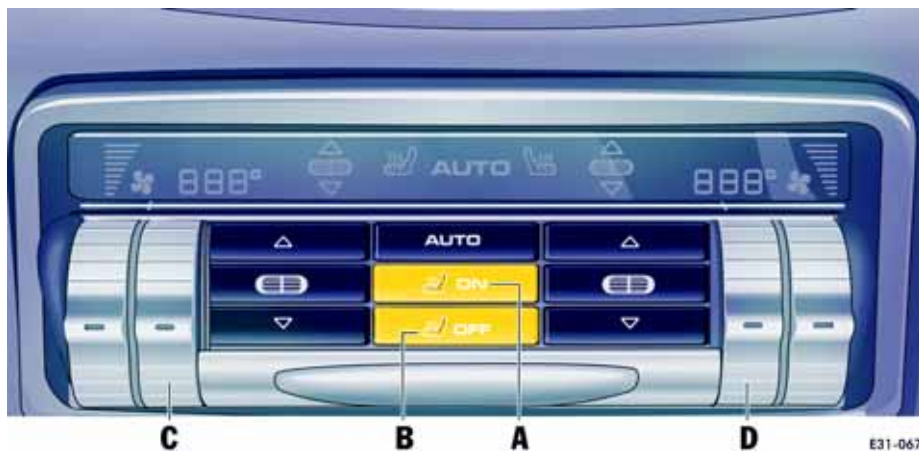
The seat heating is ready for operation when the ignition is on. The heating power can be infinitely adjusted with the thumb wheel.

Switching on

- f Turn thumb wheel until the desired position is reached.

Switching off

- f Turn thumb wheel to **0**.



- A - Switches seat heating on
- B - Switches seat heating off
- C - Temperature control for left seat
- D - Temperature control for right seat

Rear seat heating in vehicles with an four-zone air conditioning system

Switching on

- f Press button **A**.

After the seat heating is switched on, the air conditioning display switches to seat heating mode for approx. 10 seconds.

Controlling the temperature

- f Move button **C** or button **D** upwards or downwards until the desired position is reached.

Switching off

- f Press button **B**.

Safety Belts



Danger!

Always make sure your and your passengers' safety belts are properly fastened while the vehicle is in motion.

Failure to follow safety belt warnings may result in serious personal injury or death.

- f For your and your passengers' protection, use safety belts at all times while the vehicle is in motion.
- f Use appropriate child restraint systems for all small children.

Proper wearing of safety belts

- f 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.
- f The shoulder belt should always rest on your upper body. The shoulder belt should never be worn behind your back or under your arm.
- f For maximum effectiveness, the lap belt should be worn low across the hips.
- f Pregnant women should position the belt as low as possible across the pelvis. Make sure it is not pressing against the abdomen.
- f Belts should not be worn twisted.

- f 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.
- f Several layers of heavy clothing may interfere with proper positioning of belts.
- f Belts must not rub against sharp objects or damage may occur to the belt.
- f Two occupants should never share the same belt at the same time.

Care and maintenance

- f Keep belt buckles free of any obstruction that may prevent a secure locking.
- f 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.
- f If safety belts do not work properly, see your authorized Porsche dealer immediately.
- f If the belts show damage to webbing, bindings, buckles or retractors, they should be replaced to ensure safe operation.
- f Do not modify or disassemble the safety belts in your vehicle.

- f The belts must be kept clean or the retractors may not work properly.
Please observe the chapter "CAR CARE INSTRUCTIONS" on Page 284.
- f Never bleach or dye safety belts.
- f Do not allow safety belts to retract until they are completely dry after cleaning or this may cause damage to the belt.

Belt tensioner

Depending on the force of a collision, fastened seat belts are automatically tightened in an accident.

The belt tensioners are triggered in:

- Front and rear impacts
- Side impacts (only belt tensioners of the front seats are triggered)

Maintenance note

The belt tensioner system can be triggered only once; the system must be replaced afterwards.

If there is a fault in the belt tensioner system, the airbag warning light lights up.

Work may be performed on the belt tensioner system only by an authorized Porsche dealer. Smoke is released when the belt tensioners are triggered.

This does not indicate a fire in the vehicle.



Safety Belt Warning System

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 if vehicle speed exceeds 6 mph (10 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.



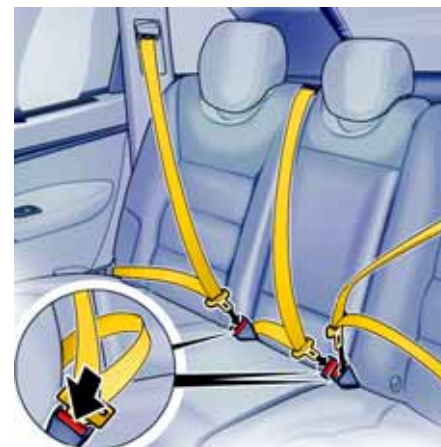
Fastening the safety belt

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

Note on operation

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

- f The belt cannot be pulled out while accelerating and slowing down, when cornering and when driving uphill.
- f Insert the belt tongue into the appropriate buckle on the inboard side of the seat, until it locks securely with an audible click.
- f Make sure that belts are not trapped or twisted, and that they are not rubbing on sharp edges.
- f 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 upwards. Pregnant women should position the belt as low as possible across the pelvis, and ensure that it is not pressing against the abdomen.
- f Pull on the diagonal section of the belt now and again during the journey to ensure that the horizontal section remains tight.



- f Make sure that the belts and buckles fit correctly on the rear seat bench.

Releasing the safety belt

- f Hold the belt tongue.
- f Press the red button (**arrow**).
- f Guide belt tongue to the reel.



Safety belt height adjustment

The heights of the belt deflectors for the driver's seat, passenger's seat and the outer rear seats can be adjusted.

Adjust the height of the safety belt so that it runs across the middle of the shoulder, not against the neck.

Adjusting belt height manually

- f Upward – push belt deflector up.
- f Downward – press button **A** and move belt deflector.



Adjusting belt height electrically

- f Operate rocker switch **B** in the desired direction until the optimal belt adjustment is reached.

On vehicles with comfort memory, seat belt height adjustment can be stored on the person buttons and vehicle keys and recalled with these.

- f Please observe the chapter "FRONT SEAT WITH MEMORY" on Page 37.

Airbag Systems

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 weight sensing for the passenger's seat in accordance with U.S. Federal/Canadian 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 by frontal collisions with an impact of sufficient severity.

Seatbelts always provide the primary protection to occupants in the event of collision, when correctly worn. This is particularly the case in collisions below airbag actuation thresholds.

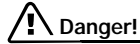
Therefore, all persons within the vehicle must wear safety belts at all times (in many states, state law requires the use of safety belts).

f Please observe the chapter "SAFETY BELTS" on Page 46.

The **front airbags** are located under the padded steering wheel panel on the driver's side and, on the passenger's side, in the dashboard.

The **side airbags** for the front seats are installed on the side in the seat backrests.

The **head airbags** are installed above the doors in the roof area.



Danger!

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.

Improper handling of weight sensing can unintentionally impair switching the passenger's airbag off and on.

- f Make sure there are no people, animals or objects between the driver or passenger and the area into which the airbag inflates.
- f Sit back as far from the dashboard or steering wheel as is practical, while still maintaining full vehicle control.
- f Always hold the steering wheel by the outer rim. Never rest your hands on the airbag panel.
- f **Always fasten seat belts** because triggering of the airbag system depends on the force and angle of impact.
- f Do not transport heavy objects on or in front of the passenger seat. These could impair the function of the airbag, the seat belts, and weight sensing.
- f Do not hang objects (e.g., jackets, coats, coat hangers) over the backrest.
- f Always keep the lid of the door storage compartment closed. Objects must not protrude out of the door storage compartment.
- f No changes must be made to the wiring or components of the airbag system.
- f Do not add any additional coverings or stickers to the steering wheel or in the area of the passenger airbag and side airbags. Doing so may adversely affect the functioning of the airbag system or cause harm to the occupants if the airbag system should deploy.
- f Do not modify the seat coverings. Do not attach additional cushions, protective coverings, or pillows to the passenger's seat. Do not affix things to the passenger's seat or cover it with other materials. Do not cover the back of the backrest. Do not make changes to the passenger's seat and to the seat base frame.
- f Do not undertake 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.
- f If the warning light comes on, the airbag system should be repaired immediately by your authorized Porsche dealer.
- f 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.

- f Using accessories not approved by Porsche can cause the weight sensing to be impaired.
- f Do not squeeze objects, such as the fire extinguisher, or first aid kit under the seat.
- f Only have seats removed and installed by an authorized Porsche dealer so that weight sensing components will not be damaged.
- f Give your passenger all of the information in this chapter.

Note

Airbag components (e.g. steering wheel, 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

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 upper 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.

Your vehicle is equipped with a crash sensing and diagnostic module. This module will record the use of the seat belt restraint system by the driver and front passenger when the airbags and/or belt tensioner are triggered.

Precondition for activating the restraint systems:

- Ignition is switched on.

Advanced Airbag

Your vehicle is equipped with weight sensing for the passenger's seat in accordance with U.S. Federal/Canadian Motor Vehicle Safety Standard 208.

Depending on the weight 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:

- Ignition is switched on.

Seat adjustment for the passenger's seat

If the seat is in an extreme position (e.g., the backrest is in contact with the rear seat bench), the backrest can warp. Warping of the backrest can lead to malfunctions.

- f Correct the seat adjustment.
The seat is not jammed and is self-supporting. The backrest is in the upright position.

- f Do not transport a load and objects in the rear footwell or under the passenger's seat.
If the load or objects are under the seat, they can cause malfunctions.

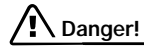
If the weight on the passenger's seat is reduced significantly, e.g., by supporting weight on the armrest, the passenger's airbag can be switched off.

- f Select an upright seat position, and do not support weight on the armrests or lean out of the window.
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.

If the passenger's seat is warped significantly, a message is displayed in the multi-purpose display in the instrument panel:

- f Correct the seat adjustment.
- f Please observe the chapter "WARNING LIGHTS AND WARNING MESSAGES" on Page 124.

Automatic deactivation of the passenger airbags



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:

- f 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.

Before transporting a child on the passenger seat:

- f Please observe the chapter "CHILD RESTRAINT SYSTEMS" on Page 55.
- 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 front seat the front airbag remains active on the passenger's side.



A - PASSENGER AIRBAG OFF indicator lamp

Note on operation

Although not desired, it can occur in the case of heavier children that the passenger airbags remain 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 **A** in the central console.

- f If in doubt, fasten the child restraint system on the rear bench or transport the passenger on the rear bench.

Note

- f After switching on the ignition, the PASSENGER AIRBAG OFF warning light lights up for a few seconds as a check.

If there is a change in status in the PASSENGER AIRBAG OFF indicator lamp, a message is displayed in the multi-purpose display in the instrument panel:

- f Please observe the chapter "WARNING LIGHTS AND WARNING MESSAGES" on Page 124.

PASSENGER AIRBAG OFF indicator lamp lights up

- The passenger's airbag is switched off.

PASSENGER AIRBAG OFF indicator lamp does not light up

- The passenger's airbag is active and ready for operation.
- If the passenger's seat is not occupied, the PASSENGER AIRBAG OFF indicator lamp will also not light up, even though the passenger's airbag is switched off.



Danger!

Risk of serious or mortal injury 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 „PASSENGER AIRBAG OFF“ must be on.

**If the “PASSENGER AIRBAG OFF” indicator lamp does not light up, it could indicate a fault in the system.
In this case:**

- f Fasten the child restraint system on the rear bench immediately.
- f Have the fault remedied at your nearest authorized Porsche dealer.



Warning lights and warning messages

Faults are indicated by a warning light on the tachometer and a message on the instrument panel's multi-purpose display.

- f Please observe the chapter “WARNING LIGHTS AND WARNING MESSAGES” on Page 124.

f 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.

Airbag maintenance

In order to ensure long-term functioning, the airbag system must be inspected by an authorized Porsche dealer at the intervals recommended in your Maintenance Booklet.

Important 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:

- f Please observe the chapter “CHILD RESTRAINT SYSTEMS” on Page 55.

Child Restraint Systems

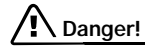
Porsche recommends that all infants and children be restrained in child restraint systems at all times while the vehicle is in motion in accordance with applicable laws.

Use only child restraint systems with the LATCH-system recommended by Porsche. These systems have been tested and adjusted to the interior of your Porsche and the appropriate child age groups. Other systems have not been tested and could entail an increased risk of injury.

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

- f Always observe the separate installation instructions for your child seat.

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



Danger!

Risk of serious personal injury or death to the child.

- f 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 should 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 age and size of the child.
- Child restraint systems that are damaged or have been heavily stressed in an accident must be replaced immediately.
- 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

Under all normal circumstances, the child seat must be placed in the rear.

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

Children up to an age of 9 months

Children of this age must be transported in a restraint system which is fitted **facing backwards**.

Children in ages between an age of 9 months up to 3 years

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

Children in ages from 3 to 6 years

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

Children in ages from 6 to 12 years

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

Using child restraint systems in the front passenger seat



Danger!

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:

- f 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.

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.

- f Seek appropriate advice from your authorized Porsche dealer about the possible installation of a Porsche child restraint system.
- f 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.
- f 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. You must recognize that any substantial frontal impact could result in the deployment of the passenger airbag, which could lead to serious injury or death of the child.

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:

- make sure that the PASSENGER AIRBAG OFF indicator lamp lights up.
- adjust the passenger's seat as far away from the airbag as possible



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 "PASSENGER AIRBAG OFF" must be on.

If the "PASSENGER AIRBAG OFF" indicator lamp does not light up, it could indicate a fault in the system.

In this case:

- f Fasten the child restraint system on the rear bench immediately.
- f Have the fault remedied at your nearest authorized Porsche dealer.

Child restraint system for children older than one year

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

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

Small adult passengers

- f Make sure that the PASSENGER AIRBAG OFF indicator lamp does not light up.



Risk of serious or mortal injury due to the passenger airbag not triggering.

When the ignition is on and the small adult passenger is seated on the passenger seat, the indicator lamp "PASSENGER AIRBAG OFF" must be off.

If the "PASSENGER AIRBAG OFF" indicator lamp lights up, it could indicate a fault in the system.

In this case:

- f Carry the passenger on the rear bench.
- f Have the fault remedied at your nearest authorized Porsche dealer.

Automatic locking retractor

The safety belts for the front passenger and the rear bench 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.



Danger!

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:

- f 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.

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.

- f Seek appropriate advice from your authorized Porsche dealer about the possible installation of a Porsche child restraint system.
- f 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.

Before transporting a child on the passenger seat:

- f Please observe the chapter "CHILD RESTRAINT SYSTEMS" on Page 55.
- f 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. You must recognize that any substantial frontal impact could result in the deployment of the passenger airbag, which could lead to serious injury or death of the child.



A - PASSENGER AIRBAG OFF indicator lamp



Danger!

Risk of serious personal injury or death to the child, when excessive force is acting on the passenger's seat due to the seat belt and the passenger's airbag is switched on unintentionally.

- f After fastening the child restraint system, do not adjust the seat.
- f Check the condition of the passenger airbag system shown by the indicator lamp **A** in the central 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. Fasten child seat.
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 seat 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

Use only child restraint systems with the LATCH system recommended by Porsche. These systems have been tested and adjusted to the interior of your Porsche and the appropriate child age groups. Other systems have not been tested and could entail an increased risk of injury.

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

- f Always observe the separate installation instructions for your child seat.



Installing a LATCH child seat system

Markings on the right and left for the LATCH child seat anchorage can be found on the backrests of the outer rear seats. The anchor bars **A** for the LATCH child seat anchorage can be found directly under the markings between backrest and seat cushion.

Danger!

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:

- f 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.
- f Please see your authorized Porsche dealer for correct Porsche Child Seat availability.
- f Porsche recommends the use of a Porsche Child Seat with Lower Ancorage and Iether for Children system (LATCH).

1. Secure the child seat to retaining lugs **A** as outlined in the operating manual for the child seat.
2. Pull the child seat to check that both fastening points are engaged correctly.



Warning!

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. Such use could result in serious personal injury or death.

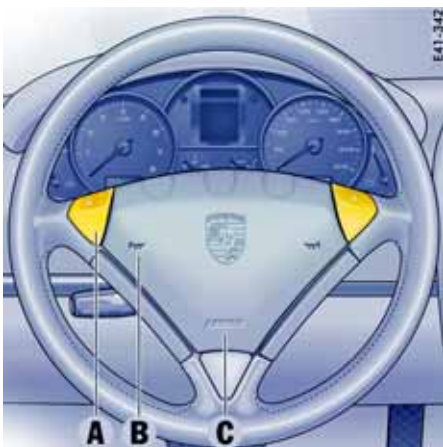
- f Do not misuse the child restraint anchorages. Only attach **one** child seat tether per anchorage.
- f They are not designed to withstand loads imposed by adults.

Child Restraint Anchorages

f Please observe the chapter "AUTOMATIC LOCKING RETRACTOR" on Page 58.

If your child restraint seat or seats require the use of a tether strap, you will want to use the anchor points **A** provided behind the rear bench backrests.

To ensure proper installation, see your authorized Porsche dealer.



Steering Wheel

Tiptronic rocker switches

The Porsche Tiptronic is a six-speed transmission and features an "automatic" and a "manual" gear-shift mode.

You can change temporarily to manual mode using rocker switches **A** on the steering wheel.

f Please observe the chapter "TIPTRONIC S" on Page 221.

Horn

f Press button **B** to operate the horn.

Airbag unit

Airbag unit **C** is located behind the padded steering wheel boss.

In conjunction with the safety belts, the "airbag" is a safety system designed to provide the driver and passengers with maximum protection from injury in an accident.

f Please observe the chapter "AIRBAG SYSTEMS" on Page 50.

Steering Wheel Heating

If the interior temperature in the vehicle is lower than +54°F (+12°C) when the ignition is switched on, the steering wheel heating is switched on automatically.

When this happens, the steering wheel adjusts to a temperature of +73°F (+23°C).

If the interior temperature rises above +71°F (+22°C) when the vehicle is operational, the steering wheel heating switches off again.

On vehicles with manual air conditioning

The steering wheel heating **switches itself on** when the following criteria are fulfilled at the same time:

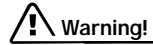
1. Low outside temperature.
2. The interior temperature setting in the display of the air conditioning is 10 and more bars.

The steering wheel heating **switches itself off** again after a warm-up phase, or is switched off, when the interior temperature setting in the display of the air conditioning is less than 10 bars.

For more information about setting the interior temperature on vehicles with manual air conditioning:

f Please observe the chapter "SETTING TEMPERATURE" on Page 146.

Steering Wheel Adjustment



Warning!

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

f Do not adjust the steering wheel when driving.

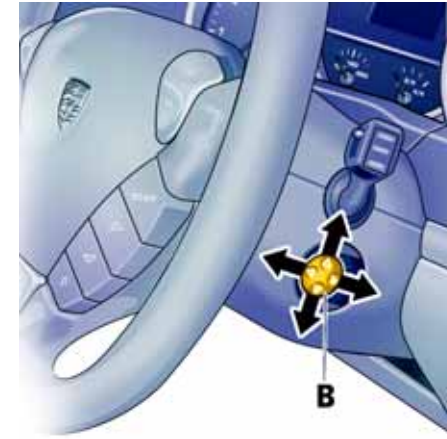
Risk of crushing due to uncontrolled recall of seat memory settings.

f Do not leave children in the car unattended.



Manual adjustment

1. Swivel locking lever **A** downwards.
2. Adapt the steering wheel setting to the backrest angle and your seat position. Move the steering wheel in the desired direction.
3. Swivel locking lever **A** back until you feel it engage.



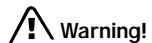
Electrical adjustment

- f Press control switch **B** in the relevant direction until the desired setting is reached.

The steering wheel setting can be stored in the seat memory.

- f Please observe the chapter "FRONT SEAT WITH MEMORY" on Page 37.

Multi-Functional Steering Wheel



Warning!

There is a danger of accident if you set or operate the on-board computer, radio, navigation system, telephone or other equipment when driving.

This could distract you from the traffic and cause you to lose control of the vehicle.

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

Depending on the equipment in your vehicle, you can use these function keys to operate the following Porsche communication systems:

- Telephone,
- Radio with CD drive,
- CD changer,
- Satellite radio.

Readiness for operation of multi-functional steering wheel

- With ignition switched on **and**
 - With Porsche communication systems switched on.
- f Please observe the operating instructions supplied for the Porsche communication systems before operating the function keys.

Note on operation

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



Operating the function keys

The function keys on the steering wheel (**arrows**) can be operated by pressing and by pulling.

Various functions may require you to press or pull the buttons several times in order to achieve the desired setting.



E31-155

Steering wheel buttons – lighting

When the light switch is operated, the light switches on automatically.
Using the buttons on the back of the steering wheel (**arrow**), the lighting for the function keys and the rocker switches can be switched on and off.

Switching lighting off

f Press button.

Switching lighting on









f Press button again.



E41-340

Multi-functional steering wheel with telephone function

f Please observe the operating instructions supplied for the Porsche communication systems before operating the function keys.

-  **Answer the telephone**
 - Take calls.
-  **Hang up the telephone**
 - End or reject the call.
-  **Increase the volume of the relevant communication system**
-  **Decrease the volume of the relevant communication system**
-  **MUTE Switch off the sound**
-  **Next radio station/title**
 - Select the next radio station or title.
-  **Last radio station/title**
 - Select the previous radio station or title.
-  **Source selection**
 - Select available audio source.
Depending on the equipment in your vehicle, the following sources are available:
radio, CDS (single CD player), CDC (CD changer).



Function keys without telephone function

f Please read the operating instructions supplied for the Porsche communication systems before operating the function keys.

- MAN** Manual tuning
 - Set radio station manually.
- SCAN** Scan titles, radio stations
 - Scan titles, radio stations briefly.
- +** Increase the volume of the relevant communication system
- Decrease the volume of the relevant communication system
- △** Next radio station/title
 - Select the next radio station or title.
- ▽** Last radio station/title
 - Select the previous radio station or title.
- MUTE** Switch off the sound
- 🎵** Source selection
 - Select available audio source. Depending on the equipment in your vehicle, the following sources are available: radio, CDS (single CD player), CDC (CD changer).

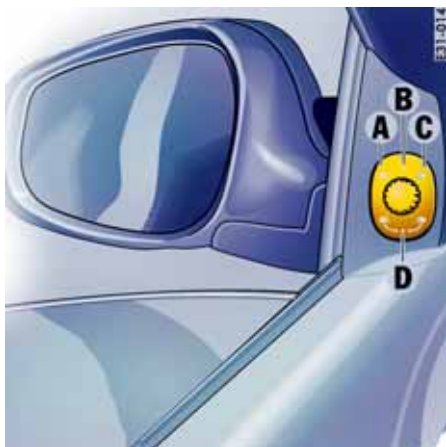


Interior Mirror

Initial position – lever forward
Anti-dazzle setting – lever back

Note on operation

When the interior mirror is being adjusted, anti-dazzle lever **A** must point forward.



- A - Door mirror setting – driver's side
- B - Heat door mirror
- C - Door mirror setting – passenger's side
- D - Fold in door mirrors

Door Mirrors

The convex mirror glass on the passenger's side provides a larger field of view.

Warning!

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

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

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

- f Fold in door mirrors before using the car wash.

Adjusting mirrors

1. Switch ignition on.
2. Select **A** for the driver's side or **C** for the passenger's side by turning the control switch.
3. Move the door mirrors in the appropriate direction by tilting the control switch.

If the electrical adjustment facility fails

- f Adjust the mirror by pressing on the mirror face.

Adjusting the door mirrors synchronously

In the multi-purpose display of the instrument panel, you have the option of adjusting the door mirrors synchronously.

- f Please observe the chapter "MIRRORS" on Page 121.

Folding in door mirror

- f Switch ignition on.
- f Turn control switch to **D**.
Both door mirrors fold in automatically.

If the electrical adjustment facility fails

- f Fold in mirror manually.

Unfolding door mirrors

- f Switch ignition on.
- f Turn control switch to **A** or **C**.
Both door mirrors unfold automatically.

If the electrical adjustment facility fails

- f Unfold mirrors manually.

Door mirror heating

The door mirror heater is ready for operation when the ignition is switched on.

Switching on

- f Turn control switch to **B**.
Both door mirrors are heated.

Switching off

- f Change the position of the control switch.

Storing door mirror settings

On vehicles with seat memory, individual door mirror settings can be stored on the person buttons of the seat memory and vehicle keys and recalled with these.

- f Please observe the chapter "FRONT SEAT WITH MEMORY" on Page 37.
- f Please observe the chapter "STORING PASSENGER MIRROR SETTING AS A PARKING AID" on Page 38.



A - Control switch for door mirror adjustment
C - Passenger mirror setting

Swivelling down mirror glass as parking aid

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

- f Please observe the chapter "MIRRORS" on Page 121.

Preconditions

- Vehicle must be equipped with seat memory.
- Control switch **A** must be turned to position **C** (passenger mirror's setting).
- Reverse gear must be engaged.

Moving mirror glass to its initial position with reverse gear engaged

The mirror glass swivels to its initial position when:

- The car is shifted out of reverse gear **or**
- The position of the control switch for the door mirror setting is changed.



E - Light-emitting diodes (LED)
 F - Button for automatic anti-dazzle operation
 G - Light sensors

Automatic Anti-Dazzle Mirror

Sensors on the front and rear sides of the interior mirror measure the incident light. The mirrors automatically change to anti-dazzle position or revert to their normal state, depending on the light intensity.

Warning!

Danger of injury. Electrolyte fluid can emerge from broken mirror glass. This fluid irritates the skin and eyes.

- f If the electrolyte fluid should come into contact with the skin or eyes, immediately rinse it off with clean water.
 See a doctor if necessary.

Risk of damage to paintwork and leather and plastic parts, and clothing. Electrolyte fluid can be removed only while it is still wet.

- f Clean the affected parts with water.

Note on operation

The incident light in the area of light sensors **G** must not be restricted (e.g. by stickers on the windshield).

Switching off automatic anti-dazzle operation

- f Press button **F**.
 Light-emitting diode **E** goes out.

Note on operation

Anti-dazzle operation switches off automatically, if:

- Reverse gear is engaged **or**
- Interior lighting **and/or** reading lights in the front are switched on.

Switching on automatic anti-dazzle operation

- f Press button **F**.
 Light-emitting diode **E** lights up.



- 0 - Initial position
- 1 - Ignition on
- 2 - Start engine
- 3 - Ignition off

Ignition Lock/Steering Lock

The ignition lock has a total of four ignition lock positions.

Note on operation

The car key rebounds to the initial position from every ignition lock position.



Porsche Entry & Drive control unit

For vehicles that have **Porsche Entry & Drive** you do not need to insert the key into the ignition lock again 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.

Removing the control unit from the ignition lock

- f Press button **A** and remove the control unit.

Ignition lock position 0

Initial position

The ignition key cannot be withdrawn when the ignition is switched on or when the engine is started.

To withdraw the ignition key:

- f Stop the vehicle.
- f **On vehicles with Tiptronic S:**
Move selector lever to position **P**.
- f Switch ignition off.
- f Withdraw the ignition key.

Note on operation

The vehicle battery discharges if the ignition key is left inserted.

If the vehicle battery is dead, the key can not be pulled out of the ignition lock.

Ignition lock position 1

Ignition on

- f Turn ignition key to position **1**.
Ignition is switched on.

Note on operation

All electrical equipment can be switched on.
The warning lights light up for a lamp check.

- f Please observe the chapter "INSTRUMENT PANEL USA MODELS" on Page 82.

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 **3** (ignition off) first.

Ignition lock position 2

Starting engine

- f Operate footbrake.
- f Fully depress and hold the clutch pedal **or on vehicles with Tiptronic S:**
move the selector lever to position **P** or **N**.
- f Do not press the accelerator pedal.
The engine control module will provide the correct starting mixture.
- f Turn ignition key to ignition lock position **2**.

- f Do not operate the starter longer than approx. 10 seconds.

If necessary, repeat the starting procedure after a pause of approx. 10 seconds.

Turn the ignition key to ignition lock position **3** (ignition off) first.

- f Do not warm up the engine when stationary.
Drive off immediately.
Avoid high revolutions and full throttle until the engine has reached operating temperature.
- f If battery output is insufficient, jump leads can be used to start the engine.
Please observe the chapter "EMERGENCY STARTING WITH JUMPER CABLES" on Page 355.

Notes on operation

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.

When the engine is started, the warning lights must go out.

Ignition lock position 3

Ignition off

- f Turn ignition key to ignition lock position **3**.

Locking the steering column

Vehicles without Porsche Entry & Drive

The steering column is **automatically locked** when the ignition key is withdrawn from the ignition lock.

The steering column is **automatically unlocked** when the ignition key is inserted into the ignition lock.

Vehicles with Porsche Entry & Drive

The steering column is **automatically locked** when the ignition is switched off and the vehicle is locked.

Manually locking the steering column on vehicles with Porsche Entry & Drive

- f Depress the clutch on vehicles with manual transmission.
- f Once the ignition is switched off, turn the control unit again to ignition lock position **3** and hold it there for **2 seconds**.
The steering column is locked.

The steering column is **automatically unlocked** by turning the control unit from ignition lock position **0**.

Starting and Stopping the Engine

- f Please observe the chapter "IMMOBILIZER" on Page 21.
- f Please observe the chapter "EMISSION CONTROL SYSTEM" on Page 282.



Danger!

Risk of poisoning. Exhaust gas contains colorless and odorless carbon monoxide (CO), which is toxic even in low concentration. Carbon monoxide can cause unconsciousness and even death if inhaled.

- f 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.

An unattended vehicle with a running engine is potentially hazardous. If warning lights should come on to indicate improper operation, they would go unnoticed.

- f Never leave the engine idling unattended.

Danger of fire.

- f Do not drive or park your car where combustible materials, such as dry grass or leaves, can come into contact with the hot exhaust system.
- f 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.

Starting vehicles with manual transmission

- f Operate footbrake.
- f Fully depress and hold the clutch pedal.
- f Put the gearshift lever in neutral.
- f Do not press the accelerator pedal. The engine control module will provide the correct starting mixture.
- f Turn ignition key to ignition lock position **2**.
- f Do not operate the starter longer 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 **3** 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.

- f Do not warm up the engine when stationary. Drive off immediately.
Avoid high revolutions and full throttle until the engine has reached operating temperature.
- f If battery output is insufficient, jump leads can be used to start the engine.
- f Please observe the chapter "EMERGENCY STARTING WITH JUMPER CABLES" on Page 355.

Note on operation

To ensure a good charge condition for the battery and thus its ability to start the engine, all electrical accessories which are not required should be switched off when the ignition is switched on and when engine revolutions are low (in stop and go traffic).

Starting vehicles with Tiptronic S

- f Operate footbrake.
- f Move selector lever to position **P** or **N**.
- f Do not press the accelerator pedal.
The engine control module will provide the correct starting mixture.
- f Turn ignition key to ignition lock position **2**.
- f Do not operate the starter longer 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 **3** 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.

- f Do not warm up the engine when stationary.
Drive off immediately.
Avoid high revolutions and full throttle until the engine has reached operating temperature.
- f If battery output is insufficient, jump leads can be used to start the engine.
Please observe the chapter "EMERGENCY STARTING WITH JUMPER CABLES" on Page 355.

Note on operation

To ensure a good charge condition for the battery and thus its ability to start the engine, all electrical accessories which are not required should be switched off when the ignition is switched on and when engine revolutions are low (in stop and go traffic).

Starting with auxiliary battery

If your vehicle is fitted with an additional battery in the luggage compartment, you have the possibility of starting the engine with the ignition key, even if the main battery fails.

In vehicles with Porsche Entry & Drive:

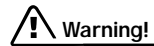
1. Remove the Porsche Entry & Drive control unit from the ignition lock.
Please observe the chapter "REMOVING THE CONTROL UNIT FROM THE IGNITION LOCK" on Page 70.
 2. Insert the ignition key into the ignition lock and start the engine as described.
- f Please have the cause of the fault remedied at an authorized Porsche dealer.

Stopping

- f Withdraw the ignition key only when the vehicle is stationary, otherwise the steering lock engages and the vehicle cannot be steered.
- f Only switch the ignition off when the vehicle comes to a stop, as there is no steering assistance and brake boost when the engine is switched off.
- f **Always** withdraw the ignition key and engage the parking brake when leaving the vehicle. The control unit **always** remains in the ignition lock in vehicles that have **Porsche Entry & Drive**.

Note on operation

The vehicle battery discharges if the ignition key is left inserted.

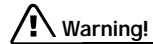


Danger of injury. Hot engine compartment components can burn skin on contact.

- f Before working on any part in the engine compartment, turn the engine off and let it cool down sufficiently.

Radiator fans

The radiator and radiator fans are in the front of the car.



Danger of injury. After the ignition is switched off, the engine compartment and coolant temperatures are monitored for approx. 30 minutes. During this period, and depending on temperature, the radiator fan may continue to run or start to run.

- f Carry out work in these areas only with the engine off and exercise extreme caution.



Parking Brake

The parking brake acts on the rear wheels and serves to secure the car while parked.

- f Use the parking brake only after the vehicle has come to a full stop.

Applying the parking brake

- f Press down firmly on the foot pedal.
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 parking brake is not released before moving off.
If the brake is not fully set, the vehicle may roll without control.
- f Before exiting the vehicle, make sure that the parking brake is fully applied and the vehicle is not moving at all.



Danger!

Risk of serious personal injury or death. A partially engaged parking brake may allow the vehicle to roll, causing serious personal injury or death to any person in its path.

- f Engage the parking brake fully.
-
- f Please observe the chapter "WARNING LIGHTS AND WARNING MESSAGES" on Page 124.

(P) Releasing the parking brake

- f Press on the footbrake and pull handle **A** of the parking brake.
The warning light and the message disappear.

BRAKE



Parking Brake warning light USA



Parking Brake warning light Canada

The warning lights will go out after the parking brake is fully released.

The warning lights are not an indicator that the parking brake is fully applied; it is only intended to be a warning to release the parking brake before driving the car.



Caution!

A partially engaged brake will overheat the rear brakes, reduce their effectiveness and cause excessive wear.

f Release the parking brake fully.

f When parking your car, press down firmly on the foot pedal.

f Move the selector lever to "P" (Tiptronic) or move the gearshift lever to reverse or first gear (Manual transmission).

f On hills also turn the front wheels towards the curb.

Brakes

f 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.

f Therefore, always maintain a safe distance from the car in front of you.

Note

Even though the brake discs consist of alloyed grey 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 disc 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!

Risk of an accident. In the unlikely event of hydraulic failure of one brake circuit:

- f 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.
- f 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



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!

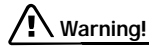
Risk of an accident.

Any obstruction of the brake pedal could increase the stopping distance.

- f 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.
- f Secure the floor mat to prevent it from sliding into positions that could interfere with the safe operation of your vehicle.
Your Porsche dealer will be glad to offer you floor mats of the correct size including a securing possibility.

Note

In case one of the two brake circuits fails, increased pedal travel is required to bring your vehicle to a full stop.



Warning!

To avoid overheating and premature wear of the brakes:

- f Before descending a steep grade, reduce speed and shift the transmission into a lower driving position to control speed.
- f Do not “ride the brakes” by resting your foot on the pedal when not intending to apply brake pressure.
- f Do not hold the pedal down too long or too often. This could cause the brakes to get hot and not function properly.

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. When the vehicle is driven on salted or gritted roads for extended periods, the brakes should be washed down thoroughly about every 2 weeks. An automatic carwash facility cannot do this job properly. Brakes will dry after a few cautious brake applications.



Warning!

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.

- f Cautiously apply brakes to test brakes after being exposed.

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.

- f Have the brake system inspected at the intervals recommended in your Maintenance Booklet.



Brake wear warning message

A warning message will be displayed on the multi-purpose display of the instrument panel if the brake pads are worn, excessively.

- f Do not continue to operate the vehicle.
Have your authorized Porsche dealer inspect or replace the brake pads.
- f Please observe the chapter "WARNING LIGHTS AND WARNING MESSAGES" on Page 124.

Brake pads and brake discs

Wear on the brake pads and brake discs 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.

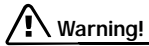
The high-performance brake system is designed for optimal braking effect at all speeds and temperatures.

Certain speeds, braking forces and ambient conditions (such as temperature and humidity) therefore might cause the brakes to squeal.

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 also applies whenever the brake pads and brake discs are replaced.



Warning!

- f Do not obstruct the pedal travel with floor mats or other objects.

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.

- f Please observe the chapter "TOWING" on Page 374.

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.

- f For this reason, keep further back from the vehicle in front and "dry" the brakes by applying them at intervals. Make sure that following traffic is not affected.

After a long drive over salted or gritted roads, a coating may form on the brake discs and pads that significantly reduces friction and thus braking action.

- f Therefore, clean the brake discs and pads approx. every 2 weeks with a strong jet of water. The cleaning effect of automatic car washes is insufficient.

To prevent corrosion of the brake discs, "brake them dry" before parking the car.

- f Even though the brake discs consist of alloyed grey 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.

- f To relieve the braking system on downhill stretches, change down to a lower gear in good time to obtain engine braking. If engine braking is insufficient on steep stretches, operate the footbrake at intervals. Continuous braking overheats the brakes and reduces the braking effect.



- f Please observe the chapter "BRAKE-FLUID LEVEL" on Page 269.

Instrument Panel USA Models


Warning and indicator lights on the tachometer

-  Emission Control warning light (Check Engine)
-  Airbag warning light
-  Safety belt warning light
-  PSM warning light
-  ABS warning light
-  Cruise control readiness
-  Hydraulically disengageable anti-roll bars

Indicator lights in central instrument panel

-  Turn signal indicator light, left
-  Turn signal indicator light, right

Warning and indicator lights on the speedometer

-  Trailer turn signal Indicator light
-  Rear fog light indicator light
-  Tire pressure warning light
-  Differential locking indicator light
-  BRAKE Brake warning light
-  Fog light indicator light
-  General warning Observe warning message on the multi-purpose display!
-  High beam indicator light

- A Oil temperature gauge
- B Tachometer
- C Clock
- D Clock reset button
- E Cooling system temperature gauge
- F Multi-purpose display
- G Fuel gauge
- H Reset button for trip counter display
- I Speedometer
- J Mileage displays
- K Voltmeter





Instrument Panel Canada Models


Warning and indicator lights on the tachometer

-  Emission Control warning light (Check Engine)
-  Airbag warning light
-  Safety belt warning light
-  PSM warning light
-  ABS warning light
-  Cruise control readiness
-  Hydraulically disengageable anti-roll bars

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Oil Temperature Gauge

A warning message will appear on the multi-purpose display of the instrument panel if the engine oil temperature is too high.

- f Reduce speed and engine load immediately if the red zone is reached.



Tachometer

The start of the red zone on the tachometer 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.



Cooling System

- f If the cooling system is in any way faulty, consult your authorized Porsche dealer.

Temperature gauge

USA: Display in °F
Canada: Display in °C

Pointer to the left – engine cold

- f Avoid high engine speeds and heavy engine loading.

Pointer in the middle – normal operating temperature

The pointer may move up to the red area when engine is heavily loaded and outside temperature is high, but should return to “normal” when engine load is reduced.

Engine coolant temperature warning

A warning message will appear on the multi-purpose display of the instrument panel if the engine coolant temperature is too high.

- f Switch engine off and let it cool.
- f Check radiator and air passages in front end of car for obstructions.
- f Check coolant level.
Add coolant if necessary.
Please have the fault remedied at an authorized Porsche dealer.
- f Please observe the chapter “COOLANT LEVEL” on Page 267.

Note on operation

To prevent excessive temperatures, the cooling air guides must not be restricted by covers (e.g. films, “stone guards”).

Engine coolant level warning

A warning message will appear on the multi-purpose display of the instrument panel if the engine coolant level is too low.

- f Switch engine off and let it cool.
- f Top off coolant.
Please have the cause of the fault remedied at an authorized Porsche dealer.
- f Please observe the chapter “COOLANT LEVEL” on Page 267.



Caution!

Risk of engine damage.

- f Do not continue driving if the warning persists even when the engine coolant level is correct.
- f Have the fault remedied at your nearest authorized Porsche dealer.



Fuel

Level gauge

When the ignition is on the fuel level is displayed.

f Please observe the chapter "CAPACITIES" on Page 386.

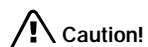
If the vehicle's inclination changes (e.g. going up-hill/downhill), minor deviations in the indication may occur.



Fuel reserve warning

When the engine is running, the warning light on the multi-purpose display of the instrument panel lights up if less than 3 gallons (12 liters) of fuel remains in the tank or the range on remaining fuel falls below approx. 30 miles (50 km).

f Fill up at the next opportunity.



Caution!

A shortage of fuel may cause damage to the emission control system.

f Never drive the tank dry.

f If the warning lights have come on, do not take turns at high speed.

f Please observe the chapter "HOW EMISSION CONTROL WORKS" on Page 283.



Odometer

The upper display counts the total mileage, the lower display counts the short trips.

After exceeding 6213 miles (9999 kilometers), the short trip counter returns to 0.

Resetting the short trip counter to "0"

f Press button **A** for approx. 1 second.



Clock **A** is adjusted on the multi-purpose display in the instrument panel:

- f Press button **B**.
The SETTINGS > CLOCK menu is automatically opened on the multi-purpose display.
- f Please observe the chapter "CLOCK" on Page 116.

Clock



Risk of an accident and loss of control.

- f Do not reach through the steering-wheel spokes while driving.
- f In the event of a sudden turn or airbag deployment, serious personal injury could result if hand is positioned through steering wheel spokes.



Voltmeter

The voltmeter indicates the battery voltage.
Normal range: 12 to 16 volts.

The voltage may drop considerably when the vehicle is being started.

If the indicator is continually below 12 volts when the engine is running:

- ⌘ Please have the battery charging system checked at an authorized Porsche dealer.

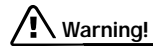
Battery/alternator

A warning message will appear on the multi-purpose display of the instrument panel if the voltage drops significantly.

- ⌘ Stop in a safe place and switch off the engine.

Possible causes

- Defect in the battery charging system
- Broken drive belt



Warning!

Risk of accident and risk of engine damage. A broken drive belt means there is no power assistance to the steering (more effort is required to steer) and engine cooling fails.

- ⌘ Do not continue driving.
- ⌘ Have the fault remedied at your nearest authorized Porsche dealer.

Danger of steering assistance failing during a long journey in the water if the drive belt slips.

- ⌘ If the steering assistance fails, more effort will be required to steer.

Emission Control



Check engine warning light

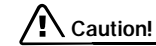
The emission control system detects malfunctions early that could, for example, cause increased pollutant emissions or consequential damage. Faults are indicated by the warning light in the instrument panel by being continuously lit or flashing.

The faults are recorded in the control unit's fault memory.

The warning light in the instrument panel lights up when the ignition is switched on as a lamp check and goes out approx. 4 seconds after the engine starts.

The warning light in the instrument panel flashes to indicate operating states (e.g. engine misfiring) which might cause damage to certain parts of the emission control system.

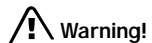
- f In this case, immediately reduce the engine load by easing off the accelerator.
The warning light in the instrument panel is lit continuously after the critical range is left.
- f In order to avoid consequential damage to the engine or emission control system (e.g. catalytic converter) go immediately to the nearest authorized Porsche dealer to have the fault diagnosed and rectified.



Risk of damage. If the warning light in the instrument panel continues flashing even when you have eased off the accelerator pedal, the emission control system may overheat.

- f 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.
- f Switch off the engine.
- f Contact your nearest authorized Porsche dealer to have the fault rectified.

Multi-Purpose Display



Warning!

There is a danger of accident if you set or operate the on-board computer, radio, navigation system, telephone or other equipment when driving.

This could distract you from the traffic and cause you to lose control of the vehicle.

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

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.

As a rule, you can use the menu items:

MAIN MENU > SETTINGS > FACTORY SETTINGS

to return to the basic factory settings.

- f Please observe the chapter "FACTORY SETTINGS" on Page 123.



Readiness for operation

- Ignition is on.

Operation, controls

The multi-purpose display is operated with the rocker switch at the end of the wiper stalk and the RESET switch at the bottom of the wiper stalk.

To move up in the menu

- f Press rocker switch up.

To move down in the menu

- f Press rocker switch down.

To call selected menu line

- f Press RESET switch.

To scroll in the menu

Arrows at the top and bottom of the menu indicate additional entries.

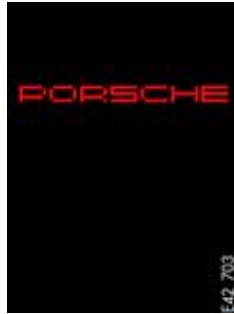
- f Press rocker switch up or down.

In the COMFORT menu, the menu scrolls automatically as you approach the end of the list.

Note on operation

Depending on the equipment of your vehicle, some information or functions may not be available on the multi-purpose display (e.g. navigation, audio system, compass or tire pressure).

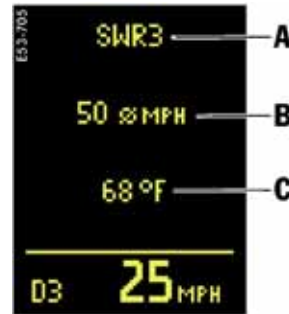
Various menus can only be called up when the vehicle is stationary.



Basic Screens

The following basic screens are available once the ignition has been switched on:

- Main menu
- Range on remaining fuel
- Average speed
- Navigation
- Tire pressure
- Compass



Information in the basic screen

The selected basic screen shows the following:

- Top display **A**:
TV information (e.g. TV station, channel)
Audio information (e.g. station, frequency, CD)
- Centre display **B**:
Information about range on remaining fuel, average speed, compass, navigation, tire pressure, or access to main menu
- Bottom display **C**:
Outside temperature indicator
(except for compass, navigation, and tire pressure)



Changing basic screens

- f Operate the rocker switch.

Resetting basic screens

The values can be reset to zero in the basic screens for average speed.

- f Press RESET switch for longer than 1 second.
The value is cleared.

General information

Range on remaining fuel

The range on remaining fuel is continuously recomputed while driving based on fuel level, current consumption and average consumption.

Average speed

The displayed values are based on the distance travelled since the last reset to “zero”.

Note on operation

Switching the ignition off does not reset the measurements. Values can thus be collected over long periods. Disconnecting the vehicle battery clears the memories.

Further on-board computer functions can be displayed in the PCM.
Please follow the separate operating instructions for PCM.



Main Menu

- f Operate the rocker switch until the basic screen MAIN MENU is displayed.
- f Press RESET switch.

The submenus are listed:

- Telephone
- MPH limit
- Vehicle info
- Tire pressure
- Settings

Note

It is possible to leave the main menu via the BACK command at any time by confirming the RESET switch.



Telephone

MAIN MENU > PHONE

f Select PHONE with the rocker switch.

f Press RESET switch.

Note

The telephone function of the multi-purpose display is linked to both the PCM and to multi-function switches and the operating lever.

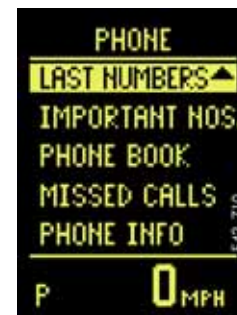
A SIM card must be inserted in the drawer of the PCM as a prerequisite for telephone operation.



No net, Phone off, Enter PIN, Insert SIM card

If the link to the network is lost, no PIN is entered, no SIM card is inserted or the telephone is switched off, a corresponding indication will appear.

f Press RESET switch. The display reverts to the last menu.



The PHONE menu offers a choice of five submenus:

- Last numbers
- Important numbers
- Phone book
- Missed calls
- Telephone info

Note

The phone number of an incoming call is shown on the multi-purpose display. The name is shown only if the caller is stored in the telephone book.



Last numbers

MAIN MENU > PHONE > LAST NUMBERS

The LAST NUMBERS menu shows the most recent entries dialled via the respective SIM card.

Re-call telephone partner

- f Select the number or entry with the rocker switch.
- f Press RESET switch.
The connection is established.



Important numbers

MAIN MENU > PHONE > IMPORTANT NUMBERS

The IMPORTANT NUMBERS menu shows numbers that were stored as the most important numbers on the SIM card.

- f Select the entry with the rocker switch.
- f Press RESET switch.
The connection is established.



Phone book

MAIN MENU > PHONE > PHONE BOOK

The PHONE BOOK menu shows the entries of the telephone book that are stored on the SIM card.

- f Select the entry with the rocker switch.
- f Press RESET switch.
The connection is established.

If the rocker switch is pressed for longer than one second, the initial letters for which entries exist are shown.
This allows the desired entry to be found more quickly.



Missed calls

MAIN MENU > PHONE > MISSED CALLS

The telephone numbers of the rejected calls are shown in the MISSED CALLS menu. The numbers are stored on the SIM card.

Return call

- f Select the number or entry with the rocker switch.
- f Press RESET switch.
The connection is established.



Phone info

MAIN MENU > PHONE > PHONE INFO

Automatic indication of an incoming call on the multi-purpose display can be switched on or off with the PHONE INFO menu.

- f Select ON or OFF with the rocker switch.
- f Press RESET switch.



Accepting, refusing, ending a call

Incoming calls are shown on the multi-purpose display (PHONE INFO must be activated).

- f Select ACCEPT or REFUSE with the rocker switch.
- f Press RESET switch.

After the call is accepted, END appears in the menu.

- f Select END with the rocker switch.
- f Press RESET switch. The call is ended.



MPH limit

MAIN MENU > MPH LIMIT

A speed limit can be entered to monitor the driving speed. When it is exceeded, a signal sounds and the message LIMIT EXCEEDED appears in the multi-purpose display.



Accepting current speed

To accept the current speed as the limit:

- f Select CURRENT MPH with the rocker switch.
- f Press RESET switch.
LIMIT ACTIVE is activated automatically.
The selected speed limit is shown.



Preset speed

To accept a target speed as the limit:

- f Select XXX MPH SET with the rocker switch.
- f Press RESET switch.
- f The limit is set in increments of 1 mph (around 1 km/h) by pressing the rocker switch up or down.
If the rocker switch is operated for longer than 2 seconds, the setting is changed to increments of 6 mph (10 km/h).
- f Press RESET switch.
LIMIT ACTIVE is activated.



Activating/deactivating the limit

- f Select LIMIT ACTIVE with the rocker switch.
- f Press RESET switch.



Vehicle info

MAIN MENU > VEHICLE INFO

- f Select VEHICLE INFO with the rocker switch.
- f Press RESET switch.



The following information can be displayed:

- Warnings
All current warnings and messages pertaining to the safety of the vehicle can be displayed.
- Level
The current state of the vehicle's ground clearance can be displayed for vehicles with level control.
- Locks/reduction
The selected driving programmes for Low Range/High Range as well as the fully engaged locks can be displayed.
- Average consumption
The average fuel consumption can be displayed and reset.



Example: Brake pad warning message

Warnings

MAIN MENU > VEHICLE INFO > WARNINGS

NO WARNING is displayed if the vehicle is in perfect condition.

Any warning messages are displayed.

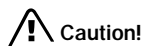
- f Select warnings one after the other with the rocker switch.



Example: Front side light warning message

Returning to the VEHICLE INFO menu

- f Press RESET switch.



Caution!

Warning messages indicate possible faults.

- f Go to an authorized Porsche dealer immediately.



Level

MAIN MENU > VEHICLE INFO > LEVEL

The ground clearance of vehicles equipped with level control is shown in the LEVEL menu.

Note on operation

- f The level is set using the rocker switch behind the selector lever in the center console.
- f Please observe the chapter "AIR SUSPENSION WITH LEVEL CONTROL AND HEIGHT ADJUSTMENT" on Page 254.

Returning to the VEHICLE INFO menu

- f Press RESET switch.



Locks/reduction

MAIN MENU > VEHICLE INFO >
LOCKS/REDUCTION

The selected driving programmes for Low Range/
High Range as well as the fully engaged locks are
displayed.

- Longitudinal lock on/off
- Reduction on/off
- Transverse on/off

Returning to the VEHICLE INFO menu

- f Press RESET switch.

Note on operation

- f The driving program is set using the rocker switch behind the selector lever in the center console.
- f Please observe the chapter "DRIVING PROGRAMS FOR ON-ROAD AND OFF-ROAD DRIVING" on Page 229.



Average consumption

MAIN MENU > VEHICLE INFO > AVERAGE CON-
SUMPTION

The displayed value is based on the distance trav-
elled since the last reset to "zero".

Resetting average consumption

- f Select RESET with the rocker switch.
- f Press RESET switch for longer than 1 second.
The value is set to "0.0".

Tire Pressure

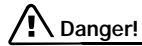
- f Please observe the chapter "TIRES/WHEELS" on Page 297.

The tire pressure monitoring monitors the pressure in the four road wheels and warns the driver if the pressure is too low.

