WKD 9Y0 00 21 21

Cayenne

WKD 9Y0 00 21 **21**

PORSCHE

Cayenne

Good to know – Owner's Manual

WKD 9Y0 00 21 **21** 08/2020

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Porsche recommends seat belt usage and observance of traffic laws at all times.
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⚠ WARNING

Operating, servicing and maintaining a passenger vehicle or off-highway motor vehicle can expose you to chemicals including engine exhaust, carbon monoxide, phthalates, and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize exposure, avoid breathing exhaust, do not idle the engine except as necessary, service your vehicle in a well-ventilated area and wear gloves or wash your hands frequently when servicing your vehicle.
For more information go to www.P65Warnings.ca.gov/passenger-vehicle.

Safety instructions, warnings and symbols in the Owner's Manual

For your own protection and longer service life of your vehicle, please heed all operating instructions and special warnings. These special warnings contain important messages regarding your safety and/or the potential for damage to your Porsche. Ignoring them could result in serious mechanical failure, serious personal injury or death.
Different types of warnings and symbols are used in this Owner's Manual.

⚠ DANGER Serious injury or death

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

⚠ WARNING Possible serious injury or death

Failure to observe warnings in the "Warning" category can result in serious injury or death.

⚠ CAUTION Possible moderate or minor injury

Failure to observe warnings in the "Caution" category can result in moderate or minor injuries.

NOTICE

Failure to observe warnings in the "Notice" category can result in damage to the vehicle.

Information

Additional information is indicated using the word "Information".

✓ Prerequisites that must be met in order to use a function.
▶ Instructions that must be followed.
1. Instructions are numbered in cases where a sequence of steps must be followed.

1. Instructions that must be followed on the touch display.

▷ Indicates where you can find more information on a topic.

Structure of the Manual

Owner's Manual – Digital

The Owner's Manual is available in digital form on-board in the vehicle and as an app.

▷ Page 4

Table of Contents

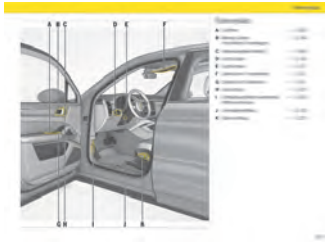
Get an overview and find the information you want.

Safety and Driving Pleasure

Find out how you can play your part in combining safety with driving pleasure.

▷ From page 7

Overviews



Get to know the various components and controls.

▷ From page 25

Practical Tips

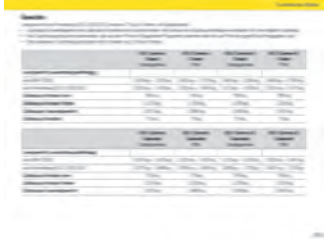
Browse to find additional information about new functions.

▷ From page 32

Topics from A to Z

Find out about components and controls and how to use them.

Technical Data



Check specific values.

▷ From page 334

Index

Jump directly to the information you need.

Owner's Manual – Digital

Further information about your vehicle is available (depending on country) in the **on-board** Owner's Manual in your vehicle and in the Porsche "Good to know" **app**: Video instructions, interactive graphics, practical tips and functions in detail.

On-board

You can find the Owner's Manual in the Porsche Communication Management (PCM) under:

▸ **CAR** ▸ **CONTROL** ▸ **Manual**

App

You can download the Owner's Manual from the relevant app store by searching for **Gut zu wissen**, **Good to know** or 车主指南:

Download on the App Store

GET IT ON Google Play

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Contents

Safety and Driving Pleasure

Dear Owner, thank you for choosing a Porsche Sports car. No other car embodies such a unique blend of legendary heritage, cutting edge innovation, high performance and great sportiness.

As your safety and driving experience is our goal, we encourage you to read the Owner's Manual and take time to familiarize yourself with the operation of your Porsche vehicle before you drive it.

To prevent or minimize injury, always use your seat belts and always lawfully operate your Porsche vehicle.

Always keep your Owner's Manual in the car. If you sell your Porsche vehicle, pass the Owner's Manual and other operation manuals on to the new owner.

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

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

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

⚠ WARNING Misuse of your Porsche

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

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

Reporting Safety Defects

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 authorized Porsche dealer, or Porsche Cars N.A..

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at 1–888–327–4236 (TTY: 1–800–424–9153); go to http://www.safercar.gov; or write to:
Administrator, NHTSA,
1200 New Jersey Ave,
SE, Washington, DC 20590.

You can also obtain other information about motor vehicle safety from http://www.safercar.gov.

Your car has thousands of parts and components that have been designed and manufactured in accordance with Porsche high standards of engineering quality and safety.

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 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 products without incurring any obligation to install them on products previously manufactured.

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

For Canada only

If you live in Canada and you believe that your vehicle has a defect that could cause a crash, injury or death, you should notify Porsche Cars Canada, Ltd. immediately and may also inform Transport Canada, Defect Investigations and Recalls.

Canadian customers who wish to report a safety-related defect to Transport Canada, Defect Investigations and Recalls, may either call Transport Canada toll-free at:
Tel: 1-800-333-0510 or
Tel: 1-819-994-3328 (Ottawa region and from other countries)
TTY for hearing impaired:
1-888-675-6863
or contact Transport Canada by mail at:
Transport Canada Motor Vehicle Safety Investigations Laboratory
80 Noel Street Gatineau,
QC J8Z 0A1

For additional road safety information, please visit the Road Safety website at:
English: http://www.tc.gc.ca/eng/motorvehiclesafety/menu.htm

French: http://www.tc.gc.ca/fra/securiteautomobile/menu.htm

Note to owners

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

Note aux proprietaires

Au Canada on peut se procurer un exemplaire de ce Manuel en français auprès du concessionaire ou du:
Porsche Cars Canada, Ltd.
Automobiles Porsche Canada, LTEE
165 Yorkland Boulevard
Unit 150
Toronto, ON
Canada, M2J 4R2
Telephone number for customer assistance:
1-800-PORSCHE / Option 3

Excellent technology: A prerequisite for your driving pleasure

In order for your Porsche to achieve its full potential, the vehicle requires your attention and care.

Checking the vehicle for damage and correct functioning

A vehicle with technical defects may be the cause of accidents due to faulty operating behavior, for example.

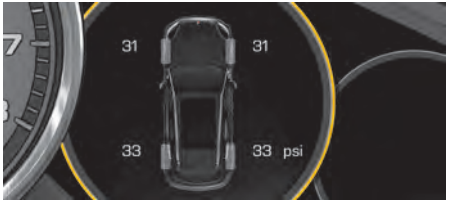
- Check your vehicle regularly (at least once a month and prior to long journeys) to ensure it is free of technical defects. Pay particular attention to the following:
  - Undamaged tires, correct tire pressure and sufficient tread
  - Correctly functioning headlights, brake lights and turn signals
  - Undamaged aerodynamic components
  - Intact wiper blades
  - Windshield and window glass is clear and free of cracks or other damage
  - Door and interior mirrors are intact and correctly adjusted
  - Sensors and cameras are without cracks or damage
  - Cooling air ducts, sensors and cameras are not covered (e.g. by films, stone guards, license plate holders)
- Only operate the in-vehicle telephone or radio equipment with installed radio antenna using the connected external antenna so that the threshold values for electromagnetic radiation in the vehicle are not exceeded.

Checking tires for damage

Damaged tires may burst while driving. You may lose control of the vehicle.

- Inspect the tires as often as required depending on use, but at least once a month, for any foreign objects that may have entered, nicks, cuts, tears, or dents. Check the tire sidewalls in the process.
- If in doubt, have the tire and the entire wheel checked by an authorized Porsche dealer.
- **Do not** continue driving with damaged tires. Have defective tires replaced immediately. Contact an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Setting the right tire pressure



Tire pressure that is too low or too high destroys the tire and wheel, extends the braking distance and significantly increases the risk of an accident. If the

tire pressure is too low, there may be a noticeable increase in fuel consumption.

- Adjust tire pressure to suit your tires and the load.
  - ▷ Please see chapter "Technical Data" on page 334.
  - ▷ Please see chapter "Wheels and Tires" on page 316.
- Make sure that the settings in the TPMS menu correspond to the tires fitted on the vehicle and its payload.
  - ▷ Please see chapter "Vehicle Settings" on page 285.
- When a red tire pressure warning appears on the instrument cluster: stop immediately in a suitable place and check the tires for damage. **Do not** continue driving with damaged tires. If necessary, repair damage using tire sealant.
  - ▷ Please see chapter "Flat Tire" on page 121.

Checking the lights

If the lights are faulty, your vehicle will be dark and difficult to see when visibility is poor. Other road users may notice you too late, increasing the risk of an accident. Components of the lighting system are the following:

- Side, low beam, driving, high beam, turn signal lights
- Brake and reversing lights
- Fog lights

- Check that all lights function correctly and have defective lights repaired immediately.

Checking aerodynamic components

Damaged or missing aerodynamic components (such as spoilers or underbody paneling) impair vehicle handling.

- Check your vehicle regularly for damage.
- Damaged or missing components must be replaced immediately.

Keeping the windshield, windows and wiper blades clean and functional

Dirty windshields and windows as well as defective wiper blades reduce visibility and significantly increase the risk of an accident.

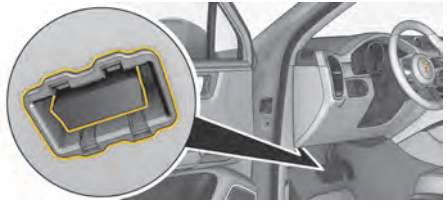
- Keep the vehicle and windshield/windows clean.
- Thaw frozen wiper blades and free them from the windshield.
- Replace wiper blades regularly, or at the latest when they leave streaks on the windshield.
  - ▷ Please see chapter "Wiper blades" on page 331.

Service and modifications to the vehicle must be performed by an authorized Porsche dealer

Any modification to the vehicle may impair or eliminate its safety functions. Unauthorized work performed during the warranty period may result in claims being invalidated.

- Have all service work and modifications to the vehicle performed exclusively by an authorized Porsche dealer. This ensures that your vehicle remains reliable and safe to drive, and that no consequential damage occurs to your vehicle. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Diagnostic socket



The diagnostic socket is used to connect diagnostic devices in authorized Porsche dealers.

External equipment (e.g. navigation units, head-up displays) connected to the diagnostic socket can impair operation of the vehicle systems and run down or damage the battery (exhaustive discharge) when the ignition is switched off. The external equipment and cables can obstruct clearance around the pedals or become caught between the pedals when braking or changing direction.

- Do not connect any equipment to the diagnostic socket.
- Do not place any equipment or cables in the driver's footwell.

Spare parts for your Porsche

- Only use genuine Porsche spare parts for your vehicle or spare parts of a similar quality, which have been manufactured according to the specifications and production requirements of Porsche. This ensures that your vehicle remains reliable and safe to drive, and that no consequential damage occurs to your vehicle. These parts are available from authorized Porsche dealers. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.
- Only use accessories that originate from the Porsche Tequipment range or that have been tested and approved by Porsche. For information on Porsche Tequipment: Contact an authorized Porsche dealer.

Information

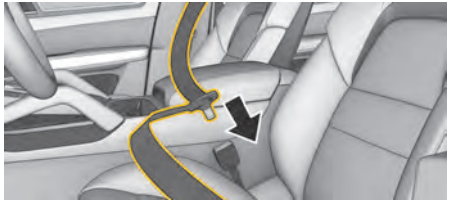
If other spare parts or accessories are used, Porsche does not accept any liability for damages caused by these parts. Even if a supplier has obtained a General Operating License for spare parts or accessories, the safety of the vehicle may still be affected. The use of spare parts or accessories not approved by Porsche may also void your vehicle warranty.