The display as well as the settings for tire pressure monitoring are done on the multi-purpose display in the TIRE PRESSURE menu. However the tire pressure must be set manually on the wheel.

The tire pressures to be monitored for tire type are permanently set in the tire pressure monitoring and cannot be changed.

The driver is solely responsible for filling the tires correctly and for selecting in the multi-purpose display.



Danger!

Risk of serious personal injury or death. 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.

Despite the advantages offered by the tire pressure monitoring, it 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 tire pressure monitoring low tire pressure message.

- f When a flat tire has been displayed, immediately stop in a suitable place and check the tires for damage. If necessary remedy the damages with a tire sealant.
- f Do not by any means continue to drive with leaking tires.
- f Defective tires must be immediately replaced by a specialist repair shop.
Tire repairs are not permissible under any circumstances.
- f Sealing the tire with the tire sealant is only an emergency repair, so you can drive to the next repair shop. The maximum permitted speed is **50 mph (80 km/h)**.

- f Do not drive with tires whose tire pressure drops again in a short period of time. In cases of doubt, have tires checked by a specialist repair shop.
- f If the tire pressure monitoring is defective (e.g., defective wheel transmitter), contact a specialist repair shop immediately and have the damages repaired.
The tire pressure will not be monitored by a defective tire pressure monitoring.
- f Tires lose air over time without a tire defect being present. A tire pressure warning will then appear in the multi-purpose display. Correct the tire pressure at the next opportunity.
- f The tire pressure monitoring gives a warning about tire damages due to insufficient tire pressure as well as about a gradual loss of pressure due to foreign objects.
The tire pressure monitoring cannot warn you about tire damages occurring suddenly (e.g., flat tire due to sudden external effects).
- f Before fitting tires approved by Porsche which are not stored in the on-board computer, the missing information should be supplemented in the on-board computer.



Tire pressure screen

Indication of tire pressures on the basic screen "Tire pressure"

The basic screen "Tire pressure" shows the current actual values of the tire pressures. These values would be identical to those of a pressure gage connected to the four valves. These pressures change while the vehicle is being driven.

- The tire pressures increase as the temperature in the tires rises, e.g. during high-speed highway driving.
- The tire pressures decrease as the temperatures drop, e.g. during trips in cold regions (such as mountains).

The pressure changes by around 1.5 psi (0.1 bar) for a temperature change of 50°F (10°C).

The values displayed on the basic screen therefore do not allow conclusions to be drawn about possible pressure deviations.

- f Use the pressure differences shown in the TIRE PRESSURE menu or from tire pressure messages or warnings when correcting the tire pressure.



Filling information

Tire pressure menu display

MAIN MENU > TIRE PRESSURE
(only when vehicle is stationary)

Deviations in the tire pressures from the required pressure are shown in the TIRE PRESSURE menu (filling information). The tire pressure monitoring takes this relationship between tire pressure and temperature into account.

A "-" in front of the value indicates a pressure loss.

- f The tire pressures must be adjusted to the required pressure.

Example: If the tire pressure display shows "-3 psi", you must increase the tire pressure by 3 psi.



System learning phase

Each time a wheel is changed, the tire pressure monitoring re-learns the tires. The system identifies the wheel positions.

The current tire pressures will not be available on the multi-purpose display until the learning phase is complete.

System learning phase

- f Select tire type **and** tire size in the menu TIRE PRESSURE > SETTINGS > TIRES. The learning process is started. The tire type **and** size must be selected even if the settings for the new set of wheels are the same as for the old wheels.

Note

The spare wheel and collapsible spare wheel do not contain a wheel transmitter and are not monitored by the tire pressure monitoring.

The tire pressures for cold tires (68 °F/20 °C) are shown in the TIRE PRESSURE menu (filling information) during the learning phase. The required pressure for the spare wheel is always displayed in the TIRE PRESSURE menu (filling information).

- f Check the tire pressure for the spare wheel and collapsible spare wheel manually.



Tire pressure menu

MAIN MENU > TIRE PRESSURE

The TIRE PRESSURE menu provides an overview of the current pressure specifications for the respective wheel (filling information). The pressure differences with respect to the required pressure are specified.

If the wheels have not been learned, the current pressures are unavailable.

The spare wheel is not monitored. The required pressure is specified in brackets.

To make changes to the settings of the tire pressure monitoring, select SETTINGS in the TIRE PRESSURE menu.



Tire pressure settings

MAIN MENU > TIRE PRESSURE > SETTINGS



Warning!
Incomplete entries on the multi-purpose display affect correct information of warnings and messages.

- f After one of the following actions, the settings must be updated in the TIRE PRESSURE menu:
 - Changing a wheel
 - Filling with tire sealant
 - Adding air (after previous warning “Flat tire”)
- f Please observe the chapter “SELECTION AFTER WARNING” on Page 112.

The following settings made in this menu serve as the basis on which the tire pressure monitoring determines the correct pressure.

- **Tires**
Select the type and size of the tires on the vehicle.
- **Load**
Select the type of loading.
- **System**
Switch tire pressure monitoring on.

Note on operation

Settings can be made only when the vehicle is stationary.



Tire type menu

Tire type

MAIN MENU > TIRE PRESSURE > SETTINGS > TIRE TYPE

The tire type and corresponding tire size are set in the TIRE TYPE menu.

- Summer
- All season
- Winter
- All terrain
- Spare wheel



Selection of tire sizes for summer tires

Example: Selecting summer tires

MAIN MENU > TIRE PRESSURE > SETTINGS > TIRE TYPE > SUMMER

- f Select tire type with the rocker switch.
- f Press RESET switch.
- f Select tire size with the rocker switch (e.g. 255/55 R 18).
- f Press RESET switch.
The menu returns to TIRE PRESSURE > SETTINGS and shows the current settings.

Note on operation

- f The tire size and type can be found on the tire sidewall.
Please observe the chapter "TIRES/WHEELS" on Page 297.

Note

Before fitting tires approved by Porsche which are not stored in the multi-purpose display, the missing information should be supplemented in the multi-purpose display.

- f Go to an authorized Porsche dealer immediately.

Speed limits for tires



Risk of accident due to excessive speed. This could lead to severe personal injury or death.

- f Always observe the permissible maximum speed of the respective tire.
- f Exceeding maximum tire speed could result in a tire burst, causing loss of control of the vehicle. This could lead to severe personal injury or death.
Moreover, Porsche recommends obeying all traffic laws at all times to maintain the safety of yourself and all vehicle occupants.

The speed code letter indicates the maximum permissible speed for the tire.

- f Please observe the chapter "SPEED CODE LETTER" on Page 310.



Spare wheel selection

Spare wheel

MAIN MENU > TIRE PRESSURE > SETTINGS > TIRE TYPE > SPARE WHEEL

This menu lists all possible spare wheel types available depending on the equipment of the vehicle.

- Spare wheel
- Collapsible spare wheel
- Sealing set

Spare wheel



Warning!

Risk of accident.

The spare wheel does not contain a wheel transmitter and is not monitored by the tire pressure monitoring.

- f The spare wheel must be used only over short distances.

- f Please observe the chapter "SPARE WHEEL" on Page 331.

- f Select SPARE WHEEL with the rocker switch.

- f Press RESET switch.
The message SYSTEM NOT ACTIVE, WORKSHOP appears after the RESET switch is pressed.
The display automatically returns to the TIRE PRESSURE menu (filling information).
The required pressure specifications can be read.

- f Select BACK. The menu returns to the basic screen.

The reminder SPARE WHEEL OR SEALING SET OPERATION appears each time the ignition is switched on.

- f Please observe the chapter "MESSAGE "SPARE WHEEL OR SEALING SET OPERATION"" on Page 113.

Collapsible spare wheel



Warning!

Risk of accident.

The spare wheel does not contain a wheel transmitter and is not monitored by the tire pressure monitoring.

- f The collapsible spare wheel must be used only over short distances.

- f Please observe the chapter "COLLAPSIBLE SPARE WHEEL" on Page 325.

- f Select COLLAPSIBLE WHEEL with the rocker switch.

- f Press RESET switch.
The required pressure and speed limit for the collapsible spare wheel are displayed at first. This is followed by the message SYSTEM NOT ACTIVE, WORKSHOP.

A warning appears on the multi-purpose display if the speed limit of 50 mph (80 km/h) is exceeded.

The reminder SPARE WHEEL OR SEALING SET OPERATION appears each time the ignition is switched on.

- f Please observe the chapter "MESSAGE "SPARE WHEEL OR SEALING SET OPERATION"" on Page 113.

Tire sealant/sealing set



Warning!

Risk of accident.

- f Have the tire replaced by a specialist repair shop as soon as possible.

- f Avoid hard acceleration and high cornering speeds.

- f Do not exceed maximum speed of 50 mph (80 km/h).

- f Please observe the safety and operating instructions on compressor.

- f Please observe the chapter "TIRE SEALANT" on Page 317.

- f Select SEALING SET with the rocker switch.

- f Press RESET switch.
The display automatically returns to the TIRE PRESSURE menu (filling information).

- f Inflate tires according to the displayed pressure differences.

A warning appears on the multi-purpose display if the speed limit of 50 mph (80 km/h) is exceeded.

SPARE WHEEL OR SEALING SET OPERATION appears each time the ignition is switched on.

- f Please observe the chapter "MESSAGE "SPARE WHEEL OR SEALING SET OPERATION"" on Page 113.



Load

MAIN MENU > TIRE PRESSURE > SETTINGS > LOAD

The tire pressure must be adjusted according to the vehicle load.

- f Please observe the chapter "TIRE PRESSURES, COLD" on Page 385.
- Partial load
up to 3 people and 46 lbs (21 kg) of luggage
- Full load
more than 3 people and 46 lbs (21 kg) of luggage

Selecting load

- f Select type of load with the rocker switch.
- f Press RESET switch. The set load status is shown.

Deviations from the required pressure are shown in the menu TIRE PRESSURE > SETTINGS (filling information).

- f Correct the pressure.



System

MAIN MENU > TIRE PRESSURE > SETTINGS > SYSTEM

Tire pressure monitoring can be switched on or off in the SYSTEM menu.

If tire pressure monitoring is switched off, tire pressures and warnings are not shown. Tire pressure information is not available on the tire pressure monitoring screen either.

Switching on tire pressure monitoring

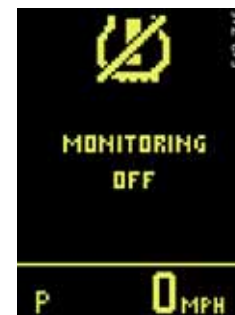
- f Select ON with the rocker switch.
- f Press RESET switch.

The display automatically returns to the menu TIRE PRESSURE > SETTINGS.

- f Check whether the settings in the menu agree with the tires mounted on the vehicle. Correct any incorrect settings before driving the vehicle.
- f Select the tire type **and** tire size in the menu MAIN MENU > TIRE PRESSURE > SETTINGS. The system will re-learn the wheels only if the tire type **and** tire size have been selected.

Switching off tire pressure monitoring

- f Select OFF with the rocker switch.
- f Press RESET switch. The message MONITORING OFF is displayed for 10 seconds. The menu then returns to the basic screen.



"Monitoring off" message

If tire pressure monitoring is deactivated, the message MONITORING OFF appears each time the ignition is switched on.

- f The message is displayed for 10 seconds **or**
- f Press RESET switch.

Tire pressure warnings and messages

The tire pressure monitoring warns about loss in pressure in two stages, depending on the amount of pressure loss:

Stage 1 – Tire pressure too low message
(3 to 6 psi (0.2 to 0.4 bar) loss in pressure)

Stage 2 – Flat tire warning
(loss in pressure as of 6 psi (0.4 bar))



Warning!

Risk of accident. Tire damage may impair road safety.

- f Stop the vehicle in a suitable place. Check the tires for signs of damage and change them if necessary.

Example: If the tire pressure display shows „- 3 psi“, you must increase the tire pressure by 3 psi.

Tires lose air over time without a tire defect being present. The tire pressure monitoring will then issue a corresponding message or warning.

- f Correct the tire pressure.



Message indicating tire pressure loss

This message indicates a pressure loss of between 3 and 6 psi (0.2 and 0.4 bar) if the wheel positions have not been identified.

This message appears when the vehicle is stationary and the ignition is switched on again.

- f The message is displayed for 10 seconds **or**
- f Press RESET switch.

Note on operation

- f Correct the tire pressure at the next opportunity.



Message indicating tire pressure loss for a wheel

The system has identified the wheel positions. The deviation from the required pressure is displayed for the corresponding wheel.

This message indicates a pressure loss of between 3 and 6 psi (0.2 and 0.4 bar).

This message appears when the vehicle is stationary and the ignition is switched on again.

- f The message is displayed for 10 seconds **or**
- f Press RESET switch.

Note on operation

- f Correct the tire pressure at the next opportunity.



Message indicating a flat tire while the system is learning

This warning message indicates a flat tire with a pressure loss of at least 6 psi (0.4 bar). The system has not identified the wheel positions yet; the tire pressures are not displayed.

This warning cannot be acknowledged.

- f Stop the vehicle in a suitable place. Check the tires for signs of damage and change them if necessary.

When the vehicle is stationary, the screen changes to SELECTION AFTER WARNING.

- f Please observe the chapter "SELECTION AFTER WARNING" on Page 112.



Message indicating a flat tire after the learning phase has been completed

This warning message indicates a flat tire with a pressure loss of at least 6 psi (0.4 bar). The system has identified the wheel positions. The deviation from the required pressure is displayed for the corresponding wheel.

This warning cannot be acknowledged.

- f Stop the vehicle in a suitable place. Check the tires for signs of damage and change them if necessary.

When the vehicle is stationary, the screen changes to SELECTION AFTER WARNING.

- f Please observe the chapter "SELECTION AFTER WARNING" on Page 112.



Selection after warning

When the vehicle is stationary after a tire pressure warning, the screen changes to SELECTION AFTER WARNING.

- f In the menu, select the task performed.

Adding air

1. Inflate the tire.

For vehicles without air suspension: Please observe the chapter "REDUCING FILLING PRESSURE ON VEHICLES WITHOUT AIR SUSPENSION" on Page 328.

For vehicles with air suspension:
Please observe the chapter "REDUCING TIRE PRESSURE ON VEHICLES WITH AIR SUSPENSION" on Page 330.

2. After inflating the wheel in question, select ADD AIR.
The display returns to the basic screen after acknowledgement.

Wheel change

1. Change wheel.
2. After changing a wheel, select menu item WHEEL CHANGE.
The display returns to the SPARE WHEEL menu after acknowledgement.
3. Select spare wheel type.
Please observe the chapter "SPARE WHEEL" on Page 106.

Sealing set

1. Remedy the tire damage with a tire sealant.
Please observe the chapter "TIRE SEALANT" on Page 317.
2. After filling in the flat with the tire sealant, select menu item SEALING SET.
Please observe the chapter "TIRE SEALANT/ SEALING SET" on Page 107.

The display returns to the basic screen after selecting SEALING SET.

A warning appears on the multi-purpose display if the speed limit of 50 mph (80 km/h) is exceeded.

Note on operation

If you make a selection without performing the action described in the selection, the message CAUTION – FLAT TIRE – CHECK TIRES will appear again.

- f Check the tires for signs of damage and fill or change them if necessary.



Warning “When vehicle stops: Hit selection”

If you drive off after changing a wheel or inflating the tires and neglect to make a selection in the screen SELECTION AFTER WARNING, the following message will appear: WHEN VEHICLE STOPS: HIT SELECTION

- f The next time you stop the vehicle, perform the settings in the “Selection after warning”.

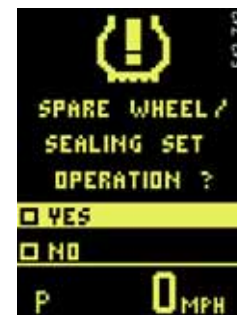


Wheel change message

The WHEEL CHANGE? CHECK SETTINGS message appears after a wheel change, if the tire type and tire size of the new tires have not been set in the tire PRESSURE > SETTINGS menu.

When the vehicle is stationary, the display changes to SELECTION AFTER WARNING.

- f Please observe the chapter “SELECTION AFTER WARNING” on Page 112.
- f Select WHEEL CHANGE. The menu automatically changes to TIRE TYPE.
- f Select the appropriate tire type **and** tire size. Only if the tire type **and** size are selected will the tire pressure monitoring re-learn the tires.



Message “Spare wheel or sealing set operation”

The message SPARE WHEEL OR SEALING SET OPERATION? appears after switching on the ignition if a spare wheel type (spare wheel, collapsible spare wheel, or sealing set) was set.

- f Select YES or NO with the rocker switch.
- f Press RESET switch.

Yes:

- In case of sealing-set operation, the menu changes directly to the basic screen. All settings are retained.
- If the vehicle is operated with a collapsible spare wheel or spare wheel, the warning message "SYSTEM NOT ACTIVE, WORKSHOP" is initially displayed for 10 seconds. The system then returns to the basic screen.

No:

The display automatically returns to the menu TIRE PRESSURE > SETTINGS.

- f Set the mounted tire set with tire type **and** tire size. The system will re-learn the tires.

No monitoring

In the event of faults the tire pressure monitoring cannot monitor the tire pressure. The warning light on the instrument panel and a message on the multi-purpose display light up.

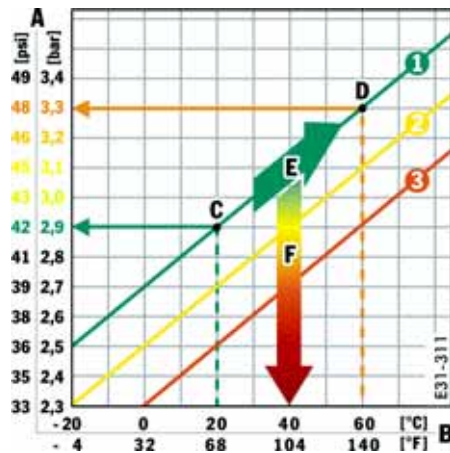
Monitoring is not active when:

- the tire pressure monitoring is faulty,
 - wheel transmitters for the tire pressure monitoring are not present,
 - temporarily after changing a wheel,
 - has detected too many wheel transmitters,
 - there is external interference by other radio sources, e.g., wireless headphones,
 - tire temperatures are too high.
- f Please observe the chapter "WARNING LIGHTS AND WARNING MESSAGES" on Page 124.



Tire pressure monitoring warning light

- f All warnings and messages in the tire pressure monitoring are also indicated by the warning light in the instrument panel. The warning light goes out as soon as all faults are remedied.



Pressure increase as the result of temperature increase

- A - Tire pressure
- B - Tire temperature
- C - Tire pressure for cold tires
- D - Tire pressure for hot tires
- E - Pressure increase as the result of temperature increase
- F - Pressure drop in faulty/leaking tires
- 1 - Required-pressure line
- 2 - Notification of tire-pressure loss (from -3 to -6 psi/-0.2 bar to -0.4 bar)
- 3 - Flat-tire warning (as of -6 psi/-0.4 bar)

In accordance with physical principles, the air pressure changes as the temperature changes. The tire pressure increases or decreases by around 1.5 psi (0.1 bar) for a temperature change of 50°F (10°C).

Tire pressure specifications

The tire pressure must match the prescribed value (required pressure).

You can find information on the tire pressure for cold tires (68°F/20°C):

- In the TIRE PRESSURE menu (filling information):
As a deviation from the required pressure for each wheel if the system has learned the values.
- In the TIRE PRESSURE menu (filling information):
As a required pressure for each axle if the system has not learned the values.
- On the tire pressure plate in the front left door aperture for each wheel.
- In this Owner's Manual:
Please observe the chapter "TIRE PRES-SURES, COLD" on Page 385.

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.

f Please observe the chapter "TIRES/WHEELS" on Page 297.



Settings

MAIN MENU > SETTINGS

The following functions can be selected in the main menu SETTINGS:

- Clock
- Compass
- Comfort (only with vehicle stationary)
- Lights (only with vehicle stationary)
- Units (only with vehicle stationary)
- Language (only with vehicle stationary)
- Factory settings (only with vehicle stationary)



Clock

MAIN MENU > SETTINGS > CLOCK

To set the clock:

- f Select time with the rocker switch.
- f Press RESET switch.
- f Select the hours or minutes display with the rocker switch.
- f Press RESET switch.
- f Set the time in increments of 1 h or 1 min.
- f Press RESET switch.



To select 12 h mode:

- f Select 12 h MODE with the rocker switch.
- f Press RESET switch.

Note on operation

There is also a button on the instrument panel to call the CLOCK menu.

- f Please observe the chapter "CLOCK" on Page 89.

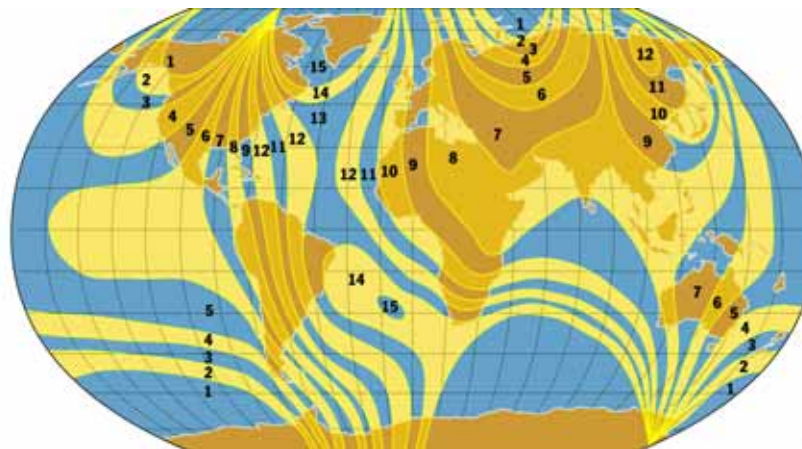


Compass

MAIN MENU > SETTINGS > COMPASS

If you drive your vehicle across the magnetic field zone set on the multi-purpose display, you must enter your current zone in the COMPASS menu (see illustration).

- f Enter the corresponding zone in increments of 1 using the rocker switch.
- f Press RESET switch.



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Calibrating

In rare cases, external disturbances may necessitate calibration of the compass. The warning message "CAL." appears on the multi-purpose display.

- f To calibrate the compass, follow the displayed instructions DRIVE IN A FULL CIRCLE.

The system automatically returns to the MAIN MENU after successful calibration.



Comfort

MAIN MENU > SETTINGS > COMFORT

The COMFORT menu offers the following submenus:

- Alarm
 - Door opening
 - Mirrors
- f Select the entry with the rocker switch.
- f Press RESET switch.

Note on operation

Comfort settings can be made only when the vehicle is stationary.



Alarm

MAIN MENU > SETTINGS > COMFORT > ALARM

The passenger compartment monitoring system and the inclination sensor (protection against towing) can be temporarily deactivated in the ALARM menu.

When locked again, the ultrasound passenger compartment monitoring system and inclination sensor are activated once more.

- f Please observe the chapter "TEMPORARILY DEACTIVATING PASSENGER COMPARTMENT MONITORING SYSTEM AND INCLINATION SENSOR" on Page 29.



Passenger compartment

The alarm is triggered if motion is detected in the interior with the doors closed (e.g. if a window is broken in a theft).

- f Select INTERIOR with the rocker switch.
- f Press RESET switch.
This activates/deactivates passenger compartment monitoring.

Inclination

The alarm is triggered if the vehicle is raised markedly at one end with the doors closed (e.g. theft attempt by towing).

- f Select ANGLE with the rocker switch.
- f Press RESET switch.
This activates/deactivates the inclination sensor.



Door opening

MAIN MENU > SETTINGS > COMFORT > DOOR OPENING

You can set different variants of locking and unlocking the doors and the rear lid as well as the check-back signal when locking and unlocking the vehicle and save them on the respective remote control.

Therefore:

1. Select the desired setting with the rocker switch.
2. Press RESET switch.
3. Switch ignition off.
4. Close the driver's door.
5. Lock the vehicle with the radio remote control (button **2**). The settings are now stored on this radio remote control.



Doors

MAIN MENU > SETTINGS > COMFORT > DOOR OPENING > DOORS

Door unlocking can be set on an individual basis.

Single door

Only the driver's door is unlocked.
The door of the access side is unlocked in vehicles equipped with Porsche Entry & Drive.

Vehicle side

Both doors on the driver's side are unlocked.
The doors on the access side are unlocked in vehicles equipped with Porsche Entry & Drive.

All

All doors are unlocked.

Note on operation

If the unlocking button (button **1**) of the remote control is pressed a second time within 2 seconds, all vehicle doors are unlocked, independent of the affected setting.

Tailgate

When the TAILGATE function is active, rear access (rear lid, rear window and spare wheel bracket) is included in the central locking system.

Access is possible when the vehicle is stationary and unlocked.

At speeds higher than 4 mph (6 km/h), release is blocked until a door is opened with the vehicle stationary.

When the TAILGATE function is deactivated, access is only possible using button **3** of the remote control.

**AUTO LOCK (automatic door locking) and
AUTO UNLOCK (automatic door unlocking)**

You can set diverse variants of automatic door locking (AUTO LOCK) and automatic door unlocking (AUTO UNLOCK).

Note on operation

Doors locked using AUTOLOCK can **always** be opened by pulling the inner door handle **twice** independent of the setting for door unlocking.

**Option 1:
AUTO LOCK off and AUTO UNLOCK off**

The doors do not lock and unlock automatically.

**Option 2:
AUTO LOCK on and AUTO UNLOCK off**

Doors lock automatically when a speed of approx. 6 km/h (4 mph) is exceeded.

The automatically locked doors can be opened by pulling the inner door handle **twice**.

**Option 3:
AUTO LOCK on and AUTO UNLOCK on**

Doors lock automatically when a speed of approx. 6 km/h (4 mph) is exceeded.

On vehicles **without** Porsche Entry & Drive, the doors are unlocked automatically when the ignition key is withdrawn.

On vehicles **with** Porsche Entry & Drive, the doors are unlocked when the ignition is switched off twice.

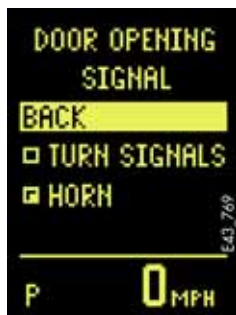
**Option 4:
AUTO LOCK off and AUTO UNLOCK on**

The doors do not lock automatically.

If the doors are locked with the central locking system button:

On vehicles **without** Porsche Entry & Drive, the doors are unlocked automatically when the ignition key is withdrawn.

On vehicles **with** Porsche Entry & Drive, the doors are unlocked when the ignition is switched off twice.



Signal

MAIN MENU > SETTINGS > COMFORT > DOOR OPENING > SIGNAL

If the function TURN SIGNALS is active, opening of the door is confirmed by the emergency flashers flashing.

- f Select TURN SIGNALS with the rocker switch.
- f Press RESET switch.

If the function HORN is active, opening of the door is confirmed by an acoustic signal.

- f Select HORN with the rocker switch.
- f Press RESET switch.



Mirrors

MAIN MENU > SETTINGS > COMFORT > MIRRORS

When this function is active, the mirrors move simultaneously and in the same direction.

- f Select SYNCHRONISING with the rocker switch.
- f Press RESET switch.



Lighting

MAIN MENU > SETTINGS > LIGHTS

You can set the duration the lights remain on after the vehicle is locked.

- f Select OFF DELAY with the rocker switch.
- f Press RESET switch. The set coming home time is active.
- f Select time with the rocker switch and press the RESET switch.
- f You can use the rocker switch to set an off-delay time (Coming Home function) ranging from 15 to 90 seconds. The time is set in increments of 15 seconds.
- f Press RESET switch.



Units

MAIN MENU > SETTINGS > UNITS

The UNITS menu offers the following options:

- Speedometer
Select unit for speedometer:
mph, km/h
- Consumption
Select unit for fuel consumption:
l/100km, mpg (USA), mpg (UK), km/l
- Temperature
Select unit for temperature: °F, °C
- Tire pressure
Select unit for pressure: psi, bar

- f Select the desired item with the rocker switch and the RESET switch.
- f Activate or deactivate the desired units with the RESET switch.



Language

MAIN MENU > SETTINGS > LANGUAGE

- f Select language with the rocker switch.
- f Press RESET switch.

Note on operation

Changing the language will affect the entire multi-purpose display.



Factory settings

MAIN MENU > SETTINGS > FACTORY SETTINGS

All settings made (Clock, Comfort, Lights, Units, Language) can be reset to the factory settings.



Resetting

f Select RESET with the rocker switch.

f Press RESET switch.

Note










This will delete all personal settings selected up to this point.


















Warning Lights and Warning Messages


















If a warning message appears, always refer to the corresponding chapters in this Owner's Manual.


















Warning messages are issued only if all measurement preconditions are met.















Therefore, check all fluid levels regularly – in particular, always check the engine oil level after refuelling.





















Instrument panel	Multi-purpose display	Text display	Meaning/measures
		Steering faulty	Steering lock engaged. Have the fault remedied at an authorized Porsche dealer.
		Ignition lock faulty	Do not continue driving. Have the fault remedied at an authorized Porsche dealer.
		System fault – Workshop	Have the fault remedied at an authorized Porsche dealer.
		Key not recognised in vehicle	Make sure that you have the remote control with you.
		Turn ignition key to left for 2 seconds	Engage the steering lock.
		Key: replace battery	Replace the remote-control battery.
		Move the steering wheel	Turn the steering wheel so that the steering wheel lock can engage/disengage.
		Key not found	Make sure that you have the remote control with you.
		Switch selector lever to position "P".	Tiptronic S: The vehicle could roll away. The ignition key can be withdrawn only in selector lever position P .
		Apply the brake	Apply the brake when starting.
		Move selector lever to position "P" or "N"	Tiptronic S: The vehicle can be started only in position P or N .
		Applying the clutch	Manual transmission: Apply the clutch when starting.
















Instrument panel	Multi-purpose display	Text display	Meaning/measures
		Immobiliser active	Have the fault remedied at an authorized Porsche dealer.
		Check left cornering light	Check bulb.
		Check right cornering light	Check bulb.
		Check dipped beam	Check bulb.
		Check trailer lights	Check bulb.
		Check direction indicators	Check turn signal bulb.
		Check brake lights	Check bulb.
		Check high beam	Check bulb.
		Check number plate light	Check bulb.
		Check fog lights	Check bulb.
		Check reversing lights	Check bulb.
		Check tail lights	Check bulb.
		Check front side lights	Check bulb.
		Check headlight beam adjustment	Have the fault remedied at an authorized Porsche dealer.
		Daytime driving lights off	Daytime driving lights switch off when the engine is shut off. Switch on lights if necessary.
		Airbag faulty	Have the fault remedied at an authorized Porsche dealer.








Instrument panel	Multi-purpose display	Text display	Meaning/measures
		Passenger airbag switched on	Advanced Airbag - displays when the passenger's airbag switches on or displays for approx. 10 seconds with the passenger's airbag switched on after switching on the ignition
		Passenger's airbag deactivated	Advanced Airbag - displays when the passenger's airbag deactivates or displays for approx. 10 seconds with the passenger's airbag deactivated after switching on the ignition
		Checking passenger's seat settings	Weight sensing is impaired on the passenger's seat (Advanced Airbag). Correct the seating position, set the backrest upright, do not support weight on the armrests, or lift on the handles.
		Safety belt	Fasten safety belt.
		Warning – Flat tire – Check tires	Stop in a suitable place and check the tires. Change wheel if necessary.
		Check spare wheel – Required pressure: 50 psi/3.4 bar	Appears about every 6 months. Check if the pressure of the mounted spare wheel matches the required pressure, as it is not monitored electronically.
		Tire pressure too low – Add air	System detects a pressure loss of at least 2.9 psi. (0.2 bar). Correct tire pressure at the next opportunity.
		Collapsible spare wheel/sealing set max. 50 mph (80 km/h)	Observe maximum permitted speed.
		Collapsible spare wheel 51 psi/3.5 bar max. 50 mph (80 km/h)	Information on driving with a collapsible spare wheel. Observe maximum speed of max 50 mph or 80 km/h and required pressure of 51 psi or 3.5 bar.
		System not active	Indication when spare wheel or collapsible spare wheel is used or tire pressure monitoring is faulty. Consult a qualified specialist repair shop. Select new set of wheels in the Tire pressure menu after changing the wheels.

Instrument panel	Multi-purpose display	Text display	Meaning/measures
		System not active – Brief disturbance	External interference (e.g., wireless headphones) or excessive temperature (over 248 °F/120 °C) at the wheel transmitters. Tire pressure monitoring will reactivate itself.
		System not active – Too many wheel transmitters	Tire pressure monitoring detects more than 4 wheel transmitters (winter wheels in the luggage compartment, for example). System will reactivate itself.
		No monitoring – System learning	After the tire type and size are selected in the tire pressure menu, the system re-learns the tires.
		Wheel change? Check settings	Display after a wheel change without changed settings in the tire pressure menu. Select tire type and size.
		When vehicle stops: Hit selection	Displayed after a flat tire if the system was not informed about the work performed. Make a selection on the multi-purpose display when the vehicle is stationary.
		Monitoring off	Tire pressure monitoring was intentionally deactivated. Tire pressure monitoring can be switched on or off on the multi-purpose display.
		Engine temperature too high	Switch engine off and let it cool. Check coolant level. Add coolant if necessary.
		Check coolant level	Switch engine off and let it cool. Check coolant level. Add coolant if necessary.
		Battery/generator warning	Stop in a suitable place and switch engine off. Do not continue driving. Have the fault remedied at an authorized Porsche dealer.
		Starting engine	The battery discharges if the engine is not running and loads are switched on. Start the vehicle or switch the loads off.
		Electrics – Loads – Switch-off	Vehicle electrical system is overloaded. Certain loads (e.g. heated rear window, seat heating) will be switched off.

Instrument panel	Multi-purpose display	Text display	Meaning/measures
		Please refuel	
		Topping up washer fluid	
		Oil level monitoring – Failure – Workshop	Have the fault remedied at an authorized Porsche dealer.
		Checking the oil level	
		Oil pressure too low	Immediately stop in a suitable place and switch engine off. Do not continue driving. Check engine oil level. Add oil if necessary. Do not continue driving if the warning light comes on even when the oil level is correct. Have the fault remedied at an authorized Porsche dealer.
		Service in 1864 mls (3000 km)	Service indicator Bring the vehicle in for service no later than after the distance shown has been covered. However, it is the intervals in the „Maintenance“ booklet that are decisive.
		Service now	Service indicator Have your vehicle serviced at an authorized Porsche dealer.
		Brake pads – Workshop	Have the brake pads replaced at an authorized Porsche dealer without delay.
		Warning – Brake circuit division	Stop immediately in a suitable place. Do not continue driving. Have the fault remedied at an authorized Porsche dealer.
ABS		ABS failure – Workshop	Drive carefully. Have the fault remedied at an authorized Porsche dealer.
		PSM failure – Workshop	Drive carefully. Have the fault remedied at an authorized Porsche dealer.
		Warning – Brake fluid level	Stop immediately in a suitable place. Do not continue driving. Have the fault remedied at an authorized Porsche dealer.

Instrument panel	Multi-purpose display	Text display	Meaning/measures
		Parking brake	Parking brake not released.
		PSM on	Porsche Stability Management was switched on.
		PSM off	Porsche Stability Management was switched off.
		PHC failure	The Porsche Drive-Off Assistant (manual transmission) and the Engine Braking Support (downhill assistance) are not available.
		Brake booster faulty	Greater braking pedal force necessary. Drive carefully to the nearest authorized Porsche dealer.
		Sport shock absorber	Current setting of Porsche Active Suspension Management.
		Normal shock absorber	Current setting of Porsche Active Suspension Management.
		Comfort shock absorber	Current setting of Porsche Active Suspension Management.
		Warning – Air suspension	Stop in a suitable place. Do not continue driving. Have the fault remedied at an authorized Porsche dealer.
		Air suspension faulty – Workshop	Drive carefully to the nearest authorized Porsche dealer.
		Spare wheel filling	Collapsible spare wheel being filled with level-control compressor. Do not drive off!
		Control off	Level control has been switched off (to jack up the vehicle).
		Not permissible	The prerequisites for setting the desired level have not been met.
		Pressure accumulator charging	Level control temporarily unavailable.
		All-wheel drive system faulty	Have the fault remedied at an authorized Porsche dealer.

Instrument panel	Multi-purpose display	Text display	Meaning/measures
		Shifting not possible, Speed too high	Tiptronic S: When changing between Low Range and High Range, the limit speed (Low Range program) must not be exceeded.
		Changing only possible in Neutral	Tiptronic S: The selector lever must be in position N when changing between Low Range and High Range.
		Possible only in neutral with brake applied	Manual transmission: The vehicle must be stationary, the brakes must be applied, and the gearshift lever must be in the Neutral position when changing between Low Range and High Range.
		Warning – Parking lock! Operate footbrake.	Do not continue driving. Apply the parking brake. Have the fault remedied at an authorized Porsche dealer.
		Warning – off-road anti-roll bar	The anti-roll bars cannot be engaged; the system is faulty. Drive carefully to the nearest workshop. Have the fault remedied at an authorized Porsche dealer as soon as possible.
		Off-road anti-roll bar faulty	The anti-roll bars cannot be disengaged. Have the fault remedied at an authorized Porsche dealer.
		Off road anti-roll bar disengaged, max. 30 mph (50 km/h)	The anti-roll bars are disengaged. Speeds above 30 mph (50 km/h) are impermissible.
		Not permissible	The prerequisites (speed and lateral acceleration) for disengaging the anti-roll bars have not been met.
		Only possible with reduction	Disengagement of the anti-roll bars is only possible with Low Range engaged.
			Spare wheel not locked Lock spare wheel bracket properly.
			Driver's door open All unlocked doors and lids are displayed when the vehicle exceeds 2 mph (3 km/h).

Instrument panel	Multi-purpose display	Text display	Meaning/measures
			Passenger's door open All unlocked doors and lids are displayed when the vehicle exceeds 2 mph (3 km/h).
			Rear left door open All unlocked doors and lids are displayed when the vehicle exceeds 2 mph (3 km/h).
			Rear right door open All unlocked doors and lids are displayed when the vehicle exceeds 2 mph (3 km/h).
			Hood open All unlocked doors and lids are displayed when the vehicle exceeds 2 mph (3 km/h).
			Rear lid open All unlocked doors and lids are displayed when the vehicle exceeds 2 mph (3 km/h).
			Rear window open All unlocked doors and lids are displayed when the vehicle exceeds 2 mph (3 km/h).
		System fault – Workshop	Several systems may have failed. Have the fault remedied by a qualified specialist workshop.



Light switch **with** driving light assistant

☀️ Light Switch

- Light is switched off.

auto Automatic driving light assistant

☞☞ Side lights

Lincence plate light, instrument illumination

☞☞ Low beam, high beam

Only when the ignition is switched on



Light switch **without** driving light assistant

☞ Fog lights

Only when side lights or low beam are switched on:

Pull switch to first click.
Indicator light lights up.

☞ Rear fog light

Pull switch to second click.
Indicator light lights up.

Note on operation

If the ignition key is withdrawn and the door is opened while the lights (not the parking light) are on, an acoustic signal (gong) warns of possible battery discharge.

In some countries, differences are possible due to provisions of law.

Automatic driving light assistant

The driving light assistant is a comfort function. Your Porsche's driving light (low beam) is switched on and off automatically, irrespective of the ambient brightness.

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 does not therefore absolve the driver of responsibility for the correct operation of the driving light.

The low beam is switched on automatically in the following situations:

- Dusk
- Darkness
- Travelling through tunnels
- Rain (in conjunction with the rain sensor)
- Highway driving

Note on operation

Fog is not recognised.

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



Warning!

Risk of accident due to driving without lights.

- f Always carefully monitor the automatic driving light control.

Off delay and door-surrounding lighting

Off delay and door-surrounding lighting are active when the automatic driving light assistant is switched on.

- f Please observe the chapter "DOOR-SURROUNDING LIGHTING" on Page 168.
- f Please observe the chapter "COMING HOME FUNCTION (AUTO SHUT OFF DELAY)" on Page 168.

Highway function

The light is switched on at speeds of over 87 mph (140 km/h). If you are travelling slower than 40 mph (65 km/h), the driving light is switched off after a delay of approx. 2 minutes, if the external lighting conditions permit.

Rain function

The driving light is switched on after five seconds of continuous wiper operation.

The driving light is switched off approx. 4 minutes after the wipers have stopped.

Bi-Xenon main headlights with dynamically controlled cornering light

The Bi-Xenon main headlights are equipped with an additional light in vehicles with a cornering light. As a result of its particular positioning, the additional light provides significantly better lane lighting to the left and right of the main light beam.



A - Instrument lighting knob



Instrument Illumination

When the light is switched on, the brightness of the instrument illumination can be adjusted by turning thumb wheel **A**.

Automatic Headlight Beam Adjustment

Vehicles with Bi-Xenon headlights feature automatic headlight beam adjustment.

When the ignition and the low beam are switched on, the level of the headlight beam automatically changes in accordance with the vehicle load. The level of the headlight beam is automatically kept constant during acceleration and braking.

Checking operation

1. Switch the low beam on.
2. Switch ignition on.
The light beam first dips all the way down and is then adapted to the vehicle load. If this test item is not met, the headlight beam adjustment system must be checked by an authorized Porsche dealer.



Turn signal/High Beam/Headlight Flasher Stalk

Turn signals, low beam and high beam are ready for operation when the ignition is on.

- 1 - Turn signal light, left
- 2 - Turn signal light, right
- Move the stalk to the upper or lower pressure point - turn signals flash three times
- 3 - High beam (push forward)
- 4 - Headlight flasher (pull backward)
- Lever in center position - low beam (when the light is switched on)

Note on operation

When the high beam is switched on or the headlight flasher is operated, the blue indicator light on the speedometer is lit.

Parking light

The parking light can only be switched on when the ignition is switched off.

- f Move the lever up or down to switch on the right or left parking light.



Emergency flasher

The emergency flasher is ready for use regardless of the ignition lock position.

Switching on and off

- f Press button **A** to switch on.
Press button **A** again to switch off.

All turn signal lights and indicator lights on the dashboard flash when the switch is operated.

Danger!

Risk of an accident.

- f 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.
- f Do not remain in the car. Someone approaching from the rear may not realize your vehicle is stopped and cause a collision.

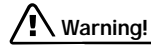
Danger of fire.

- f 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.

Hot engine compartment components can burn skin on contact.

- f Before working on any part in the engine compartment, turn the engine off and let it cool down sufficiently.

Windshield Wiper/Washer Stalk



Warning!

Danger of injury when the windshield wipers operate unintentionally.

Risk of damage to the engine compartment lid, windshield and wiper system.

- f Only wipe the windshield when sufficiently wet, otherwise it could be scratched.
- f Loosen frozen wiper blades before driving off.
- f Do not operate headlight washer when it is frozen.
- f Always switch off windshield wipers in car wash to prevent them wiping unintentionally (rain sensor operation).
- f Do not operate headlight washer in car washes.
- f Always switch off windshield wipers before cleaning the windshield to avoid unintentional operation (rain sensor operation).
- f Always hold the wiper arm securely when replacing the wiper blade.
- f Always switch the windscreen wipers off (position **0**) before opening the engine compartment lid. If the wiper arms are not in position **0**, they will automatically move to this position when the engine compartment lid is opened. This will happen even if the ignition is off. The wiper arms remain in this position until the lid is closed and the wiper system is switched off and then on again.



0 – Windshield wipers off

1 – Front windshield wiper – rain sensor operation

- f Move wiper stalk upwards to the first click.

Notes on operation

The amount of precipitation which has settled on the windshield is measured. Wiper speed is automatically adjusted accordingly.

f f f



The rain sensor remains switched off if the wiper lever is already in position **1** when the ignition is switched on.

To switch the rain sensor on again:

- f Move wiper stalk to position **0** and then to position **1** – switching on is confirmed by one wipe of the windscreen – **or**
- f Operate windscreen washer system **5** – switching on is confirmed by three wipes of the windscreen – **or**
- f Change the sensitivity of the rain sensor with four-stage switch **A**.

Changing the sensitivity of the rain sensor

Sensitivity can be set with switch **A** in 4 stages:

- f Adjust switch **A** upwards – high sensitivity.
The setting is confirmed by one wipe of the windshield.
- f Adjust switch **A** downwards – low sensitivity.

2 – Front windshield wiper – slow

- f Move wiper stalk upwards to the second click.

3 – Front windshield wiper – fast

- f Move wiper stalk upwards to the third click.

At speeds of less than approx. ca. 2.5 mph (4 km/h), rain sensor operation mode is automatically activated if the windshield wiper is switched on. If you exceed a speed of approx. 5 mph (8 km/h), the system switches to the pre-selected wiper level.

4 – Front windshield wiper – one-touch operation

- f Move wiper stalk downwards. The front windshield wipers go through one wipe cycle.

5 – Front windshield wipers and washer system

- f Pull wiper stalk towards the steering wheel. The washer system sprays and wipes while the lever is pulled towards the steering wheel. When the wiper lever is released, a few wipes are executed.

Headlight washer (on vehicles with Bi-Xenon headlights):

The washer sprays only while low beam or high beam is switched on.

To activate the headlight washer system, the wiper lever must be pulled for a longer period of time.

The headlight washer can be re-activated at the earliest after five washing cycles.

The spray duration is limited.

Maintenance note

- f If heavily soiled, repeat wash.
- f Persistent dirt (e.g. insect remains) should be regularly removed.
Please observe the chapter “CAR CARE INSTRUCTIONS” on Page 284.

The **front windscreen washer nozzles** are heated when the ignition is on, as a precaution against freezing. However, this does not replace the use of antifreeze.

6 – Rear window wiper – intermittent operation

- f Move wiper stalk forwards to the first click. The rear window wiper wipes at preset intervals.

7 – Rear window wiper – one-touch operation

- f Push wiper stalk forward briefly. The washer system sprays and the rear window wiper goes through three wipe cycles.

8 – Rear window wiper and washer system

- f Push wiper stalk forwards as far as it will go. The washer system sprays and wipes while the lever is pulled away from the steering wheel. When the wiper lever is released, a few drying wipes are executed.

Maintenance note

If the wiper blades rub or squeak, this can be as a result of the following:

- If the vehicle is washed in an automatic car wash, residues may adhere to the windshield. These residues can only be removed using a special cleaning solution. Please contact your authorized Porsche dealer for further information.
 - The wiper blades may be damaged or worn.
- f Replace the damaged wiper blades immediately.



A - SET (Store speed)

1 - RESUME - Switch on/resume cruise control readiness (pull toward driver)

2 - OFF - Interrupt (push away from driver)

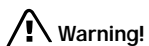
3 - + SPEED - Accelerate (raise clockwise)

4 - - SPEED - Decelerate (lower counter-clockwise)

Cruise Control

Cruise control maintains any selected speed between 25 and 124 mph (40 and 200 km/h) without your having to use the accelerator.

The cruise control is operated with the operating lever on the steering wheel.



Warning!

Risk of accident while using cruise control in heavy traffic and consequent personal injury, on twisting roads or under unfavorable road conditions (e.g. wintry or wet conditions, varying road surfaces).

f Do not use the cruise control under such conditions.

f Observe all local and national speed limits.

Risk of an accident, personal injury and loss of control.

f Do not reach through the steering-wheel spokes while driving.

Switching cruise control readiness on

f Pull back the operating lever to position **1** until it clicks audibly into place.



Cruise control readiness

The green indicator light on the tachometer now indicates readiness.

Maintaining and storing speed

f Bring the car to the desired speed with the accelerator.

f Press button **A**.
The desired speed has now been stored.

Accelerating (e.g. to overtake)

Option 1

- f Increase the speed as usual with the accelerator.
When you ease off the accelerator, the previously stored value is set again.

Option 2

- f Push operating lever upwards into position **3** until the desired speed is reached.
The speed reached is maintained and stored when the operating lever is released.

Option 3

- f Push operating lever slightly upwards into position **3** (a maximum of 10 times).
The speed is increased by 1 mph (2 km/h).

Note on operation

Cruise control operation is automatically interrupted if the speed is increased by more than approx. 16 mph (25 km/h) for longer than 20 seconds.

Decelerating

Option 1

- f Push operating lever down into position **4** until the desired speed is reached.
The speed reached is maintained and stored when the operating lever is released.

Option 2

- f Push operating lever slightly downwards into position **4** (a maximum of 10 times).
The speed is reduced by 1 mph (2 km/h).

Interrupting cruise control operation

The speed driven before the interruption remains stored in the memory.

- f Push the operating lever forward to position **2** (it doesn't engage) **or**
- f Operate brake or clutch pedal **or**, on vehicles with Tiptronic S, select position **N**.
- f Please observe the chapter "TIPTRONIC S" on Page 221.

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 the actual vehicle speed falls by approx. 6 mph (10 km/h) below the set vehicle speed for longer than 5 seconds (e.g. upward slopes).
- If Porsche Stability Management (PSM) intervenes for longer than 0.2 seconds.
- If Low Range is switched on.

Resuming the stored speed

- f Pull back the operating lever to position **1**.

Note on operation

The stored speed should only be recalled when traffic conditions and the road surface so permit.

Switching cruise control readiness off

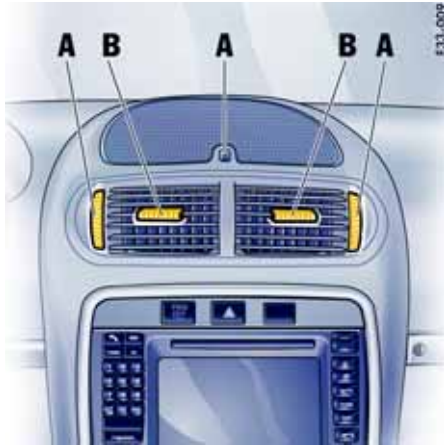
- f Push forward the operating lever to position **2** until it clicks audibly into place.
The memory is cleared and the green readiness light goes out.

When the vehicle is parked and the ignition switched off, the memory is cleared.

Tip on driving

On upward or downward slopes, the set speed cannot always be maintained by cruise control.

- f To obtain sufficient engine braking or a better engine-speed range, therefore, you have to change down to a lower gear.



A - Continuous opening and closing
B - Setting vent direction

Changing air flow direction

- f Swivel vent fins **B** in the desired direction.

Note on operation

Fresh air or conditioned fresh air can be delivered from all vents depending on the air distribution setting.

Fresh-air intake

In order to ensure unhindered air intake:

- f Keep the fresh-air intake between the windshield and the engine compartment lid free from snow, ice and leaves.

Vents

○ Opening vents

- f Rotate thumb wheel **A** upward.

● Closing vents

- f Rotate thumb wheel **A** downward.



Heated Rear Window

The heated rear window is ready for operation when the ignition is on.

Switching on

- f Press button **B**.
Indicator light in 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 again by pressing the switch again.

Switching off

- f Press button **B**.
Indicator light in button goes out.

Cover Flap of the Air-Conditioning Control Panel

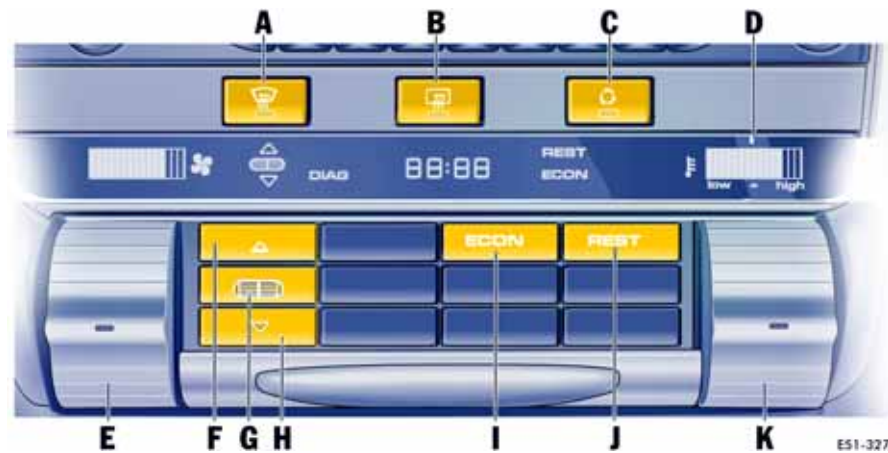
Opening the cover flap

- f Swivel cover flap on the handle (**arrow**) downwards. Other buttons for operating the air-conditioning system are uncovered.

Sensors

To avoid damaging the air-conditioning system:

- f Do not cover the sun sensor on the instrument panel and temperature sensor **E** on the front control panel of the air-conditioning system.



- A - Windscreen defroster
- B - Heated rear window
- C - Recirculated air
- D - Air-conditioning display
- E - Air-quantity button
- F - Air to windscreen
- G - Air to central and side vents
- H - Air to footwell
- I - ECON button (air-conditioning compressor off/on)
- J - REST button (engine residual heat)
- K - Temperature button

Manual Air Conditioning

Air quantity, air distribution, and temperature can be set on the control panel of the manual air conditioning.

This individual adjustment is shown on the air-conditioning display panel.

Note on operation

The air conditioner settings are stored on the respective remote control when switching off the ignition and locking the vehicle. The "Air flow OFF" setting is stored for approx. 60 minutes and the "Recirculated air" setting is stored for approx. 20 minutes.

Display

The air-conditioning display panel shows the following:

- Air quantity,
- Air distribution,
- Selected interior temperature,
- Individual settings,
- Time that is identical to that shown in the instrument panel.



Setting temperature

- f Use button **K** to select the interior temperature to suit personal comfort.
- f Push temperature button up or down.
The selected temperature is shown in a bar display on the display above the button.
If a bar cannot be seen, the air conditioning is running at its maximum setting.
If all bars can be seen, the heating is running at its maximum setting.

Note

- f For maximum cooling, activate recirculated air (button **C**).



Setting air quantity

- f Push button **E** or **K** up or down for air quantity.
The selected air quantity is shown in a bar display on the display above the button.

If the air quantity was reduced so much that "OFF" appears on the display, the outside-air supply is interrupted.



Warning!

Risk of accident due to hampered vision. If the air quantity is "OFF", the windows may mist up.

- f Push button **E** up (to increase air quantity).



Defrost windscreen

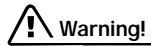
- f Press button **A**.
Indicator light lights up.
The air flows to the windscreen and the front side windows.
The windscreen is demisted or defrosted as quickly as possible.

Ending the function

- f Press button **A** again.



Switching circulating-air mode on



Warning!

Risk of accident due to hampered vision. In circulating-air mode, the windows may mist up.

- f Only select circulating-air mode for short periods.
 - f If windows mist up, end circulating-air mode by pressing the circulating-air button again and selecting the function "Defrost windscreen".
-
- f Press button **C**.
Indicator light in button lights up.
The outside-air supply is interrupted and only the inside air is circulated.



Air to windscreen

- f Press button **F**.
The air flows to the windscreen.



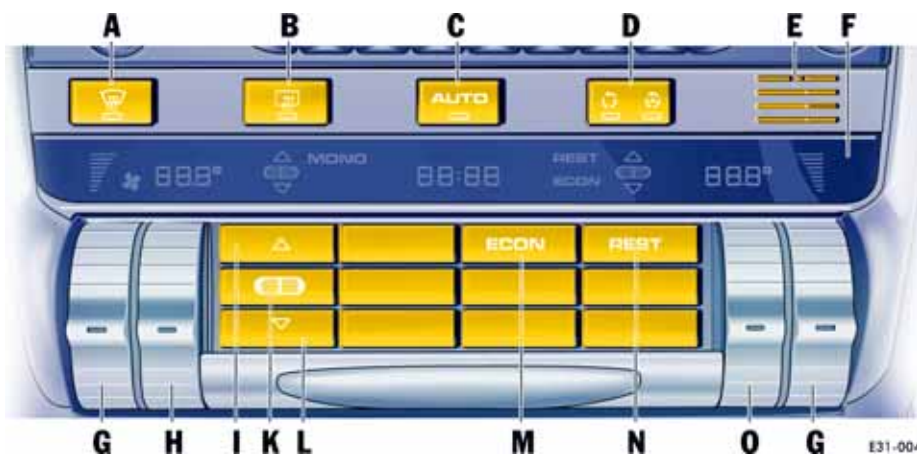
Air to central and side vents

- f Press button **G**.
The air flows from the central and side vents.
Vents must be open.



Air to footwell

- f Press button **H**.
The air flows to the footwell.



Automatically Controlled Two-Zone Air Conditioning

Depending on various factors (e.g. sunlight, air quality), the air-conditioning system controls the preset interior temperature fully automatically.

If necessary, the automatic system can be manually influenced.

This individual adjustment is shown on the air-conditioning display panel.

Note on operation

The air conditioner settings are stored on the respective remote control when switching off the ignition and locking the vehicle. The "Air flow OFF" setting is stored for approx. 60 minutes and the "Recirculated air" setting is stored for approx. 20 minutes.

- A - Windshield defroster
- B - Heated rear window
- C - AUTO button (automatic mode)
- D - Recirculated air, automatic recirculated air
- E - Temperature sensor
- F - Air-conditioning display
- G - Air-quantity button, for the left or right side
- H - Temperature button, left side
- I - Air to windshield
- K - Air to central and side vents
- L - Air to footwell
- M - ECON button (air-conditioning compressor off/on)
- N - REST button (engine residual heat)
- O - Temperature button, right side

Display

The air-conditioning display panel shows the following:

- Air quantity
- Selected interior temperature, left/right
- Individual settings
- Time that is identical to that shown in the instrument panel

Automatic mode

- f Press AUTO button **C**.
Indicator light in button lights up.
Air quantity and distribution are automatically controlled and variations are compensated.

Note on operation

If necessary, the automatic system can be manually influenced.
This manual setting is retained until the appropriate function button is pressed again or the AUTO button is pressed.

Switching MONO function on

The temperature settings for the driver's side can be accepted for the entire vehicle.

- f Press AUTO button **C** for 2 seconds.
The MONO logo appears on the air-conditioning display panel.

Ending MONO function

- f Press AUTO button **C** for 2 seconds **or**
- f Change the settings in the air-conditioned areas.

Setting temperature

To suit personal comfort, the interior temperature can be adjusted between 61°F and 85°F (16°C and 29.5°C).

Recommendation: 72°F (22°C)

- f Push temperature button up or down.
Button **H**: left side of vehicle
Button **O**: right side of vehicle
The selected temperature is shown on the display above the button.

If "LO" or "HI" appears on the display, the system is operating at maximum cooling or heating power. Automatic mode is switched off.

If the preselected temperature is changed, the air quantity blowing out can adjust automatically in automatic mode.

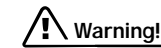
The desired temperature is reached more quickly this way.



Setting air quantity

- f Push button **G** up or down to adjust the air quantity.
The selected air quantity is shown in a bar display on the display above the button.
- f Press AUTO button **C** to return to automatic mode.

If the air quantity was reduced so much that "OFF" appears on the display, the outside-air supply is interrupted.



Warning!

Risk of accident due to impaired vision. If the air quantity is "OFF", the windows may mist up.

- f Only select recirculating-air setting for short periods.
- f If windows mist up, turn off the recirculating-air setting by pressing the circulating-air button briefly and select the function "Defrost windshield".
- f Push button **G** up (to increase air quantity).



Defrosting the windshield

- f Press button **A**.
Indicator light in button lights up.
The air flows to the windshield and the front side windows.
The windshield is demisted or defrosted as quickly as possible.

Ending the function

- f Press button **A** again **or**
Press the AUTO button **C**.



Switching automatic circulating-air mode on

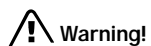
- f Press button **A** once.
Indicator light in button lights up.
Control of the outside-air supply depends on the air quality.

Note

The recommended operating mode is automatic circulating-air mode.



Switching circulating-air mode on



Warning!

Risk of accident due to hampered vision. In circulating-air mode, the windows may mist up.

- f Only select circulating-air mode for short periods.
- f If windows mist up, end circulating-air mode by pressing the circulating-air button again and selecting the function "Defrost windshield".

- f Press button **D** twice.
Indicator light in button lights up.
The outside-air supply is interrupted and only the inside air is circulated.

Note on operation

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



Air to windshield

- f Press button **I**.
The air flows to the windshield.



Air to central and side vents

- f Press button **K**.
The air flows from the central and side vents.
Vents must be open.



Air to footwell

- f Press button **L**.
The air flows to the footwell.

Ending air distribution functions

- f Press the relevant button again **or**
- f Press the AUTO button **C**.

ECON mode

The outside air that is flowing in does not dry up if the air-conditioning compressor is switched off.



**Risk of accident due to hampered vision.
If the air-conditioning compressor is
switched off, the windows may mist up.**

- f Do not switch off the air-conditioning compressor in damp weather.

Switching air-conditioning compressor off

Whenever outside temperatures exceed 37.4°F (3°C), the air-conditioning compressor is always switched on in automatic mode.

The compressor can be switched off to save fuel, but control comfort is then limited:

- f Press ECON button **M**.
The ECON logo appears on the air-conditioning display panel.
The air-conditioning compressor is switched off.

Switching air-conditioning compressor on

- f If the interior temperature is too high:
Press ECON button **M** or
Press AUTO button **C**.

Information on air-conditioning compressor

The air-conditioning compressor:

- Can switch off briefly if engine is under an extreme load to ensure sufficient engine cooling.
- Switches off automatically at temperatures below approx. 37.4°F (3°C) and cannot be switched on, even manually.
- Operates most effectively with windows closed.
If the car has been in the sun for a long time, however, it is a good idea to ventilate the interior briefly with the windows open.

Notes on operation

Depending on the outside temperature and humidity, condensation can drip from the evaporator and form a pool under the car.
This is normal and not a sign of leakage.

If uncooled air flows out when the lowest temperature has been set ("LO"), switch off the air-conditioning compressor and have the fault remedied at an authorized Porsche dealer.

REST mode

Using engine residual heat

The residual heat of the engine can be used to heat the interior up to 20 minutes after the ignition has been switched off.

- f Press REST button **N**.
The air-conditioning settings cannot be changed in REST mode.

Ending the function

- f Press REST button **N**.

Note on operation

If the battery positive voltage is too low, REST mode is automatically ended.

- f Please observe the chapter "WARNING LIGHTS AND WARNING MESSAGES" on Page 124.



Automatically Controlled Four-Zone Air Conditioning

Depending on various factors (e.g. ambient temperature, sunlight, air quality), the air-conditioning system controls the preset interior temperature fully automatically.

Temperature, air quantity and air distribution can be set individually for the front left, front right, rear left and rear right air-conditioned areas.

If necessary, the automatic system can be manually influenced. This individual adjustment is shown on the air-conditioning display panel.

Note on operation

The air conditioner settings are stored on the respective remote control when switching off the ignition and locking the vehicle. The "Air flow OFF" setting is stored for approx. 60 minutes and the "Recirculated air" setting is stored for approx. 20 minutes.

Control panel for air-conditioned areas – front and rear

- A - Windshield defroster
- B - Heated rear window
- C - AUTO button (automatic mode)
REST button (engine residual heat)
- D - Recirculated air, automatic recirculated air
- E - Temperature sensor
- F - Air-conditioning display
- G - Air-quantity button, left
- H - Temperature button, left
- I - Air to windshield, left
- K - Air to left central and side vents
- L - Air to footwell, left
- M - Setting for air-conditioned areas, rear
- N - ECON button (air-conditioning compressor off/on)
- O - Air to windshield, right
- P - Air to right central and side vents
- Q - Air to footwell, right
- R - Temperature button, right
- S - Air-quantity button, right

Display

The air-conditioning display panel shows the following:

- Air quantity
- Selected interior temperature
- Individual settings
- Time that is identical to that shown in the instrument panel



Control panel for air-conditioned areas at the rear

- C - AUTO button (automatic mode)
- F - Air-conditioning/seat heating display
- G - Air-quantity button, left
- H - Temperature button, left; seat heating, left
- I - Air to vent, left door post
- K - Air to left central vent (center console)
- L - Air to footwell, left
- O - Air to vent, right door post
- P - Air to right central vent (center console right)
- Q - Air to footwell, right
- R - Temperature button, right; seat heating, right
- S - Air-quantity button, right
- T - Seat heating off/on

Rear seat heating

Switching on

- f Press **ON** button.

After the seat heating is switched on, the air conditioning display switches to seat heating mode for approx. 10 seconds.

Controlling the temperature

- f Move button **H** or button **R** upwards or downwards until the desired temperature is reached.

Switching off

- f Press **OFF** button.

Disabling control panel for air-conditioned areas at the rear

The rear control panel for the air conditioning can be disabled using the safety button in the armrest of the driver's door.



Safety button

- f Please observe the chapter "SAFETY BUTTON" on Page 25.

AUTO REST Automatic mode

You can switch to automatic mode for the front and rear air-conditioned areas, independently of one another.

- f Press AUTO button **C** on the front or rear control panel.
The indicator light in button **C** of the front control panel and the Auto indication in the rear control panel are lit.
Air quantity and distribution are automatically controlled and variations are compensated.

Note on operation

If necessary, the automatic system can be manually influenced.
This setting is retained until the appropriate function button is pressed again or the AUTO button **C** is pressed.

Switching MONO function on

The temperature and air quantity settings for the driver's side can be accepted for the entire vehicle.

- f Press AUTO button **C** in the front control panel for 2 seconds.
The MONO logo appears on the air-conditioning display panel.

Ending MONO function

- f Press AUTO button **C** in the front control panel for 2 seconds **or**
- f Change the settings in the air-conditioned areas.

Setting temperature

To suit personal comfort, the interior temperature for each of the four air-conditioned areas can be adjusted between 61°F and 85°F (16°C and 29.5°C).

Recommendation: 72°F (22°C)

- f Push temperature button up or down.
Button **H**:
Left air-conditioned area at the front or rear.
Button **R**:
Right air-conditioned area at the front or rear.
The selected temperature is shown on the display above the button.

If "LO" or "HI" appears on the display, the system is operating at maximum cooling or heating power.

If the preselected temperature is changed, the air quantity blowing out can adjust automatically in automatic mode.
The desired temperature is reached more quickly this way.

Setting air quantity

The air quantity can be selected individually for each of the four air-conditioned areas.

- f Push button for air quantity up or down.
Button **G**:
Left air-conditioned area at the front or rear.
Button **S**:
Right air-conditioned area at the front or rear.
The selected air quantity is shown in a bar display on the display above the button.
- f Press AUTO button **C** to return to automatic mode.

If the air quantity on the front control panel was reduced so much that "OFF" appears on the display, the outside-air supply is interrupted.



Warning!

Risk of accident due to impaired vision caused by misted windows. If the air quantity is "OFF", the windows may mist up.

- f Push button **G** up (to increase air quantity).



Defrosting the windshield

- f Press button **A** on the front control panel.
Indicator light lights up.
The air flows to the windshield and the front side windows.
The windshield is demisted or defrosted as quickly as possible.

Ending the function

- f Press button **A** again or
Press the AUTO button **C**.



Switching automatic circulating-air mode on

- f Press button **D** on the front control panel once.
Indicator light in button lights up.
Control of the outside-air supply depends on the air quality.

Note

The recommended operating mode is automatic circulating-air mode.



Switching circulating-air mode on



Warning!

Risk of accident due to impaired vision. In recirculating-air mode, the windows may fog up.

- f Only select recirculating-air mode for short periods.
- f If windows mist up, end circulating-air mode by pressing the circulating-air button again and selecting the function "Defrost windshield".

- f Press button **D** on the front control panel twice.
Indicator light in button lights up.
The outside-air supply is interrupted and only the inside air is circulated.

Note on operation

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

Air to windshield and side windows

The air quantity can be selected individually for each of the four air-conditioned areas.

- Front control panel:
The air flows to the windscreen.
- Rear control panel:
The air flows to the respective side window.

f Press button **I** or **O**.

Air to central and side vents

f Press button **K** or **P**.

- Front control panel:
The air flows from the front central and side vents.
- Rear control panel:
The air flows to the center vents.

f Vents must be open.

Air to footwell

f Press button **L**.
The air flows to the footwell.

Ending air distribution functions

- f Press the relevant button again **or**
- f Press the AUTO button.

ECON mode

The outside air that is flowing in does not dry up if the air-conditioning compressor is switched off.



Warning!

**Risk of accident due to hampered vision.
If the air-conditioning compressor is
switched off, the windows may mist up.**

f Do not switch off the air-conditioning compressor in damp weather.

Switching air-conditioning compressor off

Whenever outside temperatures exceed 37.4°F (3°C), the air-conditioning compressor is always switched on in automatic mode.

The compressor can be switched off to save fuel, but control comfort is then limited:

f Press ECON button **N** on the front control panel. The air-conditioning compressor is switched off.

Switching air-conditioning compressor on

f If the interior temperature is too high:
Press ECON button **N** **or**
Press the AUTO button **C**.

Information on air-conditioning compressor

The air-conditioning compressor:

- Can switch off briefly if engine is under an extreme load to ensure sufficient engine cooling.
- Switches off automatically at temperatures below approx. 37.4°F (3°C) and cannot be switched on, even manually.
- Operates most effectively with windows closed.
If the car has been in the sun for a long time, however, it is a good idea to ventilate the interior briefly with the windows open.

Notes on operation

Depending on the outside temperature and humidity, condensation can drip from the evaporator and form a pool under the car.
This is normal and not a sign of leakage.

If uncooled air flows out when the lowest temperature has been set ("LO"), switch off the air-conditioning compressor and have the fault remedied at an authorized Porsche dealer.

AUTO REST REST mode

Using engine residual heat

The residual heat of the engine can be used to heat the interior up to 20 minutes after the ignition has been switched off.

- f Press AUTO/REST button **C** on the front control panel.
The air-conditioning settings cannot be changed in REST mode.

Ending the function

- f Press AUTO/REST button **C**.

Note on operation

If the battery positive voltage is too low, REST mode is automatically ended.

- f Please observe the chapter "WARNING LIGHTS AND WARNING MESSAGES" on Page 124.



Controlling rear air-conditioned areas with the front control panel

- f Press button **M**.
The Symbol appears on the display.
The rear air-conditioned areas can be controlled from the front control panel.

Ending the function

- f Press button **M** again.

Note on operation

The function is ended automatically 10 seconds after the last settings are made.



- A - "-" button
- B - TIMER button
- C - ON/OFF button
- D - "+" button


Parking Heater

The parking heater features two functions: parking heating and parking ventilation.

The parking heater is ready for use regardless of the ignition key position.

The parking heater is also used as an auxiliary heater. Operation of the parking heater is clearly audible when outside temperatures are low, even if the parking heater has been manually switched off.

The parking heater is operated using the following buttons on the front air-conditioning control panel:

-  Switch parking heater on and off
Activate program
- TIMER** Start programming
Call memories
- +** Set ON times
Activate heating function
- Set ON times
Activate ventilating function



Danger!

Risk of poisoning due to carbon monoxide (CO). The parking heater consumes fuel and emits exhaust fumes. Exposure to such fumes can cause unconsciousness, serious personal injury or death.

- f Switch off the parking heater before refuelling.
- f Do not operate the parking heater in enclosed spaces (e.g. a garage).

Notes on operation

The parking heater runs on fuel, and it therefore cannot be switched on after the reserve warning lights up.

f Please observe the chapter "FUEL RESERVE WARNING" on Page 88.

The parking heater must be operated at least once per month, with the engine cold and the blower at its lowest setting.

Ignition off: When the parking heater is running, the remaining running time is shown on the display panel.

Operation of the parking heater is clearly audible when outside temperatures are low and the engine is cold.



Switching parking heater on and off

Switching on

- f Press ON/OFF button **C**.
The programed parking heating or parking ventilation function is switched on.

Switching off

- f Press ON/OFF button **C** again.

Note on operation

- f After switching off the parking heater using ON/OFF button **C** wait for at least 2 minutes before you press the button again.
The combustion chamber is cleaned.



E - Parking ventilation symbol
F - Memory symbol
G - ON time symbol
H - Parking heating symbol
I - ON time

Complete programming of the parking heater requires definition of the

- Function **and**
- ON time.

Programming the parking heater

The parking heater has three independent memories for programming the ON times. The ON time, together with the associated parking heating or parking ventilation function, can be programmed in each memory.

Programming function

1. Switch ignition off.
2. Press **TIMER** button on the front air-conditioning control panel.
The symbols for the parking heating **H** or parking ventilation **E** function flash on the display.
3. Select function.
Press "+" button for parking heating or "-" button for parking ventilation.

If no other entry is made within **10 seconds**, the display returns to its initial status.

However, the selected function is retained and is activated when the parking heater is next turned on.

- f Please observe the chapter "SWITCHING PARKING HEATER ON AND OFF" on Page 159.

Programming ON times

1. Switch ignition off.
2. Press TIMER button.
3. Select function (parking heating or parking ventilation).
4. Select the memory using TIMER button **B**.
The desired memory can be selected by pressing button **B** several times.
5. Set ON time using the "+" and "-" buttons **A** und **D**.
Pressing the buttons adjusts the time on a minute-by-minute basis. If the button is kept depressed, the time is adjusted faster.
ON times are only valid for 24 hours.
6. Press ON/OFF button **C**.
Displays **F** and **G** flash for approx. 10 seconds.
The button **C** can be pressed again to switch off the displays before this time has elapsed.
ON time **I**, clock symbol **F** and memory **G** are displayed for 2 minutes after ON/OFF button **C** has been pressed.
The display then goes out.
The parking heater has now been programmed and the selected memory is active (symbol **G** is lit).

Note on operation

Only **one** memory can be active at any one time.

Activating the memory

The parking heater runs for 30 minutes. It then switches itself off automatically.
The program must be reactivated for every subsequent run.

To do this:

1. Switch ignition off.
2. Press TIMER button **B**.
3. Select function (parking heating or parking ventilation).
4. Select the memory using TIMER button **B**. The ON time that was last saved is displayed.
5. Press ON/OFF button **C**.
The program is reactivated.
Displays **F** and **G** flash for approx. 10 seconds.
The ON/OFF button can be pressed again to switch off the displays before this time has elapsed.
After the ON/OFF button has been pressed, the ON time **I**, clock symbol **F** and memory **G** are displayed for 2 minutes.
The display then goes out.
The parking heater has now been programmed and the selected memory is active (symbol **G** is lit).

Note on operation

Only **one** memory can be active at any one time.

Example:

The parking heater is to activate the parking heating function at 9:48 a.m.

To do this:

1. Switch ignition off.
2. Press TIMER button **B** on the front air-conditioning control panel.
The symbols for the parking heating or parking ventilation function flash on the display.
3. Press "+" button **D**.
This selects the parking heating function.
4. Select the memory using TIMER button **B**.
5. Set ON time to 9:48 a.m. using the "+" and "-" buttons (**A** and **D**).
6. Press ON/OFF button **C**.
The parking heater has now been programmed and the selected memory is active.

Note on operation

If the parking heater is switched on manually prior to program start of an active memory, this will delete the programming.
The memory must be reactivated if it is needed.
If the memory is not reactivated, the parking heater will not switch on.

Parking heater faults

In the event of faults in the parking heater, no function symbol appears on the display – only the remaining running time is shown. The display flashes on briefly and then goes completely dark.

- f Have the parking heater checked at an authorized Porsche dealer.

In the event of a serious accident, the parking heater switches off automatically for safety reasons.

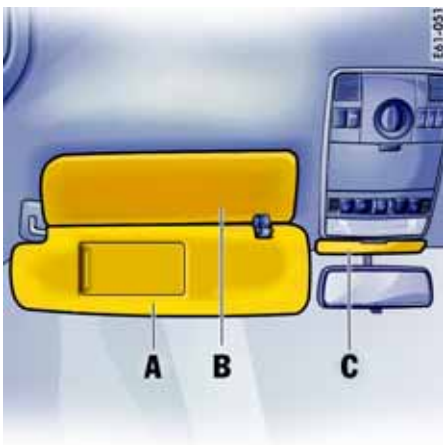
The parking heater is not ready for operation.

- f Please consult an authorized Porsche dealer.

If the temperature rises, the overheating protection switches the parking heater off automatically. The parking heater is not ready for operation.

- f Please consult an authorized Porsche dealer.

The parking heater is switched off automatically if the voltage is too low. The parking heater is temporarily unavailable.

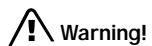


Note on operation

Please note that sun visor **B** must be swivelled upwards before swivelling back sun visor **A**. Otherwise, sun visor **B** can no longer be swivelled upwards.



Sun Visors



Warning!

Risk of injury.

- f Keep the sliding cover closed while driving.
- f Swing sun visor **A** down to prevent dazzle from the front.
You can cover the gap above the interior mirror using the small sun visor **C**.
- f If you are dazzled from the side, unclip sun visor **A** from the inner bracket and swivel it round so that it is in front of the door window.
You can also swivel sun visor **B** downwards.

Make-up mirror

The make-up mirror on the rear of the sun visor is closed with a sliding cover.

- f The make-up mirror illumination is switched on automatically when the sliding cover is opened (**arrow**).



Pulling out sun blinds

- f Pull out sun blind (**arrow**) and engage in holders **A**.

Retracting sun blinds

- f Disengage the sun blind from holders **A** and carefully guide it back into the retractor roller.

Sun Blinds, Rear Side Windows

The sun blinds in the rear door trim panels can be pulled out.



Caution!

Risk of damage.

- f Pull out sun blinds during the journey only when door windows are closed.



A, D - Switch for individual reading lights
 B - Button for dimming the comfort lighting
 C - Switch for interior light

Interior light, front

Switching on

- f Move switch **C** to the left.

Switching on and off automatically

- f Move switch **C** to the right.
 The lights are **switched on** when a door is unlocked or opened or when the ignition key is withdrawn from the ignition lock. The lights are **switched off** with a delay of approx. 30 seconds after the door is closed. The light goes out immediately as soon as the ignition key is inserted in the ignition lock or the vehicle is locked.

Switching off

- f Move switch **C** to center position.

Interior Lighting

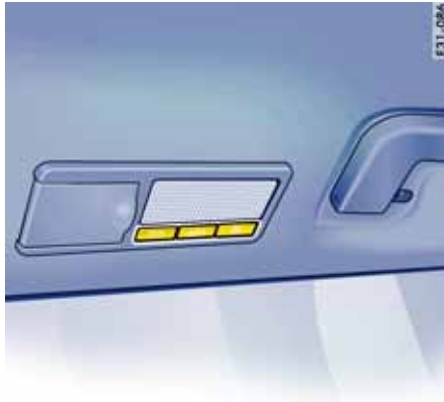
Reading lights, front

Switching on

- f Press button **A** or **D**.

Switching off

- f Press button **A** or **D**.



Reading lights, rear right

Rear reading lights



Switching on

- f Move toggle switch forward.



Switching on and off automatically

- f Move toggle switch to center position.
The lights are **switched on** when a door is unlocked or opened or when the Ignition key is withdrawn from the ignition lock. The lights are **switched off** with a delay of approx. 30 seconds after the door is closed. The light goes out immediately as soon as the ignition is switched on or the vehicle is locked.

0 Switching off

- f Move toggle switch back.



A - Button for dimming the comfort lighting

Comfort Lighting

The footwell and door panel lighting improve your orientation inside the vehicle when it is dark. These lights are switched on when the vehicle is unlocked and switched off again automatically when the vehicle is locked.

Dimming (adjusting the brightness of) the comfort lighting

Once the last door is closed, the footwell and door panel lights are dimmed to the set value.

The comfort lighting is dimmed using button **A** in the front roof console.

- f Hold down button **A** until the level of brightness that you require is reached.

Door-Surrounding Lighting

The door-surrounding lighting enables passengers to enter the vehicle safely. Obstacles on the ground (e.g. puddles) can be identified more easily.

The area in front of the vehicle is illuminated with the following lights when the vehicle is unlocked by remote control or by Porsche Entry & Drive:

- Low beam
- Lights in the door mirrors
- Side marker light
- License plate lights.

Note on operation

- f Set light switch to **auto**.
- Please observe the chapter "LIGHT SWITCH" on Page 132.

The door-surrounding lighting switches off after the Coming Home light (light that is used during twilight hours) that has been set on the multi-purpose display has expired or when the ignition is switched on.

- f Please observe the chapter "LIGHTING" on Page 121.

Coming Home Function (Auto Shut Off Delay)

The following lights remain switched on for a certain period to allow you to get out of the vehicle safely and with the best possible view at dusk or in darkness:

- Lights in the door mirrors
- Side marker light
- License plate lights.

Note on operation

- f Set light switch to **auto**.
- f Please observe the chapter "LIGHT SWITCH" on Page 132.

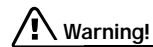
The lights are switched off when the vehicle is locked or, at the latest, after the Coming Home light that has been set on the multi-purpose display has expired.

- f Please observe the chapter "LIGHTING" on Page 121.

Sliding/Lifting Roof

The electric sliding/lifting roof is made of single-sheet safety glass. It is equipped with a sliding-roof cover that can be infinitely adjusted manually to protect against the sun.

The sliding/lifting roof is operated using a knob in the roof console.



Warning!

Risk of injury when operating or automatically closing the sliding/lifting roof.

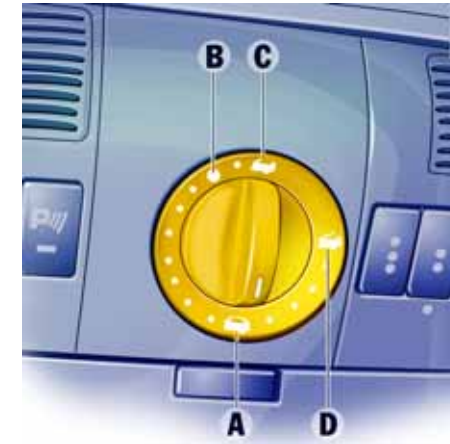
- f Take care to ensure that nobody can be injured when the sliding/lifting roof is operated.
- f Always withdraw ignition key when leaving the vehicle or switch ignition off in vehicles that have Porsche Entry & Drive. Always take the ignition key with you when leaving the vehicle. Uninformed persons (e.g. children) could injure themselves by operating the sliding/lifting roof.
- f In case of danger, release the knob or car key immediately and operate the sliding/lifting roof in the opposite direction.
- f Always keep the sliding/lifting roof and the side windows closed while driving off-road.

Readiness for operation of the sliding/lifting roof

- With ignition switched on.
- With ignition key withdrawn until door is first opened, but only for a maximum of 10 minutes.

Readiness function of the sliding/lifting roof switches off after 10 minutes

If the vehicle is unlocked, the sliding/lifting roof can no longer be operated after 10 minutes (to save the vehicle battery). The power supply is switched back on when the ignition is switched on or the engine started.



- A - Closes sliding/lifting roof completely
- B - Opens sliding/lifting roof to comfort setting
- C - Opens sliding/lifting roof completely
- D - Opens sliding/lifting roof in lift position

Note on operation

Using the automated presetting system, every usable sliding/lifting roof position can be controlled directly with the knob.

A - Closing sliding/lifting roof completely

- f Turn knob to switch position **A**.

Note on operation

The sliding/lifting roof is equipped with a force limiter. If the sliding/lifting roof is obstructed during the closing process, the sliding/lifting roof opens again immediately.

Using the force limiter to close the sliding/lifting roof

- f Remove the obstruction.
- f Turn knob to position **A** again.

B - Opening sliding/lifting roof to comfort setting

- f Turn knob to switch position **B**.

The sliding/lifting roof opens in switch position **B** until it reaches the best position from the point of view of noise. It can be opened fully, however, if you continue to turn the switch beyond the limit to position **C**.

C - Opening sliding/lifting roof completely

- f Turn knob beyond stop position **B** to switch position **C**.
This requires a somewhat greater effort.
Once released, the knob rebounds to position **B**.

D - Lifting sliding/lifting roof

- f Turn knob between switch positions **A** and **D** until it reaches the required position. The roof is lifted completely in switch position **D**.

Comfort function on vehicles without Porsche Entry & Drive

Closing the sliding/lifting roof

- f Hold the vehicle key in the door lock in the locking position until the windows and the sliding/lifting roof have reached the desired position.

Comfort function on vehicles with Porsche Entry & Drive

Closing the sliding/lifting roof

- f Hold the car key in the door lock in the locking position until the windows and the sliding/lifting roof have reached the desired position
or
- f Hold the button in the door handle when locking the vehicle until the windows and the sliding/lifting roof have reached the desired position.

Emergency operation of sliding/lifting roof

If the sliding/lifting roof is defective, this can be closed or opened manually.



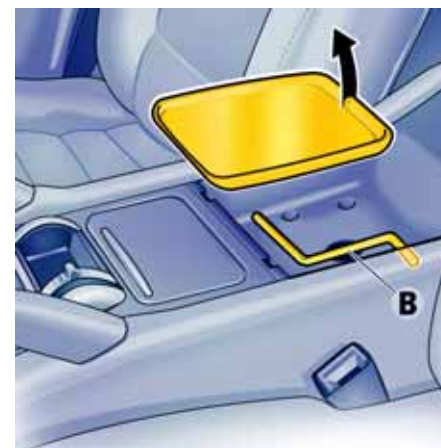
Warning!

Risk of serious personal injury and damage to the sliding/lifting roof during emergency operation.

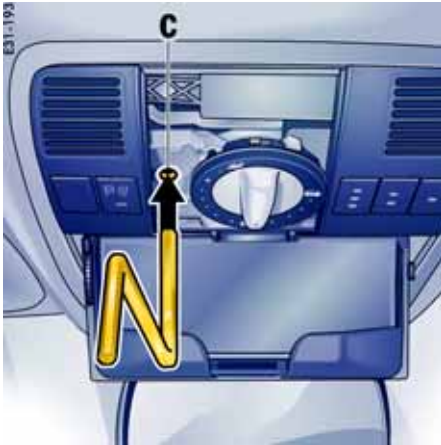
- f Take care to ensure that nobody can be injured when the sliding/lifting roof is operated.
- f During and after emergency operation, the sliding/lifting roof may no longer be operated with the rocker switch.



1. Open the glasses case in the roof console (arrow).
2. Unclip cover **A**.



3. Remove key **B** from the lower storage tray (underneath the rubber mat) in the center console.



4. Insert the key in opening **C**. This requires a somewhat greater effort.
5. Close sliding/lifting roof
To close the roof – turn to the right.
To open the roof – turn to the left.
6. Remove the key and return it to the storage tray.
7. Clip in cover.
- f Have the fault remedied at an authorized Porsche dealer.

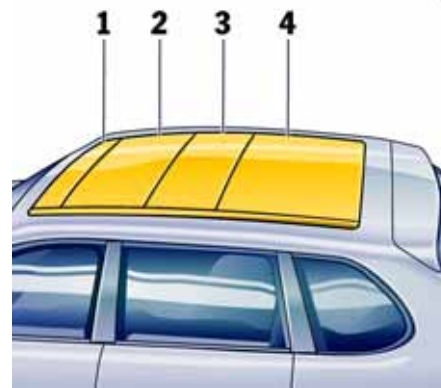
Panorama roof system

The Panorama roof system of your Porsche consists of a total of four roof elements.

Roof element 1 is the draft deflector. This adjusts itself according to the speed, and helps protect from the disturbing effects of the wind when the Panorama roof system is open, especially at high speeds or from turbulent air flow.

Both **roof elements 2 and 3** can be moved by activating the knob in the vehicle's longitudinal direction. Roof element 3 can also be raised. This allows the interior to be better ventilated.

Roof element 4 is a fixed glass element and completes the Panorama roof system.



- 1 - Draft deflector
- 2 - Sliding roof element
- 3 - Sliding/lifting roof element
- 4 - Fixed glass element



Risk of damage when activating the Panorama roof system due to improperly attached roof elements.

- f Check that the roof elements are securely attached before starting to drive.
- f Make sure there is sufficient clearance between the Panorama roof system and the attached roof elements.

Readiness for operation of the Panorama roof system

- With ignition switched on.
- With ignition key withdrawn until door is first opened, but only for a maximum of 10 minutes.

Readiness function of the Panorama roof system switches off after 10 minutes

If the vehicle is unlocked, the Panorama roof system can no longer be operated after 10 minutes (to save the vehicle battery). The power supply is switched back on when the ignition is switched on or the engine started.



- A - Close Panorama roof system completely*
- B - Open sliding roof element completely*
- C - Open Panorama roof system completely*
- D - Sliding/lifting roof element in lift position*
- E - Open sliding/lifting roof element completely*

Note on operation

Using the automated presetting system, every usable roof position can be controlled directly with the knob.

- f Always keep the Panorama roof system and the side windows closed while driving off-road.



Warning!

Risk of injury when operating or automatically closing the Panorama roof system.

- f Take care to ensure that nobody can be injured when the Panorama roof system is operated.
- f Always withdraw ignition key when leaving the vehicle or switch ignition off in vehicles that have Porsche Entry & Drive. Always take the ignition key with you when leaving the vehicle. Uninformed persons (e.g. children) could injure themselves by operating the Panorama roof system.
- f In case of danger, operate the knob in the opposite direction or release the car key immediately.

A - Closes Panorama roof system completely

- f Turn knob to switch position **A**.

B - Opens sliding roof element completely

- f Turn knob to switch position **B**.
Roof element 2 will be opened completely. The roller blind will open automatically to the selected opening width.

C - Opens Panorama roof system completely

- f Turn knob beyond the stop position **B** to switch position **C**.
Roof elements 2 and 3 will be opened completely. The roller blind will open automatically to the selected opening width.

D - Raises sliding/lifting roof element

Turn knob to switch position **D**.
Roof element 3 will be raised completely. The roller blind does not change position here.

E - Opens sliding/lifting roof element completely

- f Turn knob to switch position **E**.
- f **Roof element 3** will be opened completely. The roller blind will open automatically to the selected opening width.

Comfort function on vehicles without Porsche Entry & Drive

Opening and closing the Panorama roof system

- f Hold the vehicle key in the door lock in the unlocking or locking position until the windows and the Panorama roof system have reached the desired position.

Comfort function on vehicles with Porsche Entry & Drive

Opening and closing the Panorama roof system

- f Hold the vehicle key in the door lock in the unlocking or locking position until the windows and the Panorama roof system have reached the desired position.

Closing the Panorama roof system

- f Hold the button in the door handle when locking the vehicle until the windows and the Panorama roof system have reached the desired position.

Force limiter for the Panorama roof system

All roof elements are equipped with a force limiter. If the sliding roof or the sliding/lifting roof element is obstructed during the closing or opening process, the respective roof element opens or closes again immediately.

Closing a roof element after triggering the force limiter

1. Remove the obstruction.
2. Turn knob to position **A** again.

Electric emergency closing function



Risk of injury from the emergency closing function for the Panorama roof system. The force limiter is not available and the roof elements will close with full force.

- f Take care to ensure that nobody can be injured when the Panorama roof system is closing.

If the roof cannot be closed due to dirt, ice, or similar substances:

1. Turn knob to position **A**.
2. Hold the knob in position **A** until all roof elements are completely closed.

Save final position of the Panorama roof system

After disconnecting/reconnecting the vehicle battery or if the vehicle battery is discharged, or after emergency starting with jumper cables, the final positions of the Panorama roof system are lost.



Risk of injury when closing the Panorama roof system. The force limiter is not available and the roof elements will close with full force.

- f Take care to ensure that nobody can be injured when the Panorama roof system is closing.

1. Switch ignition off.
2. Turn knob to position **A**.
3. Switch ignition on.
4. Hold knob in position **A**. The closing process begins after around 5 seconds. Hold the knob in position until the roller blind and all roof elements are completely closed. The procedure lasts approximately 20 seconds.

Note on operation

If the procedure is interrupted, saving the final positions must be started from the beginning.



Roller blind

A roller blind is integrated into the Panorama roof system and can be adjusted by activating the rocker switch in the roof console.

Opening/closing the roller blind

The rocker switch has a two-stage function:

- If the rocker switch is pressed to the first stage, the roller blind opens or closes as long as the rocker switch is being pressed.
- If the rocker switch is pressed completely, the roller blind opens or closes to the final position.

Opening the roller blind

f Press rocker switch to the rear **F**.

Closing the roller blind

f Press rocker switch to the front **G**.

Note

If the rocker switch is pressed completely while the roof elements are moving, the roller blind opens or closes to the final position after the roof elements have reached the selected position.

Roller blind cleaning position

1. Close Panorama roof system and roller blind completely.
2. Turn knob to position **C**. The Panorama roof system opens completely.
3. When the Panorama roof system has reached the final position, hold the rocker switch **G** to the front for longer than 3 seconds, until the roller blind is completely closed.
4. Remove dirt (e.g., leaves).
5. Keep the rocker switch **F** pressed to the rear, until the roller blind is completely closed.
6. Close sliding roof element.



Caution!

Risk of damage if the Panorama roof system and roller blind are in the roller blind cleaning position while driving.

- f Close the Panorama roof system completely one time before driving off.

Emergency operation of the Panorama roof system

Use emergency operation only under exceptional circumstances if the electric emergency closing function cannot be implemented and the end position cannot be stored.

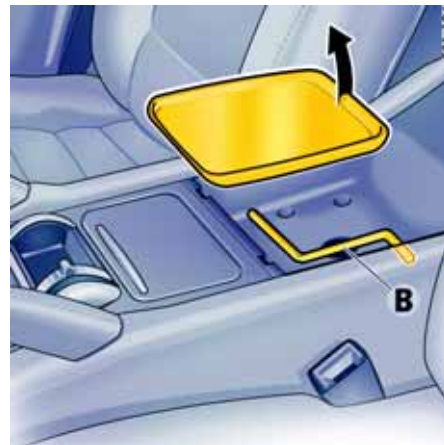
- f Before using emergency operation, please check whether the fuse is defective. After the fuse has been changed, the limit positions of the Panorama roof system will have to be stored again.



Danger!

Danger of injury and risk of damage when closing the roof.

- f Take care to ensure that nobody can be injured when the roof elements are activated.
- f Do not operate the Panorama roof system with the knob during and after emergency operation.



1. Remove key **B** from the lower storage tray (underneath the rubber mat) in the center console.



2. Unclip cover.
3. Insert the key in opening **H** or **I** until it can be felt and heard to engage. This requires a somewhat greater effort.
H – Emergency operation for the sliding roof element and the draft deflector
I – Emergency operation for the sliding/lifting roof element

4. Hold the key in this position and turn.
To close the roof – turn clockwise.
To open the roof – turn counter-clockwise.

Note on operation

When using emergency closing for the sliding/lifting roof element, make sure that the roof element is completely closed (center position between sliding and lifting roof position).

5. Remove the key and return it to the storage tray.
6. Clip in cover.

To rule out malfunctions in the system, the final positions of the Panorama roof system must be saved again after emergency operation.

- f Please observe the chapter “SAVE FINAL POSITION OF THE PANORAMA ROOF SYSTEM” on Page 175.

Parking Aids

ParkAssist

ParkAssist provides a visual and acoustic indication to the driver of the distance between the vehicle and a large obstacle.

ParkAssist is switched on automatically when the ignition is switched on and remains active up to a speed of approx. 9 mph (14 km/h).

ParkAssist is switched off automatically at high speed. ParkAssist is switched on again automatically when the speed drops below approx. 9 mph (14 km/h).

The selector lever position determines activation levels for ParkAssist and the corresponding area that is monitored.

Selector lever position:

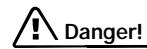
- **P** – ParkAssist is **not** activated.
- **R, N** – ParkAssist is activated for the front **and** rear areas.
- **D, M** – ParkAssist is activated for the front area.

Gearshift lever position:

- **R** – ParkAssist is activated for the front **and** rear areas.
- **In all other gearshift positions** – ParkAssist is activated for the front area.

Note

On vehicles with manual transmission, the parking assistant is not switched on in the rear area if the vehicle rolls backward without reverse gear engaged.



Danger!

Risk of serious personal injury or death.

ParkAssist cannot detect small objects such as children and pets.

Even when using ParkAssist, the driver is still responsible for taking due care when parking and when assessing obstacles.

- f Make sure that no persons especially small children, animals or obstacles are within the maneuvering area.



Switching ParkAssist on and off

- f Switch ParkAssist on and off using button **A** in the roof console.
When ParkAssist is switched off, the indicator light in the button lights up.

Note on operation

It is a good idea to switch off ParkAssist when driving off-road and on unpaved surfaces.



Front ultrasound sensors

Sensors

Six ultrasound sensors in the front and rear bumpers measure the distance to the closest obstacle.

- Range of outer sensors (front and rear): approx. 24 in. (60 cm)
- Range of front middle sensors (**arrow**): approx. 48 in. (120 cm)



Rear ultrasound sensors

- Range of rear middle sensors (**arrow**) (only in vehicles **without** spare wheel bracket): approx. 59 in. (150 cm)
- Range of rear middle sensors (only in vehicles **with** spare wheel bracket): approx. 48 in. (120 cm)

Obstacles cannot be detected in the "blind" sensor area (above and below the sensors).

Maintenance note

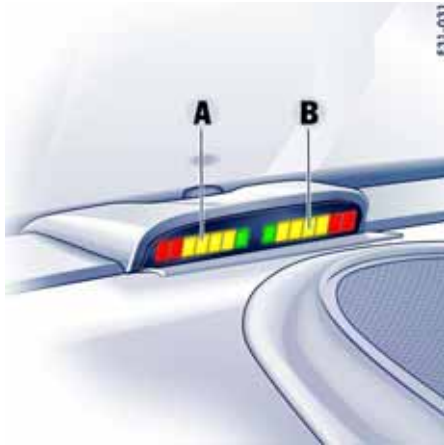
- f The sensors must always be kept free of dust, ice and snow in order to ensure that they are fully functional.
- f Do not damage sensors by abrasion or scratching.
- f Maintain sufficient distance when cleaning with steam-jet units.
The sensors will be damaged if the pressure is too high.

Note on operation

The rear ultrasound sensors may not function correctly if tires that have not been recommended by Porsche are fitted on the spare wheel bracket.

If the spare wheel bracket is open, this may impair the function of the rear ultrasound sensors.

In vehicles that have air suspension with level control and height adjustment, the system may not recognise obstacles near the ground at terrain level or special terrain level.



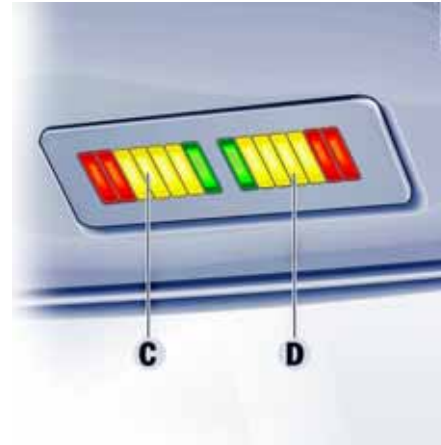
A - Front display - left monitoring area
B - Front display - right monitoring area

Warning indicators, signal tones, distances

The warning indicator for the front area is located on the dashboard.

The warning indicator for the rear area is located in the rooflining at the rear of the loadspace.

The warning indicators for the various monitoring areas (left and right) are subdivided respectively into one green, 4 yellow and 2 red light segments.



C - Rear display - right monitoring area
D - Rear display - left monitoring area

If ParkAssist is activated, the **green light segments** of the active warning indicators are lit up continuously.

If the vehicle approaches an obstacle that has been detected by the sensors, one or more of the yellow or red light segments lights up, depending on the distance to the obstacle.

If the **first yellow light segment** lights up, the obstacle is still 48 in. (120 cm) (to the front) or 48 in. to 59 in. (120 to 150 cm) (to the rear) away. A brief signal tone sounds when reversing.

An **intermittent tone** sounds when the distance becomes less than approx. 24 in. (60 cm). The **fourth yellow light segment** lights up.

A **continuous tone** sounds when the distance becomes less than approx. 10 in. (25 cm) (on vehicles with trailer coupling: approx. 14 in. (35 cm)). The **second red light segment** lights up.

If the obstacle is approached even closer, the system may not be able to recognize the obstacle any longer.

f Set the radio volume so that the signal tones are not drowned out.

You can have the volume of the signal tones adjusted to your own requirements at your authorized Porsche dealer.

Note on operation

If the obstacle is approached even closer after the continuous tone sounds and the second red light segment lights up, the system may not be able to recognize the obstacle any longer.

Limits of ultrasonic measurement

- ParkAssist cannot detect sound-absorbing obstacles (e.g. powder snow),
- Sound-reflecting obstacles (e.g. glass surfaces, flat painted surfaces),
- And very thin obstacles.

Other ultrasound sources (e.g. pneumatic brakes of other vehicles, jackhammers) can interfere with detection of obstacles.

Fault indication without warning tone

All red light segments of the active warning indicators light up when there is a **temporary fault** in ParkAssist.

Note

Correct operation is no longer ensured if there is a temporary fault (e.g. caused by ice formation or heavy soiling on the sensors).

The system detects the temporary fault.

All light segments light up until a speed of 9 mph (14 km/h) is reached.

ParkAssist is ready for operation again when the interference has been eliminated.

Fault indication with warning tone

In the event of a **long-lasting fault** in ParkAssist, the red light segments of the active warning indicators light up **and** a continuous tone sounds for three seconds after a transmission range has been selected.

Possible causes

- Defect or system fault.
- f Switch ParkAssist off.
When ParkAssist is switched off, the indicator light in the button lights up.
- f Please have the fault remedied at an authorized Porsche dealer.

Driving with a trailer

The ParkAssist rear monitoring area is switched off when the trailer's power supply is plugged in.



A - Control switch for door mirror adjustment
C - Passenger mirror setting

Swivelling down mirror glass as parking aid

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

f Please observe the chapter "MIRRORS" on Page 121.

Preconditions

- Vehicle must be equipped with seat memory.
- Control switch **A** must be turned to position **C** (passenger mirror's setting).
- Reverse gear must be engaged.

Moving mirror to its initial position

The mirror glass swivels to its initial position when:

- The car is shifted out of reverse gear **or**
- The position of the control switch for the door mirror setting is changed.



A - Programmable keypad
B - Light-emitting diode for status identification

Garage Door Opener

The programmable garage door opener in your Porsche replaces up to three original hand-held transmitters used to operate a variety of devices (e.g. garage door, gate to the property, alarm system).

You have the option of programming each individual key in key pad **A** with an original hand-held transmitter frequency.

Warning!

Risk of accident when using the garage door opener if persons, animals or objects are within the range of movement of the equipment that is being operated.

- f When using the garage door opener, ensure that no persons, animals or objects are within the range of movement of the equipment that is being operated.
- f Observe the safety notes for the original hand-held transmitter.

To operate the device in question (e.g. garage door, gate to the property, alarm system):

- f Press the relevant button in keypad **A**.
 Light-emitting diode **B** lights up during the signal transfer.

Notes on operation

- f Always use the garage door opener in the direction of travel.
 Otherwise, range restrictions cannot be ruled out.
- f Before selling the vehicle, delete the programmed signals in keypad **A** of the garage door opener.
- f Please read the instructions for the original hand-held transmitter to find out whether the original transmitter is equipped with fixed or changeable code.



Allocating garage door opener signals to the keys

f Please follow the operating instructions for the original hand-held transmitter.

Before programming the keypad the first time with garage door opener signals

This process deletes the standard codes set at the factory. Do not repeat the process if you program further buttons.

f Keep the two outer buttons of keypad **A** depressed for approx. 20 seconds until light-emitting diode **B** begins to flash.

Garage door opener with fixed code system

1. Point the original transmitter at the position marked.
2. Press the button of the original hand-held transmitter and at the same time the button to be allocated on keypad **A**.
3. Keep both buttons depressed until light-emitting diode **B** starts to flash (first slowly and then quickly).
Only release both keys when light-emitting diode **B** flashes quickly.
The rapidly flashing light-emitting diode **B** confirms that the new frequency signal was programmed successfully.
4. Repeat steps 1 to 3 to allocate signals for the garage door opener to other keys.

Garage door opener with changeable code system

1. Allocate the required keys as for the systems with fixed code (points 1 to 4).
2. To synchronise the system:
Press the programming button on the receiver for the garage door actuator.
Afterwards, you usually have approx. 30 seconds to initiate step 3.
3. Press allocated button in keypad **A** twice (in some devices you must press the allocated button a third time to complete the setting).
4. Repeat the programming steps to allocate signals for the garage door opener to other buttons.

Note

f Please consult your authorized Porsche dealer if you have not been able to successfully allocate signals for the garage door opener to the keys even though you have carefully followed the instructions in this chapter and the operating instructions for the original hand-held transmitter.

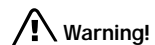
Reprogramming an individual button of keypad A

1. Press the button of keypad **A** to be reprogrammed. Do not release the buttons before step 4 is executed.
2. When the light-emitting diode **B** flashes slowly (after approximately 20 seconds), point the original transmitter at the position marked.
3. Press the button of the original hand-held transmitter and keep it depressed.
4. The light-emitting diode **B** first flashes slowly and then more quickly.
Only release both buttons when light-emitting diode **B** flashes quickly.

Deleting programmed signals (e.g., when selling the vehicle)

- f Keep the two outer buttons of key pad **A** pressed for approx. 20 seconds until light-emitting diode **B** begins to flash.
All programmed signals are deleted.

Ashtray



Warning!

Danger of fire.

- Never use ashtray for waste paper disposal, as it could pose a fire hazard.



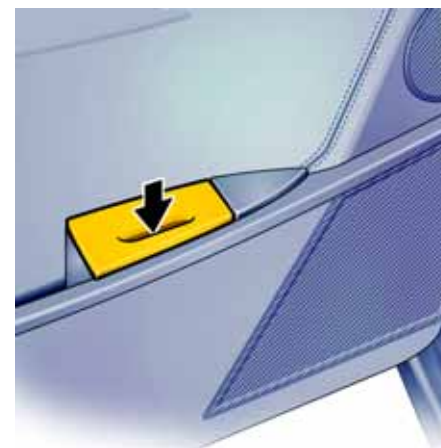
Ashtray, front

Opening

- Press ashtray lid briefly.