Load, safety systems, children in the vehicle: Knowledge for Porsche drivers

With your Porsche, you can accelerate to above 60 mph (100 km/h) within a few seconds. This being said, you should do everything necessary to ensure safety before driving.

For this reason, prepare for the journey with the same passion that you feel during driving.

Correct use of seat belts



The seat belts can only protect you from injuries if they are functional and are used correctly.

Information

Severe injuries can occur at speeds as low as 20 mph (30 km/h) if a seat belt is not worn. Safety systems only protect when used in combination. For example, the airbags can protect you properly only if the seat belts are worn correctly.

- Always make sure that seat belts fit snugly, including on short trips.
- Use one seat belt to secure one occupant only.
- Remove any loose articles of clothing, e.g. winter coats.
- Do not place the seat belts across fragile or hard objects (e.g. glasses or ball-point pens).
- Do not twist the seat belts.
- Always fully roll up unused seat belts.
- For pregnant women: Pregnant drivers or passengers should position the lap belt under the belly and the shoulder belt taut over the chest.
- If worn or damaged, have the belt, belt buckle or attachment points replaced.
  - Please see chapter "Seat Belts" on page 246.

Airbag system

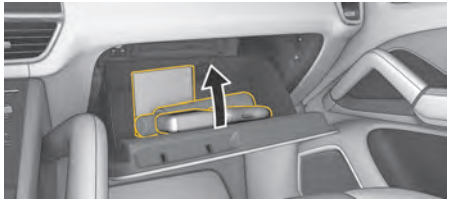
Airbag systems can only perform their protective function if all occupants have their seat belts fastened and maintain the correct seating position. Objects and luggage must be stowed safely.

- Make sure that there are no persons, animals or objects between the occupants and the area into which the airbag deploys.
- Maintain a safe distance from the airbags, e.g. do not lean against the inside of the doors. Always keep your feet in the footwell when driving. Do not put your feet on the dashboard or seat.

Airbag systems that have been tampered with offer no protection. They may either not trigger or be triggered in an uncontrolled manner. Uncontrolled triggering can cause serious injuries.

- Do not use seat covers.
- Do not attach any additional trim or stickers to the steering wheel or in the vicinity of the airbags.
- Do not route any cables for additional electrical equipment close to the airbag wiring.
- Do not remove airbag components, e.g. steering wheel, front seats, roof trims.
- Do not modify the wiring or components of the airbag system.
  - ▷ Please see chapter "Airbag Systems" on page 54.

Securing all objects in the passenger compartment



An unsecured or incorrectly positioned load in the passenger compartment can be thrown around as a result of braking, acceleration, changes of direction or accident. Occupants may be endangered or injured.

Information

For example, unsecured objects can be thrown forward at up to 50 times their weight in the event of a rear-end collision at 30 mph (50 km/h). A 1.5-quart bottle of water, for example, is thrown through the passenger compartment with a force of up to 165 lbs. (75 kg).

- As a rule, transport only secured objects in the vehicle.
- Always stow items safely, e.g. in the luggage compartment or in a roof transport system.
- Place small objects in the storage compartments and close all storage compartments. Objects must not protrude out of the storage compartments.
- Never place objects on the dashboard or on the luggage compartment cover.
- Secure loads with tie-down belts (tear strength of at least 1,540 lbs. (700 kg)).
- Do not transport heavy objects in open storage compartments.
- Also provide your passengers with all information regarding safety measures.

For correctly loading your Porsche and stowing items:

- ▷ Please see chapter "Storage" on page 263.
- ▷ Please see chapter "Luggage Compartment" on page 164.

Preventing crushing hazards

If persons or animals are within the range of movement of certain vehicle components, there is a risk of body parts being trapped or crushed. These components include:

- Adjustable seats
- Doors
- Windows
- Trailer hitch
- Flaps, lids, roofs and spoilers
- Storage compartment lids

- Make sure that no persons or animals are within the range of movement when moving these vehicle components.

Take account of children's behavior

Children often cannot judge dangers correctly and may behave inappropriately in dangerous situations.

Children can accidentally trigger automatic settings (e.g. seat adjustment) and thus injure themselves. Children may not be able to exit the vehicle in emergency situations, e.g. an overheated passenger compartment. This is dangerous to life, especially for young children.

- Keep children away from electrically live or hot parts, e.g. the tailpipe.
- Keep toxic materials, e.g. tire sealing compound, engine oil, out of the reach of children.
- Do not leave children in the vehicle unattended.

Safe use of child restraint systems

Child restraint systems can only work when installed correctly.

- **Only** use child restraint systems approved for your Porsche.
- Before using a child restraint system: Read and follow the instructions from the child restraint system manufacturer as well as this manual.
  - ▷ Please see chapter "Child Restraint Systems (Child Seats)" on page 97.

Safe, competent driving: Making the right decisions

You are ultimately responsible for keeping your powerful vehicle under control.

Drive safely

- Never drive after you have consumed alcohol or drugs.
- Always drive defensively.
- Expect the unexpected.
- Use signals to indicate turns and lane changes.
- Turn on headlights at dusk or when the driving conditions warrant it.
- Always keep a safe distance from the vehicle in front of you, depending on traffic, road and weather conditions.
- Reduce speed at night and during inclement weather.
- Driving in wet weather requires caution and reduced speeds, particularly on roads with standing water, as the handling characteristics of the vehicle may be impaired due to hydroplaning of the tires.
- Always observe speed limits and obey road signs and traffic laws.
- When tired, get well off the road, stop and take a rest. Turn the engine off. Do not sit in the vehicle with engine idling.
- On hills also turn the front wheels toward the curb.

The safe driver:

– knows her/his car and all controls,
– maintains the vehicle properly,

– 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 and actions listed on the following pages. If in doubt, have these checks performed by your authorized Porsche dealer.

Avoid distractions

If you operate the PCM or other vehicle components while driving, you will be distracted from the traffic situation and may not be able to respond to dangerous situations in time. For your safety, some functions are only available when the vehicle is stationary.

- Never adjust the mirror, seat or steering wheel while driving. The seat or steering wheel may move further than desired. You may lose control of the vehicle. Adjust the mirror, seat and steering wheel position as required before your journey.
- Only use the multifunction steering wheel, radio, navigation system, etc. while driving if the traffic situation allows you to do so safely. In case of doubt, stop the vehicle.
- Do not use a phone or other mobile devices while driving.
- Only make or receive calls using hands-free equipment.
- Do not reach between the steering-wheel spokes while driving. Otherwise, you may not be able to react in time to dangerous situations in time.

Be aware of braking behavior in rain or snow

In heavy rain, while driving through water or after leaving a car wash, the brake disks are coated with a water film, the braking action may be delayed and increased pressure may be required.

Following a long drive over salted or gritted roads, a coating may form on the brake disks and pads that significantly reduces friction and therefore also the braking action.

- Dry the brakes by frequent braking, particularly before you park the vehicle. This will prevent corrosion.
- Corroded brakes tend to "judder". If braking comfort is noticeably impaired, have the brake system checked.

Suitable tires and appropriate driving style

▷ Please see chapter "Wheels and Tires" on page 316.

Reacting correctly to uneven running and vibration

Damage to tires or the vehicle can cause uneven running or vibration while driving. You may lose control of the vehicle.

- Reduce speed immediately, but without braking sharply.
- Stop the vehicle and inspect the tires. If a cause cannot be established for the fault, drive on carefully and have the fault corrected. Visit an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Keeping tires in a safe condition

Damaged tires can burst, especially at high speeds. Prevent damage to the tires by driving carefully.

- Cross curb edges slowly and at right angles if possible.
- Avoid driving over steep or sharp curbs.

Running in new tires

New tires have not yet achieved their maximum grip and tend to slip.

- Run in new tires at a moderate speed for the first 125 miles (200 km).

Driving with snow tires

Maximum speed values apply for snow tires. If you exceed the maximum permitted speed, the tires may burst.

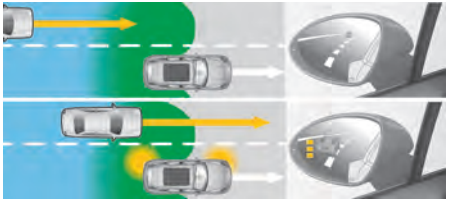
- Always observe the maximum permitted speed for the respective tire.
- Affix the sticker with the maximum permitted speed in the driver's field of vision. Observe country-specific regulations.
- Set the maximum permitted speed as the speed limit using the instrument cluster.
  - ▷ Please see chapter "Instrument Cluster" on page 139.

Driving with summer tires

Parking or maneuvering at outside temperatures below 60 °F (15 °C) may result in noises.

- Change to snow tires when outside temperatures are below 45 °F (7 °C).

Assistance systems and their limits



Your Porsche is equipped with driver assistance systems for driving comfort.

None of these systems can overcome the limits set by the laws of driving physics.

- These systems should not induce you to take greater risks with your safety. The driver assistance systems cannot reduce the risk of accidents due to an inappropriate driving style.
- The driver assistance systems cannot replace your attention. Drive with care so you can respond appropriately to the traffic situation.
- Familiarize yourself with the driver assistance systems before using them.

An overview of the driver assistance systems is provided below:

Adaptive Cruise Control (ACC)	▷ p. 41
Adaptive Cruise Control (ACC) with Porsche InnoDrive	▷ p. 48
Anti-lock Braking System (ABS)	▷ p. 228
Porsche Hill Control (PHC)	▷ p. 227
Speed limiter (LIM)	▷ p. 256
HOLD function	▷ p. 132
Automatic driving light control, high beam assistant	▷ p. 159
Night assist	▷ p. 188
ParkAssist, rear view camera, Surround View, Active Parking Support, Maneuvering Assist, Rear Cross Traffic Alert (RCTA), Egress Warner (EW)	▷ p. 198
Porsche Active Safe (PAS)	▷ p. 208
Porsche Active Suspension Management (PASM)	▷ p. 211 ▷ p. 212
Porsche Stability Management (PSM)	▷ p. 228
Porsche Torque Vectoring Plus (PTV Plus)	–
Porsche Vehicle Tracking System Plus (PVTS Plus)	▷ p. 231
Tire Pressure Monitoring System (TPMS)	▷ p. 139
Active Lane Keeping	▷ p. 36
Lane Keep Assist	▷ p. 156
Lane Change Assist (LCA)	▷ p. 151
Cruise control (GRA)	▷ p. 104
Speed limit display	▷ p. 273

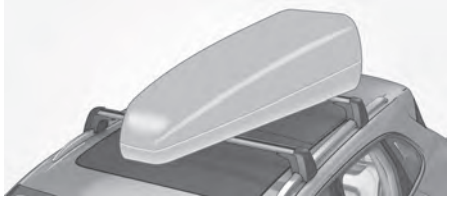
Emergency braking function

You can carry out full braking using the electric parking brake, for example if the conventional foot-brake is defective.

This emergency braking function works with very high braking power. As a result, the traffic behind may be endangered.

- Only use the emergency braking function in an emergency situation and not during normal driving.
- For emergency braking, pull and hold (P). Release the switch to stop braking.
  - ▷ Please see chapter "Brakes" on page 76.

Driving with a loaded vehicle



The handling of your Porsche changes depending on the load condition. Use of a roof transport system creates greater wind resistance.

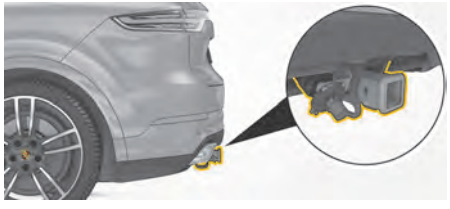
- Adapt your driving style to the altered vehicle handling.
- Do not drive at a speed of more than 80 mph (130 km/h) when the roof transport system is fitted and loaded.
- Do not drive at a speed of more than 110 mph (180 km/h) when the roof transport system is fitted but not loaded.
- Before fitting a roof transport system or driving with a roof transport system, read the following section in this Owner's Manual:
- ▷ Please see chapter "Roof transport system" on page 241.

Driving off with Performance Start

The vehicle accelerates very rapidly when driving off with Performance Start activated. In some situations (poor road conditions, driver inattention, etc.) control over the vehicle may be lost or other road users may be endangered as a result.

- Only use Performance Start on public roads if the road and traffic conditions permit.
- Do not endanger other road users when driving off with Performance Start.
- By switching the sports exhaust system to the sound-optimized mode, the very sporty driving style is accompanied by a significantly increased noise level. Therefore, assume your social responsibility and respect nearby residents, especially at night.

Driving with a trailer



A hitched trailer and attachable accessories (e.g. bicycle rack systems) have a significant effect on vehicle handling. Driver assistance systems are also switched off or may behave differently.

- Adapt your driving style to avoid accidents.
- Before you hitch a trailer or drive with a hitched trailer:
  - ▷ Please see chapter "Trailer Hitch" on page 275.

Off-road driving

When driving off-road with your Porsche, you must adapt your driving style to avoid accidents, injury and damage to the vehicle.

- Take care that your vehicle does not overturn on embankments, slopes or hills.
- Before driving through water, check the speed of the water, the condition of the surface beneath it and the water depth.
- Always check the ground clearance of your vehicle when driving over obstacles.
- ▷ Please see chapter "Off-road Driving Programs" on page 194.

Responding correctly to warning signals

If the sensors detect malfunctions or defective parts, the vehicle warns you with lights or messages. Disregarding vehicle warning signals may result in an increased risk of accidents and injuries.

- Familiarize yourself with the meaning of warning lights and messages before starting to drive so

that you can respond correctly to the warnings. Stop driving if necessary.

- ▷ Please see chapter "Warning and Information Messages" on page 293.
- ▷ Please see chapter "Instrument Cluster" on page 139.

Hazards during refueling

Fuel is highly flammable, can burn quickly or explode. Fuel and fuel vapors are also harmful to health.

- ▶ Fire, open flames and smoking are prohibited during refueling.
- ▶ Do not inhale fuel vapors.
- ▶ Avoid contact with skin or clothing.
- ▷ Please see chapter "Refueling" on page 234.

Hazardous fluids

Not only fuel, but also engine oil, transmission oil, electrolyte, coolant, refrigerant and brake fluid are hazardous to health and may be fatal if swallowed.

Used engine oil contains chemicals that have caused cancer in laboratory animals.

- ▶ Only work on the vehicle outdoors or in wellventilated spaces.
- ▶ Fluid containers must be labeled appropriately and must be kept out of reach for children.
- ▶ Dispose of residues in an environmentally friendly manner and according to regulations.
- ▶ Always protect your skin by washing thoroughly with soap and water.

Engine oil can ignite. Engine oil stored in nonventilated areas or thrown-away cloths with engine oil residues can self-combust and result in a fire.

- ▶ Wipe up spilled engine oil with a cloth.
- ▶ Cloths soaked with engine oil must be stored in a well-ventilated area until disposal.

Portable Fuel Containers

⚠ DANGER Portable Fuel Container Leaks

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

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

Toxic exhaust gases

Exhaust gas contains colorless and odorless carbon monoxide, which is toxic even in low concentrations.

- ▶ Turn off the engine when the vehicle is stationary. Never leave the engine running unnecessarily in confined spaces.
- ▶ Perform work with the engine running only outdoors or with suitable extraction systems for the exhaust gases.

California Proposition 65

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

Parking the vehicle safely

An improperly parked vehicle can roll away in an uncontrolled manner, endangering persons or causing vehicle damage.

Before you leave the vehicle:

- Activate the electric parking brake.
- Activate the transmission parking lock using the P button. If operating mode **P** flashes on the instrument cluster, the parking lock is not correctly engaged. Press the P button on the selector lever again or switch off the ignition.
  The transmission parking lock is engaged automatically when the ignition is switched off.

⚠ CAUTION Hot Exhaust System

The exhaust system is very hot when the engine is running and for a while after the engine has been stopped. Risk of burns and fire!

- Do not park your vehicle in places where combustible materials, such as dry grass or leaves, can come into contact with the hot exhaust system.
- To prevent injury, make a point of noting where your vehicle's exhaust pipe is, avoid placing your legs near the exhaust pipe, and closely supervise children around the vehicle during time when the exhaust pipe could be hot. A hot exhaust pipe can cause serious burns.

Just in case: Safety in the event of a breakdown or emergency

If you break down, pay attention to this information – for your own safety!

Do not use voice control in case of an emergency

In an emergency, your voice can change so much due to stress that voice control does not recognize it.

- Do **not** use voice control in an emergency.

Removing the fire extinguisher

If available in the relevant vehicle, the fire extinguisher is located under the passenger seat.

- Hold the extinguisher with one hand and press the PRESS button on the fire extinguisher holder with the other hand.

For a proper and safe handling of the fire extinguisher, please note the following points:

- Observe the inspection intervals for the fire extinguisher. If the fire extinguisher is used after the inspection interval has elapsed, functionality is no longer guaranteed.
- Observe the operating instructions on the fire extinguisher.
- Observe the safety instructions on the leaflet supplied by the fire extinguisher manufacturer on the extinguisher handle.
- Have the fire extinguisher checked by an authorized Porsche dealer every one or two years.
- Have the fire extinguisher refilled after use.

Caution when working on the vehicle

The engine and adjacent components in the engine compartment become very hot when the engine is running. The coolant reservoir is pressurized.

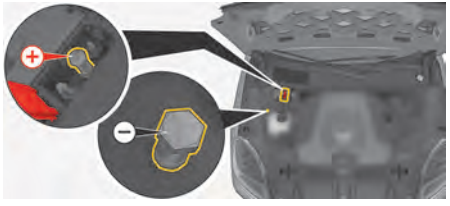
The fans can start running automatically at any time.

- Stop the engine and, if possible, let it cool.
- Keep body parts, clothes, long hair and jewelry away from all moving parts, such as fans and drive belts.
- Wear protective gloves that protect against hot parts.
- Only top up coolant when the engine is cold and the vehicle is level. Do **not** open the coolant reservoir when the engine is hot.

Protective equipment must be worn to perform certain types of work on the vehicle, e.g. gloves to prevent cuts.

- Always have work performed on the vehicle by an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Emergency starting



Emergency starting using unsuitable jumper cables or following incorrect procedures can cause short circuits and potentially a fire.

Moreover, there are injury risks in the engine compartment due to automatically running parts such as for e.g. the radiator fan.

Before providing or receiving emergency starting:

▹ Please see chapter "Emergency Starting" on page 111.

Towing

Danger of significant damage to the vehicle as a result of tow-starting and push-starting.

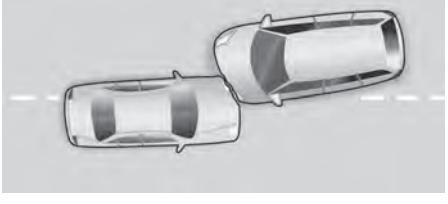
- **Never** tow-start or push-start the vehicle.
- Before towing your vehicle or having your vehicle towed:
  ▹ Please see chapter "Towing" on page 270.

Flat tires

Depending on the driving speed, the vehicle can no longer be steered safely when the tires are damaged.

- **Never** continue driving with a flat tire.
- Stop the vehicle safely in line with the traffic conditions and repair the damage.
  ▹ Please see chapter "Flat Tire" on page 121.

After a collision



The safety systems may not be operational (e.g. seat-belt pretensioners and airbags) after a collision. The safety systems can then no longer protect you.

- Have the safety systems checked even if they were not triggered.
- Have triggered safety systems replaced. Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Carry Emergency equipment

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

Before driving: Important information regarding your Porsche

Feel comfortable in the driver's seat

- Check operation of the horn
- Position seat for easy reach of foot pedals and controls. To reduce the possibility of injury from the air bag deployment, you should always sit back as far from the steering wheel as is

practical, while still maintaining full vehicle control.
- Adjust the inside and outside rear view mirrors.
- Check operation of the foot and electric parking brake.
- Never leave an idling car unattended.
- Lock doors from inside, especially with children in the car to prevent inadvertent opening of doors from inside or outside.
- Drive with doors locked.

Breaking in the vehicle

The moving parts of a new vehicle must be run in. The parts require the first 2,000 miles (3,000 km) for this purpose. The oil and fuel consumption may be somewhat higher than normal during this period.

During the breaking-in period, drive as follows:
- Preferably take long trips. Avoid frequent cold starts with short-distance driving whenever possible.
- Do not participate in motorsport events, sports driving training or similar events.
- Avoid high speeds of over 4,000 rpm. Drive at low engine speeds when the engine is cold.

Breaking in new brake pads

New brake pads and brake disks have to be “bedded in” and therefore only attain optimal friction when the vehicle has covered several hundred miles.

The somewhat reduced braking effect requires more effort when pressing the brake pedal. This is also the case after the brake pads or brake disks have been replaced.

Getting to know the special features of the hybrid vehicle

Electrical system

The voltage in the high-voltage vehicle electrical system and high-voltage battery is extremely dangerous. Touching damaged high-voltage cables, the on-board charger, the high-voltage heater, the high-voltage battery, the power electronics or the A/C compressor can cause a fatal electric shock.

All components of the hybrid system are marked with warning stickers. The high-voltage cables are orange-colored.
- Do not perform any work on the high-voltage vehicle electrical system, orange-colored high-voltage cables, on-board charger, high-voltage heater, high-voltage battery, power electronics or A/C compressor.
- Never damage, remove or disconnect the orange high-voltage cables from the high-voltage vehicle electrical system.
- Do not touch parts of the hybrid system that have been damaged, e.g. following an accident.
- Never remove the high-voltage battery.

Restricted perception

When running electrically, the vehicle produces considerably less driving and running noise than when using the combustion engine. In certain situations - in zones with traffic calming, when reversing or parking, for example - other road users may not hear your vehicle.
- Drive with extreme care and attention.

Emergency switch-off of the hybrid system

Information

Do not remove the "e-hybrid" logos in order to ensure fast and safe rescue or recovery after an accident.

To protect the hybrid system from dangerous high voltage, it is automatically switched off in the following cases:
– An accident where the seat-belt pretensioners or airbags are triggered.
– An electric short circuit is detected in the hybrid system.

– A plug connection of the hybrid system is disconnected.

The vehicle cannot be started if emergency switch-off of the hybrid system has been activated.

- Never attempt to restart the hybrid system yourself.
- Visit a qualified specialist workshop. Porsche recommends a Porsche partner as they have trained workshop personnel and the necessary parts and tools.

Before driving on race tracks

Compared to normal road use, when driving on circuits the vehicle is subjected to disproportionately higher loads. In pure racing vehicles these loads are taken account of by regular maintenance and component reconditioning intervals. These cover checks and the replacement of individual components where necessary after each use on the track, as well as the reconditioning of entire assemblies after certain periods of use.

- Always make inquiries about the current stipulations before driving on race tracks: Contact an authorized Porsche dealer.

Brake system

Brake fluid absorbs moisture from the air over time. This absorption of water lowers the boiling point and can severely impair braking efficiency at high temperatures.

Driving on racetracks puts high pressure on brake pads and brake disks.

- If the brake fluid is more than 12 months old: Replace brake fluid before driving on a track.
- Have the brake pads and brake disks checked for wear before and after driving on tracks.

Tires

The tires are also subject to high stress when the vehicle is driven around a track.