Emptying

- Move unlocking button **A** to the right; the ashtray insert pops out.
- Once you have emptied the ashtray, replace the insert and push it down until it clicks audibly into place.



Ashtray, rear

Depending on how the vehicle is equipped, an ashtray can be installed in the rear door panels.

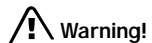
Opening

- Press ashtray lid briefly.

Emptying

- Open ashtray cover and press carefully to the door trim panel. The insert is raised slightly.
- Remove and empty insert.

Cigarette Lighter



Warning!

Danger of fire and burning. The cigarette lighter is ready for use, regardless of the ignition lock position.

- f Do not leave children in the car unattended.
- f Never touch the heating element or sides of the lighter.
- f Hold the lighter by the knob only.

The cigarette lighter is ready for use regardless of the ignition lock position.



Lighter, front

- f Press ashtray lid briefly. Ashtray opens independently.
- f Press lighter into the receptacle (**arrow**). When the element is red hot the lighter jumps back to its initial position.



Lighter, rear

- f Press cover in the center console briefly. Cover opens independently.
- f Press lighter into the receptacle (**arrow**). When the element is red hot the lighter jumps back to its initial position.

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 reception.

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.

Note

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 distortion. 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 disc player



Caution!

To avoid damage to compact disc player and discs.

- f Use only compact discs labeled as shown, having no dirt, damage or warpage.
- f Never attempt to disassemble or oil any part of the player unit. Do not insert any object other than a disc into the slot. Remember there are no user-serviceable parts inside the compact disc player.
- f Do not allow the disc to sustain any fingerprints, scrapes or stickers on the surfaces. This may cause poor sound quality. Hold the disc only on the edge or center hole.
- f When not in use, take the disc out of the player, put the disc back into its case and store it away from dust, heat, damp and direct sunlight. Leaving the disc on the dashboard in the sun can damage the disc.

- f If the disc gets dirty, clean the disc 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. Disc cleaners are available in audio stores.

Car Telephone and Aftermarket Alarms

Important legal and safety information regarding the use of cellular telephones

Some states 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.



Danger!

Risk of an accident.

Severe personal injury or death can result in the event of an accident.

Looking away from the road or turning your attention away from your driving can cause an accident and serious personal injury or death.

When using your cellular telephone, you should always:

- f Give full attention to your driving - pull off the road and park before making or answering a call if traffic conditions so require; and

- f Keep both hands on the steering wheel - use hands-free operation (if available) - pull off the road and park before using a hand-held telephone.

It is essential to observe the instructions of the telephone manufacturer before putting the telephone into operation.

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. He is 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 non-dealer-ship technicians or outside the selling dealer, problems may result. Installation of aftermarket equipment is not covered under the New Car Warranty.

- f 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

- f Unscrew external antennas before using an automatic car-wash.

Porsche Communication Management (PCM)



Warning!

There is a danger of accident if you set or operate the on-board computer, radio, navigation system, telephone or other equipment when driving.

This could distract you from the traffic and cause you to lose control of the vehicle resulting in serious personal injury or death.

- f Operate the components while driving only if the traffic situation allows you to do so safely.
- f Carry out any complicated operating or setting procedures only with the vehicle stationary.
- f If it is necessary to operate these components while the vehicle is in motion, use the function keys on the multi-functional steering wheel.

- f 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/winter 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.

- f Refer to the separate radio operating instructions before putting into operation.



Fire extinguisher under the right front seat

- f Take the fire extinguisher out of the drawer under the seat.

Note

- f Pay attention to the final control date on the fire extinguisher. If the fire extinguisher is used after its testing interval has elapsed, it may not function properly.
- f Follow the operating instructions on the fire extinguisher.
- f The functional ability of the fire extinguisher should be checked by a specialist workshop every 1 to 2 years.
- f After use, have the fire extinguisher refilled.

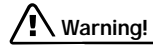
Fire Extinguisher

If the vehicle is equipped with a fire extinguisher, it is mounted underneath the left or right front seat, depending on equipment level.

Fire extinguisher under the left front seat

- f To remove the fire extinguisher in case of an emergency, hold the fire extinguisher with one hand, and press the PRESS button on the fire extinguisher holder with the other hand (arrow).

Storage



Warning!

Unsecured luggage and heavy objects may come loose during braking, rapid directional changes or in an accident and cause serious personal injury or death.

- f Do not carry items of luggage or objects in the passenger compartment unsecured.
- f Do not transport any heavy objects in open storage trays.
- f Always keep the storage trays closed while driving.
- f Always protect the passenger compartment with a safety net and a luggage compartment cover.

Note on operation

An unsecured or incorrectly positioned load can slip out of place or endanger the vehicle occupants during braking, direction changes or in accidents:

- f Please observe the chapter "LOADING INFORMATION" on Page 213.

Storage options

- In the glasses case in the roof console
- In the glove compartment, pen holder
- In the front and rear armrests
- In the drawer underneath the passenger's seat
- In the storage compartments at the sides of the luggage compartment
- In the door trim panel
- In the center console, front and rear
- On the back of the front seats
- Coat hook on the rear grab handles
- Under the load compartment floor
- In the front and rear cupholders



Glasses case in the roof console

Sunglasses (for example) can be stored in this storage compartment.

Opening

- f Press button (**arrow**).

Closing

- f Close the lid until it clicks audibly into place.



Opening

- f Press button **A** and open cover.

Locking

- f Always lock button **A** with the car key to secure the contents from unauthorized access.

Glove compartment

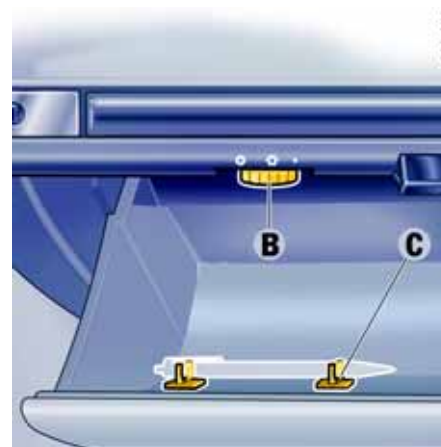


Warning!

Risk of injury by the glove compartment lid in case of an accident.

- f Keep the glove compartment closed while driving.

A drawer, designed to hold the vehicle folder, is located in the glove compartment.



B - Thumb wheel for cooling the glove compartment

C - Holder for pens

○ Cooling the glove compartment.

- f Rotate thumb wheel **B** leftwards.

● Switch cooling off

- f Rotate thumb wheel **B** rightwards.



Storage trays in the armrest between the front seats

Two storage trays are located in the armrest.

Opening the top tray

f Press button **A** and lift the cover.



Opening the lower tray

f Press button **B** and lift top tray with the cover closed.



Storage tray in the rear armrest

One storage tray is located in the armrest.

Opening the storage tray in the armrest

1. Fold down the armrest completely.
2. Press button **C** and lift the cover.



Drawer underneath the right front seat

There is room for the fire extinguisher in the drawer underneath the right front seat. On vehicles with DVD navigation, the DVD player is under the right front seat.

- f Please observe the chapter "DVD PLAYER UNDER THE RIGHT FRONT SEAT" on Page 198.

Opening

- f Lift the unlocking handle and pull out the drawer.

Closing

- f Close the drawer until it clicks audibly into place.



Side storage compartments in the luggage compartment

Space is provided for the warning triangle in the right-hand storage compartment.

Depending on how the vehicle is equipped, there is an additional storage option in the left-hand storage compartment.

The intermediate base can be removed to increase the size of the drawer.

Opening the storage compartment

- f Pull off the cover on the handle recess.

Closing the storage compartment

- f First, insert the cover at the bottom and then close it until it clicks audibly into place.



Caution!

Risk of damage.

- f Because of the heat, the right-hand storage compartment cannot be used as such in vehicles that have air suspension with level control and height adjustment.

Cupholder

You can place drinks cans and cups in the cupholder.

- f Keep the cupholder closed while driving.



Warning!

Risk of accident, scalding or damage due to spilling drinks.

- f Only use cupholder when safe to do so it is.
- f Only use containers which fit.
- f Never put overfull containers in the cupholder.
- f Never use hot drinks.



Opening front cupholder

- f Open shutter **A** (arrow).



Removing cupholder insert

The cupholder insert can be removed for cleaning. Removing the insert makes an additional storage tray available.

- f Open shutter **A**.
- f Press together the cupholder insert at the two engagement recesses **B**.
- f Remove the cupholder insert.



Opening rear cupholder

- f Press on the cover of the cupholder (**arrow**).

Closing rear cupholder

- f Close and engage the cupholder.



DVD player under the right front seat

On vehicles with DVD navigation, the DVD player is under the right front seat behind a cover.

Opening the cover

- f Pull cover upwards on the handle (**direction of the arrow 1**).
- f Pull out cover towards the front (**direction of the arrow 2**).



Closing the cover

- f Insert the four guide lugs of the cover into their openings (**arrow**).
- f Press the cover into place.
- f Push down the cover until it can be felt clicking into place.

Rear Lid

The equipment features "Porsche Entry & Drive" and "spare wheel bracket" affect operation of the rear lid.

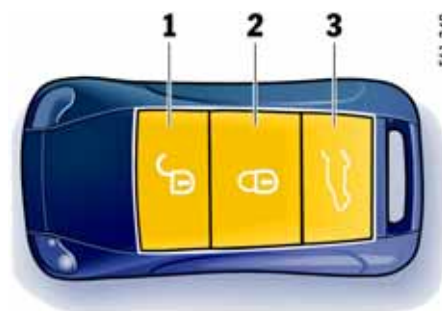
- f Please observe the chapter "UNLOCKING VEHICLE DOORS" on Page 22.
- f Please observe the chapter "SPARE WHEEL" on Page 331.



Danger!

Risk of poisoning. Exhaust gases can enter the passenger compartment when the rear lid is open.

- f Always keep the rear lid closed when the engine is running.
- f Always keep the rear lid closed while driving.



Unlocking rear lid

- f Briefly press button **3** on the remote control. If the vehicle doors and the rear lid are not opened, the rear lid will lock automatically after 120 seconds.



Opening rear lid

On vehicles with spare wheel bracket, the bracket must be swung aside before the rear lid can be opened.

- f Please observe the chapter "SPARE WHEEL" on Page 331.
- f Press unlocking handle (**arrow**) and open the rear lid.



Closing rear lid

The rear lid has a power closing mechanism.

- f Pull down the rear lid using the closing handle (**arrow**) and rest it against the lock. The rear lid is automatically pulled closed and locked.

Warning!

Danger of crushing. The rear lid is automatically pulled into the lock and locked.

- f Make sure that your fingers are not under the rear lid.
- f Keep foreign objects or limbs away from moving parts (latch striker) of the power closing mechanism.
- f Do not leave children in the car unattended.

Automatic locking

In the multi-purpose display of the instrument panel, you can set different variants of locking and unlocking the doors and the rear lid as well as the check-back signal when locking and unlocking the vehicle and save them on the respective remote control.

- f Please observe the chapter "TAILGATE" on Page 119.

Emergency operation of rear lid

If the rear lid cannot be opened with the radio remote control (e.g., if the battery of the remote control is dead), the emergency operation must be performed:

1. Unlock and open the driver's door with the vehicle key.
2. Switch on the ignition so that the alarm system will not be triggered.
3. Check if the TAILGATE function is activated in the multi-purpose display of the instrument panel. Please observe the chapter "TAILGATE" on Page 119.
4. Press the central locking button in the armrest.

The rear lid is now unlocked and can be opened with the unlocking handle.



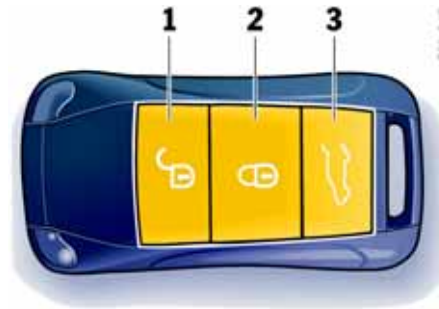
Rear Window



Danger!

Risk of poisoning. Exhaust gases can enter the passenger compartment when the rear window is open.

- f Always keep the rear window closed when the engine is running.
 - f Always keep the rear window closed while driving.
-
- f Please observe the chapter "PORSCHE ENTRY & DRIVE" on Page 22.



Unlocking

- f Briefly press button **3** on the remote control. The rear window can be opened with unlocking button **A**.

Opening

- f Press unlocking button **A** or
- f Press button **3** of the remote control for approx. 2 seconds. The rear window pops open.

Closing

- f Lower the rear window and press it into the lock until it can be felt to engage and lock.

Automatic Locking

In the multi-purpose display of the instrument panel, you can set different variants of locking and unlocking the doors and the rear lid as well as the check-back signal when locking and unlocking the vehicle and save them on the respective remote control.

- f Please observe the chapter "TAILGATE" on Page 119.



Loadspace

The maximum permissible load on the loadspace floor is 400 kg or 880 lbs. The weight must be distributed evenly over the entire loadspace.

f Please observe the chapter "LOADING INFORMATION" on Page 213.

Opening loadspace floor

1. Pull handle **A** and lift the loadspace floor.



2. Unclip prop **B** and insert it into receiver **C** in the loadspace floor.

Closing loadspace floor

1. Lift the loadspace floor slightly and clip prop **B** into its holder in the vehicle floor.
2. Close the loadspace floor.



Tie-down rings

You can secure the load in the luggage compartment against slipping. Tie-down straps or the luggage net can be fastened to tie-down rings **D**.

f Make sure that all rings are equally loaded when securing a load.

Note on operation

The tie-down rings are not designed to restrain a heavy load in an accident.

Luggage Compartment Cover

The luggage can be protected against prying eyes with the luggage compartment cover.

- f Always pull out the luggage compartment cover when transporting objects in the luggage compartment.
The luggage compartment cover is not designed to carry objects.
- f Do not hang bags or objects on the support brackets **A**. The support brackets could break off.
- f Please observe the chapter "LOADING INFORMATION" on Page 213.

Warning!

Danger of injury. During braking, direction changes or in an accident, objects can slide into the passenger compartment and endanger the occupants.

- f Do not place objects on top of the luggage compartment cover.



Pulling out luggage compartment cover

- f Pull out the cover by the handle and insert it into the guides on the left and right side walls of the luggage compartment.

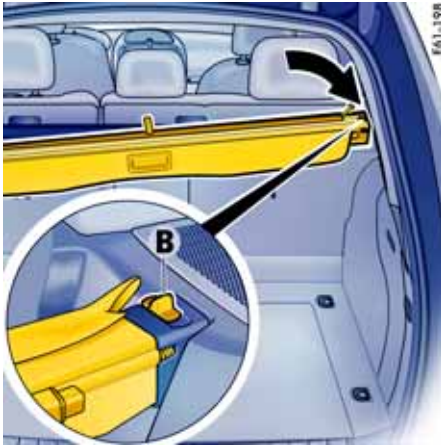
Retracting luggage compartment cover

- f Disengage the luggage compartment cover from the guides on the side walls and carefully guide it back into the retractor roller.



Remove luggage compartment cover

- f Pull the release **B** back.
- f Lift the cover at the right and remove.

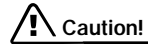


Installing luggage compartment cover

- f Insert the cover into the receiver on the left side.
- f Press the cover down into the receiver on the right side until it can be heard and felt to engage. Release **B** must point forwards.

Engine Compartment Lid

Opening



Caution!

Risk of damage to engine compartment lid or windshield wipers.

- f Make sure that the windshield wipers are not pulled out forwards when opening the engine compartment lid.
- f Always switch the windshield wipers off (position **O**) before opening the engine compartment lid. If the wiper arms are not in position **O**, they will automatically move to this position when the engine compartment lid is opened. This will happen even if the ignition is off. The wiper arms remain in this position until the lid is closed and the wiper system is switched off and then on again.

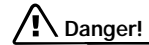


1. Pull release lever (**arrow**). Hood is unlocked.



2. Unlatch safety catch **A**.
3. Open the lid completely.

Closing



Danger!

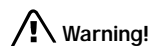
Risk of loss of control or an accident, resulting in serious personal injury or death.

- f Should you notice at any time while driving that one of the lids is not secured properly, please stop immediately in a suitable place and close it.
The front lid may fly up impairing vision.
- f Lower lid and let it fall into the lock.
If necessary, push the lid with the palm of your hand in the area of the lock.
- f Check that the lid has correctly engaged in the lock.
If the lid is not closed properly, a message will be displayed on the multi-purpose display of the instrument panel while the vehicle is being driven.

Luggage Safety Net

The safety net can hold back only lightweight items during braking, direction changes or in an accident.

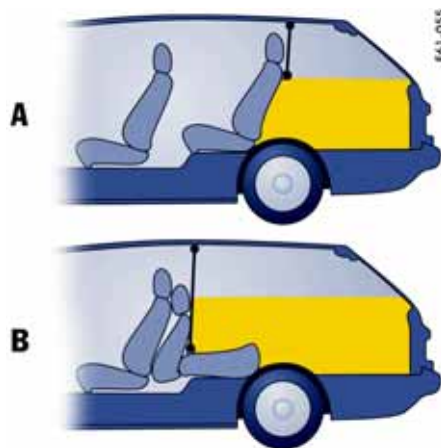
- f Please observe the chapter "LOADING INFORMATION" on Page 213.



Warning!

Danger of injury. During braking, direction changes or in an accident, an unsecured load can slip and endanger the occupants.

- f Always secure the passenger compartment with the luggage safety net.
- f Always fasten the load at the tie-down rings.
- f The load must never project over the top edge of the seat backrest.
- f If the safety net was heavily stressed or damaged during braking or an accident, etc., have the luggage safety net and its bracket checked by an authorized Porsche dealer.

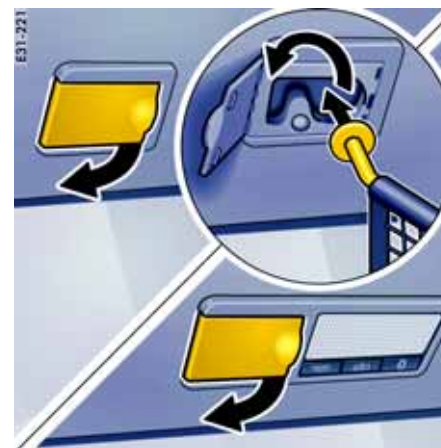


Permitted uses

A-Option 1

B-Option 2

- f Please observe the chapter "FOLDING REAR SEATS FORWARD" on Page 41.



Securing interior with luggage safety net

Pulling out luggage safety net

- f Open covers of the luggage safety net brackets.
- f Pull the luggage safety net out and engage the fastening hooks on the left and right sides into the rings on the ceiling. The luggage safety net fastening hooks can be pulled out at the sides.
- f Make sure that the luggage safety net fastening hooks are properly engaged in the rings.



Removing luggage safety net assembly from the rear seat backrest

1. Open both rear doors.
2. Fold down the left seat backrest first, followed by the right seat backrest. The seat cushions need not be folded for this purpose.
- f Please observe the chapter "FOLDING REAR SEATS FORWARD" on Page 41.
3. Push the luggage safety net assembly in the **direction of the arrow 1.**
4. Lift the luggage safety net assembly off in the **direction of the arrow 2.**

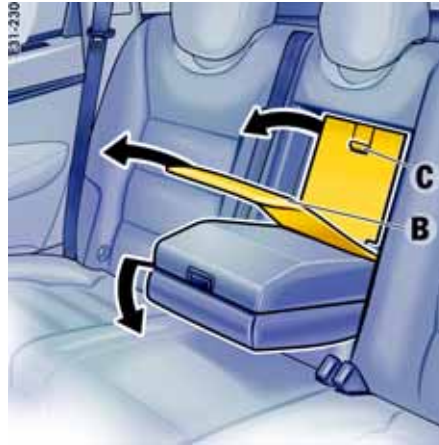


Ski Bag

Long objects such as skis can be transported in the passenger compartment, where they can be kept clean and protected against damage.

Loading ski bag

1. Press release button **A** on the lid of the through-load facility.
Open the lid downward.



2. Fold down the armrest of the rear seat backrest.
3. Pull protective cover **B** off the Velcro strap at the top and lower it.
4. Press release button **C** on the lid of the through-load facility downwards and fold down the lid.



5. Pull out and unfold the ski bag.
6. Insert objects into the ski bag from the luggage compartment.



Stowing ski bag

1. Empty ski bag.
2. Pull ski bag into the passenger compartment.
3. Close lid in the luggage compartment.
4. Carefully fold the ski bag and close the lid.
5. Put in the protective cover and secure it with the Velcro strap.

Note on operation

- f Fold up the ski bag only when it is dry.

Securing load

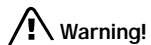
- f Secure the stowed objects with tightening belt **D**.
- f Insert belt tongue into the buckle.

Roof Transport System

- f Please follow the separate instructions for fitting the Roof Transport System.
- f Please observe the chapter "LOADING INFORMATION" on Page 213.

Fitting normal commercially available luggage racks is **not** possible.

The **Porsche Roof Transport System** allows the transport of various sports and hobby equipment. Your authorized Porsche dealer will be pleased to tell you about the manifold uses of the Roof Transport System.



Warning!

Risk of an accident, loss of control and damage to the vehicle.

- f Completely remove the Roof Transport System before using an automatic car wash – risk of damage to the vehicle.
- f Do not exceed the permissible roof load, the permissible gross weight and the permissible axle loads.
Please observe the chapter "WEIGHTS" on Page 387.
- f Distribute load evenly, with heavy items as low as possible. Items of luggage must not project beyond the side of the load area.
- f Fix and secure every item to the basic carrier with a rope or lashing strap (do not use elastic rubber tensioners).
- f Before every journey, and at regular intervals during long trips, check that Roof Transport System and load are secure. Re-tighten if necessary and secure additionally by locking.

When the Roof Transport System is loaded, the maximum speed depends on the nature, size and weight of the load being carried.

- f Adapt your driving style and speed to the changed conditions.
Nevertheless, Porsche recommends that you do not exceed the posted speed limit.

Driving, braking and steering behavior change due to the higher center of gravity and the greater wind-resistant area. You should adapt your driving style appropriately.

- f Since fuel consumption and noise are increased with the Roof Transport System fitted, it should not remain on the car if not in use.



E33-016

Trailer Coupling



Warning!

Risk of accident.

- f Follow the operating instructions for the trailer recommended by the trailer manufacturer.
- f Do not modify or repair the trailer coupling.
- f Before having new ADAPTER fitted, find out from your authorized Porsche dealer about the current authorization status.

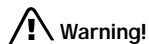
- f Use only ADAPTER makes tested and approved by Porsche.
 - f Ensure that all trailer equipment conforms to the appropriate classification for total gross trailer weight and tongue weight.
-
- f Please observe the chapter "WEIGHTS" on Page 387.
 - f Please observe the chapter "LOADING INFORMATION" on Page 213.

Retrofitting

Have a trailer coupling retrofitted only by an authorized Porsche dealer. The dealer is familiar with the manufacturer's specifications and any necessary conversion measures.

Electrical connection

Your Porsche is equipped with a 7-pin connector **A** for the electrical connection to the trailer.



Warning!

Risk of accident. Failure to keep an electrical adapter clean may result in corrosion and affect operation of electrical lines, resulting in possible trailer brake system failure.

- f Periodically inspect and clean adapter as needed.

Hitching trailer

- f Always turn off the alarm system before you attach a trailer. The inclination sensor could trigger the alarm unintentionally.
- f Follow the operating instructions for the trailer recommended by the trailer manufacturer.
- f Please observe the chapter "WEIGHTS" on Page 387.

Unhitching trailer

- f If the trailer is equipped with an overrun brake, do not unhitch the trailer when its brake is still applied.

Loading Information

Definitions

The towing capacity (gross weight of the trailer) is the sum of the trailer's empty weight and the weight of the load.

The vertical coupling load is the weight that the trailer drawbar exerts on the trailer coupling of the vehicle.

The rear-axle load is the vehicle weight on the rear axle plus the weight of the transported load and the vertical coupling load of the trailer.

The gross weight of the vehicle and trailer is the sum of the weight of the towing vehicle and the weight of the trailer.

The Curb weight - actual weight of your vehicle - vehicle weight including standard and optional equipment, fluids, emergency tools, and spare tire assembly. This weight does not include passengers and cargo.

The Gross Vehicle Weight is 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, hitch, trailer tongue load 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 jamb.

For determining the compatibility of the tire and vehicle load capabilities:

- f Please observe the chapter "TIRES, RIMS, TRACKS" on Page 382.

The load capacity coefficient (e.g. "106") is a minimum requirement. For more information:

- f Please observe the chapter "INSCRIPTION ON RADIAL TIRE" on Page 309.

The Gross Combined Weight Rating is the maximum total weight rating of vehicle, passengers, cargo and trailer.

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.

If a trailer is being towed, the trailer tongue weight must be included as part of the cargo load.

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.

- f Never exceed the permissible limits.

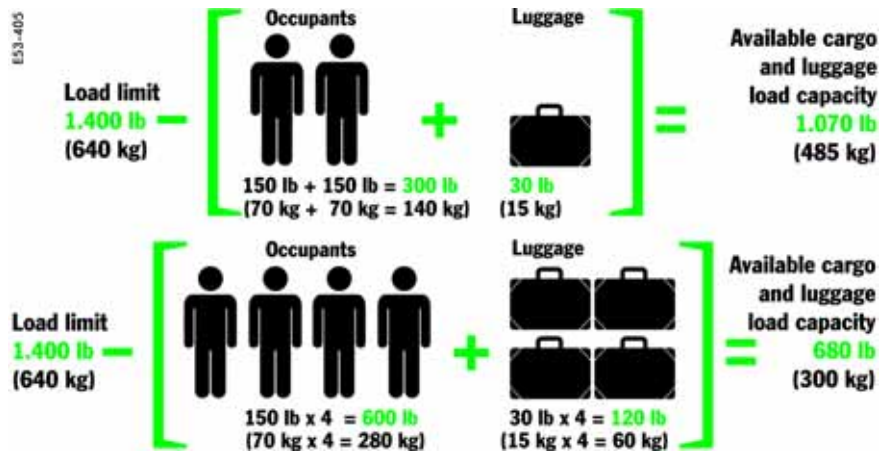


Risk of personal injury or death. Injuries are much more likely in an accident if persons ride in the cargo area.

- f Persons must ride only on the seats provided for this purpose.
- f Make sure that everybody fastens their safety belts.

Risk of personal injury, loss of control and damage to vehicle.

- f Never exceed the specified axle loads. Overloading can shorten the service life of the tires and car, as well as lead to dangerous vehicle reactions and long braking distances. Damage due to overloading is not covered by the vehicle warranty.



Example for determining the combined weight of occupants and cargo

Vehicle Load Capacity

- f The combined weight of occupants and cargo should never exceed the weight shown on the tire plate in the vehicle. Please observe the chapter "TIRE PRESSURE PLATE" on Page 301.
- f Never exceed the number of passengers shown on the tire pressure plate in the vehicle.

Determining the combined weight of occupants and cargo:

- f 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 pounds.
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 five - 150 lb passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs. [1400 - 750 (5 x 150) = 650 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.
6. If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this manual to determine how this reduces the available cargo and luggage load capacity of your vehicle.

Stowing load in the vehicle



Warning!

Danger of injury.

An unsecured or incorrectly positioned cargo can slip out of place or endanger the vehicle occupants during braking, direction changes or in accidents.

Never transport objects which are not secured.

- f Always transport cargo in the cargo area, never in the passenger compartment (e.g. on or in front of the seats).
- f Support the cargo on the seat backrests whenever possible. Always lock the backrests into place.
- f Place the cargo behind unoccupied seats whenever possible.
- f Stow heavy objects as close to the front of the cargo area as possible, with lightweight objects behind them.
- f The cargo must never project over the top edge of the seat backrest.
- f Always protect the passenger compartment with a luggage safety net and a luggage compartment cover.
Do not drive with objects on top of the luggage compartment cover.

- f If the rear seats are not occupied, the backrests can be additionally secured with the safety belts. Simply cross the outer safety belts and insert each into the opposite buckle.
- f Make sure that the cargo cannot damage the heating filaments of the rear window and the TV antenna of the side window.

Luggage net

- f Luggage must be stowed completely covered by the luggage net.
The luggage net can prevent only lightweight objects from slipping.

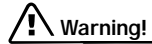
Tie-down belts

- f Do not use elastic belts or straps to tie down cargo.
- f Do not place belts and straps over sharp edges.
- f Observe the directions for use and information for the tie-down equipment.
- f Use only belts with a tear strength of at least 1543 lbs. (700 kg) and a maximum width of 1 in. (25 mm).
- f Cross the belts over the load.

Driving

- f The car's handling changes depending on the vehicle loading. Adapt your driving style to the changed driving behavior.
- f Do not exceed the maximum gross weight and the axle load.
- f Please observe the chapter "WEIGHTS" on Page 387.
- f Never drive with the rear window or rear lid open.
Exhaust gases can enter the passenger compartment.
- f Adapt the tire pressure to the load.
- f Please observe the chapter "LOAD" on Page 108.
- f Please observe the chapter "TIRE PRESSURES, COLD" on Page 385.

Towing a trailer



Warning!

Driving with a trailer

- f Always observe the permissible towing capacity, vertical coupling load and rear-axle load. Please observe the chapter "WEIGHTS" on Page 387.
- f When connected, the trailer must always be horizontal behind the towing vehicle. If necessary, use a trailer with an adjustable drawbar.
- f When the vehicle is driven in the mountains, the engine output decreases as altitude increases. The maximum weights stated are the values at sea level. The total permissible weight of the car-trailer combination must therefore be reduced by 10% for each increment of 3,280 ft. (1,000 meters) altitude. A fractional increment counts as the full 3,280 ft. (1,000 meters). Please take this into consideration when planning your route.

Distributing the load

- f Distribute the load in the trailer so that heavy objects are as close to the axle as possible. Always safeguard all objects against slipping and tie them down securely.
- f You should make the best possible use of the trailer coupling's rated vertical coupling load when loading the trailer, but never exceed it.

Tire pressure

- f Select the vehicle tire pressure for full load when towing a trailer.
- f Please observe the chapter "TIRE PRESSURES, COLD" on Page 385.
- f Check the tire pressure of the trailer's wheels according to the manufacturer's instructions.

Door mirrors

- f If the width of the trailer obstructs your view of the traffic behind the trailer, you must have additional door mirrors fitted.

Headlights, lights

- f Always check the headlight adjustment before driving with a trailer. If necessary, correct with the headlight beam adjustment function.
- f Check whether the plug of the trailer is plugged into the towing vehicle and whether all lights function.

Driving with a trailer

When towing a trailer you must under all circumstances adapt your speed to prevailing road and driving conditions. Never exceed a speed of

50 mph (80 km/h). Towing at excessive speed can result in loss of control.

- f Carefully and gradually familiarize yourself with the handling and braking behavior of the car-trailer combination.
- f Do not drive with the towing vehicle empty and the trailer loaded.
If this unfavorable combination is unavoidable, please drive especially slowly.
- f Bear in mind the different vehicle handling and size in situations such as braking, parking, cornering and overtaking, etc.
- f The driving stability of the car-trailer combination worsens as the speed increases. Therefore, drive especially slowly on downhill stretches and in the case of unfavorable road and weather conditions (such as wind).
- f Drive in an appropriately low gear on downhill stretches in order to make use of the engine braking effect.

- f Slow down immediately if the trailer starts to sway. Do not countersteer; brake if necessary. Never attempt to straighten out the car-trailer combination by accelerating.

- f Activate Low Range when moving off on steep slopes.

- f Under no circumstances may people, animals or objects be in the space between the trailer and the towing vehicle when the vehicle is moving.

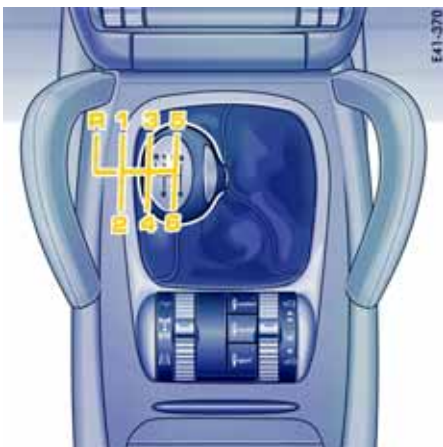
- f When reversing, bear in mind that ParkAssist is not active.

Maintenance note

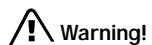
Please take into consideration that driving with a trailer places markedly greater stress on all vehicle components. Expert inspection and maintenance after every use are indispensable prerequisites for proper functioning and safety.

Shifting Gear, Traction Systems

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Manual transmission, clutch



Warning!

Risk of accident.

- f Do not obstruct the pedal travel with floor mats or other objects.

Floor mats of the correct size and with the appropriate fasteners are available from your authorized Porsche dealer.

The positions of the gears are shown on the shift diagram on the gearshift lever.

- f When shifting gears, always ensure that the clutch pedal is fully depressed and the gear has fully engaged.
- f Select reverse only when vehicle is stationary.
- f Select an appropriately low gear on upward and downward slopes.
This will ensure optimum use of engine power and engine braking.

When reverse gear is selected and the ignition is on, the reversing lights are lit.

Permitted engine speed

- f You should change into a higher gear before the needle reaches the red mark on the tachometer, or ease off the accelerator.

If the red zone is reached during acceleration, fuel feed is interrupted.



Caution!

Risk of engine damage (overrevving) when shifting down to a lower gear.

- f Take care not to exceed the maximum permitted engine speed when down-shifting.

Tiptronic S

The Porsche Tiptronic is a six-speed transmission and features an “automatic” and a “manual” gear-shift mode.

In **automatic selection mode** (selector lever position **D**), gear changing is automatic. Depending on the driving program, you can change temporarily from automatic to manual mode using the rocker switches on the steering wheel.

In **manual selection mode** (selector lever position **M**), you change gear using the rocker switches on the steering wheel or by pushing the selector lever forward or back.

You can change between selector lever positions **D** and **M** as you wish while driving.

Note on operation

Take care not to operate the rocker switches on the steering wheel inadvertently, thereby triggering undesired gear changes.



Changing the selector lever position

The selector lever is locked with the ignition key withdrawn.

The selector lever can be moved from position **P** or **N** only with:

- The ignition switched on
- The brake pedal pressed and
- The release button pressed

Release button

The release button (**arrow**) on the front side of the selector lever prevents unintentional gear changes.

The release button must be pressed when shifting to position **R** or **P**.

The selector lever cannot be operated in the event of an electrical fault.

f Please observe the chapter “SELECTOR LEVER EMERGENCY RELEASE” on Page 228.

Starting

The engine can be started only in selector lever position **P** or **N** with the brake pedal pressed.

Moving off

- f Select the desired position for moving off (**D**, **M** or **R**) only when the engine is idling and when depressing the brake pedal.
- f Since the car creeps when in gear, do not release the brake until you want to move off.
- f After selecting a gear, do not accelerate until you can feel that the gear is engaged.



Display

Indicator for selector lever position and engaged gear

When the engine is running, the selector lever position and engaged gear are indicated.

If there is a fault in the transmission:

- An **X** appears instead of the current gear indication on the multi-purpose display of the instrument panel.
The transmission no longer shifts.
- f To remedy the fault, immediately consult an authorized Porsche dealer.

Selector Lever Positions

P – Parking lock

In selector lever position **P**, the driven wheels are mechanically locked.

- f Engage parking lock only when vehicle is stationary.
- f Engage parking lock **after** applying the parking brake and release it **before** releasing the parking brake.
- f Always apply the parking brake before leaving the vehicle.

The ignition key can be withdrawn only in selector lever position **P**.

R – Reverse

- f Select reverse only if car is stationary and the brake is applied.

N – Neutral

Selector lever position **N** must be selected for towing or in car washes, for example.

- f Select the desired position for moving off (**D**, **M** or **R**) only when the engine is idling and when depressing the brake pedal.

D - Automatic selection mode (in the road driving program)

The functions of selector lever positions **D** and **M** differ in the on-road program, High Range, and in the off-road program, Low Range.

- f Use selector lever 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 and on the resistance (e.g. uphill), the gear-changing points are shifted towards higher or lower engine-speed ranges. Movement of the accelerator, driving speed, longitudinal and lateral acceleration and the road profile all have an influence on the gear-changing characteristic.

When PSM is switched off, transmission gear changes are done at higher engine speeds.

Unwanted upward shifts, e.g. before corners, are prevented by swiftly releasing the accelerator pedal.

Depending on lateral acceleration, upward changes on corners are not made until the engine-speed limit is reached.

During braking, and depending on the amount of deceleration, the Tiptronic changes down earlier. For subsequent cornering, the right gear is engaged when pressure is applied to the brakes before the corner.

The corner is taken in the right gear, and when you accelerate out of the corner you do not have to change down.

Moving off

In 2nd gear, the vehicle moves off with the throttle only slightly open. Move off in 1st gear with the throttle open wider or when the engine is cold.

When PSM is switched off, the car generally moves off in 1st gear.

Shifting gear on the steering wheel

By shifting gear with the rocker switches on the steering wheel, you can temporarily change from automatic selection mode **D** to manual selection mode **M**.

Advantages

- Shifting down before corners and on entering built-up areas.
- Shifting down on downward slopes (engine braking).
- Shifting down for brief spurts of acceleration.
- Selecting 1st or 2nd gear for moving off.

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 8 seconds (unless car is cornering, overrunning or stationary),
- if you depress the accelerator to kickdown.

Temporary change-down

Precondition

- Speed is higher than approx. 33 mph (54 km/h).
- f Depress accelerator quickly.
The Tiptronic changes temporarily to the sportiest gear-changing map, i.e. to the highest possible gear-changing points. Correspondingly, the transmission shifts down immediately by one, two or three gears.

Ending the function

- f Release the accelerator markedly (by approx. 25%).

f f f

Kickdown

The kickdown function is active in selector lever position **D**.

- f For optimum acceleration, e.g. when overtaking, depress the accelerator pedal beyond the full-throttle point (kickdown).

The transmission shifts down depending on the speed of travel and engine speed. Upward shifts occur at the highest possible engine speeds. These gear-changing speeds remain active until the accelerator is released to approx. 80% of the full-throttle position.

D - Automatic selection mode (in the off-road driving program)

The functions of selector lever positions **D** and **M** differ in the on-road program, High Range, and in the off-road program, Low Range.

- f Use selector lever position **D** for "normal" driving. The gears are shifted automatically according to the accelerator position and speed.

The gears are shifted automatically according to the accelerator position and speed. The gear-changing points have been adjusted to achieve the best possible vehicle control on difficult terrain.

Depending on the route profile, the gear-changing points are shifted towards higher or lower engine-speed ranges. On steep downhill stretches, upward shifts are prevented until medium engine speeds are reached (at least 2,500 rpm).

When the car is overrunning, an automatic upshift does not occur when the engine speed limit is reached.

Moving off

The car moves off in 1st gear.

Shifting gear on the steering wheel

By shifting gear with the rocker switches on the steering wheel, you can temporarily change from automatic selection mode **D** to manual selection mode **M**.

Advantages

- Shifting down on downward slopes (engine braking).
- Shifting down for brief spurts of acceleration.
- Selecting 1st/2nd or 3rd gear for moving off.

The manual selection mode remains engaged:

- For overrunning
- Depending on lateral acceleration
- When the vehicle is stationary (e.g. at a junction).

The system leaves manual selection mode:

- Automatically after around 8 seconds (unless car is subject to high lateral acceleration, is overrunning or stationary),
- if you depress the accelerator to kickdown.

Kickdown

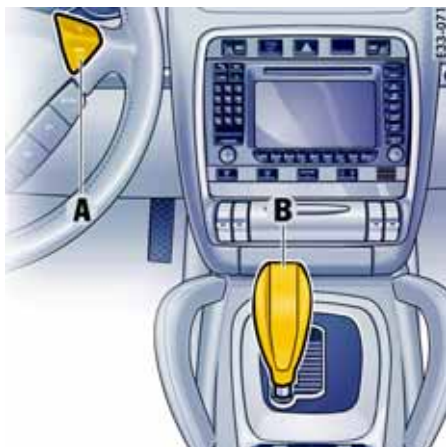
The kickdown function is active in selector lever position **D**.

- f For optimum acceleration, e.g. when overtaking, depress the accelerator pedal beyond the full-throttle point (kickdown).

The transmission shifts down depending on the speed of travel and engine speed. Upward shifts occur at the highest possible engine speeds. These gear-changing speeds remain active until the accelerator is released to approx. 80% of the full-throttle position.

Tip on driving

Unlike in the on-road driving program, an automatic upshift is **not** performed in manual selection mode **M** when the engine-speed limit is reached.



M - Manual selection mode (in the on-road driving program)

The functions of selector lever positions **D** and **M** differ in the on-road program, High Range, and in the off-road program, Low Range.

The currently selected gear is retained if 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.

Warning!

The kickdown function is not active in manual selection mode "M".
The kickdown function cannot be used to downshift in manual selection mode "M".

- f Therefore shift down manually when accelerating (e.g. to overtake).

Shifting up

- f Press upper part (+) of a rocker switch **A** or
- f Push selector lever **B** forward in the M gate.

Shifting down

- f Press lower part (-) of a rocker switch **A** or
- f Push selector lever **B** back in the M gate.

Depending on driving speed and engine speed, you can shift up or down at any time. Gear changes which would exceed the upper or lower engine-speed limit are not executed by the control unit.

You can change down two gears by quickly pressing rocker switches **A** or selector lever **B** twice.

If PSM is active and the engine-speed limit is reached, an automatic upward shift is performed or, just before idling speed is reached, a downward shift is performed.

- f Select an appropriately low gear on upward and downward slopes.
This will ensure optimum use of engine power and engine braking.

If manual mode fails, the control electronics switch to automatic mode.

In this event, the instrument panel will display selector lever position **D**.

- f To remedy the fault, please consult an authorized Porsche dealer.

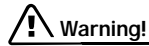
f f f

M - Manual selection mode (in the off-road driving program)

The functions of selector lever positions **D** and **M** differ in the on-road program, High Range, and in the off-road program, Low Range.

The currently selected gear is retained if 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.



Warning!

The kickdown function is **not** active in manual selection mode "**M**".

The kickdown function cannot be used to downshift in manual selection mode "M**".**

- f Therefore shift down manually when accelerating (e.g. to overtake).

Tip on driving

The kickdown function is **not** active in selector lever position **M**.

Unlike in the road driving program, an automatic upshift is **not** performed when the engine-speed limit is reached.

Shifting up

- f Press upper part (+) of a rocker switch **A** or
- f Push selector lever **B** forward in the M gate.

Shifting down

- f Press lower part (–) of a rocker switch **A** or
- f Push selector lever **B** back in the M gate.

Depending on driving speed and engine speed, you can shift up or down at any time. Gear changes which would exceed the upper or lower engine-speed limit are not executed by the control unit.

You can change down two gears by quickly pressing rocker switches **A** or selector lever **B** twice.

The gear is changed down automatically just before idle speed is reached.

- f Select an appropriately low gear on upward and downward slopes.
This will ensure optimum use of engine power and engine braking.

If manual mode fails, the control electronics switch to automatic mode. In this event, the instrument panel will display selector lever position **D**.

- f To remedy the fault, please consult an authorized Porsche dealer.

Stopping

- f For a brief stop (e.g. at a traffic light), leave the selector lever in drive position and hold the vehicle with the brake pedal.
- f Do not hold the car on a slope using the accelerator. Use the brake pedal or the parking brake instead.
- f Before leaving the vehicle, always apply the handbrake and move the selector lever to position **P**.

Tip on driving

In selector lever positions D and M, the Hillholder prevents the car from rolling backward when it has been stopped on an upward slope with the engine running.

- f Please observe the chapter "HILLHOLDER" on Page 242.

Parking

- f Go easy on the accelerator.
- f When parking or maneuvering in a small space, control the speed by careful use of the foot-brake.

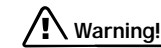
Driving in winter

In wintry road conditions it is advisable to take steep inclines in manual mode **M**. This prevents the occurrence of gear changes that could cause wheelspin.

Reduced driving program

If there is a fault in the transmission:

- An **X** appears instead of the current gear indicator on the multi-purpose display of the instrument panel.
The transmission no longer shifts.
- f To remedy the fault, immediately consult an authorized Porsche dealer.



Reverse gear lock monitoring is disabled in the emergency running program.

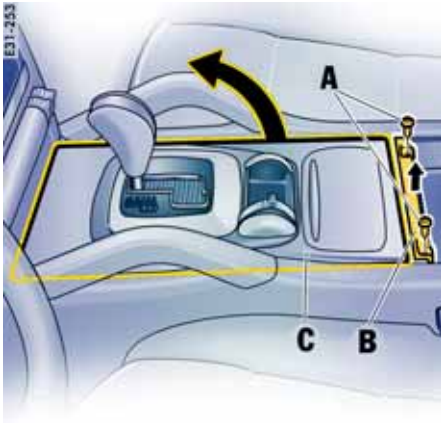
Damage to the vehicle may result as well as loss of control, if the vehicle is moving forward fast enough to cause rear wheel lockup.

- f Do not shift into **R** while the vehicle is moving forward.

Tip on driving

3rd or 5th gear in selector position **D** and reverse gear **R** are now available and will allow you to reach the nearest authorized Porsche dealer.

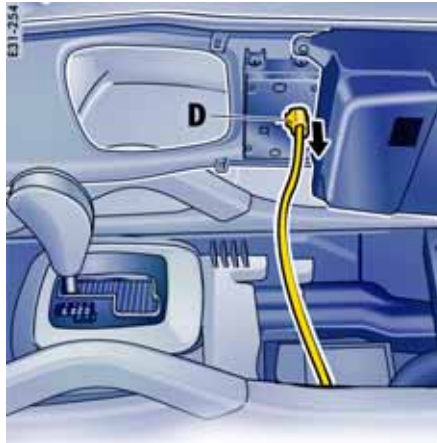
- f Please go to your authorized Porsche dealer as soon as possible.



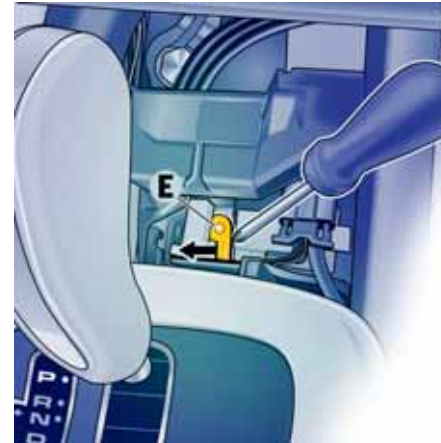
Selector lever emergency release

In the event of an electrical fault, the selector lever lock in position **P** can be manually released (for towing the vehicle, for example).

1. Raise center armrest.
2. Use the key for emergency operation of the sliding/lifting roof to undo screws **A**.
Please observe the chapter "EMERGENCY OPERATION OF SLIDING/LIFTING ROOF" on Page 171.
3. Remove trim mounting **B**.



4. Lift trim **C** at the rear and carefully pull it off.
5. Unplug plug connection **D**.



6. Press foam aside.
7. Press locking lever **E** aside (to the left) using a suitable object.
8. Move selector lever to position **N**.
9. Reassemble in reverse order.



Danger!

Risk of loss of control and personal injury.

- f Ensure that the parking brake of the vehicle is set and that vehicle does not move on its own.



Driving Programs for On-Road and Off-Road Driving

Two different driving programs with special power-transmission and running-gear control systems (such as ABS, off-road ABS and PSM, etc.) are provided in your Porsche, with the aim of realising the best possible driving dynamics combined with maximum safety.

All control systems meet these requirements for both off-road and normal driving.

With rocker switch **A**, you can easily select the appropriate driving program to suit the special requirements for the respective terrain.

Off-road program Low Range (with reduction)

When Low Range is active, the power transmission and running-gear control systems are automatically adapted to the requirements for off-road driving.

On-road driving program High Range (without reduction)

When High Range is active, the power-transmission and running-gear control systems are automatically adapted to the requirements for on-road driving.

Use

Rocker switch **A** is located in the center console of the vehicle. It features a multi-step function and can be operated in both directions.

Each time the rocker switch is pushed forward, the vehicle becomes one step more suitable for off-road driving. This is realised by changing from the on-road to the off-road driving program or by engaging the differential locks in stages. The number of differential locks that can be engaged in Low Range depends on the equipment of your vehicle.

Each time the rocker switch is pushed back, the vehicle becomes one step more suitable for on-road driving.

Once the driving program has been selected, the rocker switch springs back to home position.

Notes on operation

If the Low Range indicator light beside the rocker switch flashes rapidly **after the ignition is switched on**, there is a fault in the shifting system.

f Please have the vehicle checked immediately at an authorized Porsche dealer.



Low Range indicator light

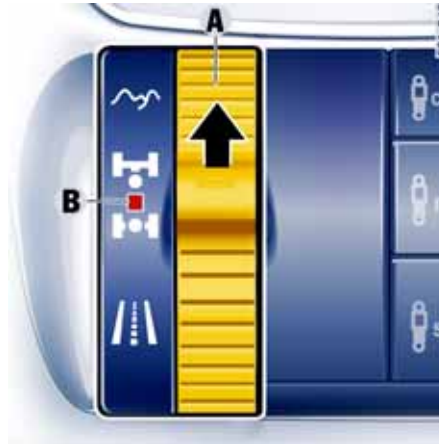
If the Low Range indicator light beside the rocker switch flashes when you attempt to operate rocker switch, the conditions for a shift have not been met:

Vehicles with manual transmission

- Vehicle is not stationary.
- Brake is not pressed.
- Gear-shift lever is not in neutral.

Vehicles with Tiptronic S

- Vehicle has exceeded or gone below the limit speed.
- Selector lever is not in position **N**.



A - Rocker switch

B - Low Range is engaged

Changing from on-road driving program to off-road driving program

Vehicles with manual transmission

- f Stop the vehicle.
- f Apply the brake.
- f Put the gearshift lever in neutral.

- f Push rocker switch **A** forward until activation of the off-road driving program is indicated on the multi-purpose display of the instrument panel and by illumination of light-emitting diode **B**. The Low Range indicator lights in the instrument panel and beside the rocker switch **flash several times** during the shifting process. Low Range is now engaged.

Caution!

Risk of engine damage (overrevving). In the Low Range program, the gear-changing points are shifted towards lower engine-speed ranges.

- f Shift early to prevent overrevving the engine.

Tip on driving

When Low Range is active, the power transmission and running-gear control systems are automatically adapted to the requirements for off-road driving.

Vehicles with Tiptronic S

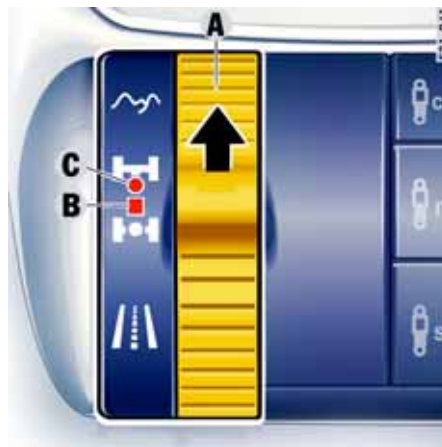
- f Reduce speed to below 9.3 mph (15 km/h) or stop vehicle.
- f Move selector lever to position **N**.
- f Push rocker switch **A** forward until activation of the off-road driving program is indicated on the multi-purpose display of the instrument panel and by illumination of light-emitting diode **B**. The Low Range indicator light on the instrument panel and light-emitting diode **B** beside the rocker switch **flash several times** during the shifting process. Low Range is now engaged.



Danger!

Serious risk of injury or death. Risk of accident due to uncontrolled vehicle movement. The selector lever is blocked during the shifting procedure. Shifting when driving uphill can cause the vehicle to stand still or even roll backwards, if the shifting procedure has not yet been completed. When driving downhill, the vehicle can accelerate unintentionally while shifting.

- f Increased brake readiness is required.
- f Please observe the chapter "POWER-TRANSMISSION AND RUNNING-GEAR CONTROL SYSTEMS" on Page 235.



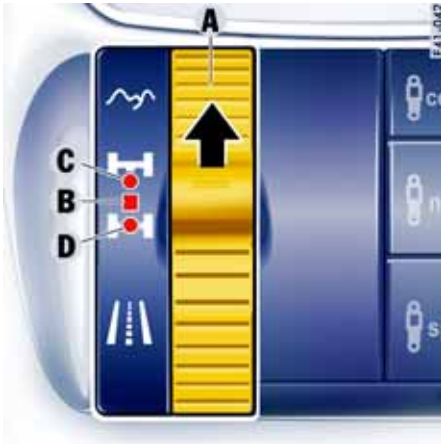
A - Rocker switch
B - Low Range is engaged
C - Center differential lock is fully engaged

Fully engaging the center differential lock in Low Range

Tip on driving

When the center differential lock is fully engaged, there is no longer any speed difference between the front and rear axles. If, for example, both wheels at the front axle lose traction on an icy road or soft surface, the rigidly linked drive wheels will permit the vehicle to continue moving nevertheless.

- f Push rocker switch **A** forwards in stages until engagement of the center differential lock is indicated on the multi-purpose display of the instrument panel and by the illumination of the two light-emitting diodes **B** and **C**. The center differential lock is changed over to fully engaged state by the automatic control system.



- A - Rocker switch
- B - Low Range is engaged
- C - Center differential lock is fully engaged
- D - Rear differential lock is fully engaged

Fully engaging the rear differential lock in Low Range

Tip on driving

When the rear differential lock is fully engaged, there is no longer any speed difference between the two rear wheels. If, for example, one drive wheel at the rear axle loses traction on an icy road or soft surface, the stiff through-drive function will permit the car to continue moving nevertheless.

f Push rocker switch **A** forwards in stages until engagement of the rear differential lock (transverse lock) is indicated on the multi-purpose display of the instrument panel and by the illumination of the three light-emitting diodes **B**, **C** and **D**.

The center and rear differential locks are changed over to fully engaged state by the automatic control system.

Note on operation

The rear differential lock can only be engaged while the engine is running.



Hydraulically disengageable anti-roll bars

The front and rear anti-roll bars can be disengaged to improve traction and comfort when driving off road. This feature increases the wheel articulation.

Condition for disengaging the anti-roll bars

- Low Range is engaged.

Note

The anti-roll bars cannot be engaged if the wheel articulation or lateral acceleration is too great.

Disengaging

- f Press button **E**.
Disengagement of the anti-roll bars is indicated on the multi-purpose display of the instrument panel and by illumination of light-emitting diode **F**.
The light-emitting diode on the button **flashes several times** during the disengagement process.
The anti-roll bars are disengaged.

Note on operation

The anti-roll bars cannot be disengaged manually at speeds above **25 mph (40 km/h)**.

Engaging

- f Press button **E**.
Light-emitting diode **F** on the button **flashes several times** during the engagement process and then goes out.
The anti-roll bars are engaged.

Note on operation

The anti-roll bars are engaged automatically when a speed of **30 mph (50 km/h)** is exceeded or when the lateral acceleration value is high.

Notes

Engagement of the anti-roll bars is audible.

At temperatures below -4°F (-20°C), the anti-roll bars take somewhat longer to engage.



Indicator light and warnings

Indication of a fault by:

- Continuous illumination of the light-emitting diode in the button
 - Illumination of the warning light on the instrument panel
 - A message on the multi-purpose display of the instrument panel
- f Adapt your driving behavior to the changed conditions.
Drive slowly to the nearest authorized Porsche dealer and have the fault remedied.
- f Please observe the chapter “WARNING LIGHTS AND WARNING MESSAGES” on Page 124.

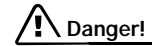
Changing from off-road driving program to on-road driving program

Vehicles with manual transmission

- f Stop the vehicle.
- f Apply the brake.
- f Put the gearshift lever in neutral.
- f Pull rocker switch **A** back in stages until light-emitting diodes **B, C and if necessary, D** are out.
The Low Range indicator light on the instrument panel and light-emitting diode **B** beside the rocker switch **flash several times** during the shifting process.
High Range is active.

Vehicles with Tiptronic S

- f Reduce speed to below 19 mph (30 km/h) or stop vehicle.
- f Move selector lever to position **N**.
- f Pull rocker switch **A** back in stages until light-emitting diodes **B, C and if necessary, D** are out.
The Low Range indicator light on the instrument panel and light-emitting diode **B** beside the rocker switch **flash several times** during the shifting process.
High Range is active.



Danger!

Serious risk of injury or death. Risk of accident due to uncontrolled vehicle movement. The selector lever is blocked during the shifting procedure. Shifting when driving uphill can cause the vehicle to stand still or even roll backwards, if the shifting procedure has not yet been completed. When driving downhill, the vehicle can accelerate unintentionally while shifting.

- f Increased brake readiness is required.
- f Please observe the chapter "POWER-TRANSMISSION AND RUNNING-GEAR CONTROL SYSTEMS" on Page 235.

Power-Transmission and Running-Gear Control Systems

A complex interconnection of all control systems acting in power transmission and in the running gear has been realised in your Porsche. All control systems have been linked with the aim of combining the best possible driving performance with maximum safety. The following systems are involved:

System/designation	Scope
PTM Porsche Traction Management	<ul style="list-style-type: none">– Full-time all-wheel drive– Electronically controlled center differential lock– Automatic brake differential (ABD)– Traction control system (TCS)– Reduction gear/Low Range
PTM Plus Porsche Traction Management	<p>In addition to the PTM features, PTM Plus also includes:</p> <ul style="list-style-type: none">– Electronically controlled rear differential lock– Hydraulically disengageable anti-roll bars
PSM Porsche Stability Management	<ul style="list-style-type: none">– Stability management system– Anti-lock brake system (ABS)– Traction control system (TCS)– Automatic brake differential (ABD)– Engine drag torque control (MSR)
Air suspension with level control and height adjustment	<ul style="list-style-type: none">– Fully load bearing air spring struts with integral shock absorbers– Air supply system with pressure accumulator
PASM Porsche Active Suspension Management	<ul style="list-style-type: none">– Shock absorber system with adaptive, continuous shock absorber control

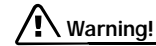
Porsche Traction Management (PTM)

Porsche Traction Management is a full-time all-wheel control system designed to influence the longitudinal and lateral dynamics. It is closely linked with the Porsche Stability Management (PSM) system:

PTM ensures the best possible power distribution to the four driven wheels at the front and rear axles. The system realises this optimal traction by intervening in the lock control function of the transfer case and rear differential. PTM is active at all times and, unlike the PSM, cannot be switched off.

Advantages of PTM

- Obvious improvement in traction, driving stability and steering ability of the car.
- Vehicle is more manageable when driven at its performance limits.
- Improved straight-ahead tracking and stability.
- The aforementioned features allow for a sportier setup of the running gear.
- The TCS and ABD provide even better traction for all wheels.



In spite of the advantages of PTM, it is still the driver's responsibility to adapt his/her driving style and manoeuvres 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.

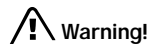
Risks of accident due to inappropriate speed cannot be reduced by PTM.

Full-time all-wheel drive

With the four-wheel drive, the drive power is variably distributed to the front and rear wheels. Power distribution and wheel speed compensation between the front and rear axles is realised with a transfer box.

Distribution of the drive power depends on the wheel speed difference between the two axles. The transfer box always controls power distribution in such a way that optimal propulsion is achieved, even on an unfavorable road surface.

Full-time four-wheel drive ensures optimal handling and great stability.



In spite of the advantages of 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 four-wheel drive.

Risks of accident due to inappropriate speed cannot be reduced by four-wheel drive.

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.

The ABD recognises 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 car moves off on a level gravel surface, traction control already becomes active at low engine speeds. If great propulsive power is required, e.g. when moving off on an uphill slope or for rapid acceleration, the ABD is adapted accordingly.

A special off-road program is used in Low Range mode.

Traction control system (TCS)

The traction control system prevents the wheels from spinning by adjusting the engine power, thereby ensuring good lane-holding ability and a stable driving behavior.

Porsche Stability Management (PSM)

PSM is an active control system for stabilisation of the vehicle during extreme driving manoeuvres. It operates together with the Porsche Traction Management (PTM) system.

PSM makes use of both the ABD and TCS systems, as well as the known functions of the anti-lock brake system (ABS) and engine drag torque control system (MSR).



Warning!

In spite of the advantages of PSM, it is still the driver's responsibility to adapt his driving style and manoeuvres 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.

Risks of accident 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 (load-alteration effect) when the driver releases the accelerator pedal or brakes on corners. This compensation functions up to the maximum lateral acceleration.
- PSM actively stabilises the vehicle in the event of under and oversteering during dynamic driving manoeuvres (e.g. rapid steering movements, during lane changes or on alternating corners).
- Improved braking stability on corners and on different or varying road surfaces.

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:

- Driving speed
- Direction of travel
- Lateral acceleration
- Longitudinal 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 needed. If necessary, PSM additionally influences the engine power or the gear-changing characteristic of the Tiptronic in order to stabilise the vehicle.

The events below inform the driver of PSM control operations and warn him to adapt his driving style to the road conditions:

- The multi-functional information light in the instrument panel lights up.
- Hydraulic noises can be heard.
- The vehicle decelerates and steering-wheel forces are altered as the PSM controls the brakes.
- Reduced engine power.
- The brake pedal pulsates and its position is changed during braking.
However, it is possible at any time to achieve full vehicle deceleration by increasing the foot pressure slightly.

Examples of PSM control operations

- **Vehicle understeers:**
If the front wheels of the vehicle drift on a corner, engine power is reduced and the rear wheel on the inside of the corner is braked if necessary.
- **Vehicle oversteers:**
If the rear of the vehicle swings out on a corner, the front wheel on the outside of the corner is braked.

Combined use of PSM and PTM/PTM Plus

In order to ensure optimal stabilisation of the vehicle, the center differential lock (PTM) and possibly the rear differential lock (PTM Plus) are also opened when PSM interventions occur.

Tip on driving

When PSM is switched off, wheel-specific brake interventions and the traction control system (TCS) are also inactive.
The automatic brake differential (ABD) remains on.

Off-road PSM (PSM in Low Range program)

When Low Range is active, an off-road PSM specially matched to off-road driving is activated to enhance traction.

At a speed below **22 mph (35 km/h)**, the terrain PSM intervenes later if the vehicle should understeer and thereby improves steerability in Low Range.

If the brakes are highly stressed, the automatic brake differential (ABD) switches itself off to protect the brakes. It remains deactivated until the brake system has cooled sufficiently.

Engine drag torque control

In conditions of excessive slip, the engine drag torque control system prevents all driven wheels from locking up when the car is overrunning. This is also the case for downshifts on a slippery road.



Switching off PSM

- f Press PSM OFF button **A**.
PSM is switched off after a short delay.
The light-emitting diode in the button lights up.
When the PSM is switched off, the multifunctional PSM light on the instrument panel is lit **and** a message appears in the multi-purpose display of the instrument panel.

During braking, the vehicle is stabilised even when PSM is switched off.

One-sided spinning of the wheels is prevented, even with PSM switched off.

PSM should always be switched on during "normal" driving.

However, it can be of advantage to switch off PSM temporarily in exceptional situations:

- On a loose surface or in deep snow
- When "rocking the vehicle free"
- When using snow chains.

Vehicles with Tiptronic: When the PSM is switched off the slip monitoring function is also deactivated.



Multifunctional PSM light

- The multifunctional light on the instrument panel lights up for a lamp check when the ignition is switched on.
- The light indicates a control operation, including when PSM is switched off (brake control in the event of one-sided wheel spin).
- Faults are displayed by the light in conjunction with the multi-purpose display of the instrument panel.
PSM is out of order.
Consult your authorized Porsche dealer.

Collapsible spare wheel

- f Never switch the PSM off when driving with a collapsible spare wheel.

Towing

- f Please observe the chapter "TOWING" on Page 374.

Tip on driving

When PSM is switched off, wheel-specific brake interventions and the traction control system (TCS) are also inactive.

The automatic brake differential (ABD) remains on.

Switching PSM back on

- f Press PSM OFF button **A**.
PSM is switched on after a short delay.

ABS (Anti-lock Brake System)



Warning!

In spite of the advantages of ABS, it is still the driver's responsibility to adapt his driving style and manoeuvres 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.

Risks of accident due to inappropriate speed cannot be reduced by ABS.

ABS ensures:

- **Full steering control**
The vehicle remains steerable
- **Good driving stability**
No skidding due to locked wheels
- **Optimum braking distance**
Shorter stopping distances in most cases
- **Lock prevention**
No flat spots on the tires

Function

The decisive advantage of ABS is in the driving stability and maneuverability of the vehicle in hazardous situations, even during heavy braking while cornering.

ABS prevents locking of the wheels during full braking, on almost all road surfaces, until shortly before the vehicle stops.

The ABS begins to control the braking process as soon as a wheel shows a tendency to lock. This controlled braking process is comparable to extremely rapid cadence braking. The pulsating brake pedal and a "rattling noise" warn the driver to adapt his driving speed to the road conditions.

Warning light

If the ABS warning lights light up in the instrument panel and on the multi-purpose display of the instrument panel while the engine is running, the ABS has switched off because of a fault. In this event, the braking system will operate **without lock prevention**, as in cars without ABS.

- f Adapt your driving style to the changed braking behavior.
- f The ABS must be checked immediately at an authorized Porsche dealer. This is necessary in order to prevent the occurrence of further faults whose effects cannot be defined.

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 the ABS to switch off.

f f f

Off-road ABS (ABS in Low Range program)

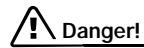
When Low Range is active, an ABS specially matched to off-road driving is activated automatically.

At speeds below **30 mph (50 km/h)**, the front wheels can lock up in cycles during braking to shorten the braking distance when the vehicle is driven off-road (the wheels dig in to the surface). If the driver needs to steer, this off-road driving program is automatically switched off briefly to maintain steerability.

Hillholder

In selector lever positions **D** and **M**, the hillholder function makes it easier to move off from a standstill on an upward slope when the engine is running. The driver does not have to apply the brake.

The hillholder thus makes moving off on slopes easier.



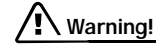
Risk of accident.

The vehicle can roll backwards if the Hillholder is switched off.

f Always apply the footbrake on slopes.

Hillholder is not active:

- In selector lever positions **N** and **R**
 - In the reduced driving program **and**
 - If not all of the wheels are touching the ground (on difficult terrain, for example).
- f Please observe the chapter "STOPPING" on Page 227.



In spite of the advantages of the hillholder function, it is still the driver's responsibility to adapt his driving style and maneuvers in line with situational conditions.

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 the hillholder function.

Driving at the limits should be avoided, e.g., on icy slopes or on slippery surfaces. In this and similar cases, the support of the hillholder function is not ensured.

Porsche Drive-Off Assistant – Moving-off assistant on vehicles with manual transmission

The Porsche Drive-Off Assistant enables the driver to move off on upward slopes. The vehicle must have sufficient road contact to use this feature.

The Porsche Drive-Off Assistant is available for slopes starting at approximately 5%.

f Please observe the chapter "TRAILER COUPLING" on Page 212.



Risk of accident.

When moving off on a slippery surface (e.g., on icy or loose surfaces), assistance by the Porsche Drive-Off Assistant is no longer assured. In this case, the vehicle could slip. The limits set by the physics of driving cannot be overcome, even with the Porsche Drive-Off Assistant. The responsibility for moving off on upward slopes is still the driver's, despite the Porsche Drive-Off Assistant.

f Always adjust your driving style to the driving conditions and vehicle load, use the footbrake if necessary.

Moving off with Porsche Drive-Off Assistant

1. Hold the vehicle securely with footbrake or parking brake on the slope.
The engine must be running.
2. Fully depress the clutch pedal.
3. Engage one of the gears used to ascend in the direction of travel (1st gear or reverse).
4. While keeping the clutch pedal depressed, release the footbrake or foot-operated parking brake.
The vehicle is held on the slope.
5. Move off as usual.

Note on operation

The Porsche Drive-Off Assistant ceases to function:

- by shifting to neutral.
- when changing gears.
- by stopping or "stalling" the engine.



Risk of accident.

If the Porsche Drive-Off Assistant ceases to function, the vehicle will no longer be held on a slope.

f Hold the vehicle with the footbrake.

Engine Braking Support (Assistance when heading downhill)

The Porsche Down-Hill Assistant is an assistance system which helps the driver at slower downhill driving up to approx. 12 mph (20 km/h), e.g., on steep slopes or on wintry mountain roads.

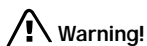
As long as the gas pedal is not used when traveling downhill, the Porsche Down-Hill Assistant is active and brakes the vehicle.

The braking ability of the Engine Braking Support is affected by slippery surfaces (e.g., on icy or loose surfaces), like all brakes.

If road grip is lost on one or more wheels, the system brakes the wheels which have good road contact.

Conditions:

- The gas pedal must not be used when travelling downhill.
- The speed must not exceed 12 mph (20 km/h).
- **Vehicles with Tiptronic S:**
The selector lever position **D**, **M** or **R** must be engaged.
- **Vehicles with manual transmission:**
The reverse gear or any other gear (1. - 6.) must be engaged. The clutch pedal must not be used when travelling downhill.



Warning!

Risk of accident. Reduced braking ability on a slippery surface.

- f Always adjust your driving style to the driving situation.

Tip on driving

The Porsche Down-Hill Assistant is active when driving downhill either forwards or backwards.

Checks on test stands

Power measurement

Power measurements on roller test stands are not approved by Porsche.

Brake tests

Brake tests must be carried out only in High Range and on plate-type test stands or roller test stands.

The following limit values must not be exceeded on roller test stands:

- Testing speed 4.7 mph (7.5 km/h)
- Test duration 20 seconds

Parking brake test

Parking brake tests on the brake tester must be performed only with the ignition switched off and the selector lever in position **N** or the gearshift lever in neutral.

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.

Dynamometer testing procedure

Some U.S. states and Canadian provinces conduct emissions inspection/maintenance testing involving the use of two-wheel dynamometer.

A two-wheeled dynamometer is a treadmill type device upon which a single axle of the car, the driving axle of the vehicle, rotates to simulate vehicle operation on the road while the vehicle remains stationary.

Your Porsche Cayenne has a full-time four-wheel drive system which cannot be disabled. Severe damage to the powertrain can result if tested on a two-wheel dynamometer.



Warning!

To avoid severe powertrain damage and a possible unexpected movement of the vehicle.

- f Your Porsche Cayenne vehicle must never be tested on a two-wheel dynamometer.
- f Advise the emission station of this warning before testing the vehicle.

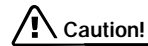
Off-Road Driving

Please read this chapter carefully before driving off road with your Porsche.

The information provided will familiarise you with the special advantages of your vehicle, allowing you to arrive at your destination safely every time.

We recommend practicing on less rugged terrain.

Vehicles with SportDesign package



Caution!

Risk of damage. On vehicles with Sport-Design package, front, rear, and side member trim are painted and pulled down lower. Off-road driving can seriously damage these trim parts.

- f When driving off-road, make sure these parts are not damaged.
- f Make sure there is sufficient clearance between obstacles and the underside of the vehicle.
- f Avoid driving through water.
- f Do not use side member trim as a running board.

Maintenance note

Please bear in mind that off-road driving subjects all vehicle components to considerably more wear than normal use, making professional inspection and maintenance after each use a vital precondition for functioning and safety.

Grains of sand, dirt particles and other abrasive materials entering the brakes can cause excessive wear or unpredictable braking action.

Rules for off-road driving

- f Ensure vehicle is equipped with approved all-terrain tires.
- f Please observe the chapter "GROUND CLEARANCE" on Page 390.
- f Activate Low Range.
- f Stow or fasten luggage and loads securely. Please observe the chapter "LOADING INFORMATION" on Page 213.
- f If unknown terrain is obscured from view, examine it on foot first and traverse it with extreme caution.
This way, obstacles are easier to recognise and damage to the vehicle is avoided.
- f Always drive with the engine running. Steering assistance is provided only with the engine running.
- f Drive slowly and uniformly.

- f Always make sure that the wheels touch the ground.
- f Before driving through water, check the water depth, the condition of the surface beneath it and the speed of the water.
- f Look out for obstacles such as boulders, holes, tree stumps or ruts.
- f Always keep the sliding/lifting roof or Panorama roof system and the side windows closed while driving.
- f Do not depart from marked routes or paths.
- f Respect Nature.
Always obey off-limits signs.

Driving systems for off-road driving

Specially adapted driving programs or power-transmission and running-gear control systems are available for off-road driving:

- Off-road program Low Range
 - Off-road PSM
 - Off-road ABS
 - Center differential lock
 - Rear differential lock
- f Please observe the chapter “POWER-TRANSMISSION AND RUNNING-GEAR CONTROL SYSTEMS” on Page 235.

Before driving off

Tires

- f Check tread depth and tire pressure.
- f Check for damage and remove any foreign objects (e.g. stones) from the tread.
- f Replace missing valve caps.

Rims

- f Replace dented or damaged rims before driving off road.

After driving off road

Off-road driving places a greater burden on the vehicle than does normal driving on roads.

We recommend inspecting the vehicle after off-road driving. Potential damage poses an accident risk and impairs driving comfort. Damage on the car is recognised in good time if the car is checked.



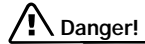
Car damage poses an accident risk for the vehicle occupants and other road users.

- f In cases of doubt, have your vehicle checked by your authorized Porsche dealer.
 - f Examine tires for signs of damage such as cuts, tears, bulges or foreign objects stuck in the tread. Replace a damaged tire if necessary.
 - f Have any damage to your vehicle repaired by an authorized Porsche dealer without delay.
-

Recommended procedure

- f Deactivate Low Range.
- f Clean headlights and tail lights and check them for signs of damage.
- f Clean the front and rear license plates.
- f Clean the tire tread with a jet of water and remove any foreign objects.
- f Clean wheels, wheel housings and the underbody with a jet of water.
- f Check whether the car has picked up plant parts or branches.
These materials increase the risk of fire and can damage fuel lines, brake hoses, boots of the axle joints and drive shafts.
- f After off-road driving, always check the entire floor assembly, tires, body structure, steering system, running gear and exhaust system for signs of damage.
- f After driving for an extended period through mud, sand, water or substances with a similar soiling effect, check the brake discs, brake pads, wheels and axle joints and have them cleaned.
- f If you experience severe vibrations after driving off road, check the wheels for foreign substances.
These substances can produce an imbalance which might be responsible for the vibrations. Removing these deposits may remedy the problem.

Uphill driving



Danger!

Danger of serious personal injury or death and risk of damage if the vehicle should overturn.

- f Do not turn around when driving uphill.
- f If it is not possible to climb a gradient, the car must be backed down in reverse gear.
- f Do not drive over embankments or slopes at steep diagonal angles.
- f If the vehicle starts to tilt, immediately steer in the direction of the tilt (line of slope).
- f When driving uphill, never let the vehicle roll backward when in idle or not in gear. Exclusive use of the footbrake is too risky in such situations.

Note on operation

- f Activate Low Range before taking extreme upward or downward gradients.

Tips on driving

- f Do not perform manual gear changes when driving, and try to avoid stopping.
- f Avoid high engine speeds (max. 2,500 rpm).

Traction on uphill slopes

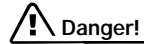
Note on operation

- f Activate Low Range and engage differential locks if necessary.

Tips on driving

- f When driving uphill, go easy on the accelerator and make sure that wheels have sufficient traction (don't spin).
- f Avoid high engine speeds (max. 2,500 rpm).
- f Drive slowly.

Driving downhill



There is a danger of serious personal injury or death and risk of damage if the vehicle should overturn.

- f Do not drive over embankments or slopes at steep diagonal angles.
- f Drive downhill slowly, with the wheels pointing straight ahead.
- f If the vehicle starts to tilt, immediately steer in the direction of the tilt (line of slope).
- f When driving downhill, never let the vehicle roll when in idle.
- f Use engine braking effect.
If the engine braking effect is not adequate, gently apply the foot brake.

Note on operation

- f Activate Low Range. The off-road ABS is switched on automatically.

Tips on driving

The same general principle as for uphill driving applies to downhill driving.

- f Do not perform manual gear changes when driving, and try to avoid stopping.
- f Avoid high engine speeds (max. 2,500 rpm).

A special circuit in the off-road ABS permits controlled brief lock-up of the front wheels so that they can dig into the loose surface more effectively. Locked wheels slip and can no longer be steered.

- f When driving down steep hills on unpaved surfaces, brake carefully so that vehicle does not start to slide.



Water crossing

- f Please observe the chapter "GROUND CLEARANCE" on Page 390.

Danger!

Danger of drowning if water enters the vehicle. Risk of damage to the engine and accessories if water penetrates.

- f Before driving through water, check the water depth **A**, water speed and the condition of the surface beneath it.
The water must not be deeper than 20 in. (50 cm).
The water must not be deeper than 22 in. (55.5 cm) for vehicles with level control and height adjustment.
- f Check the door sills and rubber seals before starting to drive.
- f Do not drive through deep or rapidly flowing water.
Deep or rapidly flowing water, e.g. mountain streams, can cause the car to deviate from the desired path.
- f Avoid a "bow wave" by driving at an appropriate speed.
- f Never open the doors when driving through water.

Soiling can impair the braking action.

- f Check and clean the brakes if they have been soiled.

Danger of steering assistance failing during a long journey in the water if the drive belt slips.

- f If the steering assistance fails, more effort will be required to steer.

Danger of damaging electrical systems

- f Avoid driving through salt water.

Notes on operation

- f Activate Low Range.
- f Switch the air conditioner off.
- f Switch the headlights off.

Tips on driving

- f Avoid high engine speeds (max. 2,500 rpm).
- f Do not perform manual gear changes when driving, and try to avoid stopping.
Moving off in the water can be difficult due to the high resistance and the loose surface involved.
- f Start the water crossing at a shallow place at walking speed.
- f After checking the body of water, take the shortest path through it.
- f Never drive into the water at high speed. The resulting "bow wave" could damage the engine and its accessories.
- f Adjust your driving style to the unfamiliar surroundings.
- f Cross the body of water slowly and at a constant speed.
- f Never turn around when crossing a body of water.
- f If it is not possible to cross the body of water, the car must be backed out of it in reverse gear.

The servo pump and alternator can fail if the car is driven through water for an extended period.

- f If the servo pump fails, substantially more force will have to be exerted in order to steer.

Maintenance note

The car requires a special check after the water crossing.

- f Remove mud from the tire tread.
- f Briefly apply the brakes in order to dry them after driving through the water.

Obstacles

- f Please observe the chapter "GROUND CLEARANCE" on Page 390.

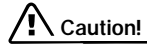
Note on operation

- f Activate Low Range and engage differential locks if necessary.

Tips on driving

- f Just before reaching the obstacle, ease off the accelerator slightly and use the car's momentum to cross the obstacle. This will prevent the car from jumping over the obstacle and landing on the following downward slope at an excessive speed.
- f Avoid high engine speeds (max. 2,500 rpm).

Crossing obstacles



Caution!

Risk of damage to the underbody and chassis components if obstacles are traversed improperly.

- f Always bear in mind the ground clearance of your vehicle.
- f Slowly drive over the middle of tree trunks, boulders or other obstacles with one of the front wheels.
- f Cross the obstacle with the rear wheel in the same way.

Note on operation

- f Activate Low Range and engage differential locks if necessary.



Tips on driving

- f Have your passenger direct you if necessary.
- f Avoid high engine speeds (max. 2,500 rpm).
- f Drive slowly.

Driving on sand

Note on operation

- f Activate Low Range and engage differential locks if necessary.

Tips on driving

Loose sand is an especially tricky surface for off-road driving.

You can often become stuck in sand within minutes if you do not drive correctly in such situations.

- f Drive at brisk pace and do not stop under any circumstances. This will reduce the chance of the car becoming bogged down.
- f Follow existing tracks – provided that they have not been covered by blown sand, are not too deep and the car's ground clearance is sufficient.
Please observe the chapter "GROUND CLEARANCE" on Page 390.
- f Avoid high engine speeds (max. 2,500 rpm).

When driving on slopes with soft sand on vehicles with Tiptronic S:

- f Use the manual select mode **M** in addition to the Low Range program.

If your vehicle becomes stuck nevertheless:

Do not spin the wheels. Instead, use branches, mats or similar items to provide adequate traction so that you can drive out of the critical area.

Track ruts

Other vehicles leave ruts in many off-road courses or gravel roads.

- f Please observe the chapter "GROUND CLEARANCE" on Page 390.



Risk of damage to the vehicle floor when driving through ruts that are too deep.

- f Always bear in mind the car's ground clearance.
- f Do not drive over ruts that are too deep.

Note on operation

- f Activate Low Range and engage differential locks if necessary.

Tips on driving

- f In cases of doubt, drive with one wheel on the strip of grass between the ruts.
- f Avoid high engine speeds (max. 2,500 rpm).
- f Drive slowly.



Air Suspension with Level Control and Height Adjustment

On vehicles with air suspension, the driver can set five different level steps manually. The preselected level is automatically adjusted to suit the vehicle speed. The height of the car is automatically kept constant when the car is loaded.

Tip on driving

It is not permissible to drive on public roads with the car in the terrain or special terrain setting.

Note on operation

Frequent level changes can cause the compressor to overheat. In this case, the compressor must cool for several minutes before the level adjustment is fully functional again.

Normal level

The ground clearance at normal level is around 8.5 in. (217 mm).

Terrain level

This setting is intended for off-road driving, field paths and forest paths, etc. The vehicle is raised by around 1 in. (26 mm) compared to normal level. Terrain level can be selected only manually at speeds below around 50 mph (80 km/h). The car is automatically lowered to normal level at speeds exceeding around 50 mph (80 km/h). The car is automatically raised to terrain level when Low Range is activated.

Special terrain level

This setting is intended only for extremely challenging terrain requiring maximum ground clearance. The vehicle is raised by 2.2 in. (56 mm) compared to normal level.

The warning light in the instrument panel comes on when the special terrain level has been reached.

Special terrain level can be selected only at speeds below around 19 mph (30 km/h).

The car is automatically lowered to terrain level at speeds exceeding around 19 mph (30 km/h).

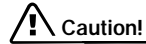
Low level

This level is intended for high-speed driving. Above speeds of around 78 mph (125 km/h), the car is lowered by around 1 in. (27 mm) compared to normal level. When the speed drops to below around 25 mph (40 km/h), the car is automatically raised to normal level.

Special low level

At extremely high speeds, for example when operated on a race track, the car is lowered 0.4 in. (11 mm) compared to the low level.

Loading level



Caution!

Risk of damage to running-gear parts, units and the vehicle underbody.

If the car is driven off a curb when at loading level, for example, insufficient ground clearance can cause it to bottom out.

f Always switch to normal level before moving off.

This setting makes it easier for you to load the luggage compartment.

The vehicle is lowered by around 2.4 in. (60 mm) compared to normal level.

The car is automatically raised to normal level at speeds exceeding around 3 mph (5 km/h).

Setting level manually

Preconditions

- Ignition on.
- Doors are closed.

Setting

- f Move rocker switch in the appropriate direction.
This sets the next possible height.

Indication of selected level

The corresponding light-emitting diode beside the rocker switch flashes during the control process. The light-emitting diode is continuously lit after the control process.

The level change is also indicated on the multi-purpose display of the instrument panel.

Exceptions

Automatic changes from normal level to low level and back are not indicated on the multi-purpose display of the instrument panel.

Note on operation

The level selected last is stored in memory after the ignition is switched off.

Raising the vehicle

1st actuation: Terrain level



2nd actuation: Special terrain level



f f f

Lowering the vehicle

1st actuation: Low level



2nd actuation: Loading level



Warning message

Various messages are indicated on the multi-purpose display of the instrument panel if there is a system fault or if the compressor switches off due to overload.

- f Please observe the chapter “WARNING LIGHTS AND WARNING MESSAGES” on Page 124.
- f Adapt your driving style to the changed conditions.
- f Consult an authorized Porsche dealer in order to remedy a system fault.
- f If the overload-protection function causes the compressor to switch off, wait for a time until it has cooled down. The system will function again as soon as it has cooled sufficiently.

The warning message appears when the control system is switched off and when the collapsible spare wheel is being filled. This does not indicate a fault.

The warning message will go out once these procedures have been completed.

Raising vehicle with the jack

Whenever it is necessary to jack up the vehicle:

- f Manually set normal level and then switch off level control.

Switching off level control

1. Switch ignition on.
2. Push rocker switch forward for 5 to 10 seconds.

A message is shown on the multi-purpose display of the instrument panel.
The vehicle can now be raised.

Switching level control back on

1. Switch ignition on.
2. Push rocker switch forward for 5 to 10 seconds **or**
3. Drive forward with the vehicle.
Level control switches on automatically.

Transporting the vehicles on car trains, ferries and car transporters

- f Tie the vehicle down only at its wheels.

Porsche Active Suspension Management (PASM)

Various messages are shown on the multi-purpose display of the instrument panel.

f Please observe the chapter “WARNING LIGHTS AND WARNING MESSAGES” on Page 124.

Three different running-gear setups can be selected with the push of a button:

- Comfort
- Normal
- Sport

If the running-gear setups “comfort” or “normal” have been selected, the system automatically changes the setup to “sport” when the car is driven in a sporty manner.

Indication of the selected running-gear setup

The light-emitting diode in the button of the selected running-gear setup is lit.

In addition, the selected running-gear setup is indicated on the multi-purpose display of the instrument panel for around 12 seconds.

Warning lights and warning messages

The warning light in the instrument panel comes on if there is a system fault. A warning message is shown on the multi-purpose display of the instrument panel.

- f Adapt your driving style to the changed conditions.
- f To remedy the fault, consult an authorized Porsche dealer.



Selecting the running-gear setup

1. Switch ignition on.
2. Press the appropriate button.

Note on operation

The running-gear setup selected last is stored in memory after the ignition is switched off.

Maintenance, Car Care

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Exercise Extreme Caution when Working on your Vehicle



Danger!

Ignoring the following instructions may cause serious personal injury or death.

- f 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.
- f Only work on your vehicle outdoors or in a well ventilated area.
- f 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 such devices such as hot water heaters which ignite a flame intermittently.
- f Before working on any part in the engine compartment, turn the engine off and let it cool down sufficiently. Hot engine compartment components can burn skin on contact.
- f Be alert and cautious around engine at all times while the engine is running.
If you have to work on the engine while it is running, always put the handbrake on **and** put the gearshift lever in neutral or the selector lever in position **P**.
- f In particular, be very careful to ensure that items of clothing (ties, shirt, sleeves etc.), jewelry, long hair, hand or fingers cannot get caught in the fan, belts or other moving parts. The radiator and radiator fans are in the front of the car.
The fans can start or continue running as a function of temperature, even with the engine switched off.
Carry out work in these areas only with the engine off and exercise extreme caution.
- f Your Porsche is equipped with an electronic ignition system. When the ignition is on, high voltage is present in all wires connected with the ignition system; therefore, exercise extreme caution when working on any part of the engine while the ignition is on or the engine is running.
- f 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.
For vehicles with air suspension with level control and height adjustment switch off level control. **Therefore:**
Please observe the chapter "RAISING VEHICLE WITH THE JACK" on Page 256.
- f 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).
- f Do not smoke or allow an open flame around the battery or fuel.
Keep a fire extinguisher in close reach.
- f 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.
- f Supplies of fluids, e.g. engine oil, washer fluid, brake fluid or coolant, are hazardous to your health.
Keep these fluids out of children's reach and dispose of them in accordance with the appropriate regulations.
- f Some countries require additional tools and special spare parts to be carried.
Please make enquiries before driving abroad.

Power measurements

Power measurements on dynamometers are not approved by Porsche.

Radiator fans

The radiator and radiator fans are in the front of the car.



Warning!

Danger of injury. The fans can start running as a function of temperature, even with the engine switched off.

f Exercise extreme caution when working in the area of the radiator fans.

Engine Oil

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 lubricant.

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 fuel filling.
- 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.

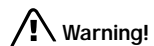
Engine Oil Level

- f Check the oil level regularly. It is best to do this when refuelling and before extended journeys.

Further important information concerning "maintenance" can be found in a separate chapter.

- f Please observe the chapter "EXERCISE EXTREME CAUTION WHEN WORKING ON YOUR VEHICLE" on Page 260.

- f Please observe the chapter "WARNING LIGHTS AND WARNING MESSAGES" on Page 124.



Warning!

Engine oil is hazardous to your health and may be fatal if swallowed.

- f Keep engine oil out of children's reach.

Used engine oil contains chemicals that have caused cancer in laboratory animals.

- f Always protect your skin by washing thoroughly with soap and water.



Oil-level warning

If the oil level is too low, this is indicated by the oil level warning light lighting up on the multi-purpose display.

- f Check the oil level using the oil dipstick as soon as possible and add engine oil if necessary.

Note on operation

- f If the engine compartment lid is opened and oil is not added, the warning message appears again after approximately 100 km.

Checking the oil level



Warning!

Danger of injury. The radiator fans can start running as a function of temperature, even with the engine switched off.

Risk of burning from hot parts in engine compartment.

- f Exercise extreme caution when working on the engine compartment.

Conditions for measuring the oil level correctly

- Vehicle must be level.
- Engine must be switched off and at operating temperature.
- Before the oil-level measurement, allow the engine oil to flow back into the oil pan for around 3 minutes.

Checking oil level with the oil dipstick

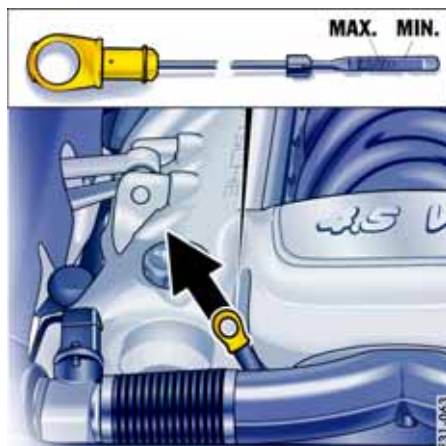
1. Withdraw oil dipstick and wipe it with a clean, lint-free cloth.

2. Push oil dipstick fully home, withdraw again and read off the oil level.

The oil level must never fall below or exceed the "Min." and "Max." marks on the dipstick.

The difference between the marks is approx. 1.6 qt. (1.5 liters).

3. Push oil dipstick in as far as the stop.



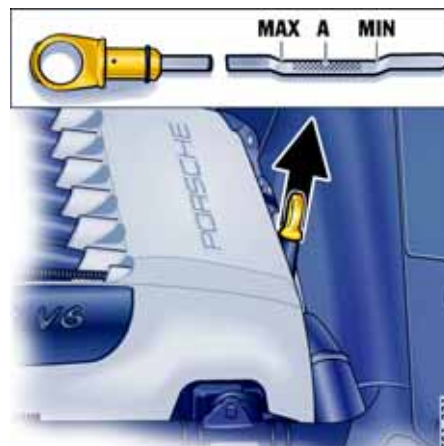
Cayenne S oil dipstick

MAX - marking

f Do not top up engine oil.

MIN - marking

f Top up engine oil immediately.



Cayenne oil dipstick

MAX - marking

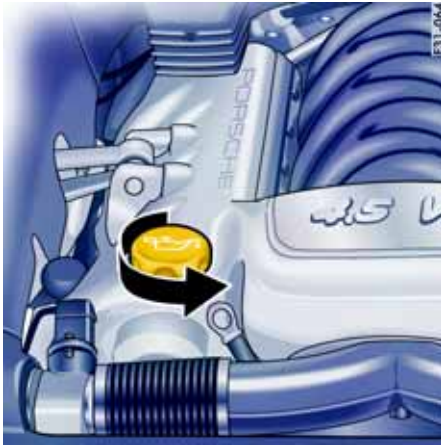
f Do not top up engine oil.

A - Normal marking

f Engine oil can be topped up.

MIN - marking

Top up engine oil immediately.



Cayenne S

Topping off engine oil



Warning!

**Fire hazard if engine oil comes into contact with hot engine parts.
Risk of damage if engine oil comes into contact with the drive belt.**

f Exercise great care when adding engine oil.



Cayenne

1. Unscrew cap of the oil filler opening
2. Add engine oil carefully.
3. Measure oil level again after a few minutes.
Never exceed the MAX mark on the oil dipstick.
4. Push oil dipstick in as far as the stop.
5. Carefully close cap of the oil filler opening.

Engine Oil Recommendation

Recommended oil viscosity ranges dependent on ambient temperatures:

Ambient temperature (seasonal)	SAE Viscosity Range
--------------------------------	---------------------

Cayenne (V6)

For all temperature ranges	0W - 30 0W - 40
----------------------------	--------------------

Cayenne S

higher than -13°F (-25°C)	0W - 40 5W - 40 5W - 50
lower than -13°F (-25°C)	0W - 40

Use only engine oils approved by Porsche.

If in doubt ask your authorized Porsche dealer for Porsche tested and approved all-season oils.

Oil change

The engine oil has to be changed at the intervals listed in your **Maintenance Schedule**.

f Please observe the chapter "CAPACITIES" on Page 386.

We recommend that you have the engine oil changed at your Porsche dealer, who has the required oils and the necessary filling equipment.

If you suspect an oil leak in the engine have your dealer check it out immediately.

All current engine oils are compatible with each other, i.e. when making an oil change it is not necessary to flush the engine if you wish to use a different brand or grade of oil.

Since, however, each brand of oil has a special composition, you should, if possible, use the same oil brand if it becomes necessary to top up between oil changes.

Porsche engines have long intervals between oil changes. Only by using oils approved by Porsche the needed engine oil performance is guaranteed.

If your vehicle is used frequently in stop-and-go traffic in cold weather, the engine will not always be properly warmed up.

Condensation from products of combustion may accumulate in the oil. In this case, it is advisable to change the oil more frequently so that your engine once again has 100% efficient engine oil.

Engine oil performance class

Engine oil is not only a lubricant, but also serves to keep the engine clean, to neutralize the dirt which penetrates into the engine through combustion and to protect the engine against corrosion. To perform these functions, the oil is provided with additives which have been specially developed for these functions.

The efficiency of an oil is expressed, for example, by the API, ILSAC or ACEA classifications.

Viscosity

Like all liquids, engine oil is viscous when cold, and thin-bodied when warm. The viscosity of an oil is expressed by its SAE class. For cold viscosity the SAE class is given as a number and the letter "W" (as in winter), for hot viscosity the SAE class is given only as a number.

The viscosity of an oil is, therefore, always the same if it has the same number of an SAE class.

E.g.: A 5 W-40 oil and a 5 W-50 oil have the same viscosity when cold; when hot the oil with the number 40 is thinner than the oil with the number 50.

Oils with two viscosities are called multigrade oils; oils with only one viscosity are termed single-grade oils.

The viscosity of the engine oil for your Porsche has to be chosen according to the ambient temperature given in the engine oil recommendation table.

Coolant Level

f Please observe the chapter "EXERCISE EXTREME CAUTION WHEN WORKING ON YOUR VEHICLE" on Page 260.

The coolant provides year-round protection from corrosion and freezing down to -31°F (-35°C) (Nordic countries -40°F (-40°C)).

f Use only anti-freeze authorized by Porsche.

f Check the coolant level regularly.

Further important information concerning "maintenance" can be found in a separate chapter.

f Please observe the chapter "EXERCISE EXTREME CAUTION WHEN WORKING ON YOUR VEHICLE" on Page 260.

Checking coolant level/adding coolant

The expansion tank for the coolant is located under the engine-compartment cover in the engine compartment.

When the **engine is cold** and the car is level, the coolant level must lie between the min- and max-marks.



Checking when engine is cold

1. Remove cover.



2. Open cap of the expansion tank carefully and allow any overpressure to escape. Then unscrew cap completely.

3. Read the coolant level.

4. Top up with coolant if necessary. Do not exceed the max- mark. Only add a mixture of anti-freeze and water in equal parts.

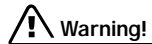
Antifreeze in coolant:

50% provides anti-freeze protection down to -31°F (-35°C).

5. Screw the cap closed firmly and put on the cover.

f f f

Checking the coolant level when a warning messages is shown on the multi-purpose display of the instrument panel



Warning!

Danger of serious personal injury from scalding. Coolant is hazardous to your health, and may be fatal if swallowed.

- f Do not open the cap of the expansion tank while the engine is hot.
- f Allow the engine to cool down before opening the cap and protect your hands, arms and face from any possible escape of hot coolant.
- f Keep coolant out of children's reach.
- f 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. Coolant can be deadly to pets if consumed.

1. Remove cover.
2. If the engine is hot, cover the the expansion tank cap with a cloth.
Open cap carefully and allow any overpressure to escape.
Then unscrew cap completely.
3. Read the coolant level.
Top up with coolant if necessary.
Only add a mixture of anti-freeze and water in equal parts.
Antifreeze in coolant:
50% provides anti-freeze protection down to -31°F (-35°C).
Do not exceed the max-mark.

Note on operation

- f If the coolant level exceeds the max-mark when the engine is hot, check the coolant level again when the engine is cold.
4. Screw the cap closed firmly and put on the cover.
 5. Have the cooling system checked by an authorized Porsche dealer.

Maintenance note

If in an emergency pure water has been added, the mixture ratio must be corrected at an authorized Porsche dealer.

Marked loss of coolant indicates leakage in the cooling system.

The cause should be remedied at an authorized Porsche dealer immediately.

Brake-Fluid Level

- f Use only new (unused) Original Porsche brake fluid.

Further important information concerning "maintenance" can be found in a separate chapter.

- f Please observe the chapter "EXERCISE EXTREME CAUTION WHEN WORKING ON YOUR VEHICLE" on Page 260.

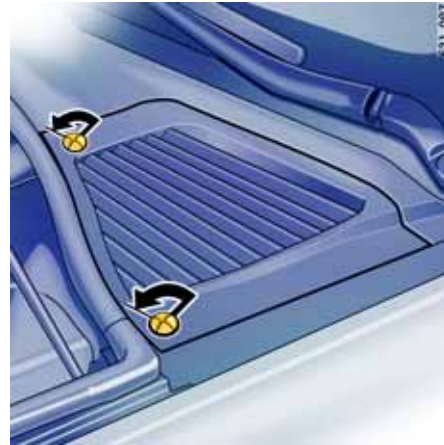


Warning!

Brake fluid is hazardous to your health, and may be fatal if swallowed.

Brake fluid also attacks paintwork.

- f Keep brake fluid out of children's reach.
- f Immediately rinse off spilled brake fluid with clean water.
- f If brake fluid gets into your eye, immediately rinse with clean water for a few minutes. Then see a doctor immediately.
- f Please note all the information on the refill container of the brake fluid.



Checking the brake-fluid level

The reservoir for the hydraulic braking system is located in the engine compartment.

1. Rotate the turn-locks 90° anti-clockwise (**arrow**) with a screwdriver and remove the cover.



2. Check brake-fluid level at the transparent reservoir.
The fluid level should always lie between the MIN and MAX marks.

A slight decrease in the fluid level due to wear and automatic readjustment of the disc brakes is normal.

If, however, the fluid level falls markedly or below the MIN mark, the braking system may have developed a leak.

- f Please have the braking system checked immediately at an authorized Porsche dealer.

Changing the brake fluid

Brake fluid absorbs moisture from the air over time. This accumulation of water lowers the boiling point and, under certain operating conditions, can affect the braking action.

- f Therefore, have the brake fluid changed in accordance with the change intervals stated in the booklet "Guarantee and Maintenance".

BRAKE



**Brake fluid warning light
USA**



**Brake fluid warning light
Canada**

The warning light in the instrument panel and the warning message on the multi-purpose display of the instrument panel indicate

- indicate the brake level fluid is too low or,
- in conjunction with large pedal travel could indicate a braking-circuit failure.

Note on operation

If the warning lights should light up while driving:

- f Stop immediately in a suitable place.
- f Do not continue driving.
Please have the fault remedied at your nearest authorized Porsche dealer.



Washer Fluid

The washer-fluid reservoir for windshield, rear window and headlights is located in the engine compartment.

Warning message on the multi-purpose display

A message is shown on the multi-purpose display of the instrument panel if the washer-fluid level is too low.

In this case, the residual quantity is only around 0.85 quarts (0.8 liter).

- f Add washer fluid at the next opportunity.

Topping off washer fluid

The capacity is approx. 7.9 quarts (7.5 liters).

Clean water is generally not enough to clean the windows and headlights.

It is advantageous to add a winter cleaner giving antifreeze protection or a suitable summer cleaner, depending on the season. Follow the instructions for the mixture ratio.

- f Use only cleaner authorised by Porsche.

1. Please note all the information on the refill container of the cleaning agent.
2. Open cap of the washer-fluid reservoir.
3. Top off washer fluid and close cap properly.

- f Do not use engine coolant anti-freeze or any other solution that can damage the car's paint, in the washer reservoir.



Power Steering



Warning!

Risk of accident. When the engine is stationary (e.g. when on tow) or the hydraulic system fails, there is no assistance for steering. Therefore, substantially more force will have to be exerted.

- f Exercise great care when on tow.
- f Have the fault remedied at your nearest authorized Porsche dealer.



The flow noise heard at full steering lock is design-related and does not indicate a defect in the steering system.

Checking hydraulic fluid

- f Use only hydraulic fluid **authorized by Porsche**.
- f Check the fluid level with the engine stopped and cold (engine temperature approx. 68° F or 20°C).
 1. Remove cover **A**.
 2. Open the reservoir cap.
 3. The fluid level should lie between the MIN and MAX marks on the dipstick. Add hydraulic fluid if necessary.
 4. Close cap carefully.
 5. Put on cover **A**.
 6. Close engine compartment lid.
- f If the fluid level drops significantly, please have the cause remedied immediately by an authorized Porsche dealer.

Further important information concerning "maintenance" can be found in a separate chapter.

- f Please observe the chapter "EXERCISE EXTREME CAUTION WHEN WORKING ON YOUR VEHICLE" on Page 260.

Air Cleaner

Regular replacement of the filter element is part of servicing.

- f In dusty conditions, clean the filter element more frequently and replace if necessary.

Further important information concerning "maintenance" can be found in a separate chapter.

- f Please observe the chapter "EXERCISE EXTREME CAUTION WHEN WORKING ON YOUR VEHICLE" on Page 260.

Particle Filter

The fresh air passing through the particle filter into the passenger compartment is virtually free of dust and pollen.

- f If the outside air is polluted by exhaust fumes, press the circulating-air button.

A dirty filter can be the cause of reduced air throughput.

- f Have filter replaced by your authorized Porsche dealer.

Regular replacement of the filter is part of servicing.

Automatic Transmission Fluid

The torque converter and the transmission are lubricated with Automatic Transmission Fluid (ATF).

- f Please observe the chapter "CAPACITIES" on Page 386.

Do not tow the car or run the engine without ATF in the transmission. The automatic transmission may be damaged by even a tiny speck of dirt, only a clean funnel or spout must be used when adding ATF.

The ATF and transmission oil has to be checked and changed at the intervals listed in your Maintenance Schedule.

We recommend that you have the ATF and transmission oil changed at your Porsche dealer, who has the required lubricants and the necessary filling equipment.

If you suspect an oil leak in the transmission, have your authorized Porsche dealer check it out immediately.

Manual Transmission Oil

The transmission oil has to be checked and changed at the intervals listed in your Maintenance Schedule.

- f Please observe the chapter "CAPACITIES" on Page 386.

We recommend that you have the transmission oil changed at your Porsche dealer, who has the required lubricants and the necessary filling equipment.

If you suspect an oil leak in the transmission, have your authorized Porsche dealer check it out immediately.

Wiper Blades

- f When wiper performance deteriorates, replace the wiper blades in good time.
- f Please observe the chapter "CAR CARE INSTRUCTIONS" on Page 284.



Caution!

Risk of damage if wiper arm accidentally falls back onto the windshield.

- f Always hold the wiper arm securely when replacing the wiper blade.

Risk of damage if wiper blades that are frozen in place are loosened improperly.

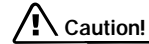
- f Thaw the wiper blades before loosening them.

Maintenance note

If the wiper blades rub or squeak, this can be as a result of the following:

- If the vehicle is washed in an automatic car wash, residues may adhere to the windshield. These residues can only be removed using a special cleaning solution. Please contact your authorized Porsche dealer for further information.
 - The wiper blades may be damaged or worn.
- f Replace damaged wiper blades as soon as possible.

Replacing windshield wiper blades

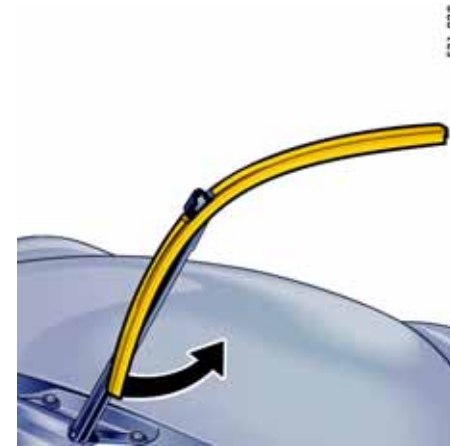


Caution!

Risk of damage.

If the wiper blades are not changed properly, they can come loose when the car is moving.

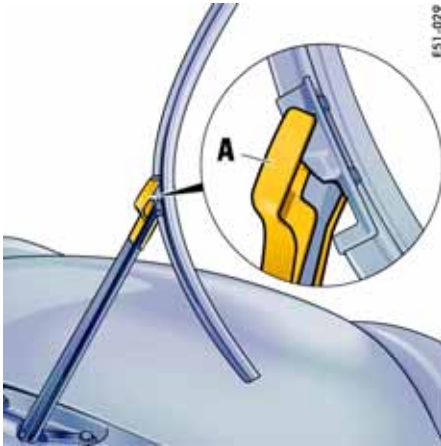
- f Check whether the wiper blades are seated securely. The wiper blade must be pushed onto the wiper arm up to the stop.