- Have the tires checked for wear before and after driving on tracks.
- Do not fit racing tires. Racing tires are not approved by Porsche.

Engine oil

- Add engine oil up to the maximum mark before driving on tracks.
- Check the engine oil level before and after driving on tracks.
  - ▷ Please see chapter "Instrument Cluster" on page 139.
  - ▷ Please see chapter "Engine Oil" on page 117.

Before driving abroad

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.
– The authorized Porsche dealer may not be able to carry out all repair work.
– Technical adjustments need to be made to the vehicle,
– Some countries require additional tools and special spare parts to be carried in your vehicle, make enquiries before driving abroad.

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.

Data processing in the vehicle

Electronic control units are installed in your vehicle. Some of these are required for the operational safety of your vehicle, while others provide assistance while driving (driver assistance systems). Moreover, your vehicle offers comfort and entertainment functions which are also made possible through electronic control units.

Storing technical data in the vehicle

Electronic control units have data memories that can temporarily or permanently store technical information about vehicle status, component stress, servicing requirements, events or faults. Generally speaking, this technical information documents the status of a component, module, system or environment such as:

- Operating states of system components (e.g. fill levels)
- Status messages about the vehicle and its individual components (e.g. wheel revolutions, speed, deceleration, lateral acceleration)
- Malfunctions and faults in important system components (e.g. lights, brakes)
- Information about events that can damage the vehicle
- The vehicle response in special driving situations (e.g. triggering an airbag, activation of the stability control system)
- Ambient conditions (e.g. temperature)

In addition to providing the actual control unit function, this data is used to detect and correct faults and enables the manufacturer to optimize vehicle functions. Most of this data is volatile and is only processed in the vehicle itself. Only a small part of the data is stored in event or fault memories. Moreover, your vehicle offers comfort and entertainment functions which are also made possible through electronic control units.

Read-out of technical data

When having your vehicle serviced, service network employees (e.g. workshops, roadside assistance, manufacturers) can read out the technical information from the vehicle. Services include repair services, service processes, warranty claims and quality assurance measures for example. The data is read out using a legally required connection for OBD ("On-board diagnosis") in the vehicle. The data is collected, processed and used by the relevant service network personnel and may be sent to Porsche in order to comply with product monitoring obligations or to improve quality for example. Fault and event memories in the vehicle can be reset by a service center during repairs or servicing.

Using functions in the vehicle

Within the scope of the selected equipment options, you can enter information such as multimedia and address book data or navigation destinations and other settings in the vehicle comfort and infotainment functions. This data may be stored locally in the vehicle or it may be contained on a device which you have connected to the vehicle (e.g. smartphone, USB stick or MP3 player). If this data is stored in the vehicle, you can delete it at any time. This data is only sent to third parties at your request and particularly while using online services, only in accordance with the settings you have selected.

If your vehicle has the required equipment, you can control your connected smartphone or another mobile device using the controls integrated in the vehicle. Images and sound from your smartphone can be output via the multimedia system. Certain information can also be transferred to your smartphone. This includes general vehicle information or position data, for example, depending on the type of integration. This allows optimal use of selected apps on the smartphone, e.g. for using a navigation system or music playback. The smartphone cannot be used to actively access vehicle data. The type of subsequent data processing is determined by the provider of the relevant app being used. Whether and which settings you can configure for this depends on the app and the operating system on your smartphone.

Use of online services

If your vehicle has a wireless network connection, this can be used to exchange data between your vehicle, the surrounding area and other systems. You can connect to the wireless network via the send and receive unit in the vehicle or via your connected mobile devices (e.g. smartphones). Online functions can be used via this wireless network connection. These include online services and applications/apps that are available to you through Porsche or other providers.

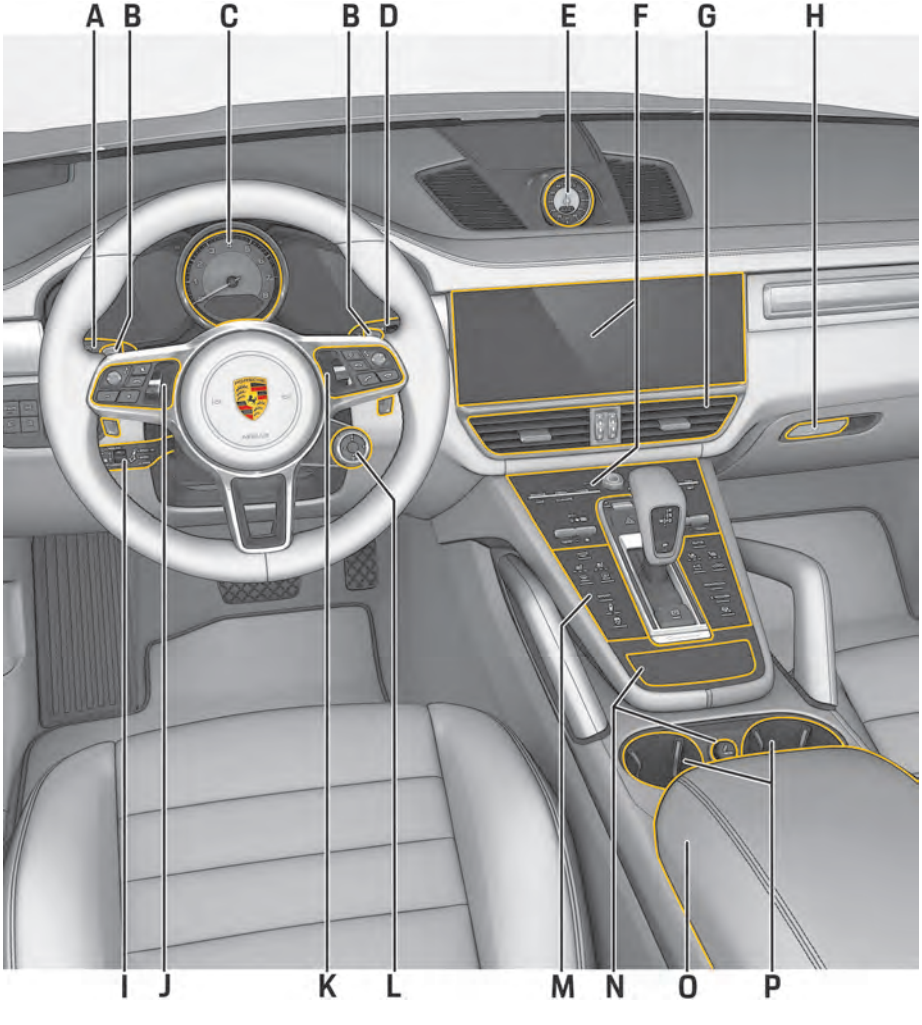
For Porsche online services, the various functions are described at a suitable place (e.g. the Porsche Connect website) and the related data protection legislation information is provided. Personal data can be used for the provision of online services. The required data exchange takes place via a protected connection, e.g. with the Porsche IT systems set up for this purpose. Collection, processing and use of personal data beyond that required for the provision of services takes place exclusively on the basis of legal authorization or consent.

Usually, you can activate or deactivate the (often fee-based) services and functions and in some cases, even the entire data connection in the vehicle. This does not apply to functions and services required by law, in particular.

If there is a possibility of using online services from other providers, these are the responsibility of and subject to the data protection policy and terms of usage of the relevant provider. Porsche has no influence on the data exchanged in these cases. Given this, please request information from the relevant service provider on the type, scope and purpose of such data collection and the use of personal data in the context of third-party services.

Overview Illustrations

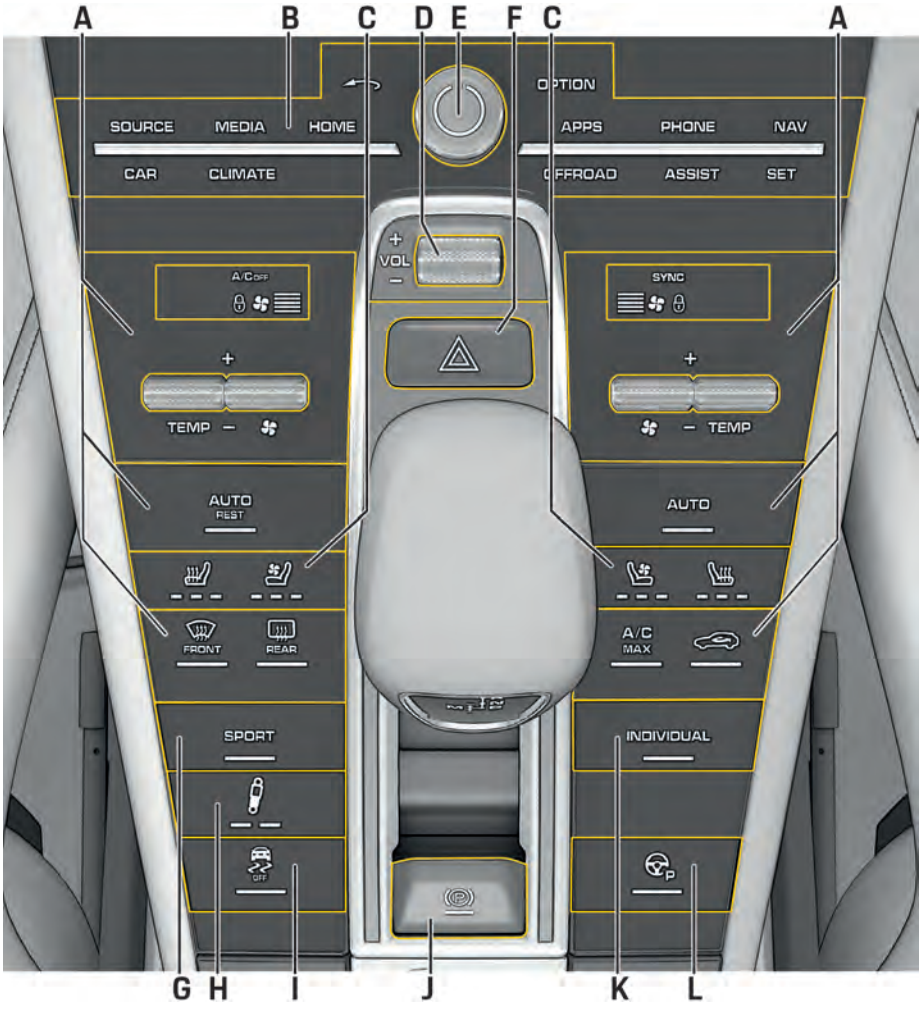
On the following pages you will find overviews of all areas of the vehicle, with a brief explanation. Further information can be found on the specified pages.