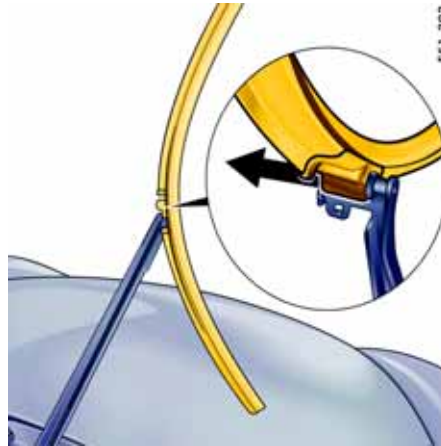
E31-028

1. Apply the parking brake.
2. Switch the windshield wipers off (position **0**).
3. Switch ignition off.
4. Fold windshield wiper arm away from the windshield.
5. Lift up wiper blade completely (**arrow**).

f f f



6. Unclip cap **A**.



7. Pull off wiper blade toward the windscreen (**arrow**).

8. Fold wiper blade back to its original position.

Note on operation

f Make sure that the wiper blade is pushed onto the wiper arm up to the stop.

9. Fit cap **A** again.

10. Fold wiper blade back to its original position.

11. Carefully fold wiper arm back on to the windshield.



Changing rear window wiper blade



Caution!

Risk of damage if the rear wiper is frozen in place and is loosened improperly.

- f Thaw the wiper blade before loosening them.
- f Grasp the wiper arm with both hands and separate it from the window.

1. Apply the parking brake.
2. Switch ignition off.
3. Carefully fold the wiper arm away from the rear window until it reaches its locking position (approx. 60°).
4. Carefully unclip the wiper blade from the wiper arm (**arrow**). Hold the wiper arm with your other hand when doing this.
5. Push the new wiper blade onto the wiper arm and snap it into place.
6. Carefully fold wiper arm back on to the rear window.

Fuel Economy

Fuel economy will vary depending on where, when and how you drive, optional equipment installed, and the general condition of your car.

A car tuned to specifications and correctly maintained, will help you to achieve optimal fuel economy.

- f 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 at correct pressure.
- f Always monitor your fuel consumption.
- f Drive smoothly, avoid abrupt changes in speed as much as possible.
- f Avoid jack rabbit starts and sudden stops.
- f Do not drive longer than necessary in the lower gears. Shifting into a higher gear early without lugging the engine will help save fuel.
- f Prolonged "warm up" idling wastes gas. Start the vehicle just before you are ready to drive. Accelerate slowly and smoothly.

- f Switch off the engine if stationary for longer periods.
- f Any additional weight carried in the vehicle reduces fuel economy. Always keep cargo to a minimum and remove all unnecessary items.
- f Organize your trips to take in several errands in one trip.
- f All electrical accessories contribute to increased fuel consumption.
- f Only switch on the air conditioning when necessary.
- f Do not drive with the Roof Transport System mounted unless you need it.

The EPA estimated m.p.g. is to be used for comparison purposes, actual mileage may be different from the estimated m.p.g., depending on your driving speed, weather conditions and trip length. Your actual highway mileage will probably be less than the estimated m.p.g.

- f 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.

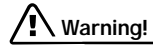
If you plan to take your Porsche outside the continental limits of the United States or Canada, there is the possibility that

- 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 equipment;
- 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



Warning!

Fuel is highly flammable and harmful to health.

- f Fire, open flame and smoking are prohibited when handling fuel.
- f Avoid contact with skin or clothing.
- f Do not inhale fuel vapours.

To prevent damage to the emission control system and engine:

- f Never drive the tank completely out of fuel.
- f Avoid high cornering speeds after the warning lights have come on.

To avoid permanent damage to the functionality of the catalytic converters and oxygen sensors, use **only unleaded fuel**.

The engine is designed to provide optimum performance and fuel consumption if **unleaded premium fuel with 98 RON/88 MON** is used.

If unleaded premium fuels with octane numbers of **at least 95 RON/85 MON** are used, the engine's knock control automatically adapts the ignition timing.

The emission control system can be damaged in various ways (e.g. fuelling incorrectly, shortage of fuel, tow-starting).

- f Please observe the chapter "HOW EMISSION CONTROL WORKS" on Page 283.
- f Please observe the chapter "LEVEL GAUGE" on Page 88.

f f f



Filler flap

The filler flap is located in the rear right wing.

Unlocking the filler flap

The filler flap is unlocked by activating the remote control or gripping the outer door handle (on vehicles with Porsche Entry & Drive).

Opening the filler flap

With the vehicle unlocked, press on the rear part of the filler flap (**arrow**). The filler flap pops up and can be opened.



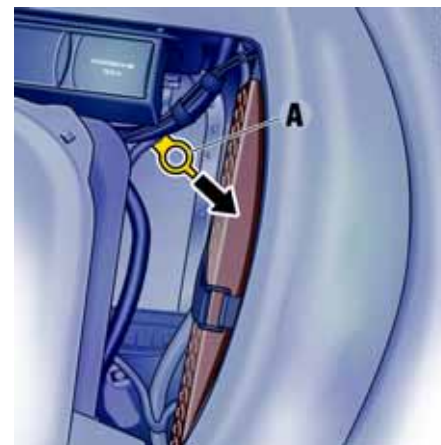
Fuel quality label

Closing the filler flap

f Close the filler flap and press on the rear of the filler flap (**arrow**) until it can be felt to engage.

Locking the filler flap

The filler flap is locked by activating the remote control or the button in the outer door handle (on vehicles with Porsche Entry & Drive).



Emergency unlocking

If the electrical release is faulty:

1. Open rear lid.
2. Remove lid of the right storage compartment.
3. Pull emergency release **A** in the **direction of the arrow**.
The filler flap pops open.



Refuelling



Danger!

The RF energy from a cellphone can cause a sparking on bare metal, much like aluminium foil in a microwave oven. The spark could ignite gasoline fumes present while refueling. Static discharge from your body can ignite gasoline fumes present when you get back out of the vehicle and touch the fuel nozzle. In either case, resulting fire can cause serious damage to the vehicle, serious injury or death to persons in immediate vicinity.

f Do not use a cellphone while pumping gas.

f Do not re-enter the vehicle while pumping gas.

Total capacity approx. 26.4 gallons (100 liters), including approx. 3 gallons (12 liters) reserve

1. Stop the engine and switch off the ignition.
2. Slowly unscw the tank cap.
Hang the tank cap on plastic strap **A** of the filler flap.
3. Insert pump nozzle fully into the filler neck with the handle of the pump nozzle facing down.
4. Do not add further fuel once the correctly operated automatic pump nozzle has switched off.
Fuel could spray or could run over when heated.
5. Replace the tank cap immediately after refueling and turn it until you hear it and feel it engage.

Maintenance note

- f If you lose the tank filler cap, you must replace it only with an original part.

Fuel Recommendations

Your Porsche is equipped with catalytic converters and must use **UNLEADED FUEL ONLY**.

Your engine is designed to provide optimum performance and fuel economy using unleaded premium fuel with an octane rating of **98 RON (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 (90 CLC or AKI)**, since the engine's "Electronic Oktane™ knock control" will adapt the ignition timing, if necessary.

The use of UNLEADED FUEL ONLY is critically important to the life of the catalytic converters. Deposits from leaded fuels will ruin the converters and make it ineffective as an emission control device.

Cars with catalytic converters have a smaller fuel tank opening, and gas station pumps 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.

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:

$$\frac{\text{RON} + \text{MON}}{2} \quad \text{or} \quad \frac{\text{R} + \text{M}}{2}$$

The CLC or AKI octane rating is usually lower than the RON rating:

For example: 95 RON equals 90 CLC or "AKI"

Fuels containing alcohol and ether

Some areas of the U.S. require oxygenated fuels during certain portions of the year. Oxygenated fuels are fuels which contain alcohols (such as methanol or ethanol) or ether (such as MTBE).

Under normal conditions, the amount of these compounds in the fuel will not affect driveability.

You may use oxygenated fuels in your Porsche, provided the octane requirements for your vehicle are met. We recommend, however, to change to a different fuel or station if any of the following problems occur with your vehicle:

- Deterioration of driveability and performance.
- Substantially reduced fuel economy.
- Vapor lock and non-start problems, especially at high altitude or at high temperature.
- Engine malfunction or stalling.

Fuels containing MMT

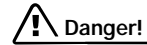
Some North American fuels contain an octane enhancing additive called methylcyclopentadienyl manganese tricarbonyl (MMT).

If such fuels are used, your emission control system performance may be negatively affected.

The check engine warning light on your instrument panel may turn on.

If this occurs, Porsche recommends you stop using fuels containing MMT.

Portable Fuel Containers



Portable fuel containers, full or partially empty, may leak causing an explosion, or result in fire in case of an accident.

- f Never carry additional fuel in portable containers in your vehicle.

Fuel Evaporation Control

Fuel tank venting

The evaporation chamber and the carbon canister prevent fuel 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 nonlevel 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.

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 the emission 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 the service 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:

- f 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.
- f Do not alter or remove any component of the emission control system.
- f 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.
- f Do not continue to operate your vehicle if you detect engine misfire or other unusual operating conditions.

Parking



Danger of fire.

- f 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.
- f 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



Danger of fire and serious personal injuries or death.

- f Do not apply additional undercoating or rust-proofing on or near the exhaust manifold, 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 engine.

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 or
 - driving until the fuel tank is completely empty
 - by other unusual operating conditions.
- f 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.

Car Care Instructions

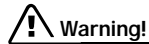
- f Please observe the chapter "EXERCISE EXTREME CAUTION WHEN WORKING ON YOUR VEHICLE" on Page 260.

Regular and correct care helps to maintain the value of your car and is also a precondition for the New Vehicle Warranty and the Anti Corrosion Warranty.

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!

Risk of serious personal injury or damage to the vehicle or property.

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 as well as damage to your vehicle.

- f Keep cleaning agents out of reach from children.
- f Observe all caution labels.
- f Always read directions on the container before using any product. These directions may contain information necessary to avoid personal injury.
- f 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.
- f 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.

Moisture and road salt on brakes may affect braking efficiency.

- f Test the brakes after each vehicle washing.

High-pressure cleaning units



Warning!

High-pressure cleaning units can damage the following components:

- Tires
- Logos, emblems
- Painted surfaces
- Widened fenders
- Lock and latch of the removable towing attachment
- Seals of the electrically retractable ball hitch
- Alternator, valve covers
- ParkAssist sensors
- f Please observe the operating instructions from the unit manufacturer.
- f Always cover the lid over the brake fluid reservoir prior to cleaning. Never point the cleaning jet directly at the lid.
- f When cleaning with a flat-jet nozzle or the like, maintain a minimum distance of 21 in. (50 cm).

- f Never use high-pressure cleaning units with a round-jet nozzle.

A high-pressure cleaning unit with round nozzle will damage your vehicle. The tires are particularly susceptible to damage.

- f Do not point the cleaning jet directly at any of the aforementioned components.

Washing

The best protection for the car from the damaging effects of the environment is frequent washing and preservation. The underside of the car should also be thoroughly washed for cinders, salt or sanding at winter's end.

The longer salt, road dust, industrial dust, insect remains, bird excrement, and tree exudations (resin, pollen), etc. are allowed to remain on the bodywork, the more serious is their harmful effect.

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 also more susceptible to scratching because of the composition of their pigments and require particularly careful paint care.

- f Do not wash your car in bright sunlight or while the bodywork is still hot.

- f When washing by hand, use abundant water, a soft sponge or wash brush and Porsche car shampoo.

- f Begin by spraying the body thoroughly with water to rinse away loose dirt.

- f After washing, rinse the car with plenty of water and then dry with a chamois leather.

Do not use the same chamois leather for drying as you use for cleaning the windshield and windows.



Warning!

Moisture which gets on the brakes during a car wash can reduce braking efficiency or make the brake pull unevenly which could increase the danger of an accident, causing serious personal injuries or death.

- f Always apply the brakes a few times after washing the car to test braking efficiency and dry the brake discs.
When doing this, take care not to hamper other road users behind you (traffic conditions permitting).

Automatic car washes

Optional add-on parts or parts which project beyond the contours of the vehicle may be damaged by design features (e.g. brushes) of automatic car washes.

The following parts are particularly susceptible to damage:

- Windscreen wipers and rear wiper (always switch them off – position 0 – to prevent them wiping unintentionally in intermittent or sensor operation).
 - Door mirrors (always fold in).
 - Roof Transport System (always remove completely).
 - Spoiler.
 - Wheels (the wider the rim and the lower the tire height, the greater the risk of damage).
- f Please consult the operator before using automatic car washes.
- f Wash and dry by hand all points not reached by a car wash, such as door and lid seams or door sills.

Note

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.

Door lock

- f To prevent the door lock from freezing during the cold season, cover the lock barrel with a suitable adhesive tape during washing.
- f Should the locks freeze, use an ordinary de-icer.
- In many cases, a well warmed key can help.
- Never use excessive force.

Paint

- f Never rub a dusty car with a dry cloth since dust particles are abrasive and could dull and damage the surface finish.

The paintwork of your car is exposed to all types of mechanical and chemical conditions, particularly climatic ones such as bright sunlight, rain, frost and snow. Ultraviolet light, rapid changes in temperature, rain, snow, industrial dust and chemical deposits constantly attack the paint which is only able to withstand such exposure in the long term if it is given regular care and attention.

- f Do not treat matt-painted components with preservatives or polishes, otherwise the matt effect will be lost.

Preservation

The paint surface becomes dull over time due to weathering. It is therefore necessary to preserve the paint regularly.

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.

Provided it is washed and treated with preservative regularly, the brand new finish of your car will be retained for years to come.

- f Simply apply paint preservative after washing the car and polish it smooth.

Polishing

- f Do not resort to using Porsche polish until it becomes evident that the normal preservatives no longer produce the desired finish.

Removing spots and stains

- f Remove tar stains, grease, oil spots and dead insects etc. as soon as possible with Insect Remover. They can cause discoloration if allowed to remain on the paintwork.
- f Wash the affected area immediately after treating it.

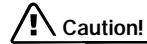
Minor paint damage

- f Have minor paint damage, such as scratches, scores or chips caused by flying stones, repaired immediately by your authorized Porsche dealer **before** corrosion begins.

However, if there are already traces of corrosion, they must first be removed carefully and thoroughly. Coat the area with a rust-proofing primer and finish off with a top coat. The paint code and color number are found on the vehicle's paint data plate.

- f Please observe the chapter "DATA BANK" on Page 378.

Cleaning the engine compartment



Caution!

Risk of damage, e.g. to the alternator, painted surfaces, and the valve covers.

- f Never use high-pressure cleaning units with a round-jet nozzle.
- f Always maintain a minimum distance of 21 in. (50 cm).
- f Always cover the lid over the brake fluid reservoir prior to cleaning with a high-pressure cleaner. Never point the cleaning jet directly at the lid.
- f Do not point the cleaning jet directly at any of the aforementioned components.

Note on operation

If the car is driven off-road frequently and after driving on salted or gritted roads:

- f Clean the engine compartment regularly.

Windows

The road dust which settles on the windshield and windows contains particles of tire rubber and oil residue. The interior trim and upholstery release particles, particularly in strong sunlight, which collect on the insides of the windows. These deposits are augmented by impurities in the air which enters the car through the fresh air vents.

- f Clean all windows regularly, inside and outside, with Porsche window cleaner.
- f Make sure not to damage the TV antenna in the side window when cleaning.
- f If you use a chamois leather for the windows, do not use it for paintwork as it will otherwise pick up a certain amount of preservative or polish and could smear the windows and thus impair vision.
- f Remove dead insects with insect remover.

Wiper blades

Wiper blades that are in perfect condition are vital for a clear view.

- f Replace the wiper blades twice per year (before and after the cold season) or whenever wiper performance deteriorates.
- f Periodically clean wiper blades with Porsche window cleaner, especially after the vehicle has been washed in a car wash. If they are very dirty (e.g. with insect remains), they can be cleaned with a sponge or cloth.

Undercoating

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.



Danger!

Danger of fire and serious personal injuries.

- f Do not apply additional undercoating or rust-proofing on or near the exhaust manifold, exhaust pipes, catalytic converters or heat shields. During driving the substance used for undercoating could overheat and ignite.
- f 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.
- f Always apply a fresh coating of suitable preservative to unprotected 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.

Headlights, lights, interior and exterior plastic parts

- f Use **only** clean water and a little dishwashing detergent to clean headlights, lights, plastic parts and surfaces.
Do not clean when dry.
Use a soft sponge or a soft, lint-free cloth.
Gently wipe the surface without applying too much pressure.
The Porsche inside window cleaner is also suitable for cleaning plastic surfaces.
Follow the cleaning instructions on the container.
Never use other chemical cleaners or solvents.
- f Rinse cleaned surfaces with clear water.

Door, roof, lid and window seals

- f Wash dirt (e.g. abrasion, dust, road salt or grit) from all seals regularly using warm soapy water. Do not use any chemical cleaning agents or solvents.

When there is a frost hazard, the outer door seals and the lid seals can be protected against freezing into place by a suitable care product.

In order to prevent damage to the anti-friction coating, the inner door seals must not be treated with care products.

Light alloy wheels

- f Please observe the chapter "AUTOMATIC CAR WASHES" on Page 286.

Pitting may occur if metallic particles which cause contact corrosion (e.g. brass or copper in brake dust) are allowed to remain on the aluminum too long.

- f If possible, wash the wheels with a sponge or wash brush about every two weeks. In areas where road salt or grit is spread on winter roads or there is a lot of airborne industrial dust, it is best to clean the wheels weekly.

The Porsche Light Alloy Wheel Cleaner (ph-value 9.5) can be used for this purpose.

If the ph-value of the detergent is incorrect, the protective coating on the wheels will be destroyed.

Polishes which dissolve oxides, such as those frequently used for other metals, or abrasive tools or agents are unsuitable because they break down the oxide film of the protective coating and will cause discoloration of the wheel.

- f Every three months, after cleaning, coat the wheels with a car wax or non-corrosive grease (e.g. vaseline).
Using a clean cloth thoroughly rub the grease into the surface.



Danger of accident if cleaning agents (e.g. wheel cleaning agents) come into contact with the brake discs. The resulting film on the brake discs can impair braking performance.

- f Make sure that no cleaning agent comes into contact with the brake discs.
- f If cleaning agent has come into contact with the brake discs, thoroughly clean the brake discs with a strong jet of water.
- f Paying attention to any road users behind you, dry the brake discs by applying the brakes.

Leather care

Characteristics and special features

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 natural leather product.

A special mention must be made here of natural leather. For natural leather, carefully selected hides of the highest quality are used. It is not covered completely with dye on production. "Nature's signature" is therefore easily recognizable. This fine material is distinguished by an outstanding seating comfort, special suppleness and a typical patina.

Leather care and treatment

- f Clean all types of leather regularly to remove fine dust using a soft, damp, white woollen cloth or a commercially available microfibre cloth.
- f Remove heavy contamination with Porsche leather cleaner.
Please always follow the instructions for use given on the containers.

Caustic cleaners and hard cleaning objects must not be used.

Perforated leather must under no circumstances get wet on its reverse side.

Once cleaned, leather (particularly the heavily stressed leather seats) must be treated only with Porsche leather care liquid.

Carpets and mats

- f Use only a vacuum cleaner or a medium stiff brush.
- f Remove stains and spots with Porsche stain remover.

The Porsche range of accessories includes floor mats to protect the carpets in summer and winter.



Risk of an accident.

- f 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.
- f 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 Porsche dealer will be glad to offer you floor mats of correct size including a securing possibility.

Airbags



Danger!

There is a danger of serious personal injury or death if the airbag system is impaired by improper cleaning work.

- f Do not make any modifications whatsoever on individual components such as the padded covers of the steering wheel, the front seats, the roof pillars and the rooflinings.
- f Let your authorized Porsche dealer clean these components.

Fabric linings

Fabric linings on pillars, headliner and sun visors, etc., must be treated only using suitable cleaning agents or a suitable dry foam and a soft brush.

Alcantara

- f Do not use a leather care product to clean Alcantara.

For regular care it is sufficient to clean the cover with a soft brush. Strong abrasion or rubbing when cleaning will permanently change the surface.

Cleaning when lightly soiled

- f Wet a soft cloth with water or a neutral soap solution and wipe off the dirt.

Cleaning when heavily soiled

- f Wet a soft cloth with lukewarm water or thinned white spirit and dab the dirt from the outside in.

Safety belts

- f Use a mild detergent to clean soiled belts.
- f When drying, avoid direct sunlight.
- f Only use suitable cleaning agents.
- f 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.

- f Clean your vehicle thoroughly inside and outside. Clean the engine compartment. The under carriage and chassis components should be free of dirt and salt deposits.
- f Fill up the fuel tank.
- f Change the oil and oil filter, and run the engine for several minutes.
- f Increase the tire pressure to 58 psi (4 bar). 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

- f Check and correct antifreeze/cleaning solution level as necessary.

Electrical system

- f 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.
- f 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.
- f Please observe the chapter "CHARGE STATE" on Page 344.

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, lids and roof must be closed. The air vents should be opened.

Practical Tips, Minor Repairs

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Exercise Extreme Caution when Working on your Vehicle



Danger!

Ignoring the following instructions may cause serious personal injury or death.

- f 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.
- f Only work on your vehicle outdoors or in a well ventilated area.
- f 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 such devices such as hot water heaters which ignite a flame intermittently.
- f Before working on any part in the engine compartment, turn the engine off and let it cool down sufficiently. Hot engine compartment components can burn skin on contact.
- f Be alert and cautious around engine at all times while the engine is running.
If you have to work on the engine while it is running, always put the handbrake on **and** put the gearshift lever in neutral or the selector lever in position **P**.
- f In particular, be very careful to ensure that items of clothing (ties, shirt, sleeves etc.), jewelry, long hair, hand or fingers cannot get caught in the engine-compartment blower, fan, belts or other moving parts.
The radiator and radiator fans are in the front of the car.
The fans can start or continue running as a function of temperature, even with the engine switched off.
Carry out work in these areas only with the engine off and exercise extreme caution.
- f Your Porsche is equipped with an electronic ignition system. When the ignition is on, high voltage is present in all wires connected with the ignition system; therefore, exercise extreme caution when working on any part of the engine while the ignition is on or the engine is running.
- f 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.
For vehicles with air suspension with level control and height adjustment:
Please observe the chapter "AIR SUSPENSION WITH LEVEL CONTROL AND HEIGHT ADJUSTMENT" on Page 254.
- f 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.
Remove the ignition key.
- f Do not smoke or allow an open flame around the battery or fuel.
Keep a fire extinguisher in close reach.
- f 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.
- f Supplies of fluids, e.g. engine oil, brake fluid or coolant, are hazardous to your health. Keep these fluids out of children's reach and dispose of them in accordance with the appropriate regulations.
- f Some countries require additional tools and special spare parts to be carried.
Please make enquiries before driving abroad.

Notes on Minor Repairs

Tool kit

The tool kit is accommodated in the spare-wheel well under the cover of the loadspace floor.

Tires/Wheels

The original equipment tires and wheel rims on your Porsche comply with all applicable Federal Motor Vehicle Safety Standards.

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.



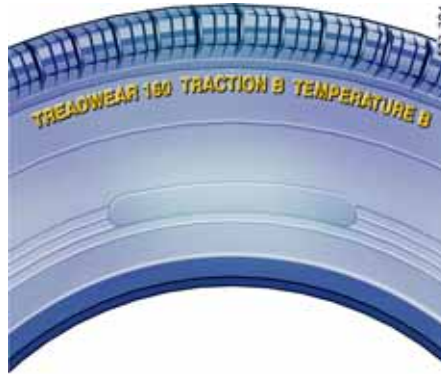
Danger!

Risk of loss of control and serious personal injury or death.

- f 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.
- f 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.
- f Continuing to operate the vehicle without correction could result in a loss of control and serious personal injury.

Uniform Tire Quality Grading

Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width.



Example

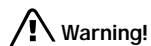
All passenger car tires must conform to Federal Safety Requirements in addition to these grades.

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.



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.

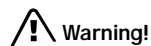
Temperature A, B, C

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.



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.

Tire pressures



Danger!

Risk of accident.

Risk of serious personal injury or death.

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 cause damage. Always use an accurate tire pressure gauge when checking inflation pressures.

- f Do not exceed the maximum tire pressure listed on the tire sidewall. (Also refer to "Technical data").
- f 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.
- f Valve caps protect the valve from dust and dirt, and thus from leakage. Always screw caps tightly down. Replace missing caps immediately.
- f For safety reasons, don't use tire inflating bottles.

- f Please observe the chapter "TIRE PRES-SURES, COLD" on Page 385.

Each tire, including the spare (if provided), should be checked every 2 weeks when cold (68°F/20°C) and inflated to the inflation pressure recommended in this Owner's Manual or on the tire-pressure plate.

If your vehicle has tires of a different size than the size indicated in this Owner's Manual or on the tire-pressure plate, 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 that illuminates a low tire pressure message when one or more of your tires is significantly under-inflated. Accordingly, when the low tire pressure message 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 tire pressure monitoring 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 tire pressure monitoring low tire pressure message.

For further information on the tire pressure monitoring:

- f Please observe the chapter "TIRE PRESSURE MENU" on Page 104.

When tires are warm, the tire pressure is increased.

- f 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 over-heat and thus be damaged – even invisibly. Hidden tire damage is not eliminated by subsequently correcting the tire pressure.

Overloading



Danger!

Risk of personal injury, loss of control and damage to vehicle parts.

- f Do not overload your vehicle. Be careful about the roof load.
- f If loading the vehicle also correct the tire pressure. Tire pressure for loaded vehicle can be found on the tire pressure plate and in the chapter technical data.
- f Never exceed the specified axle load. Overloading can shorten the service life of the tires and car, as well as lead to dangerous vehicle reactions and long braking distances. Damage due to overloading is not covered by the vehicle warranty.

- f Please observe the chapter "LOADING INFORMATION" on Page 213.



Example of a tire pressure plate A

Tire Pressure plate

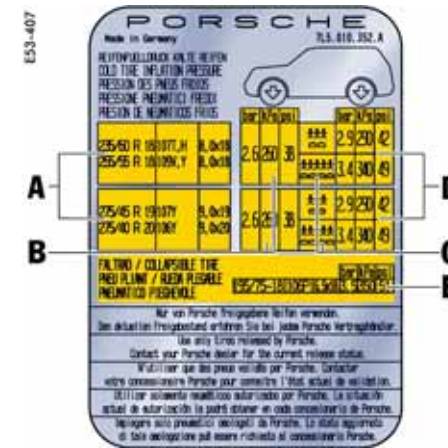
Depending on when your vehicle was manufactured, the tire pressure plate on the driver's door will contain different data.

Information on the tire pressure plate A

- 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. If a trailer is being towed, the trailer tongue weight must be included as part of the cargo load. Please observe the chapter "LOADING INFORMATION" on Page 213.

- C Original tire size
Size of tires mounted at the factory.
- D Recommended cold tire inflation pressure
These values are for cold tires (68°F/20 °C).
- E Approved tire sizes
- F Size and tire pressure for the collapsible spare wheel

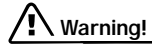


Example of a tire pressure plate B

Information on the tire pressure plate B

- A Approved tire size
- B Permissible tire pressure for the front axle
- C Tire pressure for fully loaded or partially loaded vehicle
- D Permissible tire pressure for the rear axle
- E Size and tire pressure for the collapsible spare wheel

Tire traction



Warning!

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.

- f Reduce speed on wet surfaces to prevent this.

Tire life

Tire life depends on various factors, i.e., road surfaces, traffic and weather conditions, driving habits, type of tires and tire care.

- f 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.

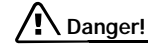
Tire wear

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.



Danger!

Driving on worn tires can result in loss of control of the vehicle and could cause serious personal injuries or death.

- f 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.
- f Specialized high performance tires on high performance sport utility vehicles 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.

- f If you notice that tires are wearing unevenly, consult your Porsche dealer.

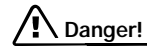
Uneven wear may not always be due to improper wheel alignment. It can be the result of individual driving habits such as cornering at high speeds. If the tire pressure is not checked and adjusted regularly, abnormal tire wear can also occur.

Tire care

- f Avoid damaging tires and wheel rims.
- f If you must drive over a curb or other obstacle, drive slowly and at an obtuse angle.
- f Check tires for uneven wear and damage before driving off.
- f Remove imbedded material.
- f Replace worn or damaged tires immediately.
- f Keep oil, fuel, brake fluid, etc. away from tires.
- f Replace missing valve stem caps.
- f Keep tires inflated correctly.
- f Wash tires when washing the vehicle. Also clean inner side of wheels.
- f Do not use abrasive cleaners when washing the wheels.
- f Check wheel rims for corrosion.
- f Remove road salt, if driving in winter.

Tire damage, puncture

- f Please observe the chapter "HIGH-PRESSURE CLEANING UNITS" on Page 285.



Risk of serious personal injury or death. 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.

- f Check tires – including sidewalls – regularly for foreign bodies, nicks, cuts, cracks and bulges.
- f 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.
- f Cross curb edges slowly and at right angles if possible.
Avoid driving over steep or sharp curbs.
- f 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.

- f Perform a visual inspection if necessary.

Tire replacements

- f Use only tire makes and types tested by Porsche.

Only tires with the same manufacturer and with the same specification code (e.g. "N0", "N1"...) should be mounted on the vehicle.

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).

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.

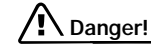
- f Please adjust your driving style accordingly.

Installation of new tires should only be done by a qualified tire technician.

Valves

- f Use only plastic valve caps.
- f The rubber valves must be replaced whenever the tires are changed.
- f The fitting and replacement specifications must be observed for metal valves.
- f Only use Original Porsche metal valves.
- f Protect the valve inserts against soiling with valve caps.
Soiled valve inserts can cause a gradual loss of air.

Parking at the curb



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 causing severe personal injury. Depending on the force of impact, the edge of the rim can also be damaged.

- f If you are in doubt, have the wheel checked by an expert, particularly if you suspect damage on the inside.
- f If you must drive over a curb or other obstacle, drive slowly and at an obtuse angle.
Exercise care when parking along curbs.

Maintenance note

Tire repairs are not permissible under any circumstances.

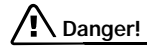
Wheel alignment, wheel balancing

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.



If, during a journey, 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 which could cause severe personal injury.

- f Stop the vehicle and check the tires.
- f If no cause for the fault can be found, drive carefully to the nearest authorized Porsche dealer.

Removing and storing tires

- f After changing, adjust tire pressure and torque wheel bolts diagonally.
Please observe the chapter "CHANGING WHEELS" on Page 315.

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, especially the spare tire, should be inspected from time to time.

Note

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 three numbers read 1204, then the tire was produced in the 12th week of 2004.

- f Store tires in a cool and dry place.
- f Rotate periodically to avoid flat spots.

Snow tires

The installation of Porsche approved winter tires is recommended.

Use Porsche approved winter tires for grip on snow and ice. For optimum performance, studding can be considered.

Check with your local Motor Vehicle Bureau for possible restrictions.



Risk of loss of control and damage to the vehicle as well as serious personal injury or death.

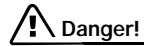
The standard tires profile and rubber mixture are optimized for wet and dry driving conditions, and may not prove favorable for snow conditions.

- f Install winter tires before driving in such conditions.

Before mounting winter tires, consult with your Porsche dealer. He has 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.

Winter tires with studs should be run at moderate speeds when new in order to give the studs time to settle.



Danger!

Risk of serious personal injury or death. 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 cause damage.

Tires with badly worn treads and studs are very dangerous and could cause accidents resulting in serious personal injuries or death.

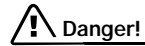
f Make sure they are replaced immediately.

f Do not exceed the winter 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.

Winter tires do not fulfill their purpose if the tread depth is less than 5/32 in. (4 mm).

Comply with all state and local laws governing snow tire and tread depth requirements.



Danger!

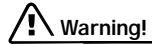
Risk of accident and serious personal injury or death due to excessive speed.

- f Always check the maximum speed rating on the tire sidewall on any tire on the vehicle.
- f Never exceed the maximum speed rating of the tires.

Wheel change

- f When wheels are removed, mark the direction of rotation and position of each wheel.
Example: FR (front right), FL, RR and RL.
- f Always fit the wheels in accordance with the markings.

Snow chains



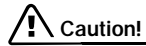
Warning!

Risk of damage to body, axle or brake components.

- f 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.
- f Follow instructions issued by the supplier of the chains.

The best possible handling characteristics are achieved when snow chains are fitted on all four wheels of the vehicle. However, it is also possible to fit snow chains on only one axle (preferably the rear axle).

- f Remove spacers if 18 inch tires, snow chains or a collapsible spare wheel are mounted.



Caution!

Risk of damage to wheel housings if the spacers on the rear axle are not removed before fitting the snow chains.

- f 17 mm spacers must always be removed from the rear axle when snow chains are to be fitted.
- f For information on the spacers: Please observe the chapter "SPACERS" on Page 314.
For information about removing the spacers: Please observe the chapter "CHANGING A WHEEL WITH REMOVAL OF 17 MM SPACER" on Page 323.
- f Before fitting chains, remove accumulated ice and snow from the wheel well.
- f 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.

- f Check with local authorities for possible restrictions.
- f 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 255/55R18 109 Y

- **P** - The tire is designed for Passenger vehicle. This information is not included on all tires.
- **255** - Indication of tire width in mm
- **55** - Indication of tire height to tire width ratio in percent
- **R** - Belt type code letter for radial

- **18** - Indication of rim diameter in inches
- **109** - Load capacity coefficient
- **Y** - Speed code letter

B TIN (Tire Identification Number)

Example: DOT xx xx xxxx xxx

- **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 1204, the tire was produced in the 12th week of 2004.

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.

- f 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 Term of tubeless or tube tire

Identification for tubeless tires.

G Radial

The identification indicates if the tire has radial structure.

Speed code letter

The speed code letter indicates the maximum permissible speed for the tire.
This code letter is shown on the tire sidewall.

T = up to 118 mph (190 km/h)
H = up to 131 mph (210 km/h)
V = up to 150 mph (240 km/h)
W = up to 167 mph (270 km/h)
Y = up to 186 mph (300 km/h)

Tip on driving

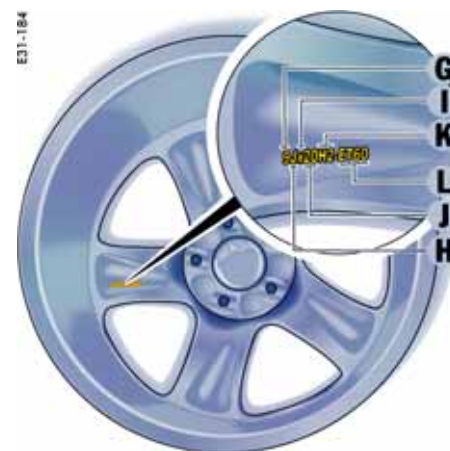
Tires with a maximum speed rating that is lower than the specified maximum vehicle speed may be mounted only if they bear an M+S identification on the tire sidewall.

- f Please note that in addition to the winter tires, all-season and all-terrain tires are also subject to speed limits and bear this identification.
- f Please observe the chapter "SPEED LIMITS FOR TIRES" on Page 106.

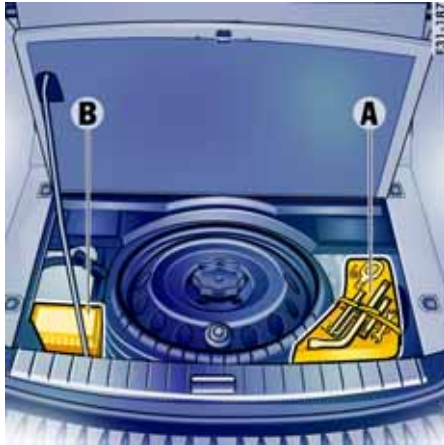
Inscription on light alloy wheels

Note on operation

- f The rim width in inches **G** and the rim offset **L** are visible from the outside. This information can be found near the tire valve.



G - Rim width in inches
H - Rim-flange contour code letter
I - Symbol for drop-center rim
J - Rim diameter in inches
K - Double hump
L - Rim offset in mm



A - Tool box
B - Compressor

Jack

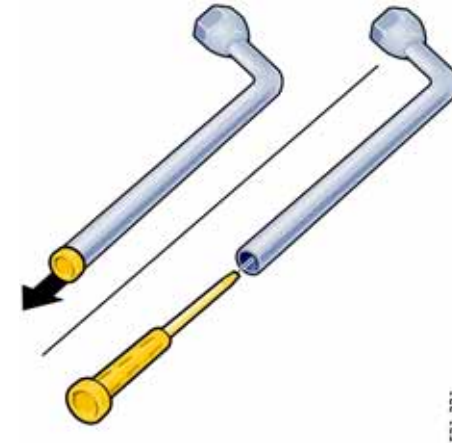
The jack is located in tool box **A** under the load-space floor.

- f Please observe the chapter "OPENING LOAD-SPACE FLOOR" on Page 202.

Warning!

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.

- f Never jack up other vehicle or other loads with the jack.
- f Always place the car on stable supports if you have to work under the car.
When working under the vehicle, always use safety stands specifically designed for this purpose.



Tool Kit

Tool box **A** and compressor **B** with pressure tester on non-air suspension vehicles are located under the cargo area.

Notes on operation

The screwdriver is located in the handle of the wheel bolt wrench.

Lifting the Vehicle with a Lifting Platform or Garage lift

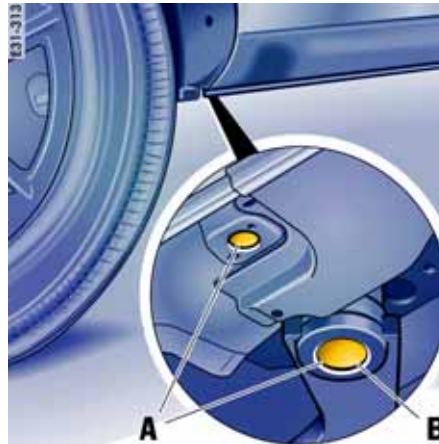
- f The car must be raised only at the illustrated jacking points.
Please observe the chapter "LIFTING THE VEHICLE WITH A JACK" on Page 319.
Please observe the chapter "RAISING VEHICLE WITH THE JACK" on Page 256.
- f Lifting at any other place may damage the vehicle or may result in personal injury.



Caution!

Risk of serious damage to the engine or the vehicle.

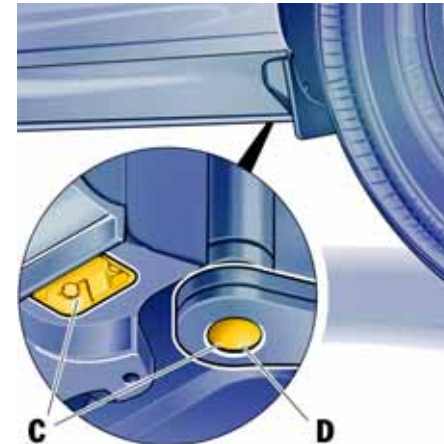
- f Never lift the vehicle by the engine, transmission or axles.
- f Do not damage any sensitive components in the vicinity of the jacking points.



A - Front jacking points platform lift
B - Front jacking point garage lift

Platform lift

- f Before the car is driven on to a lifting platform, it must be ensured that there is enough space between the lifting platform and the vehicle.



C - Rear jacking points platform lift
D - Rear jacking point garage lift

Garage lift

- A garage lift must be used only at the illustrated jacking points.
- f Lifting at any other place may damage the vehicle or may result in personal injury.

Compressor

On vehicles **without** level-control systems, there is an additional compressor with pressure tester under the loadspace floor.

- f Please observe the chapter "INFLATING TIRES ON VEHICLES WITHOUT AIR SUSPENSION" on Page 327.

On vehicles **with** level control, you can use the compressor of the level-control system to fill the tires.

The filler hose required for this purpose can be found under the left rear seat.

- f Please observe the chapter "FOLDING REAR SEATS FORWARD" on Page 41.



Wheel Bolts

- f Always clean the wheel bolts before installing.

Maintenance note

f Wheel bolts must not be greased.

- f Replace damaged wheel bolts.
Only use the original Porsche wheel bolts specially designed for this vehicle type.

Tightening torque

Tightening torque of the wheel bolts **118 ftlb.** (160 Nm).

Security wheel bolts

The adapter (wrench socket) for the security wheel bolts is located in the tool box.

To loosen or tighten the wheel bolt with anti-theft protection, the adapter must be used between the wheel bolt and the wheel bolt wrench.

- f When positioning the wrench socket, ensure that it engages fully in the teeth of the wheel bolt.

Note on operation

- f On vehicles with 17 mm spacers on the rear axle, the wheels are secured with steel nuts. There is no anti-theft protection for the wheel nuts.
- f If the wheels have to be removed at the workshop, please do not forget to hand over the socket for the security wheel bolts along with the car key.

Spacers

- f Use the spacers only together with wheels approved by Porsche.
Before having spacers fitted, find out about the current approval status.
- f Remove spacers if 18 inch tires, snow chains or a collapsible spare wheel are mounted.



Risk of accident if the spacers are not removed before mounting 18 inch tires or collapsible spare wheel.

- f 17 mm spacers are always to be removed before mounting 18 inch tires or a collapsible spare wheel, because the wheel cannot be fitted correctly.



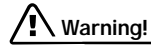
Risk of damage to wheel housings if the spacers on the rear axle are not removed before fitting the snow chains.

- f 17 mm spacers must always be removed from the rear axle when snow chains are to be fitted.

Note on operation

- f To remove or mount the spacers:
Please observe the chapter "CHANGING A WHEEL WITH REMOVAL OF 17 MM SPACER" on Page 323.
Please observe the chapter "FITTING THE 17 MM SPACER" on Page 324.

Changing Wheels



Warning!

Failure to follow these instructions may result in serious personal injuries to you or to bystanders.

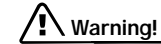
Before changing the wheel

- f 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.
- f Do not park your vehicle where it may contact dry grass, brush or other flammable materials. The hot parts of the exhaust system could set such materials on fire, thereby causing both property damage and severe or fatal physical injury.
- f Passengers must not be in the vehicle when it is jacked up.
- f 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.
- f Set the parking brake and block the wheels opposite the flat tire on the other side of the vehicle.

While operating the jack

- f The jack is only to be used for changing a wheel. Do not use it as a support to work under the car.
- f The car must be jacked up only at the illustrated jacking points. Lifting at any other place may damage the vehicle or may result in personal injury. Never jack the car up by the body or the bumpers.
- f 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.

Sequence of operation



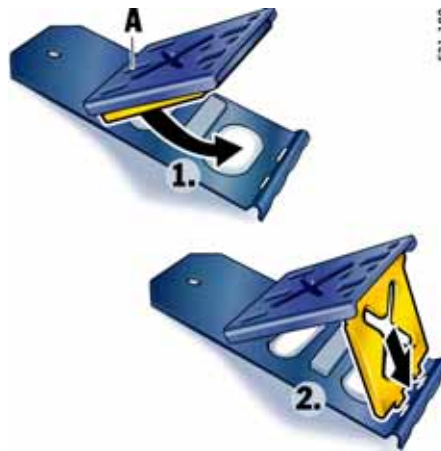
Warning!

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.

- f Never jack up other vehicles or other loads with the jack.
- f 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.
- f Please use a suitable knee rest to protect your clothing against soiling.

Flat Tire

1. Stop the vehicle as far away from the driving lane as possible.
The car must be parked on a firm and flat surface offering adequate grip.
2. Switch on the emergency flashers.
3. Fully apply the parking brake.
4. Shift into 1st gear or move the selector lever to position **P**.
5. Straighten the front wheels.
6. Withdraw the ignition key to lock the steering and prevent the engine from being started.
7. Have any passengers leave the vehicle.
8. Set up a warning triangle at a suitable distance.

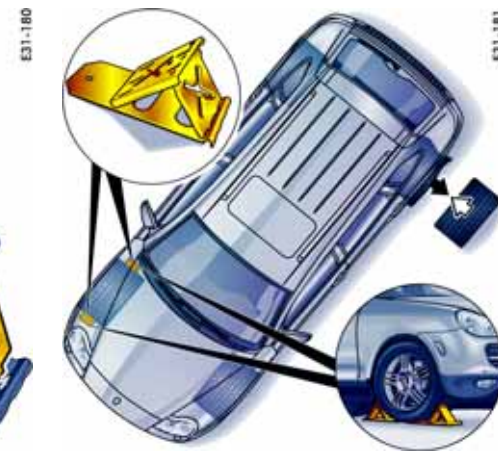


A - Folding wedges

Securing the vehicle against rolling

For this purpose, use the two folding wedges **A** fastened on the tool box.

1. Unfold the wedges.
2. Engage the wedges.



3. Place one wedge directly in front of and another directly behind the diagonally opposite wheel.



A - Filler bottle
B - Filler hose

Tire sealant

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 repair, so you can drive to the next workshop. Even with the tire air-tight, it may be used only for short journeys in an emergency.

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On vehicles **without** level control, the tire sealant and a compressor with pressure tester can be found under the cargo floor in the luggage compartment.

The tire sealant comprises:

- A filler bottle
- A filler hose
- A valve turner and
- A spare valve insert.

Danger!

Risk of accident.

- f Use the tire sealant only in the case of cuts or punctures no larger than 0.15 in. (4 mm).
- f Never use the tire sealant if the rim is damaged.

Warning!

The sealant is highly flammable and harmful to health.

- f Fire, naked flame and smoking are prohibited when handling tire sealant.
- f Avoid contact with skin, eyes or clothing.
- f Keep tire sealant away from children.
- f Do not inhale vapours.

In case of contact with the sealant:

- f If sealant gets on the skin or in the eyes, thoroughly rinse the affected part of the body off without delay.
- f Change soiled clothing immediately.
- f Visit a doctor immediately in the event of an allergic reaction.
- f If sealant was 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 - Plug of the filler hose
 D - Valve turner
 E - Valve insert
 F - Tire valve

Inserting sealant

1. Leave the object that caused the puncture in the tire.
2. Remove sealant and the enclosed sticker from the luggage compartment.
3. Adhere 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 tire valve **F**.
7. Remove valve insert **E** from the tire valve with valve turner **D**. Keep the valve insert in a clean and dry place.
8. Remove plug **C** of the filler hose **B**.
9. Push filler hose onto the tire valve.
10. Hold filler bottle higher than the level of the tire valve and press it together forcefully until the bottle is completely emptied into the tire.
11. Pull filler hose off the tire valve.
12. Twist the valve insert firmly into the tire valve using the valve turner.
13. Inflate the tire. Set the prescribed tire pressure. Please observe the chapter "TIRE PRESURES, COLD" on Page 385. Please observe the chapter "TIRE SEALANT/ SEALING SET" on Page 107.

14. Screw valve cap onto the tire valve.
15. Check the tire pressure after driving for around 10 minutes. If the tire pressure is less than 22 psi (1.5 bar), do not continue driving. If a value of more than 22 psi (1.5 bar) is indicated, correct the pressure to the prescribed value.

16. Please consult your authorized Porsche dealer.

Care Instructions

After drying, any sealant that emerges can be peeled off like a film.

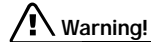


Warning!

Risk of accident.

- f Have the tire replaced by a specialist workshop as soon as possible.
- f Avoid hard acceleration and high cornering speeds.
- f Do not exceed maximum speed of 50 mph (80 km/h).
- f Please always observe the safety and operating instructions, which can be found in the separate operating instructions for the sealant and on the compressor.

Lifting the vehicle with a jack



Warning!

Danger of injury. The car may slip off the jack.

- f Make sure that no one is in the vehicle when jacking up and changing a wheel.
- f Never jack up the vehicle when it is parked on a surface that slopes up, down or to the side.
- f Use the jack only to raise the car for wheel changing.
- f Always place the car on stable supports if work has to be carried out under the car. The car jack is not suitable for this.

Danger of injury if the level-control system operates during the wheel change.

- f Set the car to jacking mode before raising the car.
Please observe the chapter "AIR SUSPENSION WITH LEVEL CONTROL AND HEIGHT ADJUSTMENT" on Page 254.

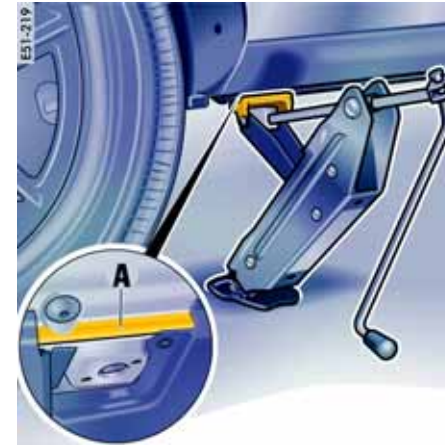
Risk of injury and damage if the vehicle is not secured.

- f Secure the vehicle against rolling.
- f Please observe the chapter "SECURING THE VEHICLE AGAINST ROLLING" on Page 316.

Maintenance note

The jacking point on the vehicle must be free of dirt.

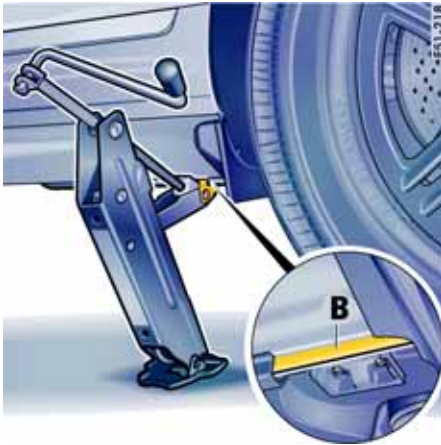
1. Slightly loosen the wheel bolts of the wheel to be changed.
2. Only set up the jack at the rear jacking point designed for the purpose. The jack foot must be in contact over its whole area and must be positioned directly below the head piece. Use a suitable support if necessary.
3. Hold jack still and wind it up until its head enters the jacking point on the vehicle. Only jack vehicle up until the wheel to be changed is completely off the ground.
4. After lowering the vehicle, remove the jack.



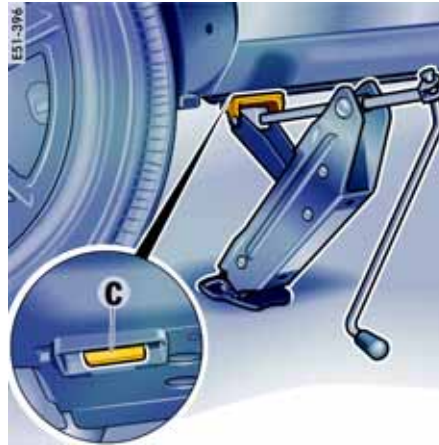
Front jacking point

Jacking points

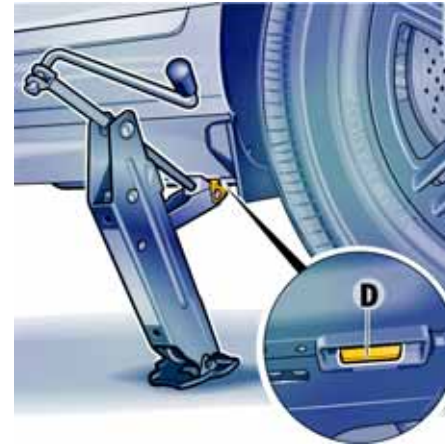
- f Set up jack only at the points provided **A** or **B**.



Rear jacking point



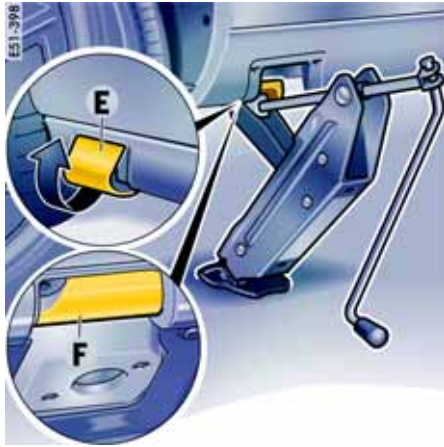
Front jacking point



Rear jacking point

Jacking points for vehicles with a running board

f Set up jack only at the points provided **C** or **D**.

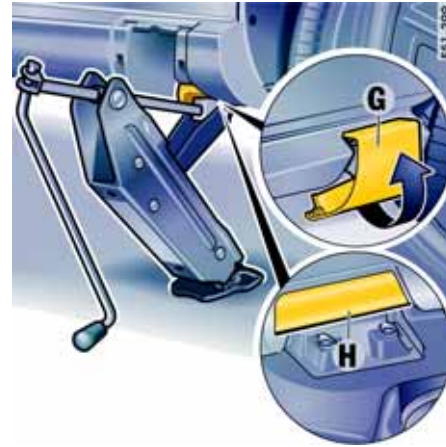


Front jacking point

Jacking points for vehicles with side member panels

The jacking points are accessible after removing the plastic caps from the side member panels.

1. Open cover cap **E** or **G** to the front in the side member panel via the internal handle recess and pull off (**arrow**).



Rear jacking point

2. Set up jack only at the points provided **F** or **H**.
3. Insert the cover cap **E** or **G** completely with both centering lugs in the slots of the side member panel and fold back until it can be felt to engage.



Wheel change

1. Remove the top wheel bolt with the wheel bolt wrench from the tool kit.



Screwing in assembly aid

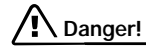
2. Remove assembly aid from the tool kit and screw in instead of the wheel bolt.
3. Remove the remaining wheel bolts. Please observe the chapter "WHEEL BOLTS" on Page 313.
4. Change wheel.

5. Insert wheel bolts and tighten by hand. Remove assembly aid and screw in remaining wheel bolt. Initially tighten bolts in diagonally opposite sequence so that the wheel is centered.
6. Inflate the tire if necessary. Please observe the chapter "TIRE PRES-SURES, COLD" on Page 385. In vehicles with tire pressure monitoring: Please observe the chapter "TIRE PRESSURE MENU" on Page 104.
7. Lower car and remove jack.
8. Tighten wheel bolts in diagonally opposite sequence.

Maintenance note

- f** Immediately after changing a wheel, use a torque wrench to check the prescribed tightening torque of the wheel bolts (118 ftlb./160 Nm).

Changing a wheel with removal of 17 mm spacer



Danger!

Risk of accident if the spacers are not removed before mounting 18 inch tires or collapsible spare wheel.

- f 17 mm spacers are always to be removed before mounting 18 inch tires or a collapsible spare wheel, because the wheel cannot be fitted correctly.

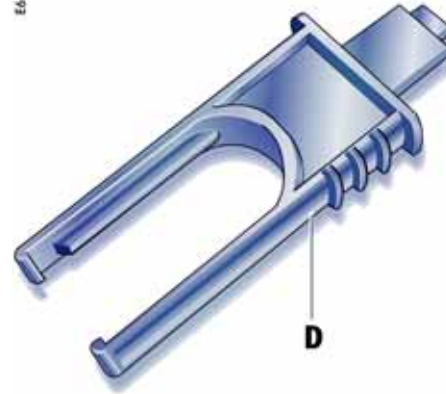


Caution!

Risk of damage to wheel housings if the spacers on the rear axle are not removed before fitting the snow chains.

- f 17 mm spacers must always be removed from the rear axle when snow chains are to be fitted.
- f Remove spacers if 18 inch tires, snow chains or a collapsible spare wheel are mounted.
- f It is not necessary to use an assembly aid for mounting a wheel or spare wheel of the same quality.
- f For information on the spacers: Please observe the chapter "SPACERS" on Page 314.

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Puller



E31-323

2. Remove wheel nuts.

1. Remove plastic covers from the wheel nuts with the puller **D** from the toolbox.



3. Unscrew the wheel bolts **A** with which the spacer is fastened.
4. Remove the spacer.
5. Remove assembly aid from the tool kit and screw in instead of the wheel bolt.
6. Fit wheel.
7. Use the wheel bolts **A** with which the spacer was fastened to mount the wheel.
Insert wheel bolts and tighten by hand.
Remove assembly aid and screw in remaining wheel bolt.
Initially tighten bolts in diagonally opposite sequence so that the wheel is centred.

8. Inflate the tire if necessary.
Please observe the chapter "TIRE PRES-
SURES, COLD" on Page 385.
On vehicles with Tire Pressure Monitoring:
Please observe the chapter "TIRE PRESSURE"
on Page 102.

9. Lower the car and remove the jack.
10. Tighten wheel bolts in diagonally opposite sequence.

Maintenance note

f Immediately after changing a wheel, use a torque wrench to check the prescribed tightening torque of the wheel bolts (160 Nm/118 ftlb.).

- f** Spacer, steel nuts, and plastic covers should be stored together.

Fitting the 17 mm spacer

1. Remove wheel.
2. Fit the spacer with the wheel bolts **A** used to fasten the wheel.
Tightening torque: **160 Nm (118 ftlb.)**
3. Fit wheel.
To do this use the original wheel nuts for fastening the wheels.
Tightening torque: **160 Nm (118 ftlb.)**
Place plastic covers onto the steel nuts.

Note

There is no anti-theft protection for the wheel nuts.

Collapsible spare wheel

The collapsible spare wheel is fastened under the floor in the luggage compartment.

On vehicles with 17 mm spacers:

- f Before fitting a collapsible spare wheel on the **rear axle** always remove the corresponding spacer.
For information on the spacers: Please observe the chapter "SPACERS" on Page 314.
For information about removing the spacers: Please observe the chapter "CHANGING A WHEEL WITH REMOVAL OF 17 MM SPACER" on Page 323.



1. Take out rotary knob **A** and put it on bolt **B**.
2. Unscrew the screw and take out the collapsible spare wheel.
3. Mount the collapsible spare wheel on the vehicle before inflating it. Leave the car jacked up. Please observe the chapter "LIFTING THE VEHICLE WITH A JACK" on Page 319.
4. Inflate the tire.
Please observe the chapter "TIRE PRES-SURES, COLD" on Page 385.

Warning!

Risk of accident.

- f The collapsible spare wheel must be used only over short distances in cases of emergency. For safety reasons, replace the tires **before** the wear indicators appear (webs in the tire grooves, 1/16 in. (1.6 mm) high).
- f Never deactivate the Porsche Stability Management (PSM) system.
- f Avoid hard acceleration and high cornering speeds.
The maximum permitted speed is **50 mph (80 km/h)** and must not be exceeded because of altered driving characteristics and for reasons of wear.
The tread depth of the spare wheel is subject to the same laws as the original tires.
- f Do not use a collapsible spare wheel from a different vehicle type.
- f Do not mount the collapsible spare wheel from your car on a different vehicle.
- f Only fit **one** collapsible spare wheel on the vehicle at a time.
- f On vehicles with air suspension, use the tire filling connection **A** only to inflate the collapsible spare wheel.
- f To avoid damage, do not use automatic car washes when the spare wheel is installed.

After using the collapsible spare wheel

- f Release air by unscrewing the valve insert.

Notes on operation

The tire will revert to its original shape only after several hours. Only then can it be stowed in the spare wheel recess in the luggage compartment.

There is a plastic sheet in the tool box to store the damaged wheel.

Maintenance note

The collapsible spare wheel must be repaired only by the manufacturer.

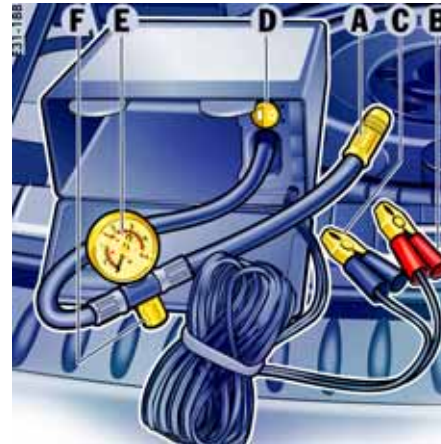
- f Please consult your authorized Porsche dealer if the collapsible spare wheel is defective.

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.

Note on operation

- f Do not press too hard or force the valve stem 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. Please observe the chapter "TIRE PRESSURES, COLD" on Page 385.
- 4. Remove the pressure gauge.
- f Please observe the chapter "TIRE PRESSURE" on Page 102.



Inflating tires on vehicles without air suspension

1. Open front lid of the compressor.
2. Screw filler hose **A** of the compressor onto the tire valve.



3. Remove cover **A** of the engine-compartment cover. Please observe the chapter "CONNECTING JUMPER CABLES" on Page 356.

f f f



+ = Positive terminal for jump lead starting
 - = Grounding point for jump lead starting

4. Connect clamps of the compressor to the jump lead starting terminals.
 Always observe the following sequence:
 - Open the cap of the positive terminal for emergency starting with jumper cables (+).
 - Connect positive lead (red) **B** to the positive terminal for emergency starting with jumper cables (+).
 - Connect negative lead (black) **C** to the negative terminal for emergency starting with jumper cables (-).

Warning!

Danger of burning. The compressor filler hose can become hot during the inflation process.

f Wear gloves.

5. Switch on compressor with switch **D**.
 The required filling pressure will be reached after a few minutes.
6. Switch off compressor with switch **D**.
7. Check filling pressure with pressure tester **E**.
 Then reduce tire pressure or add more air if necessary.
 Recheck the filling pressure.
8. Unscrew filler hose of the compressor.

Reducing filling pressure on vehicles without air suspension

1. Switch off compressor with switch **D**.
2. Open air bleed screw **F** until the correct filling pressure is achieved.



Inflating tires on vehicles with air suspension

1. Pull up the seat cushion at loop **A** on the rear left seat.
2. Pull seat cushion forward (arrow **B**).
3. Raise seat cushion vertically.

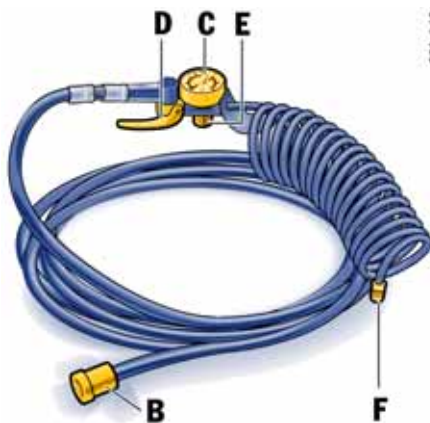


4. Open Velcro fastening strip on the fastening strap.
5. Take tire filling hose out of the bag.



6. Remove cover **A** in footwell of the front passenger seat.

f f f



- B** - Screw coupling for compressor connection
C - Pressure tester
D - Hand valve for tire filling
E - Air bleed screw
F - Filler connection for tire valve

7. Screw screw coupling **B** into the compressor connection (in footwell of the front passenger seat).

8. Screw filler connection **F** onto the tire valve.

ES1-163

Warning!

Danger of injury and risk of damage if the operating unit is used improperly.

f Use this operating unit only to inflate or to bleed air from the tires of this vehicle.

9. Switch ignition on.

10. Press hand valve **D** until the correct tire pressure is achieved.

Monitor the tire pressure with pressure tester **C** during the inflation process.

11. Unscrew the screw coupling from the compressor connection.

12. Unscrew filler connection from the tire valve.

13. Stow tire filler hose in the bag.

Note on operation

The compressor features a protective function against overheating and switches itself off automatically if necessary. The compressor must cool down for a few minutes after automatic deactivation.

Reducing tire pressure on vehicles with air suspension

f Open air bleed screw **E** until the correct tire pressure is achieved.
 Monitor the tire pressure with pressure tester **C** while correcting the tire pressure.

Spare wheel



Warning!

Risk of accident. The wheel and tire size and the tire quality of the spare wheel and normal wheel may differ.

If a spare wheel that differs from the normal tires is used, this may impair the driving behavior.

- f The spare wheel must be used only over short distances in cases of emergency.
For safety reasons, replace the tires **before** the wear indicators appear (webs in the tire grooves, 1/16 in. (1.6 mm) high).
- f Never deactivate the Porsche Stability Management (PSM) system.
- f If the tire on the spare wheel is older than 4 years, the spare wheel should be used only in the event of a flat.
- f Avoid hard acceleration and high cornering speeds.
The maximum permitted speed is **50 mph (80 km/h)** if the mounted spare wheel differs from the other three wheels on the car. This maximum speed must not be exceeded because of altered driving characteristics and for reasons of wear.
- f Do not use a spare wheel from a different vehicle type.
- f Do not mount the spare wheel from your car on a different vehicle.

Removing spare wheel



Warning!

Danger of injury if the spare wheel is removed improperly.

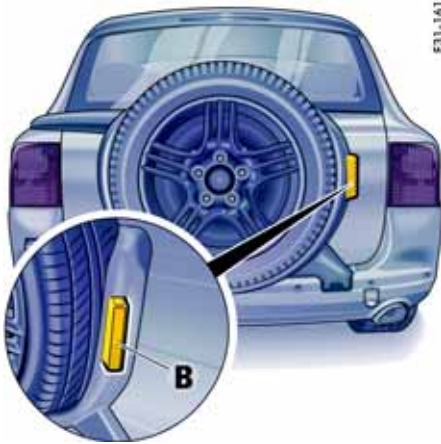
- f Remove the spare wheel only when the spare wheel bracket is locked.
- f Remove the spare wheel from the spare wheel bracket with care. The wheel is very heavy [approx. 77 lbs. (35 kg)].

1. Unscrew all five wheel bolts.
2. Remove the top wheel bolt.
Remove assembly aid from the tool kit and screw in instead of the wheel bolt.
Remove the remaining wheel bolts.



Fitting spare wheel

- f Insert wheel bolts and tighten by hand.
Remove assembly aid and screw in remaining wheel bolt.
Initially tighten bolts in diagonally opposite sequence so that the wheel is centered.
- f Please observe the chapter "TIRE PRES-SURES, COLD" on Page 385.
- f After mounting the wheel, tighten all five wheel bolts to **111 ftlb. (150 Nm)**.



B - Button for unlocking the spare wheel bracket

Opening spare wheel bracket



Warning!

Danger of injury and risk of accident if the spare wheel bracket is operated improperly.

- f Make sure that no persons or animals are within the range of movement of the spare wheel bracket. Operate the spare wheel bracket only using button **B**.
- f If the vehicle is inclined to the side, the additional lock **C** on the spare wheel bracket must be operated.

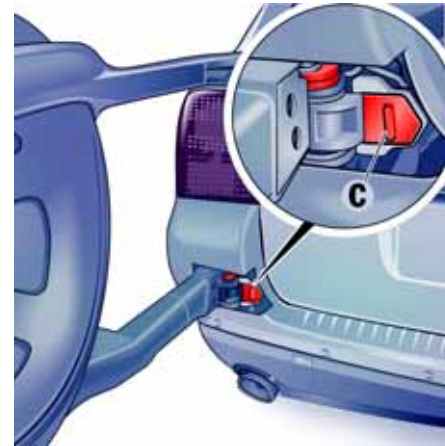
Precondition

The central locking system must be unlocked.

- f Press button **B** and swing the spare wheel bracket open.

Notes on operation

- If the opening angle **exceeds 30°**, the spare wheel bracket automatically moves to final position.
The rear lid may be opened only when the spare wheel bracket is in final position.
- If the opening angle is **less than 30°**, the spare wheel bracket automatically moves back to its initial position.
However, the spare wheel bracket is not completely engaged yet and must be closed by hand.

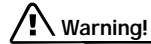


C - Additional lock

Operating the additional lock of the spare wheel bracket if the vehicle is tilted to the side

1. Open spare wheel bracket.
2. Slide additional lock **C** to the left.
The spare wheel bracket is mechanically locked.
The warning light "rear lid" and a message on the multi-purpose display of the instrument panel warn the driver that the spare wheel bracket is open.

Closing spare wheel bracket



Warning!

Danger of injury and risk of accident if the spare wheel bracket is operated improperly.

- f Operate the spare wheel bracket only using button **B**.
- f If the vehicle is tilted to the side, more effort will be required to swing the spare wheel bracket.
- f Make sure that no persons or animals are within the range of movement of the spare wheel bracket.

1. Check whether additional lock **C** is engaged. If necessary, slide additional lock **C** to the right.
2. Swing spare wheel bracket closed with force.
3. Check lock and observe indication on the multi-purpose display of the instrument panel. The indicator light must go out when the spare wheel bracket is locked.

Automatic locking

In the multi-purpose display of the instrument panel, you can set different variants of locking and unlocking the doors and the rear lid as well as the check-back signal when locking and unlocking the vehicle and save them on the respective remote control.

- f Please observe the chapter "TAILGATE" on Page 119.



D - Towing lug cover (left)
E - Emergency release cable

Emergency release for the spare wheel bracket

If the battery is flat, the only way to open the spare wheel bracket is by using the mechanical emergency release.



Warning!

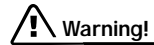
Danger of injury and risk of accident if the spare wheel bracket is operated improperly.

- f Perform emergency unlocking of the spare wheel bracket only when the vehicle is on a level surface.
1. Remove cover of left towing lug **D**.
 2. Pull emergency release cable **E** in the direction of the arrow.
The spare wheel bracket is now unlocked and can be operated.

Electrical System

In order to avoid damage and faults in electrical or electronic systems, electrical accessories should be installed at your authorized Porsche dealer.

f Use only accessories authorized by Porsche.



Warning!

Risk of short circuit and fire.

Replacing fuses or relays with engine running or the ignition on could cause electrical shock.

f Disconnect the battery during all work on the electrical system.



Relays

Relays should be checked or changed only by an authorized workshop.

Alarm system, central locking

The status of the central locking and alarm system is not changed by disconnecting the battery. When the battery is disconnected, the alarm system ceases to function.

Sockets

Electrical accessories can be connected to the 12 V sockets.

Note on operation

The sockets and thus the connected electrical accessories function even if the ignition is switched off or the ignition key is withdrawn.

If the engine is not running and the accessories are switched on, the vehicle battery will be discharged.

Changing fuses

In order to prevent damage to the electrical system due to short circuits and overloads, the individual circuits are protected by fuses.

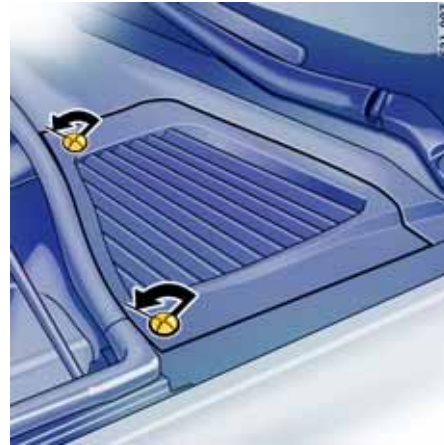
One fuse box is in the engine compartment. Two additional fuse boxes are located in the outer ends of the dashboard.

1. Switch off the consumer with the defective fuse. Before replacing a fuse, switch off all electrical consumers and remove the ignition key.
2. Open the fuse-box lid.
3. Remove the corresponding fuse from its slot to check it using the plastic gripper. A blown fuse can be identified by the melted metal strip.
4. Replace only with fuses of the same rating.

Note

If a fuse blows repeatedly, please consult an authorized Porsche dealer immediately, so that the short circuit can be located and corrected.

Never try to "repair" fuses: you may cause serious damage to other parts of the electrical system.



Cover of engine-compartment fuse box



Fuse box in engine compartment

Opening fuse-box lid in engine compartment

1. Rotate the turn-locks 90° anti-clockwise with a screwdriver and remove the cover.
2. Rotate the turn-locks of the fuse-box lid 90° anti-clockwise with a screwdriver and remove the lid.

f f f



Opening fuse-box lid in the dashboard

1. Carefully pry off the plastic cover with a screwdriver (**arrow**) and remove.
The fuse plan is located on the inside of the cover.

A - Fuse puller

2. Remove the fuses carefully with the fuse puller.

Fuse assignment – fuse box in left side of dashboard

No.	Designation	Rating in A
1	Center console socket, cigarette lighter	20
2	Parking heater radio receiver	5
3	Sockets in passenger footwell	20
4	Parking heater	15
5	Sockets in luggage compartment	20
6		
7	Diagnostic socket	5
8	Wiper motor for windscreen	30
9	Washer fluid pump, vehicle electrical system control unit	15
10	Power window, rear left	25
11	Central locking system	15
12	Interior light, vehicle electrical system control unit	20
13		
14	Power window, front left	25
15	Tail light, right; central locking system, power windows, mirrors	15
16	Horn, vehicle electrical system control unit	20
17	Turn signal, side light, left; vehicle electrical system control unit	10
18	Headlight washer system	20
19	Fog lights, vehicle electrical system control unit	15
20		
21	Cornering light, vehicle electrical system control unit	15

No.	Designation	Rating in A
22	Rear differential lock, transfer box	30
23	Rear differential lock, disengageable anti-roll bars	10
24	Tire pressure monitoring	5
25		
26	Engine control unit (engine management, radiator fans), airbag, instrument panel	10
27		
28		
29		
30		
31		
32		
33	Steering column	15
34	Passenger compartment monitoring, inclination sensor	5
35	Low beam left, high beam left, vehicle electrical system control unit	15
36	Vehicle electrical system control unit	10
37		
38		
39	Heated rear window	5
40	Instrument panel, diagnosis	5
41	Steering column lock, ignition lock, central locking system, Porsche Entry & Drive	15
42	Sliding/lifting roof or Panorama roof	30
43	Subwoofer	30
44	Electrical seat adjustment, left; electrical steering column adjustment	30

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No.	Designation	Rating in A
45	Electrical seat adjustment, left; seat heating, rear	30
46		
47	Transfer box	10
48		
49	Servotronic, disengageable anti-roll bars	5
50	Heating pipe ventilation	10
51	Diagnosis, parking brake switch, Air conditioning	5
52	Rear wiper	30
53	Vehicle electrical system control unit, central locking system, power windows, mirrors, light switch, steering column	5
54	Headlight beam adjustment	10
55		
56	Fan, front air-conditioning system	40
57	Fan, rear air-conditioning system	40
RES 1	Spare fuse 1	
RES 2	Spare fuse 2	

Fuse assignment – fuse box in right side of dashboard

No.	Designation	Rating in A
1	Towing attachment	15
2	ParkAssist	5
3	Towing attachment	15
4	Telephone/telematics control unit	5
5	Towing attachment	15
6	Porsche Stability Management (PSM)	30
7	Transfer box (center differential lock), telephone preparation	5
8	Additional high beam, vehicle electrical system control unit	20
9	CD changer, DVD navigation	5
10	TV tuner, satellite receiver	5
11	Radio or Porsche Communication System (PCM)	10
12	Radio booster	30
13		
14	Tail light, left; central locking system, power windows, mirrors	15
15	Power window, rear right	25
16		
17	Low beam, right; high beam, right; vehicle electrical system control unit	15
18	Heated rear window relay	30
19	Brake booster, towing attachment	30/25
20		
21	Hood open switch, spare wheel release	10

No.	Designation	Rating in A
22	Electrical seat adjustment, front right; seat heating, front right and rear right	30
23	Air conditioning	10
24	Electrical seat adjustment, front right; seat memory, front right	30
25	Air-conditioning system, rear	5
26		
27	Level control	15
28		
29	Transmission control unit	10
30	Rear lid power closing mechanism	20
31	Central locking system, power windows, mirrors	15
32	Central locking, right doors	10
33		
34	Power window, front right	25
35	Turn signal, side light, right; vehicle electrical system control unit	10
36	Roof module, telephone, compass	5
37		
38	Porsche Stability Management	10
39	Diagnosis	
40	Transfer box (center differential lock)	10
41	Towing attachment	10
42	Roof module	5
43	Back up light	5
44	Heated washer nozzles, running gear, seat heating	5

No.	Designation	Rating in A
45		
46		
47	Telephone preparation	10
48	Level control	10
49	Telephone, automatic anti-dazzle mirror	5
50		
51	Transmission	20
52	Selector lever switch	5
53		
54		
55	Reversing camera	5
56	Porsche Stability Management (PSM)	40
57	Transfer box (center differential lock)	40

Fuse assignment – fuse box in engine compartment

No.	Designation	Rating in A
1	Fan	60
2	Fan	30
3	Secondary air pump	40
4	Secondary air pump (Cayenne S)	40
5		
6		
7	Fuel injectors, ignition coils	20
8	Fuel injectors, ignition coils	20
9	Engine control module, camshaft adjusters, intake pipe switchover (Cayenne)	30
10	Engine components: cooling air fan, carbon canister shut-off valve, pressure sensor for air conditioning, tank leakage detection, run-on pump (Cayenne S), carbon canister shut-off valve valve (Cayenne)	10
11	Engine existing wiring, secondary air pump (Cayenne), air-conditioning compressor (Cayenne), oil-level sensor (Cayenne)	15
12	Secondary air pumps, run-on pumps	5
13	Fuel pump, right	15
14	Fuel pump, left	15
15	Engine control module, main relay	10
16	Water run-on pump (Cayenne)	30
17	Oxygen sensors ahead of catalytic converter	15
18	Oxygen sensors behind catalytic converter	7.5

Note

f Use the plastic grippers from the fuse boxes in the dashboard to replace the fuses.

Battery



Danger!

Risk of short circuit and fire.

- f Observe all warning notes on the battery.
- f Disconnect the battery during all work on the electrical system.
- f Do not lay tools or other metal objects on the battery as they could cause a short circuit across the battery terminal.

Hydrogen gas generated by the battery could cause an explosion, resulting in severe personal injuries.

- f Do not expose the battery to an open flame, electrical spark or a lit cigarette.

Risk of explosion

- f Do not wipe the battery with a dry cloth.
- f Before touching the battery, discharge any static electricity by touching the vehicle.

Risk of severe personal injury and damage to the fabric, metal or paint.

- f Wear eye protection.
- f Do not allow battery acid to come in contact with your skin, eyes, fabric or painted surfaces.

- f 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.

- f Spilled electrolyte must be rinsed off at once with a solution of baking soda and water to neutralize the acid.

Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm.

- f Always protect your skin by washing thoroughly with soap and water.

Charge state

A well charged battery will not only prevent starting problems but will also last longer.

In order to avoid unintended battery discharge

- f Switch off unnecessary electrical loads in city traffic, on short trips or in a line of traffic.
- f Always remove the ignition key from the ignition switch when leaving the vehicle or switch ignition off in vehicles **with** Porsche Entry & Drive.
- f Avoid using the Porsche Communication Management system and the audio system when the engine is not running.

Battery care

- f Ensure that battery is securely mounted.
- f Keep terminals and connections clean and properly tightened. Corrosion can be prevented by coating the terminals and connections with petroleum jelly or silicone spray.
- f Ensure that vent caps are securely tightened to prevent spillage.

Checking the electrolyte fluid level

(only on low-maintenance batteries)

Generally, the electrolyte level must be checked more often in summer than in the winter, and more often when driving long distances.

- f When adding water, use only clean containers. In no case may alcohol (e.g. window cleaner residues) be permitted to enter the battery.
- f Unscrew and open the filler vent caps of each cell.

With the car on a level surface, the fluid level should meet the indicator mark in each cell.

- f If necessary, top up with distilled water. Do not use acid. Only fill up to the mark, otherwise the electrolyte will overflow when the battery is being charged and cause damage.

Winter operation

During the winter months, battery capacity tends to decrease as temperatures drop. Additionally, more power is consumed while starting, and the headlights, heater, rear window defogger, etc., are used more frequently.

Let your Porsche dealer test the battery's capacity before winter sets in.

Vehicle storage

If the car stands for long periods in the garage or workshop, the doors and lids should be closed.

- f Remove the ignition key and, if necessary, disconnect the battery.

Notes on operation

- f 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:
 - f Lock the vehicle and unlock it again.

Maintenance note

Even if you put your vehicle out of operation, the battery still discharges.

The battery will discharge more quickly if your vehicle is not driven on a daily basis over a distance of several miles. The more often you drive your vehicle, and the longer the distance driven on each trip, the more opportunity the vehicle's charging system will have to recharge the batteries.

- f To preserve its efficiency, charge the battery about every 6 weeks.
- f Check the battery acid level and top off with distilled water if necessary.
- f Store a battery that has been removed in a dark, cool place, but not subject to freezing.

Putting vehicle into operation

After the battery is connected or charged, the PSM warning light lights up on the instrument panel and a message appears on the multi-purpose display of the instrument panel to indicate a fault.

This fault can be remedied with a few simple steps:

1. Start the engine.
To do this, turn the ignition key or the control unit (on vehicles that have Porsche Entry & Drive) to ignition lock position 2 **twice**.

2. Perform a few steering movements and drive a short distance in a straight line until the PSM warning light goes out and the message is erased from the memory of the multi-purpose display of the instrument panel.
3. If the warnings does **not** go out, then:
Drive carefully to the nearest authorized Porsche dealer.
Have the fault remedied by an authorized Porsche dealer.
4. After the warnings disappear:
Stop the vehicle in a suitable place.
5. Perform adaptation of the power windows:
Please observe the chapter "STORING FINAL POSITION OF THE DOOR WINDOWS" on Page 35.
6. On vehicles with tire pressure monitoring:
Please observe the chapter "SYSTEM LEARNING PHASE" on Page 104.

f f f

Replacing the battery

The service life of the battery is subject to normal wear; it depends greatly on care, climatic conditions, and driving conditions (distances, loads).

- f Only use an original Porsche battery, with the correct part number, as a replacement. Only this battery meets the specific requirements of the vehicle.
- f Please observe the disposal instructions for batteries.

Battery charging

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 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.



Hydrogen gas generated by the battery could cause an explosion, resulting in severe personal injuries.

- f Charge battery in a well ventilated area.
- f Never charge a frozen battery. It may explode because of gas trapped in the ice. Allow a frozen battery to thaw out first.
- f 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.

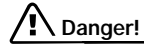
Note

Your authorized Porsche dealer will be pleased to advise you about a suitable charger.

Slow battery charging

1. Pay attention to all warnings and follow instructions that come with your battery charger.
2. When charging, ensure adequate ventilation.
3. Remove battery.
Please observe the chapter "REMOVING AND INSTALLING BATTERY" on Page 347.
4. All vent caps should be open. The fluid level should meet the indicator mark in each cell.
5. Ensure that charger is switched off – danger of short circuit!
6. Connect charger cables. Charger cables must be connected POSITIVE (+) to POSITIVE (+) and NEGATIVE (–) to NEGATIVE (–).
7. Switch on charger. Normally, a battery should be charged at no more than 10 percent of its rated capacity. Rated capacity of the battery in your vehicle is listed on the battery housing.
8. After charging, turn off charger and disconnect charger cables.
9. Tighten the vent caps and reinstall battery.
Please observe the chapter "REMOVING AND INSTALLING BATTERY" on Page 347.

Removing and installing battery



Danger!

Danger of explosion and injury and risk of short circuit and damage to the alternator and electronic control units.

- f Have the battery removed and installed only by a qualified professional.
- f Do not disconnect battery while the engine is running.
- f Disconnect and connect the battery only with the greatest care. Danger of short circuit and explosion.
- f Do not tilt the battery when removing it.
Risk of caustic burns from escaping acid.

The battery is located in the battery box under the left front seat.

If the battery is completely discharged, the vehicle must be provided with external power at the jump-lead starting points so that you can move the seat.

- f Please observe the chapter "EMERGENCY STARTING WITH JUMPER CABLES" on Page 355.

Maintenance note

The seat mounting bolts must be replaced each time they are loosened.

The bolts are micro-encapsulated and keep dust and water out.

If this is not observed, it might not be possible to attain the prescribed tightening torque of **37 ftlb** (50 Nm).



Removing battery

1. Switch off all electrical loads and withdraw the ignition key.
2. Move the left front seat all the way back and up.
Move the backrest fully upright.
3. Unclip front seat trim **A**.

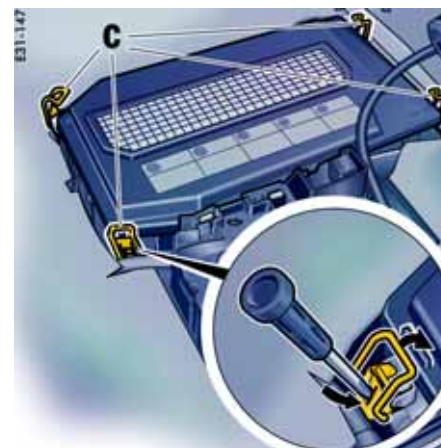
f f f



4. Fold sections of floor carpet forward.
Unscrew both screws **B** of the seat mounting.



5. Tilt the seat all the way back.
With the seat tilted back, use the fore-and-aft adjustment to move the seat forward again.



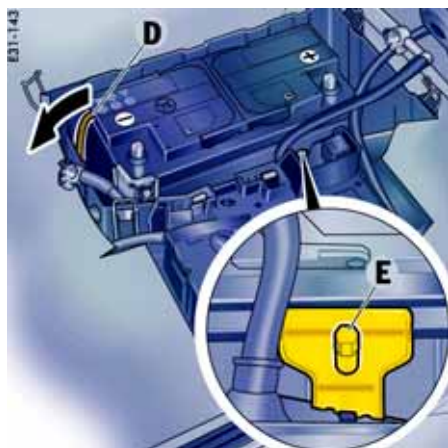
6. Open the 4 clamps **C** of the battery-box lid with a screwdriver.
7. Remove the battery-box cover with ventilation duct.



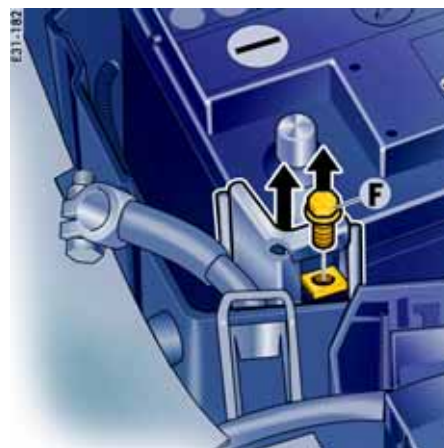
Danger!

Danger of explosion and injury and risk of short circuit and damage to the alternator and electronic control units.

- f Disconnect the negative cable first, and then the positive cable.
-
8. Disconnect the negative cable.
9. Disconnect the positive cable.



10. Pull off vent hose **D** on the battery.
11. Unscrew screw **E** of the battery fastening plate.
Remove battery fastening plate.



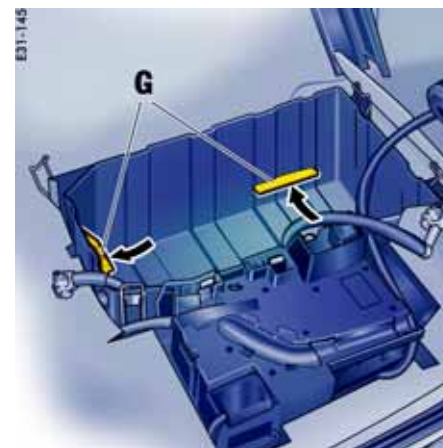
12. Unscrew screw **F** of the bracket.
Remove bracket.



Danger!
Danger of caustic burns, explosion and risk of injury. Contact with battery acid will burn your eyes and skin.

- f Lift battery out of the battery box using the folding handles.
Try not to tip the battery.

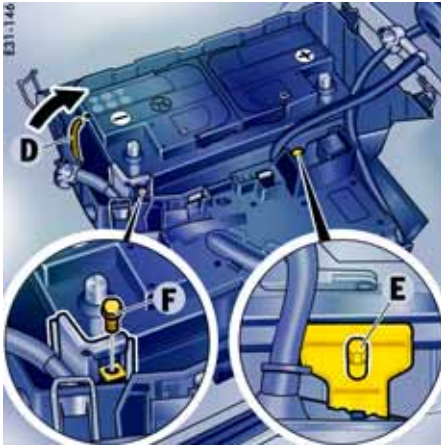
13. Lift battery out of the battery box using the folding handles. Try not to tip the battery.



Installing the battery

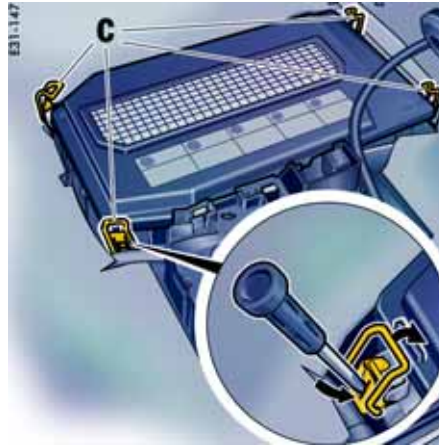
1. Danger of caustic burns!
Place battery in the battery box without tipping it if possible.
2. Push battery forwards and toward the center of the vehicle until it is under the stops **G**.

f f f



f Always tighten all screws to the prescribed torque.

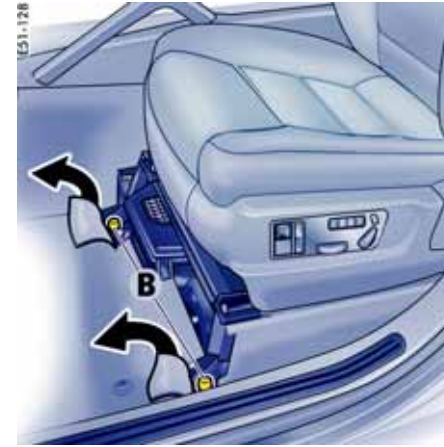
3. Fasten the battery fastening plate with screw **E**. Tightening torque 15 ftlb. (20 Nm).
4. Fasten the bracket with screw **F**. Tightening torque 6.5 ftlb. (9 Nm).
5. **Important:** Do not forget to connect vent hose **D** to the battery. Make sure that both ends of the vent hose are properly connected.



Danger!

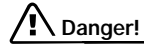
Danger of explosion and injury and risk of short circuit and damage to the alternator and electronic control units.

- f** Connect the positive cable first, and then the negative cable.
6. Connect the positive cable.
7. Connect the negative cable.
8. Put on the battery-box cover carefully. Ensure that the ventilation duct is properly inserted.
9. Engage the 4 clamps **C** on the battery-box lid and close them with a screwdriver.



10. With the seat tilted back, use the fore-and-aft adjustment to move the seat back. Tilt the seat forward.
11. Clean threaded holes on the seat mounting.
12. Use only new bolts **B** (the bolts are micro-encapsulated). Insert bolts **B** and screw them in a few turns by hand. Tighten bolts. Tightening torque 37 ftlb. (50 Nm).
13. Clip in front seat trim.
14. Move seat to normal position.

Removing and installing auxiliary battery



Danger!

Danger of explosion and injury and risk of short circuit and damage to the alternator and electronic control units.

- f Have the battery removed and installed only by a qualified professional.
- f Do not disconnect battery while the engine is running.
- f Disconnect and connect the battery only with the greatest care. Danger of short circuit and explosion.

Note

The general information contained in the chapter on the battery applies to the battery under the driver's seat and the battery in the luggage compartment.

- f Please observe the chapter "CHARGE STATE" on Page 344.

The auxiliary battery is located in the luggage compartment under the cargo area floor.

Any subwoofers or collapsible spare wheels that may be in the vehicle must be removed before the battery is removed.



Removing the collapsible spare wheel

1. Take out rotary knob **A** and put it on bolt **B**.
2. Unscrew the bolt and take out the collapsible spare wheel.

Installing the collapsible spare wheel

1. Insert collapsible spare wheel.
2. Screw in bolt **B**.
3. Place rotary knob **A** on bolt **B** and tighten it.

f f f



Removing subwoofer

1. Withdraw the ignition key.
Remove the Porsche Entry & Drive control unit from the ignition lock in vehicles that contain this feature.
Please observe the chapter "REMOVING THE CONTROL UNIT FROM THE IGNITION LOCK" on Page 70.
2. Remove any existing tire sealant **C**.



3. Undo the two fastening nuts **D**.
4. Unscrew screw **E**.
5. Disconnect plug connection **F**.



6. Remove subwoofer housing.

Installing subwoofer

1. Insert subwoofer housing.
2. Connect plug connection **F**.
3. Tighten the two fastening nuts **D**.
4. Tighten screw **E**.
5. Place any existing tire sealant **C** in recess.



Removing battery

1. Withdraw the ignition key.
Remove the Porsche Entry & Drive control unit from the ignition lock in vehicles that contain this feature.
Please observe the chapter "REMOVING THE CONTROL UNIT FROM THE IGNITION LOCK" on Page 70.
2. Undo the 4 fastening nuts of the battery box.



3. Open the 4 clamps of the battery-box cover.

4. Remove the battery-box cover.



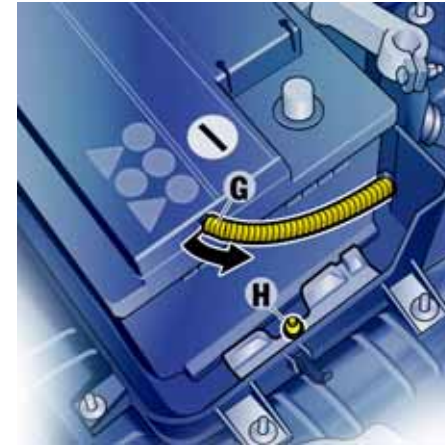
Danger!

Danger of explosion and injury and risk of short circuit and damage to the alternator and electronic control units.

- f Disconnect the negative cable first, and then the positive cable.

5. Disconnect the negative cable.

6. Disconnect the positive cable.

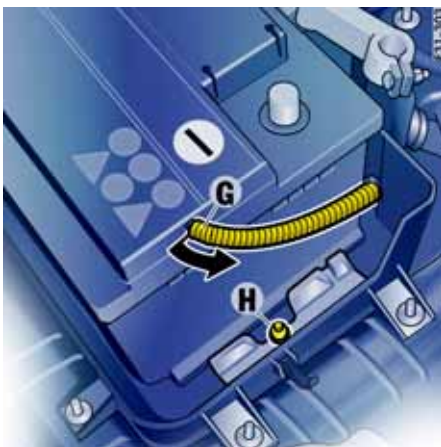


7. Pull off vent hose **G** on the battery.

8. Undo fastening nut **H** of battery fastening plate.

9. Remove battery fastening plate.

10. Lift battery out of the battery box using the folding handles.



3. Connect the positive cable.
4. Connect the negative cable.
5. Tighten battery fastening plate with fastening nut **H**.
6. Put on the battery-box cover carefully.
7. Engage the 4 clamps on the battery-box cover and close them.
8. Tighten the 4 fastening nuts of the battery box.

Installing the battery

1. Place battery in the battery box.
2. **Important:** Do not forget to connect vent hose **G** to the battery.
Make sure that both ends of the vent hose are properly connected.



Danger!

Danger of explosion and injury and risk of short circuit and damage to the alternator and electronic control units.

- f Connect the positive cable first, and then the negative cable.

Emergency Starting with Jumper Cables

If the battery is discharged, e.g. in winter or after the car has been parked for a long time, the battery of another car can be used for starting with the help of jumper cables.

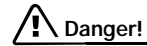
Make sure the voltage of both batteries is the same.

The capacity (Ampere hours, Ah) of the booster battery must not be substantially less than that of the discharged battery. The discharged battery must be correctly connected to the vehicle's electrical system.

- f Please observe the chapter "BATTERY" on Page 344.

Note

Do not try to start the car by pushing or towing. Damage to the catalytic converters and other components of the car may result.



Danger!

Risk of damage and serious personal injury due to short circuit.

- f Use only jumper cables of adequate diameter cross-section and fitted with completely insulated alligator clips.
- f Follow all warnings and instructions of the jumper cable manufacturer.
- f When connecting jumper cables, make sure that they cannot get caught in any moving parts in the engine compartment.
The jumper cables must be long enough so that neither vehicles nor cables touch another.
- f The vehicles must not be in contact, otherwise current might flow as soon as the positive terminals are connected.
- f The cable clamps must not be allowed to contact each other when one end of the jumper cables are connected to a battery.
- f Carefully ensure that tools or conductive jewellery (rings, chains, watch straps) do not come into contact with the positive jumper cable or the positive battery post.
- f Improper hook-up of jumper cables can ruin the alternator.

Danger of caustic burns.

- f Do not lean over the battery.

Danger of gas explosion.

- f Improper use of booster battery to start a vehicle may cause an explosion, resulting in severe personal injuries.
- f Keep sources of ignition away from the battery, e.g. open flame, burning cigarettes or sparking due to cable contact or welding work.
- f A discharged battery can freeze even at 14°F (–10°C). Before connecting jumper cables, a frozen battery must be thawed out.



Connecting jumper cables

Always observe the sequence below:

1. Remove cover **A**.
2. Open the cap of the positive terminal for jump starting(+).
3. Attach the positive lead first to the positive terminal for jump starting (+), then to the positive terminal of the donor battery.
4. Connect the negative lead first to the negative terminal of the donor battery, then to the grounding point for jump starting (-).

*+ = Positive terminal for jump starting
- = Grounding point for jump starting*

5. Run the engine of the donor car at a higher speed.
6. Start the engine.
An attempted start using jumper cables should not last more than 15 seconds. Then allow a waiting period of at least one minute.
7. Disconnect the negative jumper cable from the ground point for jump starting (-) first, then from the negative terminal of the donor battery.

8. Disconnect the positive jumper cable from the positive terminal of the donor battery first, then from the positive terminal for jump starting (+).
9. Close the cap of the positive terminal for jump starting (+).

Charging the battery

Your authorized Porsche dealer will be pleased to advise you about a suitable charger.

1. Always observe the instructions of the charger manufacturer.
2. When charging the battery, ensure adequate ventilation.
3. Check the acid level of a low-maintenance battery.
4. Connect charger to the jump starting points. Only plug into the mains and switch the charger on when it has been correctly connected up.
5. After charging, disconnect the charger.
6. Check the acid level of a low-maintenance battery.

After charging the battery

After the battery is connected or the **completely** discharged battery is charged, the PSM warning light lights up on the instrument panel and a message appears on the multi-purpose display of the instrument panel to indicate a fault.

This fault can be remedied with a few simple steps:

1. Start the engine.
To do this, turn the ignition key or the control unit (on vehicles that have Porsche Entry & Drive) to ignition lock position 2 **twice**.
2. Perform a few steering movements to the left and to the right when vehicle is standing and drive a short distance in a straight line until the PSM warning light goes out and the message is erased from the memory of the multi-purpose display of the instrument panel.
3. If the warnings does **not** go out, then:
Drive carefully to the nearest authorized Porsche dealer.
Have the fault remedied by an authorized Porsche dealer.

4. After the warnings disappear:
Stop the vehicle in a suitable place.
5. Perform adaptation of the power windows:
Please observe the chapter "STORING FINAL POSITION OF THE DOOR WINDOWS" on Page 35.
6. On vehicles with tire pressure monitoring:
Please observe the chapter "SYSTEM LEARNING PHASE" on Page 104.



831-238

Changing the battery

1. Carefully pry out the lid on the back of the key housing with a small screwdriver.
2. Replace battery (observe polarity).
A replacement battery is available from your authorized Porsche dealer.
3. Replace cover and press together firmly.

Replacing the remote control battery

Note

f Please dispose of batteries in compliance with any and all government regulations.

If the battery in the remote control becomes too weak, a warning will appear on the multi-purpose display in the instrument panel.

The battery should be changed if this should be the case.

Bulb Chart

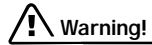
Exterior lights

	Type, rating
Halogen low beam	H7
Xenon low beam and high beam	D1S
Side marker light, rear	P21/5W
Side marker light, front	W5W
Turn signal light, rear	P21W
Turn signal light, front	PY21W
Brake light	P21W
Halogen high beam	H7
License plate light	C5W
Fog light	H11
Rear fog light	P21/4W
Back up light	P21W
Side indicator light	W5W
Additional high beam	H7
Cornering light	H3

Interior lights

	Type, rating
Interior light, front	W5W
Reading light	W5W
Footwell light	W3W
Glove compartment light	W3W
Center console	W3W
Luggage compartment light	K12V10W
Curb lights (doors)	W3W
Warning lights (doors)	W3W
Curb light (rear lid)	W5W
Guard light (rear lid)	W5W

Replacing Bulbs



Warning!

Danger of short circuit.

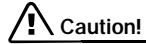
- f Always switch off the relevant consumer when changing bulbs.

Danger of injury. The headlights are under high voltage when installed.

- f Exercise extreme caution when working in the area of the headlights.

Risk of damage. Bulbs of a higher wattage can damage the light housing.

- f Only use the bulbs specified in the bulb chart.
-
- f Bulbs must be clean and free from oil, grease or fingerprints.
 - f Never touch bulbs with your bare hands. Use a cloth or soft paper when replacing bulbs.
 - f Always carry spare bulbs with you. In certain countries, the carrying of spare bulbs is mandatory.

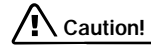


Caution!

Risk of damage to headlights due to excessive temperatures and abrasion.

- f Attach no coverings (e.g. films, "stone guards") in the area of the headlights.
 - f 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.
 - f To prevent scratches, do not rub with a dry or merely moist cloth, tissue or insect sponges.
-

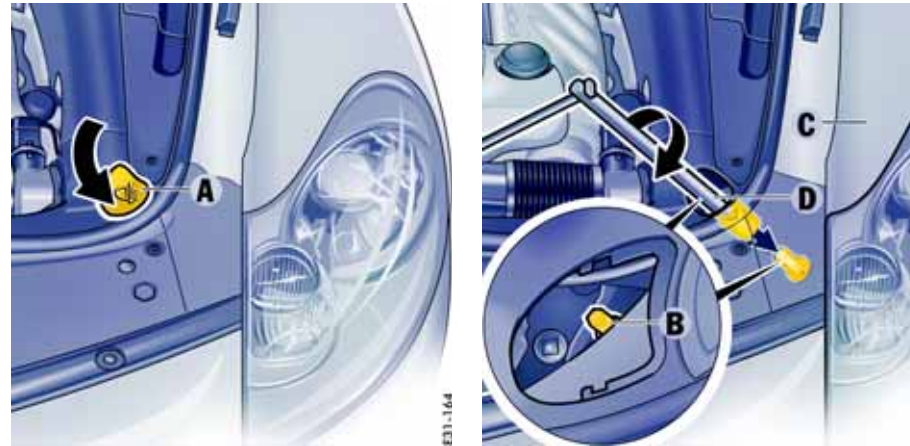
Headlights



Caution!

Risk of damage to headlights due to abrasion and excessive temperatures.

f Do not affix any coverings (e.g. "stone guards" or films) in the area of the headlights.



Removing headlights

1. Switch off ignition and withdraw the ignition key.
2. Push down cover **A** in the direction of the arrow and remove.

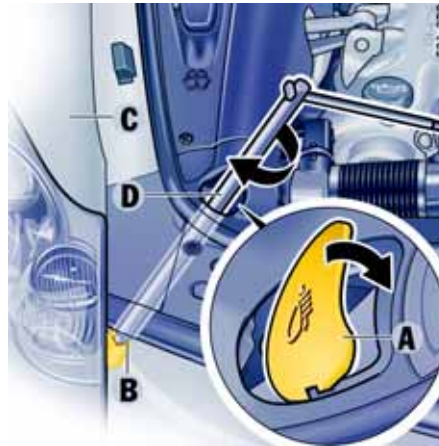
B - Headlight release
C - Wing
D - Socket wrench

3. Take socket wrench **D** out of the tool kit.
4. Push socket wrench **D** onto the release **B** and turn in the direction of the arrow.
The headlight holder has now been unlocked.
5. Pull headlight forward out of the fender.

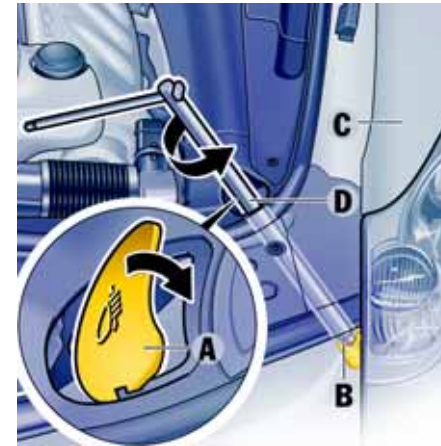
f f f



B - Headlight release
C - Wing
D - Socket wrench



B - Headlight release
C - Wing
D - Socket wrench

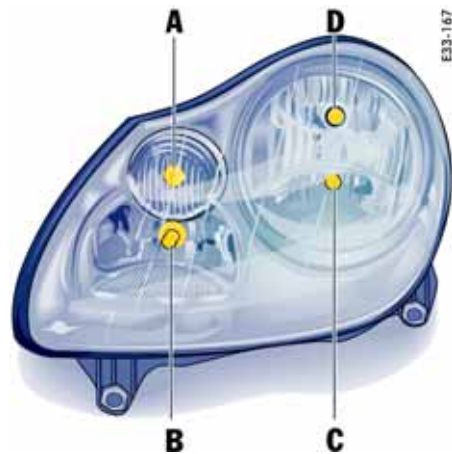


B - Headlight release
C - Wing
D - Socket wrench

Installing headlight

1. Insert headlight into the guide rails and push fully into the fender.
2. Push headlight to the rear and simultaneously turn socket wrench **D** in the direction of the arrow.
 The headlight locking device must perceptibly and audibly engage.

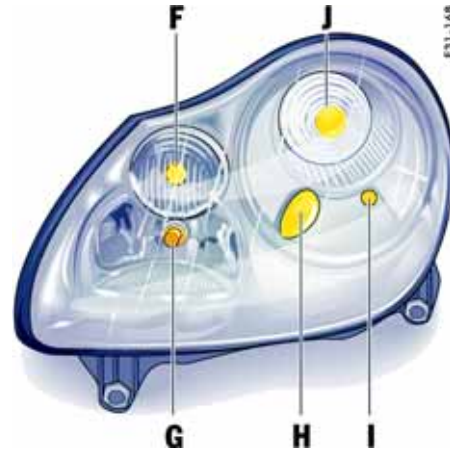
3. Check whether the headlights are seated securely.
4. Fit cover **A** and fold it down.