Porsche Advanced Cockpit

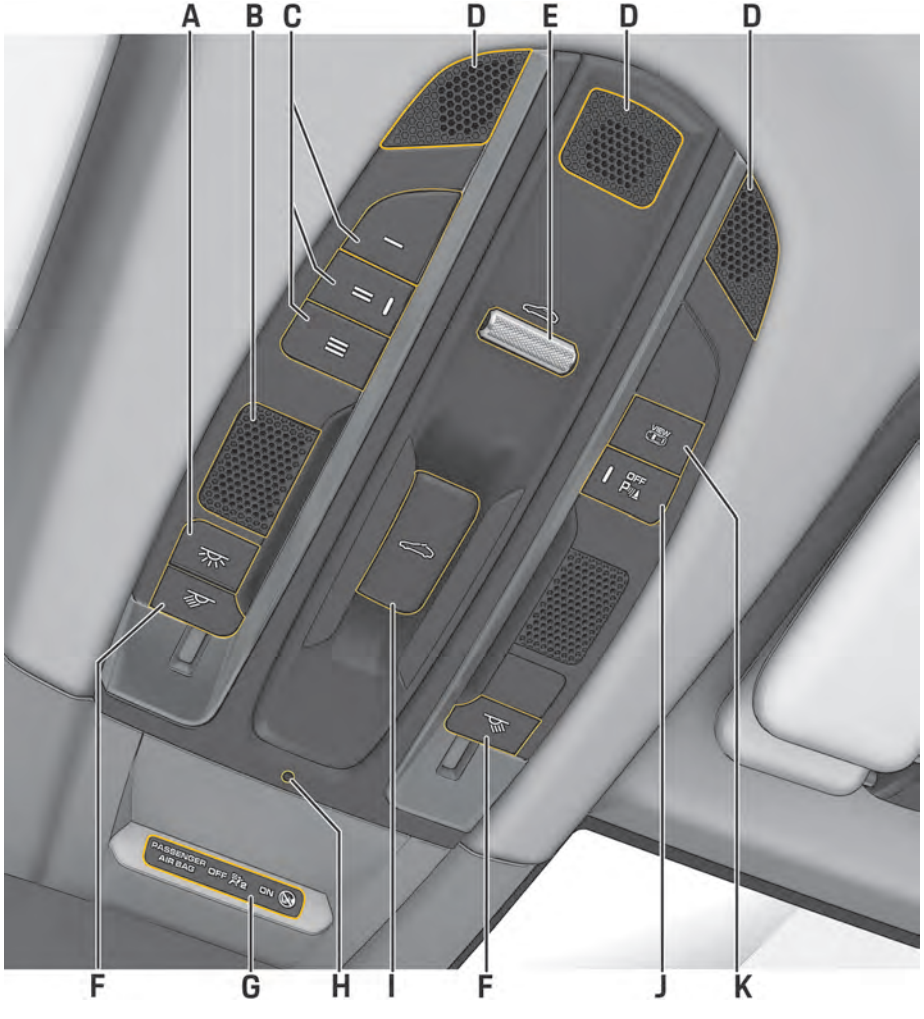
Driver's Cockpit

A	Power windows and tailgate	▷ p. 327
B	Door opener	
C	Memory buttons for personal settings	▷ p. 206
D	Light control panel	▷ p. 159
E	Ignition lock, steering lock	▷ p. 261
F	Overhead console	▷ p. 27
G	Door mirror adjustment	▷ p. 175
H	Central locking	▷ p. 85
I	Hood release	▷ p. 134
J	Steering wheel adjustment	▷ p. 262
K	Seat adjustment	▷ p. 249



Control Panel

A	Air conditioning system	▷	p. 59
B	Porsche Communication Management (PCM)	▷	p. 215
C	Seat heating, seat ventilation	▷	p. 253
D	Volume control, mute	▷	p. 215
E	Rotary push button (for controlling the PCM)	▷	p. 215
F	Emergency flasher	▷	p. 159
G	SPORT mode	▷	p. 195
H	Porsche Active Suspension Management (PASM)	▷	p. 212
I	Porsche Stability Management (PSM)	▷	p. 228
J	Electric parking brake	▷	p. 76
K	INDIVIDUAL mode	▷	p. 195
L	Active parking support	▷	p. 198

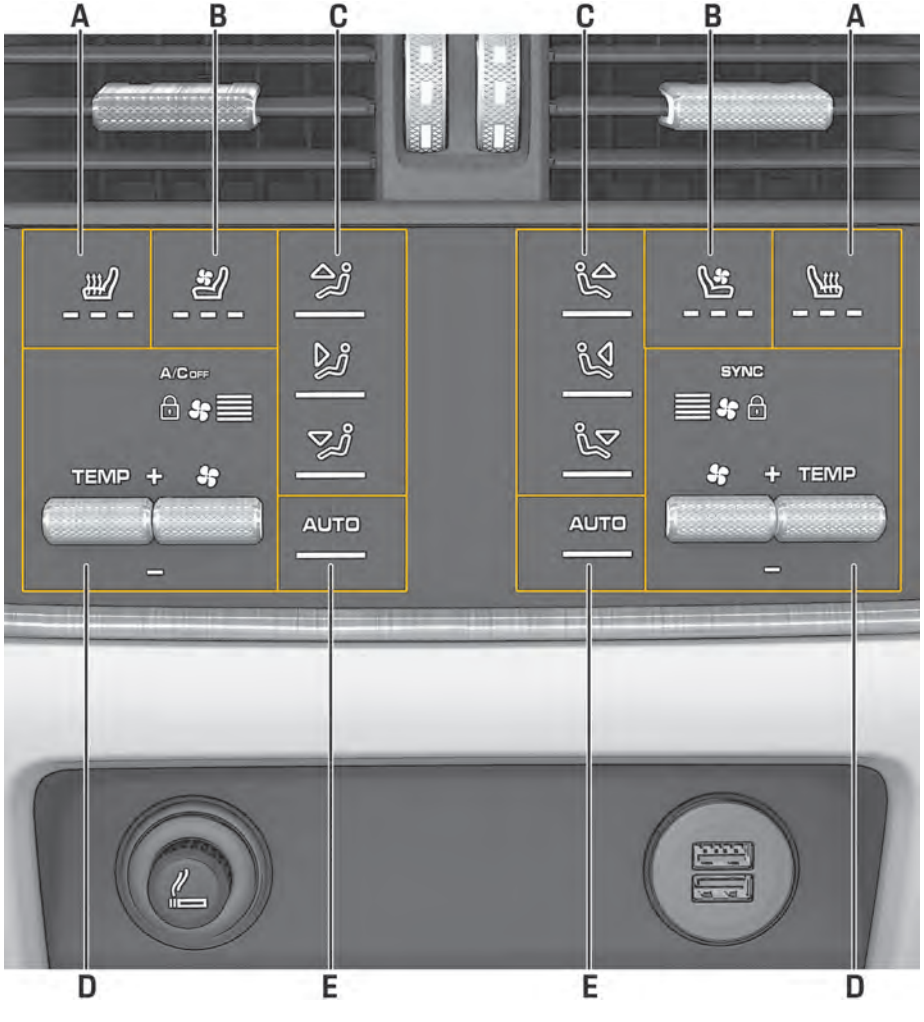


Overhead Console

A	Interior lighting	▷ p. 146
B	Hands-free microphone	
C	Garage door opener/HomeLink®	▷ p. 129
D	Passenger compartment monitoring sensors	
E	Sunblind	▷ p. 239
F	Reading lights	▷ p. 146
G	PASS AIR BAG OFF/ON warning light	▷ p. 54
H	Orientation lighting	
I	Panoramic roof system	▷ p. 238
J	ParkAssist off button	▷ p. 199
K	Activating Surround View	▷ p. 200

Rear

A	Air vents	▷ p. 62
B	Central locking	▷ p. 85
C	Door opener	▷ p. 85
D	Power windows	▷ p. 327
E	Map pocket	
F	Air conditioning system	▷ p. 59
G	Ashtray/storage compartment	▷ p. 255
H	USB charge port	
I	Seat adjustment	▷ p. 249



Air-Conditioning Control Panel in the Rear

A	Seat heating	▷ p. 253
B	Seat ventilation	▷ p. 253
C	Air distribution	▷ p. 63
D	Temperature and air flow	▷ p. 60
E	Switching on automatic mode	▷ p. 61

Engine compartment filler openings

A	Washer fluid	▷ p. 315
B	Brake fluid	▷ p. 75
C	Coolant	▷ p. 102
D	Engine oil	▷ p. 117

Practical Tips

On the following pages you will find practical tips for the selected area of your vehicle.

Practical Tips

General Operation of Porsche Advanced Cockpit and Porsche Communication Management (PCM)

Topic	Tip
Operating assistance systems	Assistance systems can be switched on and off via the touch display in the dashboard by selecting **ASSIST**. Preliminary settings for the assistance systems can be configured under **ASSIST** ▸ Options ▸ **Assistance system settings**.
Making vehicle settings	General vehicle settings can be made under **CAR** ▸ **CONTROL** ▸ **Vehicle** (Vehicle settings) or under **CAR** ▸ **CONTROL** ▸ **Search** (PCM touch display and instrument cluster settings).
Operating the instrument cluster	The displays integrated on the left and right in the instrument cluster are displayed by turning and pressing the rotary knobs on the multifunction steering wheel. ▷ Please see chapter "Instrument Cluster" on page 139.
Using the ◊ button on the multifunction steering wheel	Various vehicle and Infotainment functions (e.g. for the radio/media playback, navigation, etc.) can be freely assigned to the ◊ button on the multifunction steering wheel. ▷ Please see chapter "Vehicle Settings" on page 285.
Quick access via the Info widget and homescreen	The Info widget and the homescreen provide fast access to the most important vehicle and infotainment functions and can also be individually adapted.
Opening the Device Manager	Connections can be managed centrally using the Device Manager (e.g. connect phone or Bluetooth® audio player). ▸ Select or in the header (depending on the connection status).

Topic	Tip
Activating voice control	The button on the left-hand control lever on the steering wheel initiates different functions depending on the application: – Brief press: PCM voice control is enabled. – Longer press: Siri voice recognition is activated (only in conjunction with Apple CarPlay)
Switching between two connected cellphones	If a cellphone is already connected to the PCM, a second cellphone can also be connected to the PCM and the user can switch between the two cellphones. ▶ Select the currently connected cellphone at the top right in the header. The two devices already connected are displayed. ▶ Select the desired cellphone.

Garage door opener

Topic	Tip
Programming the garage door opener	Insufficient battery power in the original remote control can cause malfunctions in signal transmission. In this case, the system in the vehicle learns an incorrect code that cannot be reliably detected by the garage door drive system. ▶ Make sure that there is a new battery in the original remote control for the garage door opener.

Air conditioning

Topic	Tip
Switching upper ventilation panel on or off	The upper ventilation panel can be switched on and off via the touch display in the dashboard: ▶ **CLIMATE** ▶ **AIR** ▶ **Ventilation panel**
Adjusting the fresh air supply depending on the air quality	Auto air-recirculation mode can be switched on and off via the touch display in the dashboard: ▶ **CLIMATE** ▶ **COMFORT** ▶ **Auto air circ.**

Central Locking

Topic	Tip
Only one door is unlocked when the vehicle is unlocked.	The setting for locking and unlocking the doors has been changed. All doors can be unlocked irrespective of the selected setting. ▶ Press button on the vehicle key twice within 5 seconds. The setting can be changed under **CAR** ▶ **CONTROL** ▶ **Vehicle** ▶ **Locking**.
Opening and closing the tailgate with foot gesture	On vehicles with Easy Entry, the tailgate can also be operated via foot gesture. ▷ Please see chapter "Tailgate" on page 265.

Topics

On the following pages, the content is arranged in topics in alphabetical order.

Active Lane Keeping

General safety instructions

⚠ WARNING Lack of attention

Active Lane Keeping is designed for use on highways and well-surfaced country roads only. The increased comfort offered by Active Lane Keeping should not induce you to risk your safety. Responsibility for staying in the lane and correctly assessing the traffic situation always lies with the driver. The following driving situations may arise:

- In the event of heavy braking, corrective steering intervention might not take place.
- During active steering by the driver, corrective steering intervention might be reduced or not take place.
- The system cannot fully detect the environment. Steering interventions might not take place.
- The system cannot correctly interpret the environment. This could result in inadvertent steering interventions.
- Corrective steering intervention alone may not be sufficient to keep the vehicle in the driving lane if there are ruts, winding roads, inclined road surfaces or a crosswind. The driver must actively steer in such situations.
- The system may not work as expected in unclear traffic situations, such as turn-off lanes, exits, building sites or city traffic. Steering intervention might not take place or be feasible.
- It is possible that the system will remain active in unwanted or unexpected situations, or switch to passive mode unexpectedly.

- ▶ Keep your hands on the steering wheel at all times order to always be ready to steer.
- ▶ Always be ready to take over driving tasks (steering, accelerating or braking) yourself. If a warning appears on the instrument cluster, take over control of the vehicle immediately.
- ▶ Drive with extreme care.
- ▶ Always pay attention to the traffic situation and the vehicle surroundings.
- ▶ Adapt your driving speed to road and weather conditions.

⚠ WARNING Restricted perception of the environment

Detection of the area around the vehicle by the sensors (e.g. camera, radar) may be restricted by different influencing factors (e.g. rain, snow, ice, heavy water spray, oncoming headlights, dirt or damage). This can result in failure to make steering interventions or in unexpected steering interventions.

- ▶ Drive with extreme care.
- ▶ Always pay attention to the traffic situation and the vehicle surroundings.
- ▶ Clean the front camera lens and front radar regularly and keep them free of snow and ice.
- ▶ Do not cover the sensors.
- ▶ Check the windshield for damage in the area of the camera lens at regular intervals.

⚠ WARNING Unexpected system behavior

In some situations, corrective steering intervention is not enough to keep the vehicle in the lane. Furthermore, the function can change from active to passive at any time.

- ▶ Drive with extreme care.
- ▶ Always hold the steering wheel with both hands.

⚠ WARNING System fault with a warning message

If a system fault occurs, Active Lane Keeping may switch off automatically. The status display goes out, and a warning message appears on the instrument cluster.

- ▶ Drive with extreme care.
- ▶ Always hold the steering wheel with both hands.
- ▶ Always be ready to take over driving tasks (steering, accelerating or braking) yourself.
- ▶ If a warning appears on the instrument cluster, take over control of the vehicle immediately.

For other restrictions and information regarding Adaptive Cruise Control (ACC) and Lane Keep Assist:

- ▷ Please see chapter "Adaptive Cruise Control (ACC)" on page 41.
- ▷ Please see chapter "Lane Keep Assist" on page 156.

⚠ WARNING Physical limits and system limits

In some situations, corrective steering intervention is not enough to keep the vehicle in the lane. Furthermore, the function can change from active to passive at any time.

- ▶ Drive with extreme care.
- ▶ Always hold the steering wheel with both hands.

Information

The driver's steering behavior is monitored when Active Line Keeping is switched on and active. If there is no steering activity (e.g. hands not resting or resting only lightly on the steering wheel), a warning appears on the instrument cluster after a short time. The system prompts the driver to actively take over the steering. If the driver does not react to the take-over prompt, the system switches to a passive state. On vehicles with active emergency stop function, the vehicle may be decelerated to a standstill.

- Please see chapter "Emergency Stop Function" on page 113.
- Please see chapter "Adaptive Cruise Control (ACC)" on page 41.
- Please see chapter "Lane Keep Assist" on page 156.
- Please see chapter "Lane Change Assist (LCA)" on page 151.

System limitations

WARNING Driving situations with risk of accidents

There are some driving situations in which the system cannot guarantee Active Lane Keeping. There is therefore a risk of accidents when using the system!

These include the following driving situations:

- When increased attention is required on the part of the driver
- During sporty driving
- In adverse weather conditions (e.g. fog, snow or heavy rain)
- In unfavorable road conditions (including poor surfaces or unclear lane markings)
- In areas with road construction
- When approaching humps and dips
- In urban traffic
- On winding and narrow country roads
- In unclear traffic situations such as intersections or tollbooths
- Off-road or on unpaved or slippery roads

The system does not always keep the vehicle in the center of the lane or in a central position behind the vehicle ahead.

Active Lane Keeping does not react to people and animals or vehicles crossing lanes or oncoming vehicles in the same lane. These are not detected as obstructions by the sensors.

- **Never** use Active Lane Keeping in the specified situations.
- Do not use Active Lane Keeping to steer the vehicle around obstructions lying on the road.

Information

If there is a fault in the system or if Active Line Keeping does not function as described in this section, do not use the assistance function. Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Responding to warning symbols

Always heed any warning and information messages displayed in the vehicle.

- Please see chapter "Warning and Information Messages" on page 293.

Operating principle

The key components for monitoring the Active Lane Keeping environment include a front camera, front and rear radar as well as ultrasound sensors. Recorded sensor data is collated and evaluated.

Active Lane Keeping helps the driver keep the vehicle centrally in the lane by making continuous steering interventions.

When the system is active, the driver can set a preferred position within the lane. When the driver keeps the vehicle at the desired position for several seconds, the system ends lane center guidance and starts driving at an offset position in the lane. The shift in position is reset again when the system becomes passive or is deactivated (e.g. by indicating, changing lane or braking).

Active Lane Keeping is linked to the Adaptive Cruise Control (ACC) and operates within a speed range of approx. 0 mph – 130 mph (0 – 210 km/h). The system is designed for driving on highways and well-surfaced country roads.

Active Lane Keeping can make it easier to drive in traffic jam situations. The system always prioritizes the lane markings over other objects (e.g. vehicles). In some cases, this can mean that the driver has to position the vehicle in the center of the lane in order to activate the system. Activation of the system outside the center of the lane is prevented so that the driver does not feel a strong steering torque on the steering wheel immediately after the system is activated.

The driver is always responsible for moving to the side of the road to create a lane for emergency vehicles. In this situation, the driver can switch off the system or simply override the system using the steering wheel.

Behavior when the turn signal is activated

The system also takes the turn signal into account. If the driver activates the turn signal, steering interventions are suppressed on the selected side. The status icon remains green (active).

✓ Vehicles with Lane Change Assist:
If the vehicle is equipped with Lane Change Assist and this is active, a corrective steering intervention warns the driver of a potentially critical situation when changing lanes (information stage, warning stage). This also happens if the turn signal is activated for the relevant direction. If the driver overrides the steering intervention, an additional warning is provided via a warning tone (if Lane Keep Assist and warning tone volume in the PC are activated).

Behavior if there is no steering activity

The driver's steering behavior is monitored when Active Lane Keeping is switched on and active. If there is no steering activity (e.g. hands not on the steering wheel or only resting lightly), a warning appears on the instrument cluster. The system prompts the driver to actively take over the steering. If the driver does not react to the takeover prompt, the system switches to a passive state. On vehicles with active warning and brake function[1], the vehicle may be decelerated to a standstill.

▷ Please see chapter "Porsche Active Safe (PAS)" on page 208.

Display elements

Fig. 1: Active Line Keeping in the Speed & Assist display

A Active Line Keeping status display
B The ACC status display with desired speed and vehicle ahead

Reading off the system states

The table shows the system states of the Active Line Keeping and their display on the instrument cluster.

Status display	Meaning
No display	Active Line Keeping is switched off.
	Active Line Keeping is switched on but passive.
	Active Line Keeping is switched on and active.
	Active Line Keeping and Lane Keep Assist are switched on and both are passive.
	Active Line Keeping and Lane Keep Assist are switched on and both are active.
	Active Line Keeping is active and Lane Keep Assist is passive, e.g. at a vehicle speed below 38 mph (60 km/h).
	Active Line Keeping is passive and Lane Keep Assist is active, e.g. when ACC status is "Ready".

Information

When Active Lane Keeping and Lane Keep Assist are active at the same time, Active Lane Keeping continuously keeps the vehicle in the driving lane. Lane Keep Assist also warns the driver visually and acoustically when leaving the driving lane.

▷ Please see chapter "Lane Keep Assist" on page 156.
▷ Please see chapter "Setting acoustic warning" on page 158.

1. Available in some countries.

Switching Active Lane Keeping on and off

Active Lane Keeping can be switched on and off in the PCM.

▶ **ASSIST**  ▶ **Active Lane Keeping** 

Information

Active Lane Keeping can only be activated when Adaptive Cruise Control (ACC) is activated. The driver can deactivate Active Lane Keeping at any time by pressing the brake or by oversteering.

Active Lane Keeping switched on but passive

If Active Lane Keeping is switched on but passive, this may be because of the following reasons:

- The vehicle speed is above the deactivation threshold of 130 mph (210 km/h)
- The environment monitoring is not clear. For example, the lane markings of the currently driven lane are not detected (e.g. due to snow, dirt, wet conditions, oncoming headlights) or do not qualify as valid.
- The distance to the nearest lane marking is too great.
- The lane is too wide or too narrow.
- Temporarily in conjunction with a dynamic driving style.
- Your hands are not on the steering wheel.
- ACC is in "standby" mode.

Additional information

Comparison of Lane Keep Assist and Active Lane Keeping

Function	Lane Keep Assist	Active Lane Keeping	Lane Keep Assist + Active Lane Keeping
Status icon			
Lane center guidance	No	Yes	Yes
Lane departure warning	Yes	No	Yes
Steering intervention to prevent lane departure (lane edge guidance)	Yes	No	No
Speed range	approx. 40 - 156 mph (65 - 250 km/h)	approx. 0 - 130 mph (0 - 210 km/h)	See individual function
ACC dependence	No	Only in conjunction with active ACC	See individual function

Adaptive Cruise Control (ACC)

Adaptive Cruise Control (ACC) can be used on the open road to maintain a constant selected speed between approx.
19 and 130 mph (30 and 210 km/h) without having to press the accelerator pedal.
If another vehicle that traveling slower than the selected speed is detected ahead in the same lane, Adaptive Cruise Control automatically maintains a set distance. Adaptive Cruise Control will cause the vehicle to brake if the distance from the vehicle in front becomes too small and to accelerate if the distance increases.

⚠ WARNING Lack of attention

The increased comfort offered by ACC should not induce you to risk your safety. Despite ACC, responsibility for maintaining a safe distance, choosing a suitable speed, etc. remains with the driver. The system cannot replace the driver's attentiveness.

- Particular attentiveness is required while driving.
- If ACC does not decelerate quickly enough, you should use the footbrake to slow down the vehicle immediately. Make sure that you can take control of the vehicle at any time.

⚠ WARNING Unsafe traffic situation and unfavorable road conditions

If the prevailing situation does not allow you to drive safely at a sufficient distance and constant speed, use of the ACC can cause accidents.

- Do not use ACC in heavy traffic, when you encounter road works, in urban traffic, on winding roads or when road conditions are unfavorable (e. g., wintery conditions, wet or variable road surfaces).
- Observe all local and national speed limits.

⚠ WARNING Failure of Adaptive Cruise Control to detect vehicles or objects

Pedestrians or objects on the road, oncoming vehicles in the same lane and cross traffic are not detected. Stationary or slow-moving vehicles are only detected to a limited extent by ACC.

- You should intervene as necessary.
- Always keep your eyes on the road ahead.

Radar sensor

Fig. 2: Radar sensor position

Information

- Always keep the radar sensor free of dirt, ice and snow to ensure that it is always fully functional.

⚠ WARNING Restricted range of the radar sensor and camera

The range of the radar sensor and camera may be restricted by rain, snow, ice and heavy spray. Vehicles up ahead may not be adequately detected, or may not be detected at all.

- Do not use ACC in such conditions.

⚠ CAUTION ACC restricted or not available

Shocks or damage to the bumper, wheel housings or underbody, e.g. through parking collisions, can displace the sensors. This may impair the performance of the Adaptive Cruise Control.

- Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

⚠ WARNING Radiofrequency Radiation Exposure

This equipment complies with the specified FCC radiation exposure limits for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 8 in. (20 cm) between the radiator and your body.

- This transmitter must not be next to or operating in conjunction with any other antenna or transmitter.