Location of bulbs

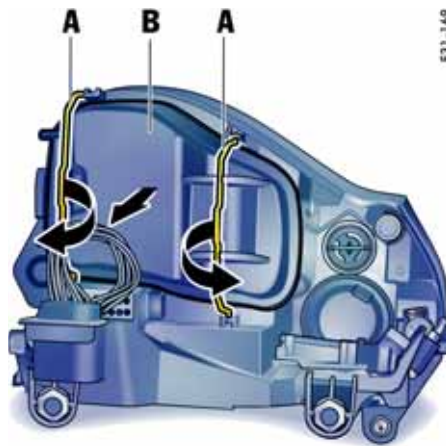
Halogen headlight

- A Bulb for turn signal
- B Bulb for high beam
- C Bulb for front side marker light
- D Bulb for low beam



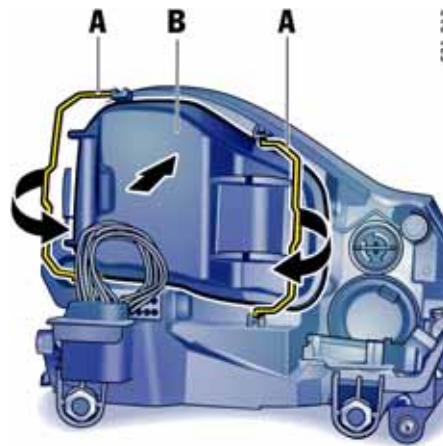
Bi-Xenon headlight

- F Bulb for turn signal
- G Bulb for additional high beam
- H Bulb for cornering light
- I Bulb for front side marker light
- J Xenon gas discharge lamp for low beam and high beam



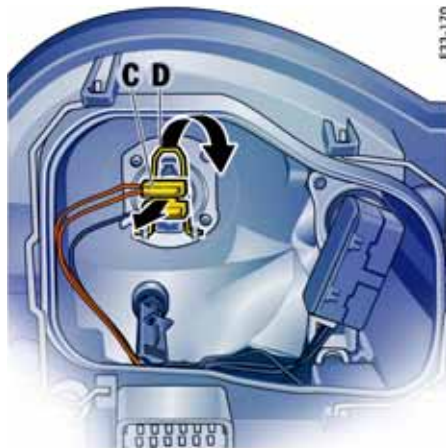
Opening the lid of the headlight housing

1. Open both clips **A**.
2. Remove housing lid **B**.



Closing lid of headlight housing

1. Put housing lid **B** on and press into place.
2. Close clips **A**.



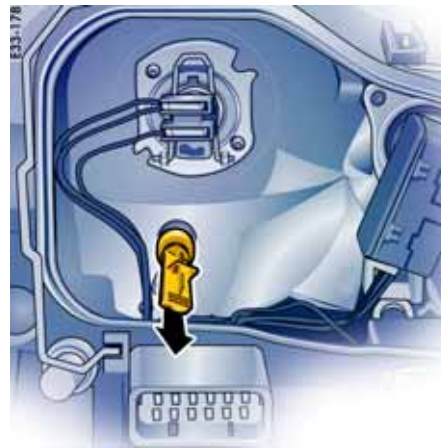
Halogen headlight

Changing bulb for low beam of halogen headlight

1. Pull off plug **C**.
2. Unclip securing clip **D**.
3. Replace defective bulb.

Note on operation

- f Make sure the bulb is installed in the correct position.
4. Reassemble in reverse order.



Changing side light bulb in Halogen headlight

1. Pull the bulb holder out of lamp bracket.



2. Pull bulb out of the holder (**arrow**).
3. Replace defective bulb.
4. Reassemble in reverse order.



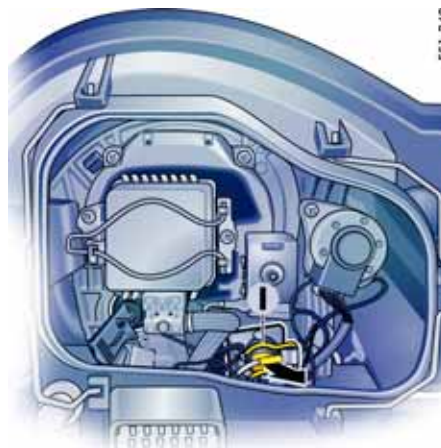
Bi-Xenon headlight

Changing Xenon gas discharge lamp for low beam and high beam

1. Pull off holder **J**.
2. Unclip securing clip **G**.
3. Replace defective bulb **H**.

Note on operation

- f Make sure the bulb is installed in the correct position.
4. Reassemble in reverse order.

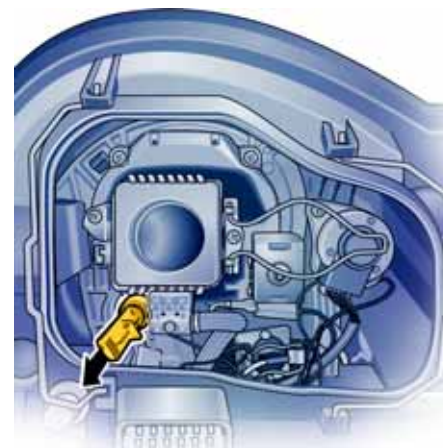


Changing cornering light in Bi-Xenon headlight

1. Pull plug off the bulb (**arrow**).
2. Unclip securing clip **I**.
3. Replace defective bulb.

Note on operation

- f Make sure the bulb is installed in the correct position.
4. Reassemble in reverse order.



Changing bulb for front side marker light in Bi-Xenon headlight

1. Pull the bulb holder out of lamp bracket (**arrow**).

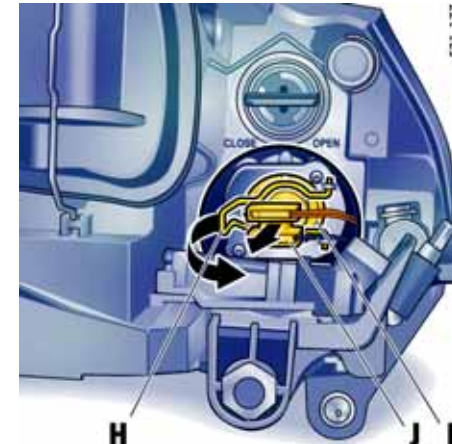


2. Pull bulb out of the holder (**arrow**).
3. Replace defective bulb.
4. Reassemble in reverse order.



Changing additional high beam light (halogen and Bi-Xenon headlights)

1. Remove cover **G**.



2. Pull plug **J** off the bulb.
3. Unclip securing clip **H**.
4. Pull bulb **I** out.
5. Replace defective bulb.

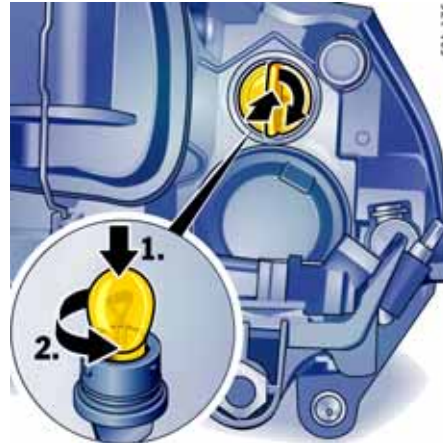
Note on operation

- f Make sure the bulb is installed in the correct position.
6. Reassemble in reverse order.



Changing turn signal bulb (halogen and Bi-Xenon headlights)

1. Turn bulb holder in the headlight housing anti-clockwise and pull it out.



2. Remove bulb from the holder (bayonet mount). To do this, push bulb into the holder and twist in the direction of the arrow.
3. Replace defective bulb.
4. Insert bulb holder into the headlight housing and turn it clockwise until it engages.

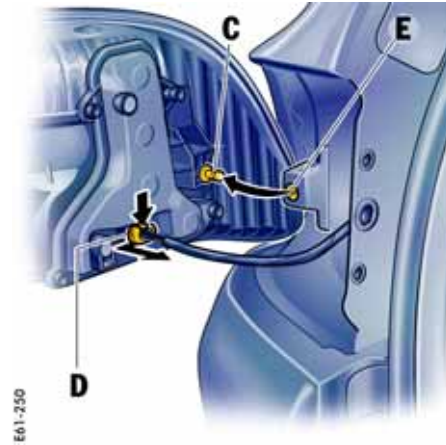
E61-249



Tail Light

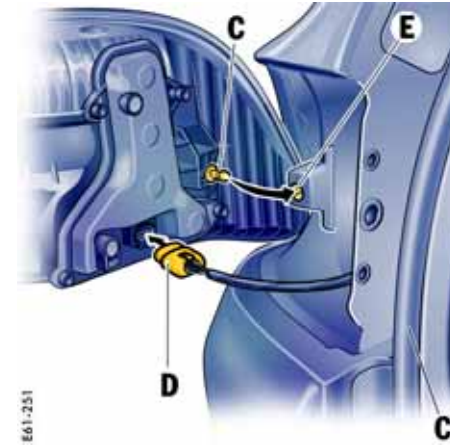
Removing tail light

Because of the design, a relatively large amount of effort is required to remove the tail light. In cases of doubt, please contact your authorized Porsche dealer.



Maintenance note

1. Switch ignition off.
2. Open rear lid.
3. Remove the two caps **A** with a tool such as a screwdriver.
4. Unscrew the two fastening screws **B** with the socket wrench from the tool kit.
5. Pull out the light unit to the side in the **direction of the arrow** and additionally pull it out in the area of the ball head **C**.
6. On the plug connection **D** press on the plug release (**arrow**) and pull off the plug.



Installing tail light

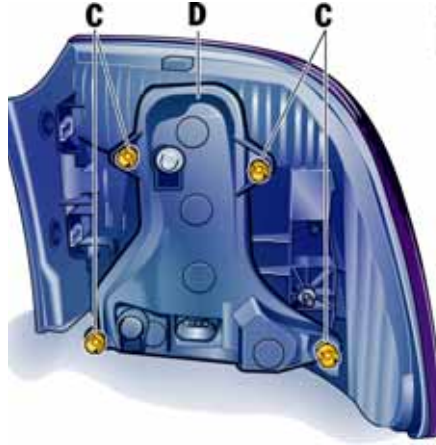
1. Push on plug connection **D** until the plug is felt to click into place (**arrow**).
2. Insert ball pin of tail light **C** into clip nut **E** and fit the tail light into the body (**arrow**).

f f f

E31-352



3. Screw in the fastening screws **B**.
4. Press in caps **A**.



E41-325

Replacing bulbs

1. Undo fastening screws **C** of the housing cover.
2. Remove housing cover **D**.



E41-326

- E** - Tail light
- F** - Reversing light
- G** - Turn signal light
- H** - Brake light
- I** - Rear fog light and tail light

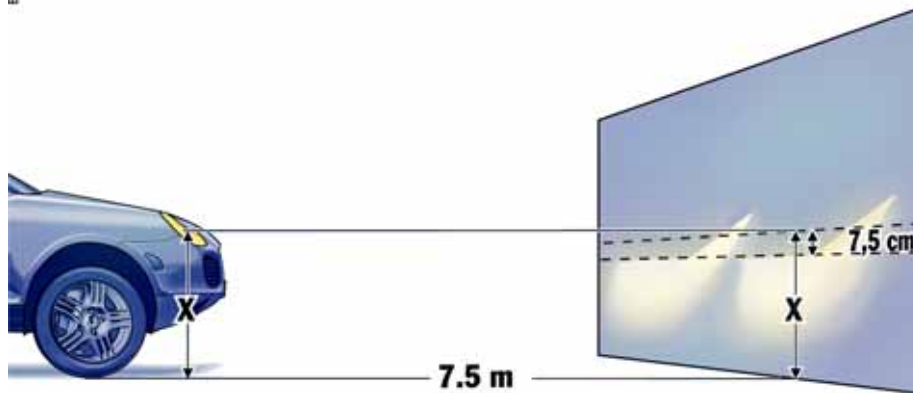
3. Replace defective bulb.
4. Insert lamp bracket.
5. Install tail light.



License Plate Lights

Changing bulb for license plate light

1. Unscrew both screws **A** and remove the light.
2. Push the bulb holder apart and pull the bulb out.
3. Replace defective bulb.
4. Reassemble in reverse order.



Headlight Adjustment

- f Check tire pressure and adjust if necessary.
- f Please observe the chapter "TIRE PRESSURES, COLD" on Page 385.
- f Please observe the chapter "REPLACING BULBS" on Page 360.

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 165lbs. (75kg) 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 lowbeam (see fig.) has to be projected on a vertical screen (wall) in distance of 7.5 m (24.6 ft.) from the front lens of the headlamp. The correct position of the cutoff is 7.5 cm (3.0 in.) at 7.5 m or 24.6 ft. (0.4°) below a horizontal line, x cm from ground to the center of the headlamp lens.

Lateral adjustment of the headlights should be carried out at a specialist workshop with an optical adjustment unit.

Distance

Visual aim shall be performed at not less than 7.5 m (this value is a rounded down conversion from the 25-foot distance typical of field aim using a screen). The 7.5 m (24.6 ft.) 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.



Height adjustment for low beam/ high beam and additional high beam

1. Push down cover in the engine compartment and remove.
2. Switch ignition on.
3. Switch on low beam and/or high beam.
4. Adjust low beam in direction of the arrow.

Changing Headlights from Left to Right-Hand Traffic

If you travel to a corresponding country where traffic uses the other side of the road, the headlights must be partially masked with films when you cross the border.

- f You can obtain the films and a set of instructions from an authorized Porsche dealer.

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.

Vehicle towing

Flat bed towing is the preferred type of towing to be used on Porsche vehicles. Under certain circumstances, wheel lifts may be used when the vehicle will not roll.

The vehicle must be towed with all four wheels off the ground, otherwise damage to the vehicle may result.

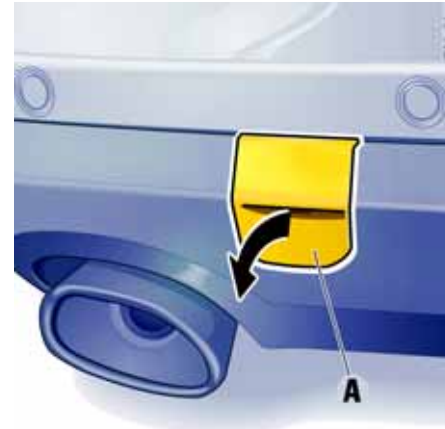
Towing hook

The towing hook is contained in the tool kit.



Risk of damage to the vehicle.

- f Use the towing hook only for an emergency to remove the vehicle off the road. The towing hook 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 hook.
- f Never use the towing hook to tow this or any other vehicle.



Front and rear mounting

1. Carefully lever out the appropriate plastic cover **A** in the bumper with the screwdriver. The cover is captive and need not be removed completely.

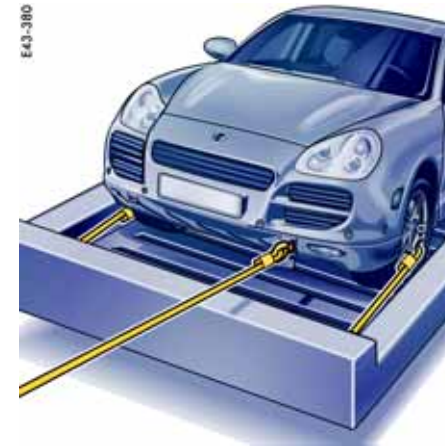


2. Screw in towing hook **B** as far as the stop (left-hand thread) and tighten hand-tight.



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

1. 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.

f f f

4. Carefully feed towing straps through the opening in the **front 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.
5. Secure straps to front of flat bed.
6. Release tension on hoist cable, but do not disconnect. Use hoist cable as a safety cable.

Recovering the vehicle

Depending on the vehicle equipment, the spare-wheel well contains one or two towing lugs.

- f When recovering the vehicle, always use two towing lugs if possible.
Screw in the towing lugs only at the front or rear.
Never screw them in so that one towing lug is at the front and one is at the back.

Vehicle Identification, Technical Data

Vehicle Identification	378
Engine Data	380
Transmission	381
Tires, Rims, Tracks	382
Tire Pressures, Cold	385
Capacities	386
Weights	387
Driving Performance	388
Dimensions	389
Ground Clearance	390



This label contains the following information:

1. Vehicle Identification No.
2. Type/Type description
3. Engine code/Transmission code
4. Paint No./Interior
5. Optional equipment

A duplicate of this label is in your Maintenance Booklet.

Note

The data bank can not be reordered when lost or damaged.

Vehicle Identification

When ordering spare parts or making inquiries, please always quote the vehicle identification number.

Data bank

The data bank is located in the passenger compartment below the steering wheel. It contains all important data about your car.



Vehicle identification number

In accordance with Federal Safety Regulations, the vehicle identification number of your car is located at the bottom left of the windshield frame and can be seen from the outside and in the luggage compartment on the right in front of the tool box.



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 **Gross Vehicle Weight Rating** and the **Gross Axle Weight Rating**.



Tire pressure plate

The tire pressure plate is fitted to the driver's door.

Engine Data

	Cayenne manual transmission	Cayenne Tiptronic S	Cayenne S manual transmission	Cayenne S Tiptronic S
Type	6-cylinder V-engine	6-cylinder V-engine	8-cylinder V-engine	8-cylinder V-engine
Number of cylinders	6	6	8	8
Bore	33.09 in. (84 mm)	33.09 in. (84 mm)	3.66 in. (93 mm)	3.66 in. (93 mm)
Stroke	37.78 in. (95.9 mm)	37.78 in. (95.9 mm)	3.27 in. (83 mm)	3.27 in. (83 mm)
Displacement	195 cu. in. (3189 cm ³)	195 cu. in. (3189 cm ³)	275 cu. in. (4511 cm ³)	275 cu. in. (4511 cm ³)
Net-horsepower, SAE J 1349 at engine speed	184 kW (250 HP) 6000 rpm	184 kW (250 HP) 6000 rpm	250 kW (340 HP) 6000 rpm	250 kW (340 HP) 6000 rpm
Net. torque, SAE J 1349 at engine speed	229 ftlb. (310 Nm) 2500 - 5500 rpm	229 ftlb. (310 Nm) 2500 - 5500 rpm	310 ftlb. (420 Nm) 2500 - 5500 rpm	310 ftlb. (420 Nm) 2500 - 5500 rpm
Maximum permitted engine speed	6700 rpm	6700 rpm	6700 rpm	6500 rpm

Transmission

Transmission ratio	Cayenne manual transmission	Cayenne Tiptronic S	Cayenne S manual transmission	Cayenne S Tiptronic S
1st gear	4.68 : 1	4.15 : 1	4.68 : 1	4.15 : 1
2nd gear	2.53 : 1	2.37 : 1	2.53 : 1	2.37 : 1
3rd gear	1.69 : 1	1.56 : 1	1.69 : 1	1.56 : 1
4th gear	1.22 : 1	1.16 : 1	1.22 : 1	1.16 : 1
5th gear	1.00 : 1	0.86 : 1	1.00 : 1	0.86 : 1
6th gear	0.84 : 1	0.69 : 1	0.84 : 1	0.69 : 1
Reduction gear	2.70 : 1	2.70 : 1	2.70 : 1	2.70 : 1
Reverse gear	4.27 : 1	3.39 : 1	4.27 : 1	3.39 : 1
Final drive ratio	4.10 : 1	4.56 : 1	4.10 : 1	4.10 : 1

Tires, Rims, Tracks

Cayenne	Tires	Wheel	Rim offset	Track	
		front/rear	front/rear	front	rear
Summer tires	235/65 R 17 108 V XL ¹⁾	7.5 J x 17	2.09 in. (53 mm)	65.2 in. (1655 mm)	65.8 in. (1670 mm)
	255/55 R 18 109 Y XL ²⁾	8 J x 18	2.24 in. (57 mm)	64.8 in. (1647 mm)	65.4 in. (1662 mm)
	275/45 R 19 108 Y XL	9 J x 19	2.36 in. (60 mm)	64.6 in. (1641 mm)	65.2 in. (1656 mm)
	275/40 R 20 106 Y XL	9 J x 20	2.36 in. (60 mm)	64.6 in. (1641 mm)	65.2 in. (1656 mm)
	275/40 R 20 106 Y XL	9 J x 20/ 10 J x 20	2.36 in. (60 mm)/ 2,17 in. (55 mm)	64.6 in. (1641 mm)	65.6 in. (1666 mm)
Winter tires	235/60 R 18 107 H XL ¹⁾	8 J x 18	2.24 in. (57 mm)	64.8 in. (1647 mm)	65.2 in. (1656 mm)
	235/65 R 17 108 H XL ¹⁾	7.5 J x 17	2.09 in. (53 mm)	65.2 in. (1655 mm)	65.8 in. (1670 mm)
	255/55 R 18 109 V XL ²⁾	8 J x 18	2.24 in. (57 mm)	64.8 in. (1647 mm)	65.2 in. (1656 mm)
	255/50 R 19 107 V XL ³⁾	9 J x 19	2.36 in. (60 mm)	64.8 in. (1647 mm)	65.4 in. (1662 mm)
All-Season	255/55 R 18 109 V XL ²⁾	8 J x 18	2.24 in. (57 mm)	64.8 in. (1647 mm)	65.4 in. (1662 mm)
	235/65 R 17 108 H XL ¹⁾	7.5 J x 17	2.09 in. (53 mm)	65.2 in. (1655 mm)	65.8 in. (1670 mm)
All-Terrain	235/60 R 18 107 T XL ¹⁾	8 J x 18	2.24 in. (57 mm)	64.8 in. (1647 mm)	65.4 in. (1662 mm)
	235/65 R 17 108 T XL ¹⁾	7.5 J x 17	2.09 in. (53 mm)	65.2 in. (1655 mm)	65.8 in. (1670 mm)
Collapsible spare wheel	195/80 17	6.5 J x 17			

Cayenne S	Tires	Wheel	Rim offset	Track	
		front/rear	front/rear	front	rear
Summer tires	255/55 R 18 109 Y XL ²⁾	8 J x 18	2.24 in. (57 mm)	64.8 in. (1647 mm)	65.4 in. (1662 mm)
	275/45 R 19 108 Y XL	9 J x 19	2.36 in. (60 mm)	64.6 in. (1641 mm)	65.2 in. (1656 mm)
	275/40 R 20 106 Y XL	9 J x 20	2.36 in. (60 mm)	64.6 in. (1641 mm)	65.2 in. (1656 mm)
	275/40 R 20 106 Y XL	9 J x 20/ 10 J x 20	2.36 in. (60 mm)/ 2.17 in. (55 mm)	64.6 in. (1641 mm)	65.6 in. (1666 mm)
Winter tires	235/60 R 18 107 H XL ¹⁾	8 J x 18	2.24 in. (57 mm)	64.8 in. (1647 mm)	65.4 in. (1662 mm)
	255/55 R 18 109 V XL ²⁾	8 J x 18	2.24 in. (57 mm)	64.8 in. (1647 mm)	65.4 in. (1662 mm)
	255/50 R 19 107 V XL ³⁾	9 J x 19	2.36 in. (60 mm)	64.6 in. (1641 mm)	65.2 in. (1656 mm)
All-Season	255/55 R 18 109 V XL ²⁾	8 J x 18	2.24 in. (57 mm)	64.8 in. (1647 mm)	65.4 in. (1662 mm)
All-Terrain	235/60 R 18 107 T XL ¹⁾	8 J x 18	2.24 in. (57 mm)	64.8 in. (1647 mm)	65.4 in. (1662 mm)
Collapsible spare wheel	195/75 18	6.5 J x 18			
Cayenne and Cayenne S		The load capacity coefficient (e.g. "106") and maximum speed code letter (e.g. "T") for permitted top speed are minimum requirements. When fitting new tires or changing tires: Please observe the chapter "TIRES/WHEELS" on Page 297.			
Tire and rim sizes		Extensive tests are performed before specific tires and wheels are approved by Porsche. Your Porsche dealer has information about approved tires and wheels and is happy to assist you. If aftermarket tires and/or wheels are installed which are not approved by Porsche, the vehicle's roadability and handling characteristics might be impaired. Since Porsche has no data on such combinations, Porsche cannot stand behind the safety or durability of these aftermarket combinations. Please observe the chapter "SNOW CHAINS" on Page 308.			

f f f

**¹⁾Snow chains
and clearance**

Clearance for tires marked ¹⁾ is only assured with snow chain, part No. 955.044.600.07.

Clearance for tires marked ²⁾, ³⁾ is only assured with snow chain, part No. 955.044.600.08.

For tires marked with ³⁾: Only use snow chains on the rear axle.

Optimal handling characteristics can be achieved only when snow chains are fitted on all four wheels of the vehicle.

It is also possible to fit snow chains on only one axle (preferably the rear axle). Maximum speed 50 km/h (30 mph).

f Observe the respective road traffic regulations.

f Use only Porsche-authorized fine-link cross-type or edge chains.

Tire Pressures, Cold

These tire filling pressures apply only to the tire makes and types approved by Porsche.
Please observe the chapter "TIRES/WHEELS" on Page 297.

Partially loaded (up to 3 people and 46 lbs./21 kg of luggage)	Cayenne S		Cayenne	
Tire size	Front axle	Rear axle	Front axle	Rear axle
235/65 R 17	38 psi (2.6 bar)	43 psi (2.9 bar)	38 psi (2.6 bar)	43 psi (2.9 bar)
235/60 R 18				
255/55 R 18				
275/45 R 19				
275/40 R 20				
Collapsible spare wheel	51 psi (3.5 bar)	51 psi (3.5 bar)	51 psi (3.5 bar)	51 psi (3.5 bar)

Fully loaded (more than 3 people and 46 lbs./21 kg of luggage)	Cayenne S		Cayenne	
Tire size	Front axle	Rear axle	Front axle	Rear axle
235/65 R 17	38 psi (2.6 bar)	50 psi (3.4 bar)	38 psi (2.6 bar)	50 psi (3.4 bar)
235/60 R 18				
255/55 R 18				
275/45 R 19				
275/40 R 20				
Collapsible spare wheel	51 psi (3.5 bar)	51 psi (3.5 bar)	51 psi (3.5 bar)	51 psi (3.5 bar)

^f On vehicles with Tire Pressure Monitoring, the vehicle load must be set in the multi-purpose display of the instrument panel. Please observe the chapter "LOAD" on Page 108.

Capacities

Use only fluids and fuels authorized by Porsche. Your authorized Porsche dealer will be pleased to advise you.
Your Porsche has been designed so that it is not necessary to mix any additives with oils or fuels.

	Cayenne S	Cayenne
Engine oil change quantity without oil filter	approx. 8.5 quarts (8.0 liters)	approx. 6.0 quarts (5.7 liters)
Engine oil change quantity with oil filter	approx. 9.0 quarts (8.5 liters) Reference indication is the level on the oil dipstick. Please observe the chapter "ENGINE OIL LEVEL" on Page 262.	approx. 6.7 quarts (6.3 liters)
Coolant ¹⁾	approx. 4.8 – 5.5 U.S. gallons (18 – 21 liters)	approx. 3.4 – 4.8 U.S. gallons (13 – 18 liters)
Manual transmission with compensation	approx. 1.9 quarts (1.8 litres)	approx. 1.9 quarts (1.8 litres)
Automatic transmission with torque converter	approx. 10.6 quarts (10.0 liters)	approx. 10.6 quarts (10.0 liters)
Transfer box	approx. 0.9 quarts (0.85 liter)	approx. 0.9 quarts (0.85 liter)
Front-axle differential	approx. 1.1 quarts (1.0 liter)	approx. 1.1 quarts (1.0 liter)
Rear-axle differential	approx. 1.5 quarts (1.4 liters)	approx. 1.2 quarts (1.25 liters)
Locking rear differential	approx. 1.7 quarts (1.6 liters)	approx. 1.7 quarts (1.6 liters)
Fuel tank	approx. 26.4 U.S. gallons (100 liters), including approx. 3 U.S. gallons (12 liters) reserve	approx. 26.4 U.S. gallons (100 liters), including approx. 3 U.S. gallons (12 liters) reserve
Fuel quality	The engine is designed to provide optimum performance and fuel consumption if unleaded premium fuel with 98 RON/88 MON is used. If unleaded premium fuels with octane numbers of at least 95 RON/85 MON are used, the engine's "Electronic Oktane™ knock control" automatically adapts the ignition timing.	
Power steering	approx. 1.6 quarts (1.5 liters) Pentosin CHF 11 S®	approx. 1.6 quarts (1.5 liters) Pentosin CHF 11 S®
Brake fluid	approx. 1.0 quart (0.95 liter) Use only Original Porsche brake fluid.	approx. 1.0 quart (0.95 liter) Use only Original Porsche brake fluid.
Window/headlight washer system	approx. 7.9 quarts (7.5 liters)	approx. 7.9 quarts (7.5 liters)

¹⁾ Depending on equipment level

Weights

	Cayenne manual transmission	Cayenne Tiptronic S	Cayenne S manual transmission	Cayenne S Tiptronic S
Empty weight				
Empty weight (depending on equipment)				
per DIN 70020	4860 - 5670 lbs. (2160 - 2520 kg)	4784 - 5578 lbs. (2170 - 2530 kg)	5006 - 5850 lbs. (2225 - 2600 kg)	4949 - 5776 lbs. (2245 - 2620 kg)
per 70/156/EEC ¹⁾	5029 - 5839 lbs. (2235 - 2595 kg)	5051 - 5861 lbs. (2245 - 2605 kg)	5175 - 6019 lbs. (2300 - 2675 kg)	5220 - 6064 lbs. (2320 - 2695 kg)
Maximum axle load, front ²⁾	3053 lbs. (1385 kg)	3053 lbs. (1385 kg)	3208 lbs. (1455 kg)	3208 lbs. (1455 kg)
Maximum axle load, rear ²⁾	3637 lbs. (1650 kg)	3637 lbs. (1650 kg)	3704 lbs. (1680 kg)	3704 lbs. (1680 kg)
Maximum gross weight	6492 lbs. (2945 kg)	6492 lbs. (2945 kg)	6790 lbs. (3080 kg)	6790 lbs. (3080 kg)
Trailer operation Canada/USA				
Maximum gross weight	6713 lbs. (3045 kg)	6713 lbs. (3045 kg)	7155 lbs. (3180 kg)	6790 lbs. (3080 kg)
Maximum axle load, front/rear axle	3053/3858 lbs. (1385/1750 kg)	3053/3858 lbs. (1385/1750 kg)	3208/3913 lbs. (1455/1775 kg)	3208/3913 lbs. (1455/1775 kg)
Roof load				
Maximum roof load ³⁾	225 lbs. (100 kg)	225 lbs. (100 kg)	225 lbs. (100 kg)	225 lbs. (100 kg)
when roof rail is fitted ³⁾	165 lbs. (75 kg)	165 lbs. (75 kg)	165 lbs. (75 kg)	165 lbs. (75 kg)
Towing capacity/vehicle + trailer weight				
Maximum towing capacity, braked (up to a max. 12% slope)	7716 lbs. (3500 kg)	7716 lbs. (3500 kg)	7716 lbs. (3500 kg)	7716 lbs. (3500 kg)
Maximum towing capacity, unbraked	1654 lbs. (750 kg)	1654 lbs. (750 kg)	1654 lbs. (750 kg)	1654 lbs. (750 kg)
Maximum vehicle + trailer weight	14209 lbs. (6445 kg)	14209 lbs. (6445 kg)	14209 lbs. (6580 kg)	14506 lbs. (6580 kg)
Maximum trailer hitch load	308 lbs. (140 kg)	308 lbs. (140 kg)	308 lbs. (140 kg)	308 lbs. (140 kg)

¹⁾ Empty weight includes 165 lbs. (75 kg) driver and baggage share.

²⁾ The maximum gross weight must not be exceeded.
Note: If additional equipment is installed, the useful load will be correspondingly less.

³⁾ Use only Original Porsche Roof Transport System.

Driving Performance

The specifications refer to a vehicle at DIN empty weight and max. 441 lbs. (200 kg) load, without performance-inhibiting extra equipment (e.g. special tires)

	Cayenne manual transmission	Cayenne Tiptronic S	Cayenne S manual transmission	Cayenne S Tiptronic S
Top track speed	133 mph (214 km/h)	133 mph (214 km/h)	150 mph (242 km/h)	150 mph (242 km/h)
Acceleration 0 - 62 mph (100 km/h)	9.1 seconds	9.7 seconds	6.8 seconds	7.2 seconds
Maximum speed when driving with a trailer	50 mph (80 km/h)			

Dimensions

	Cayenne S	Cayenne
Length	188.3 in. (4782 mm)	188.3 in. (4782 mm)
Length with external spare wheel	197.6 in. (5018 mm)	197.6 in. (5018 mm)
Width	75.9 in. (1928 mm)	75.9 in. (1928 mm)
Height at DIN empty weight	66.9 in. (1699 mm)	66.9 in. (1699 mm)
Height at DIN empty weight (rail)	68.5 in. (1741 mm)	68.5 in. (1741 mm)
Height at DIN empty weight (basic carrier of Roof Transport System)	70.4 in. (1789 mm)	70.4 in. (1789 mm)
Height at DIN empty weight with rear lid open	87.4 in. (2219 mm)	87.4 in. (2219 mm)
Max. wading depth	19.7 in. (500 mm) ¹⁾	19.7 in. (500 mm) ¹⁾
Track		
17" front		65.2 in. (1655 mm)
17" rear		65.8 in. (1670 mm)
18" front	64.8 in. (1647 mm)	64.8 in. (1647 mm)
18" rear	65.4 in. (1662 mm)	65.4 in. (1662 mm)
19" front	64.6 in. (1641 mm)	64.6 in. (1641 mm)
19" rear	65.2 in. (1656 mm)	65.2 in. (1656 mm)
20" front	64.6 in. (1641 mm)	64.6 in. (1641 mm)
20" rear	65.2 in. (1656 mm)	65.2 in. (1656 mm)
Wheelbase	112.4 in. (2855 mm)	112.4 in. (2855 mm)
Overhang, front	36.4 in. (924 mm)	36.4 in. (924 mm)
rear	39.5 in. (1003 mm)	39.5 in. (1003 mm)
Turning circle	461 in. (11.7 m)	461 in. (11.7 m)

¹⁾ Up to 21.9 in. (555 mm) for vehicles with air suspension at special terrain level.

Ground Clearance

	Cayenne S	Cayenne
Steel suspension		
Ramp angle	20.4°	20.4°
Overhang angle, front	29.1°	29.1°
Overhang angle, rear	25.7°	25.7°
Ground clearance (center of axles)	8.5 in. (217 mm)	8.5 in. (217 mm)
Air suspension – normal level		
Ramp angle	20.4°	20.4°
Overhang angle, front	29.1°	29.1°
Overhang angle, rear	25.7°	25.7°
Ground clearance (center of axles)	8.5 in. (217 mm)	8.5 in. (217 mm)
Air suspension – low level		
Ramp angle	17.7°	17.7°
Overhang angle, front	27.3°	27.3°
Overhang angle, rear	23.7°	23.7°
Ground clearance (center of axles)	7.5 in. (190 mm)	7.5 in. (190 mm)
Air suspension – loading level		
Ramp angle	14.9°	14.9°
Overhang angle, front	24°	24°
Overhang angle, rear	21.7°	21.7°
Ground clearance (center of axles)	6.2 in. (157 mm)	6.2 in. (157 mm)
Air suspension – terrain level		
Ramp angle	22.2°	22.2°
Overhang angle, front	30.7°	30.7°
Overhang angle, rear	26.6°	26.6°
Ground clearance (center of axles)	9.6 in. (243 mm)	9.6 in. (243 mm)

	Cayenne S	Cayenne
Air suspension – special terrain level		
Ramp angle	24.7°	24.7°
Overhang angle, front	32.4°	32.4°
Overhang angle, rear	28.3°	28.3°
Ground clearance (center of axles)	10.7 in. (273 mm)	10.7 in. (273 mm)

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../bildercay/GB/E42_742.tif @ 300 dpi 113	../bildercay/GB/E42_764.tif @ 300 dpi 118	../bildercay/Bilder neutral/ E41_709P.tif @ 300 dpi 124
../bildercay/Bilder neutral/ E31_179P.tif @ 450 dpi 114	../bildercay/GB/E42_767.tif @ 300 dpi 119	../bildercay/Bilder neutral/ E41_709P.tif @ 300 dpi 124
../bildercay/Bilder neutral/ E31_311.tif 115	../bildercay/GB/E42_768.tif @ 300 dpi 119	../bildercay/Bilder neutral/ E41_730P.tif @ 300 dpi 124
../bildercay/Bilder neutral/ E31_311.tif @ 450 dpi 115	../bildercay/Us/E43_769.tif @ 300 dpi 121	../bildercay/Bilder neutral/ E41_709P.tif @ 300 dpi 124
../bildercay/GB/E52_757.tif @ 300 dpi 116	../bildercay/GB/E42_770.tif @ 300 dpi 121	../bildercay/Bilder neutral/ E41_730P.tif @ 300 dpi 124
../bildercay/GB/E42_758.tif @ 300 dpi 116	../bildercay/GB/E42_772.tif @ 300 dpi 121	../bildercay/Bilder neutral/ E41_709P.tif @ 300 dpi 124
../bildercay/GB/E42_759.tif @ 300 dpi 116	../bildercay/GB/E42_773.tif @ 300 dpi 122	../bildercay/Bilder neutral/ E41_728P.tif @ 300 dpi 124
../bildercay/GB/E42_760.tif @ 300 dpi 117	../bildercay/GB/E42_774.tif @ 300 dpi 122	../bildercay/Bilder neutral/ E41_708P.tif @ 300 dpi 125

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../bildercay/Bilder neutral/
E41_710P.tif @ 300 dpi 125
../bildercay/Bilder neutral/
E41_749P.tif @ 300 dpi 125
../bildercay/Bilder neutral/
E31_174P.tif @ 450 dpi 125
../bildercay/Bilder neutral/
E41_720P.tif @ 300 dpi 125
../bildercay/Bilder neutral/
E41_720P.tif @ 300 dpi 126
../bildercay/Bilder neutral/
E41_736P.tif @ 300 dpi 126
../bildercay/Bilder neutral/
E41_736P.tif @ 300 dpi 126
../bildercay/Bilder neutral/
E31_173P.tif @ 450 dpi 126
../bildercay/Bilder neutral/
E41_727P.tif @ 300 dpi 126
../bildercay/Bilder neutral/
E31_179P.tif @ 450 dpi 126
../bildercay/Bilder neutral/
E41_726P.tif @ 300 dpi 126
../bildercay/Bilder neutral/
E31_179P.tif @ 450 dpi 126

../bildercay/Bilder neutral/
E41_714P.tif @ 300 dpi 126
../bildercay/Bilder neutral/
E31_179P.tif @ 450 dpi 126
../bildercay/Bilder neutral/
E41_714P.tif @ 300 dpi 126
../bildercay/Bilder neutral/
E31_179P.tif @ 450 dpi 126
../bildercay/Bilder neutral/
E41_714P.tif @ 300 dpi 126
../bildercay/Bilder neutral/
E31_179P.tif @ 450 dpi 126
../bildercay/Bilder neutral/
E41_714P.tif @ 300 dpi 126
../bildercay/Bilder neutral/
E31_179P.tif @ 450 dpi 126
../bildercay/Bilder neutral/
E41_712P.tif @ 300 dpi 126
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E31_179P.tif @ 450 dpi 126
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E41_712P.tif @ 300 dpi 126
../bildercay/Bilder neutral/
E31_179P.tif @ 450 dpi 127

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E41_712P.tif @ 300 dpi 127
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E31_179P.tif @ 450 dpi 127
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E41_712P.tif @ 300 dpi 127
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E31_179P.tif @ 450 dpi 127
../bildercay/Bilder neutral/
E41_714P.tif @ 300 dpi 127
../bildercay/Bilder neutral/
E31_179P.tif @ 450 dpi 127
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E41_715P.tif @ 300 dpi 127
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E31_179P.tif @ 450 dpi 127
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E41_712P.tif @ 300 dpi 127
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E41_702P.tif @ 300 dpi 127
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E41_716P.tif @ 300 dpi 127
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E41_719P.tif @ 300 dpi 127

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E41_719P.tif @ 300 dpi 127
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E41_719P.tif @ 300 dpi 127
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E41_703P.tif @ 300 dpi 127
../bildercay/Bilder neutral/
E41_705P.tif @ 300 dpi 127
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E41_717P.tif @ 300 dpi 128
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E41_717P.tif @ 300 dpi 128
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E41_704P.tif @ 300 dpi 128
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E31_184P.tif @ 450 dpi 128
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E41_701P.tif @ 300 dpi 128
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E31_184P.tif @ 450 dpi 128
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E41_726P.tif @ 300 dpi 128
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450 dpi 128

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E41_725P.tif @ 300 dpi 128
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E31_171P.tif @ 450 dpi 128
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E41_718P.tif @ 300 dpi 128
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E31_184P.tif @ 450 dpi 128
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E41_726P.tif @ 300 dpi 128
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E31_184P.tif @ 450 dpi 128
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E41_729P.tif @ 300 dpi 128
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E31_171P.tif @ 450 dpi 128
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E41_718P.tif @ 300 dpi 128
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E31_171P.tif @ 450 dpi 129
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E41_718P.tif @ 300 dpi 129
../bildercay/Bilder neutral/
E41_726P.tif @ 300 dpi 129

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E31_184P.tif @ 450 dpi 129
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E41_726P.tif @ 300 dpi 129
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E41_707P.tif @ 300 dpi 129
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E41_707P.tif @ 300 dpi 129
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E41_707P.tif @ 300 dpi 129
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E41_722P.tif @ 300 dpi 129
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E41_721P.tif @ 300 dpi 129
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E41_715P.tif @ 300 dpi 129
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E41_721P.tif @ 300 dpi 129
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../bildercay/Bilder neutral/
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../bildercay/Bilder neutral/
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E41_723P.tif @ 300 dpi 129
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E41_723P.tif @ 300 dpi 129
../bildercay/Bilder neutral/
E41_723P.tif @ 300 dpi 130
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E31_180P.tif @ 450 dpi 130
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E41_724P.tif @ 300 dpi 130
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E41_201P.tif @ 450 dpi 130
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E41_747P.tif @ 300 dpi 130
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E41_201P.tif @ 450 dpi 130
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E41_747P.tif @ 300 dpi 130

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E41_747P.tif @ 300 dpi 130
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E41_747P.tif @ 300 dpi 130
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../bildercay/Bilder neutral/
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../bildercay/Bilder neutral/
E41_741P.tif @ 300 dpi 131
../bildercay/Bilder neutral/
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E31_066P.eps 150
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E31_003.tif @ 450 dpi 153
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E31_059P.eps 155
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E31_072P.eps 155
../bildercay/Bilder neutral/
E31_071P.eps 155
../bildercay/Bilder neutral/
E31_064P.eps 156
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E31_065P.eps 156

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E31_066P.eps 156
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E31_084p.eps 158
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../bildercay/Bilder neutral/
E31_054P.eps 158
../bildercay/Bilder neutral/
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E31_193.tif @ 450 dpi 172
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E51_400.tif @ 450 dpi 176
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E31_194.tif @ 450 dpi 177
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E51_402.tif @ 450 dpi 177
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../bildercay/Bilder neutral/
E61_045.tif @ 450 dpi 185

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E31_134.tif @ 450 dpi 188
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E31_006.tif @ 450 dpi 195
../bildercay/Bilder neutral/
E31_007.tif @ 450 dpi 195

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E31_229.tif @ 450 dpi 195
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E61_197.tif @ 450 dpi 196
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E31_008.tif @ 450 dpi 197
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E31_023.tif @ 450 dpi 197
../bildercay/Bilder neutral/
E31_024.tif @ 450 dpi 198
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E51_403.tif @ 450 dpi 198
../bildercay/Bilder neutral/
E51_404.tif @ 450 dpi 198
../bildercay/Bilder neutral/
E61_240.tif @ 450 dpi 199
../bildercay/Bilder neutral/
E41_348.tif @ 450 dpi 199
../bildercay/Bilder neutral/
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../bildercay/Bilder neutral/	../bildercay/Bilder neutral/	../bildercay/Bilder neutral/
E31_122.tif @ 450 dpi 202	E31_231.tif @ 450 dpi 208	E31_180P.tif 230
../bildercay/Bilder neutral/	../bildercay/Bilder neutral/	../bildercay/Bilder neutral/
E61_119.tif @ 450 dpi 202	E31_232.tif @ 450 dpi 209	E31_040.tif @ 450 dpi 230
../bildercay/Bilder neutral/	../bildercay/Us/E33_016.tif @ 450	../bildercay/Bilder neutral/
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../bildercay/Bilder neutral/	../bildercay/Us/E53_405.tif @ 450	../bildercay/Bilder neutral/
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../bildercay/Bilder neutral/	../bildercay/Us/E33_071.tif @ 450	../bildercay/Us/E33_070.tif @ 450
E61_055.tif @ 450 dpi 206	dpi 225	dpi 240
../bildercay/Bilder neutral/	../bildercay/Bilder neutral/	../bildercay/Bilder neutral/
E31_221.tif @ 450 dpi 206	E31_253.tif @ 450 dpi 228	E31_171P.tif @ 450 dpi 240
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../bildercay/Bilder neutral/
E31_090.tif @ 450 dpi 252
../bildercay/Bilder neutral/
E31_033.tif @ 450 dpi 254
../bildercay/Bilder neutral/
E31_180P.tif @ 450 dpi 254
../bildercay/Bilder neutral/
E31_035.tif @ 450 dpi 255
../bildercay/Bilder neutral/
E31_036.tif @ 450 dpi 255
../bildercay/Bilder neutral/
E31_037.tif @ 450 dpi 256
../bildercay/Bilder neutral/
E31_038.tif @ 450 dpi 256
../bildercay/Bilder neutral/
E31_183P.tif @ 450 dpi 257
../bildercay/Bilder neutral/
E31_032.tif @ 450 dpi 257
../bildercay/Bilder neutral/
E41_717P.tif @ 300 dpi 262
../bildercay/Bilder neutral/
E31_063.tif @ 450 dpi 263
../bildercay/Bilder neutral/

E51_331.tif @ 450 dpi 263
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E41_332.tif @ 450 dpi 264
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E41_333.tif @ 450 dpi 267
../bildercay/Bilder neutral/
E31_062.tif @ 450 dpi 267
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E61_141.tif @ 450 dpi 275
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E31_321.tif @ 450 dpi 311	E51_398.tif @ 450 dpi 321	E31_153.tif @ 450 dpi 329
../bildercay/Bilder neutral/	../bildercay/Bilder neutral/	../bildercay/Bilder neutral/
E31_313.tif @ 450 dpi 312	E51_399.tif @ 450 dpi 321	E31_152.tif @ 450 dpi 329
../bildercay/Bilder neutral/	../bildercay/Bilder neutral/	../bildercay/Bilder neutral/
E31_312.tif @ 450 dpi 312	E31_323.tif @ 450 dpi 322	E51_163.tif @ 450 dpi 330
../bildercay/Bilder neutral/	../bildercay/Bilder neutral/	../bildercay/Bilder neutral/
E41_328.tif @ 450 dpi 313	E31_322.tif @ 450 dpi 322	E31_266.tif @ 450 dpi 331
../bildercay/Bilder neutral/	../bildercay/Bilder neutral/	../bildercay/Bilder neutral/
E31_180.tif @ 450 dpi 316	E61_412.tif @ 450 dpi 323	E31_161.tif @ 450 dpi 332
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../bildercay/Bilder neutral/	../bildercay/Bilder neutral/	../bildercay/Bilder neutral/
E31_114.tif @ 450 dpi 317	E61_411.tif @ 450 dpi 324	E31_157.tif @ 450 dpi 333
../bildercay/Bilder neutral/	../bildercay/Bilder neutral/	../bildercay/Bilder neutral/
E31_115.tif @ 450 dpi 318	E31_186.tif @ 450 dpi 325	E61_212.tif @ 450 dpi 334
../bildercay/Bilder neutral/	../bildercay/Bilder neutral/	../bildercay/Bilder neutral/

E31_244.tif @ 450 dpi 334
../bildercay/Bilder neutral/
E31_097.tif @ 450 dpi 335
../bildercay/Bilder neutral/
E31_245.tif @ 450 dpi 335
../bildercay/Us/E33_100.tif @ 450
dpi 336
../bildercay/Us/E33_185.tif @ 450
dpi 336
../bildercay/Bilder neutral/
E51_127.tif @ 450 dpi 347
../bildercay/Bilder neutral/
E51_128.tif @ 450 dpi 348
../bildercay/Bilder neutral/
E31_142.tif @ 450 dpi 348
../bildercay/Bilder neutral/
E31_147.tif @ 450 dpi 348
../bildercay/Bilder neutral/
E31_143.tif @ 450 dpi 349
../bildercay/Bilder neutral/
E31_182.tif @ 450 dpi 349
../bildercay/Bilder neutral/
E31_145.tif @ 450 dpi 349
../bildercay/Bilder neutral/

E31_146.tif @ 450 dpi 350
../bildercay/Bilder neutral/
E31_147.tif @ 450 dpi 350
../bildercay/Bilder neutral/
E51_128.tif @ 450 dpi 350
../bildercay/Bilder neutral/
E31_186.tif @ 450 dpi 351
../bildercay/Bilder neutral/
E31_296.tif @ 450 dpi 352
../bildercay/Bilder neutral/
E31_297.tif @ 450 dpi 352
../bildercay/Bilder neutral/
E31_299.tif @ 450 dpi 352
../bildercay/Bilder neutral/
E31_301.tif @ 450 dpi 353
../bildercay/Bilder neutral/
E31_302.tif @ 450 dpi 353
../bildercay/Bilder neutral/
E31_303.tif @ 450 dpi 353
../bildercay/Bilder neutral/
E31_303.tif @ 450 dpi 354
../bildercay/Bilder neutral/
E31_059.tif @ 450 dpi 356
../bildercay/Bilder neutral/

E31_101.tif @ 450 dpi 356
../bildercay/Bilder neutral/
E31_238.tif @ 450 dpi 358
../bildercay/Bilder neutral/
E31_164.tif @ 450 dpi 361
../bildercay/Bilder neutral/
E31_165.tif @ 450 dpi 361
../bildercay/Bilder neutral/
E31_319.tif @ 450 dpi 362
../bildercay/Bilder neutral/
E31_320.tif @ 450 dpi 362
../bildercay/Bilder neutral/
E31_166.tif @ 450 dpi 362
../bildercay/Us/E33_167.tif @ 450
dpi 363
../bildercay/Bilder neutral/
E31_168.tif @ 450 dpi 363
../bildercay/Bilder neutral/
E31_169.tif @ 450 dpi 364
../bildercay/Bilder neutral/
E31_213.tif @ 450 dpi 364
../bildercay/Us/E33_170.tif @ 450
dpi 365
../bildercay/Us/E33_178.tif @ 450

dpi 365
../bildercay/Bilder neutral/
E31_179.tif @ 450 dpi 365
../bildercay/Bilder neutral/
E51_172.tif @ 450 dpi 366
../bildercay/Bilder neutral/
E51_248.tif @ 450 dpi 366
../bildercay/Bilder neutral/
E31_324.tif @ 450 dpi 366
../bildercay/Bilder neutral/
E31_179.tif @ 450 dpi 367
../bildercay/Bilder neutral/
E31_176.tif @ 450 dpi 367
../bildercay/Bilder neutral/
E31_177.tif @ 450 dpi 367
../bildercay/Bilder neutral/
E31_174.tif @ 450 dpi 368
../bildercay/Bilder neutral/
E31_175.tif @ 450 dpi 368
../bildercay/Bilder neutral/
E51_249.tif @ 450 dpi 369
../bildercay/Bilder neutral/
E61_250.tif @ 450 dpi 369
../bildercay/Bilder neutral/

E61_251.tif @ 450 dpi 369
../bildercay/Bilder neutral/
E31_252.tif @ 450 dpi 370
../bildercay/Bilder neutral/
E41_225.tif @ 450 dpi 370
../bildercay/Bilder neutral/
E41_326.tif 370
../bildercay/Bilder neutral/
E41_349.tif @ 450 dpi 371
../bildercay/Us/E33_307.tif @ 450
dpi 372
../bildercay/Bilder neutral/
E31_261.tif @ 450 dpi 373
../bildercay/Bilder neutral/
E31_214.tif @ 450 dpi 374
../bildercay/Bilder neutral/
E31_162.tif @ 450 dpi 375
../bildercay/Us/E43_381.tif @ 450
dpi 375
../bildercay/Us/E43_380.tif @ 450
dpi 375
../bildercay/Bilder neutral/
E31_315.tif @ 450 dpi 378
../bildercay/Bilder neutral/

E31_264.tif @ 450 dpi 378
../bildercay/Us/E33_309.tif @ 450
dpi 379
../bildercay/Bilder neutral/
E61_267.tif @ 450 dpi 379