Exceptions

⚠ WARNING Adaptive Cruise Control (ACC) system limits

- The following exceptions for ACC must also be considered when using Porsche InnoDrive:
  - For safety reasons, ACC must not be used under unfavorable road conditions and/or poor weather conditions (e.g. snow-covered or slippery road

surface, fog, stone chippings, heavy rain or aquaplaning).
- Switch off ACC temporarily when driving on turn-off lanes, highway exits or in areas with roadworks. This will prevent the vehicle from accelerating to the set speed in such situations.
- ACC does not brake automatically when the foot is placed on the accelerator pedal. Placing the foot on the accelerator pedal may override the cruise and distance control.
- When approaching stationary vehicles, for example at the end of a traffic jam, ACC only operates to a restricted extent.
- ACC does not react to people, animals, crossing or oncoming objects.
- Reflective objects such as crash barriers or tunnel entrances, heavy rain or ice formation may impair the functionality of the radar sensor. A message indicating that ACC is not available appears on the instrument cluster.

Operating principle of Adaptive Cruise Control (ACC)

No vehicles detected ahead – open road

Adaptive Cruise Control behaves like a speed control system. The desired speed set is kept constant.

Vehicle detected in front – follow mode

If another vehicle that is traveling slower than the selected speed is detected ahead in the same lane, Adaptive Cruise Control automatically maintains a set distance.

If the vehicle in front stops, Adaptive Cruise Control slows the vehicle and brings it to a stop, provided that this is possible within the system's control parameters.

Adaptive Cruise Control actively keeps the vehicle in a stationary position.

When the vehicle in front drives off, the automatic speed and distance control can start again.

Override

The speed of the vehicle can be increased at any time by pressing the accelerator pedal.

If the speed set by Adaptive Cruise Control vehicle is exceeded by pressing on the accelerator pedal, the Adaptive Cruise Control is deactivated.

A message indicating that ACC is in passive mode appears on the instrument cluster. The desired speed setting is retained.

After the accelerator pedal is released, Adaptive Cruise Control maintains the desired speed on an open road, or the appropriate distance when traveling behind another vehicle.

For information on ACC operating states:

▷ Please see chapter "Operating states of Adaptive Cruise Control (ACC) when active" on page 43.

Operating Adaptive Cruise Control (ACC)

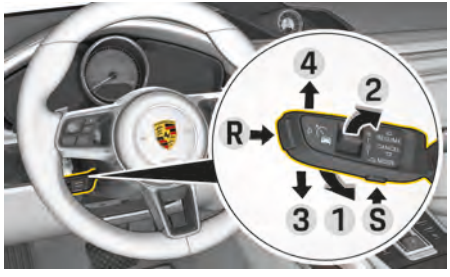


Fig. 3: Control lever

R Switch driver assistance systems on/off
S Switch between driver assistance systems
1 Set/increase the desired speed
2 Reduce the desired speed
3 Interrupt (CANCEL)
4 Return to set speed (RESUME)

Information

The driver can intervene at any time by pressing the brake or accelerator pedal.

Adaptive Cruise Control (ACC) display

All important information, messages and warnings for Adaptive Cruise Control are displayed in the **ACC** main menu on the Speed & Assist display in the instrument cluster.

Fig. 4: ACC on the Speed & Assist display

A Desired distance from the vehicle ahead
B Status display and desired speed
C Vehicle detected ahead
D Current distance from the vehicle ahead
E Current speed of the vehicle ahead
F Status display and desired speed

When Adaptive Cruise Control (ACC) is switched on, the status display **B** appears on the Speed & Assist display in the instrument cluster.

The status display **B** is red when Adaptive Cruise Control is active.

The status display **B** is gray when Adaptive Cruise Control is inactive.

Adaptive Cruise Control is switched on and no desired speed is stored.

Desired speed is stored and no vehicle has been detected ahead.

Desired speed is stored and a vehicle has been detected ahead.

Switching Adaptive Cruise Control (ACC) on and off

Switching on Adaptive Cruise Control (ACC) readiness

✓ Adaptive Cruise Control (ACC) on (button **R**).

1. Press button **S** on the control lever.
   The options menu for the driver assistance systems appears on the instrument cluster.
2. Select **ACC** using the **left** rotary knob on the steering wheel and press to confirm.
   Adaptive Cruise Control is ready.

Switching Adaptive Cruise Control (ACC) off

▸ Press button **R** on the control lever.
A message that ACC is switched off appears on the instrument cluster.
The desired speed setting is deleted.
The desired distance is stored.

Operating states of Adaptive Cruise Control (ACC) when active

Three operating modes are possible when Adaptive Cruise Control is switched on.

Adaptive Cruise Control (ACC) active

Adaptive Cruise Control automatically controls the driving speed and the distance from the vehicle ahead.

The status display **B** is red.

Adaptive Cruise Control (ACC) standby

Speed and distance control is deactivated after the brakes are applied or when the control lever is pressed down (position **3**, **CANCEL**).

The desired speed setting and the selected distance are retained. Status display **B** is gray.

▹ Please see chapter "Interrupting and resuming speed and distance control" on page 45.

Adaptive Cruise Control (ACC) passive

Speed and distance control are inactive after the accelerator pedal has been pressed.

A message indicating that ACC is in passive mode appears on the instrument cluster.

The desired speed setting and the selected distance are retained.

The status display **B** turns gray.

Speed and distance control are reactivated after the accelerator pedal has been released.

Setting and changing the desired speed

✓ Adaptive Cruise Control on.
✓ No stationary objects detected ahead.

Exception: stationary object is recognized as a vehicle.

Setting the desired speed

1. Press the control lever on the steering wheel forward.
   The current speed is saved as the desired speed to be maintained automatically (within a control range from approx.
   20 – 165 mph (30 – 210 km/h)) and appears red in the status display **B**.
   The red bar **F** indicates the speed of your vehicle.
2. Release the accelerator pedal.

The desired speed is automatically maintained provided that a slower vehicle is not detected ahead.

Information

If a stationary object is detected ahead and you press the control lever forward (position **1**), a message that ACC cannot be activated when parked appears on the instrument cluster.

Increasing the desired speed

- Briefly press the control lever on the steering wheel forwards (position **1**) (increments of 1 mph (1 km/h)) or keep it pressed (increments of 5 mph (10 km/h)).
  The status display **B** shows the new desired speed.
  The red bar **F** indicates the speed of your vehicle.

Reducing the desired speed

- Briefly pull the control lever toward the steering wheel (position **2**) (increments of 1 mph (1 km/h)) or keep it pulled (increments of 5 mph (10 km/h)).
  The status display **B** shows the new desired speed.
  The red bar **F** indicates the speed of your vehicle.

Setting the desired distance

The desired distance from the vehicle in front can be set in **5** stages. Stage **3** is recommended.

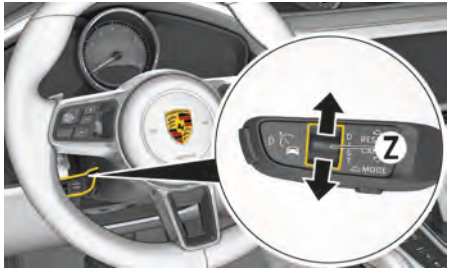


Fig. 5: Setting the desired distance

Information

When the system display is not active, pressing switch **Z** for the first time displays the main menu for the driver assistance system without changing the desired distance.

Information

The distance depends on the driving speed. It reduces as the vehicle slows down and increases as it speeds up.

Increasing the desired distance

- Press the rocker switch **Z** upward.
  The relevant more distant segment of the desired distance indication **A** to the vehicle in front **C** is displayed.

Reducing the desired distance

- Briefly press the switch **Z** downward.
  The relevant closer segment of the desired distance indication **A** to the vehicle in front **C** is displayed.

Displaying the distance from the vehicle ahead

If a vehicle is detected ahead, the vehicle symbol **C** appears on the instrument cluster and in the status display **B**.

The gray area **D** shows the current distance from the vehicle in front (Fig. 4).

The smaller the distance to the vehicle in front **C**, the larger the vehicle is shown. The greater the distance to the vehicle in front **C** the smaller the vehicle is shown.

Symbol	Suitable for	Distance at 75 mph (120 km/h)
	Speedy driving in lines of traffic	approx. 36 yards (33 m) (≙ 1 sec.)
	Driving comfortably in lines of traffic	approx. 47 yards (43 m) (≙ approx. 1.4 sec.)
	Corresponds to "half speedometer distance"	approx. 66 yards (60 m) (≙ approx. 1.8 sec.)
	Driving on country roads	approx. 84 yards (77 m) (≙ approx. 2.2 sec.)
	Driving in sparse traffic	approx. 95 yards (87 m) (≙ approx. 2.6 sec.)

⚠ WARNING Following too close

Driving too close to the vehicle in front may result in a collision.

- Always maintain the specified distance that applies in each country.

Automatic braking until the vehicle comes to a standstill

If the vehicle in front stops, Adaptive Cruise Control, if active, slows the driver's vehicle and brings it to a stop within the control parameters.

The light indicator HOLD on the instrument cluster lights up.

The vehicle is actively held in a stationary position. For information on the HOLD function: Please see chapter "HOLD Function: Standstill Management" on page 132.

Information

Depending on the traffic situation, e.g., in slow-moving traffic, deceleration begins with a slow creeping phase that ends with the vehicle at a standstill.

Information

When distance control is active or while the vehicle is held, the brake pedal may feel different and you may hear hydraulic noises. This behavior is typical of the system. There is no fault.

Moving off again

Depending on the operating status of Adaptive Cruise Control, it is possible to drive off again after the vehicle has stopped and automatic speed and distance control can start again.

Adaptive Cruise Control (ACC) active

- Push up the control lever on the steering wheel (setting **4**, **RESUME**).
  – or –
  Touch the accelerator pedal briefly.
  The vehicle continues driving automatically.
  Automatic moving off again in stop-and-go traffic within a few seconds.

Information

Depending on the situation, Adaptive Cruise Control supports automatic moving off again in stop-and-go traffic. This enables comfortable control in slow-moving traffic.

The message **ACC ready** on the instrument cluster informs the driver that the vehicle is ready to move off.

⚠ WARNING Risk of collision

The vehicle may move off again in stop-and-go traffic, even if there is an obstacle between your vehicle and the vehicle in front.

- Brake immediately.

Information

It is not possible to move off as long as the vehicle ahead remains stationary.

Adaptive Cruise Control (ACC) ready

Automatic speed and distance control only can be resumed again when the vehicle is stationary or moving and if no stationary objects are detected in front.

- Press the control lever on the steering wheel upward (position **4**, **RESUME**).
  – or –
  Set the desired speed.

Interrupting and resuming speed and distance control

Interrupting speed and distance control – CANCEL

- Press the brake pedal.
  – or –
  Press the control lever on the steering wheel down (setting **3**, **CANCEL**).
  Adaptive Cruise Control is inactive.
  The desired speed and distance settings are retained.
  The status display **B** changes from red to gray.

Information

When the vehicle is stationary, the speed and distance control can only be canceled via the control lever. Activation of ACC is thus also possible when stationary

Resuming cruise control and distance control – RESUME

- Briefly press the control lever on the steering wheel upward (position **4**, **RESUME**).
  The vehicle accelerates to the set desired speed provided there is no vehicle detected ahead traveling slower than the selected speed and the distance from this vehicle is less than the set desired distance.

The status display **B** changes from gray to red.

Information

If speed and distance control was interrupted by moving the control lever to position **3** (**CANCEL**), it can only be resumed again when the vehicle is moving and no stationary objects are detected in front.

ACC warning messages

Takeover prompt in active control mode (ACC active)

If Adaptive Cruise Control has detected that braking assistance is required on the part of the driver, a warning signal sounds and a warning message appears on the instrument cluster.

For information about Adaptive Cruise Control (ACC) warning messages:

▷ Please see chapter "Warning and Information Messages" on page 293.

⚠ WARNING Inadequate braking power during automatic braking

In this case, the deceleration through Adaptive Cruise Control is insufficient to prevent a collision.

▸ Brake immediately.

Exceptional conditions with Adaptive Cruise Control (ACC)

Adaptive Cruise Control is not available because Adaptive Cruise Control (ACC) was switched off.

– If the ignition is switched off.
– When PSM is off.
– When driver's door is open and seat belt is not fastened on the driver side.
– When the electric parking brake is activated.
– If the selector lever is in position **N**, **R** and **P**.
– On steep upward or downward slopes.

Traffic situations in which vehicles cannot be reliably detected

The Adaptive Cruise Control (ACC) radar sensor detects a narrow, conical area in front of the driver's vehicle.

Depending on the traffic situation and the size of the vehicle ahead, detection may be restricted or unstable. The system may brake too late or unexpectedly.

▸ Particular attentiveness is required while driving.
▸ Brake if necessary.

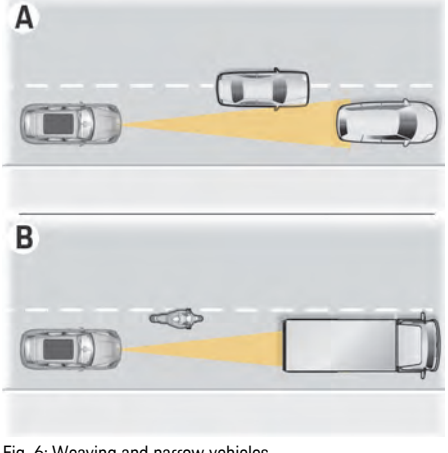


Fig. 6: Weaving and narrow vehicles

A – Erratic/weaving vehicles

The vehicle is only detected if it is completely in its own driving lane.

B – Vehicles with a small cross-section/narrow vehicles

will not be detected or will be detected too late.

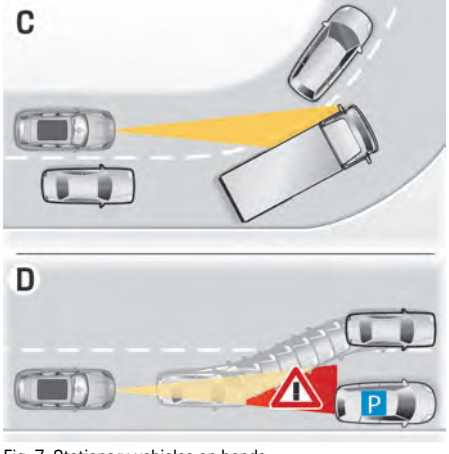


Fig. 7: Stationary vehicles on bends

C – Entering and exiting bends

Vehicles will not be detected or will be detected too late, or Adaptive Cruise Control will react to vehicles in adjacent lanes.

D – Stationary vehicles

A stationary vehicle or obstacle that suddenly appears in the radar sensor's range, e.g. after a vehicle ahead changes lanes, may only be detected to a restricted extent by Adaptive Cruise Control (ACC).

⚠ WARNING Restricted detection of a stationary vehicle

Stationary vehicles may only detected to a restricted extent by the Adaptive Cruise Control (ACC) radar sensor

- Particular attentiveness is required while driving.
- Brake if necessary.

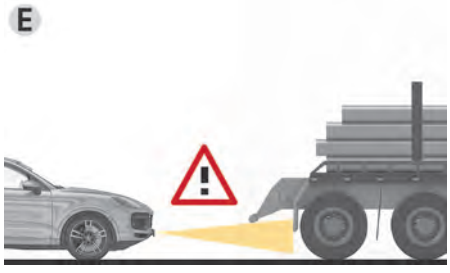


Fig. 8: Vehicles with large projecting loads

E – Vehicles with large projecting loads

The tail of the vehicle (e.g. of a timber transporter) will not be correctly detected.

⚠ WARNING Incorrect detection of tail of the vehicle ahead

In the case of vehicles ahead with long projecting loads, the tail of the vehicle may not be (correctly) detected by the Adaptive Cruise Control (ACC) radar sensor.

- Drive with extreme care.
- Brake if necessary.

Adaptive Cruise Control (ACC) with Porsche InnoDrive (PID)

Porsche InnoDrive (PID) extends Adaptive Cruise Control (ACC) as a comfort and efficiency system with functionalities for assisting the driver when driving on well-developed country roads and highways.[1]

▷ Please see chapter "Adaptive Cruise Control (ACC)" on page 41.

Using high-resolution navigation data and information from the radar and video sensors, Porsche InnoDrive detects speed limits and road features such as inclines or bend radii on the route before the driver reaches them and automatically adapts the gearshift strategy and vehicle speed accordingly, depending on the selected drive mode.

⚠ WARNING Lack of attention

The increased comfort offered by Porsche InnoDrive should not induce you to risk your safety. Despite Porsche InnoDrive, responsibility for maintaining a safe distance, choosing a suitable speed, etc. remains with the driver. The system cannot replace the driver's attentiveness.

– Porsche InnoDrive cannot always ensure that the maximum permitted speed (speed limit, place name signs) is adhered to.
– Porsche InnoDrive cannot always ensure that a speed appropriate to a bend is driven.

- Drive with extreme care.
- If the vehicle does not sufficiently adapt the vehicle speed to oncoming bends, speed limits or vehicles ahead, the driver must correct the speed in line with the current traffic situation. Always ensure that you can take control of the vehicle and brake appropriately if required to ensure road safety.

⚠ WARNING Unsafe traffic situation and unfavorable road conditions

If the prevailing situation does not allow you to drive safely at a sufficient distance or at a speed appropriate to the situation, using Porsche InnoDrive can cause accidents.

- Do not use Porsche InnoDrive in heavy traffic, where there are road works, in built-up areas, on private or field tracks, or in play streets.
- For safety reasons, Porsche InnoDrive must **not** be used under unfavorable road conditions and/or poor weather conditions (e.g. snow-covered or slippery road surface, fog, stone chippings, heavy rain or aquaplaning).

⚠ WARNING Failure of Porsche InnoDrive to detect vehicles or objects

Pedestrians, cyclists, objects on the road, oncoming vehicles and cross traffic are not detected.

- You should intervene as necessary.
- Always pay attention to the traffic conditions and vehicle surroundings.

Radar sensor and camera

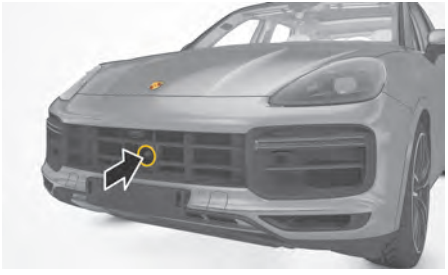


Fig. 9: Radar sensor position

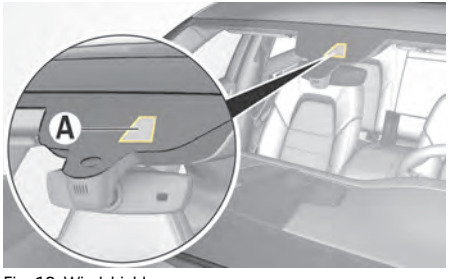


Fig. 10: Windshield camera

Information

- Always keep the radar sensor and the camera area **A** at the interior mirror free of dirt, ice and snow to ensure that they are fully functional.
- Do not cover the camera area at the interior mirror with objects (e.g. stickers).

1. Not available in some country versions.

⚠ WARNING Restricted vision of the radar sensor and camera

The range of the radar sensor and camera may be restricted by rain, snow, ice and heavy spray. Vehicles in front may not be adequately detected, or may not be detected at all.

- Do not use Porsche InnoDrive under these conditions.

⚠ CAUTION Porsche InnoDrive unavailable or only available to a limited extent

Impact or damage to the bumper, wheel housings or underbody, e.g. as a result of parking collisions, can misadjust the sensors. Stone damage in the area of the camera on the interior mirror can impair the camera view. This can adversely affect Porsche InnoDrive.

- Consult an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

⚠ WARNING Radiofrequency Radiation Exposure

This equipment complies with the specified FCC radiation exposure limits for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 8 in. (20 cm) between the radiator and your body.

- This transmitter must not be next to or operating in conjunction with any other antenna or transmitter.

Exceptions for Porsche InnoDrive

⚠ WARNING Porsche InnoDrive system limits

- The following exceptions of Porsche InnoDrive must be taken into account:

– Porsche InnoDrive offers assisted driving. It is the responsibility of the driver at all times to monitor the system, assess the traffic situation and intervene if necessary. In some cases, Porsche InnoDrive automatically determines that driver intervention is necessary. In such cases, the following message appears in the instrument cluster: **Driver takeover necessary**.
– Porsche InnoDrive switches off automatically and displays a notification when the vehicle enters a non-enabled area.
– For safety reasons, Porsche InnoDrive must not be used under unfavorable road conditions and/or poor weather conditions (e.g. snow-covered or slippery road surface, fog, stone chippings, heavy rain or aquaplaning).
– Do not use Porsche InnoDrive during trailer operation as the system does not adapt to the altered operating conditions in this case.
– Porsche InnoDrive can be activated on all roads mapped in the navigation data where the speed limit is 20 mph (30 km/h) or higher.
– If Porsche InnoDrive detects that the vehicle is on private or field tracks, or residential streets, Porsche InnoDrive cannot be activated.
– Porsche InnoDrive does not detect traffic lights and cannot take right-of-way situations into account.
– In the case of an ambiguous vehicle position in the navigation system, Porsche InnoDrive is switched off.
– On inadequately mapped streets, bends and speed limits may not always be detected correctly.

Exceptions for Adaptive Cruise Control (ACC)

⚠ WARNING Adaptive Cruise Control (ACC) system limits

- The following exceptions for ACC must also be considered when using Porsche InnoDrive:

– For safety reasons, ACC must not be used under unfavorable road conditions and/or poor weather conditions (e.g. snow-covered or slippery road surface, fog, stone chippings, heavy rain or aquaplaning).
– Switch off ACC temporarily when driving on turn-off lanes, highway exits or in areas with roadworks. This will prevent the vehicle from accelerating to the set speed in such situations.
– ACC does not brake automatically when you press the accelerator pedal. Putting your foot on the accelerator pedal may override cruise and distance control.
– When approaching stationary vehicles at the end of a traffic jam for example, ACC only reacts to a limited extent.
– ACC does not react to persons, animals, crossing or oncoming objects.
– Reflective objects such as crash barriers or tunnel entrances, heavy rain or ice formation may impair the functionality of the radar sensor. A message indicating that ACC is not available appears on the instrument cluster.

Operating principle of Adaptive Cruise Control (ACC)

▷ Please see chapter "Operating principle of Adaptive Cruise Control (ACC)" on page 42.

Operating Porsche InnoDrive

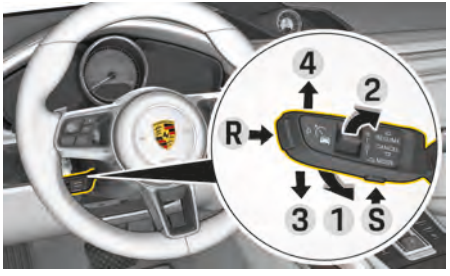


Fig. 11: Control lever

R Switch ACC and PID readiness on/off
S Switch between ACC / PID
1 Increase desired speed (Speed +)
2 Reduce desired speed (Speed –)
3 Interrupt (CANCEL)
4 Return to set speed (RESUME)/adopt

Information

The driver can intervene at any time by pressing the brake or accelerator pedal.

Porsche InnoDrive display

All important information, messages and warnings relating to Porsche InnoDrive are displayed in the **Porsche InnoDrive** main menu on the Speed & Assist display in the instrument cluster.

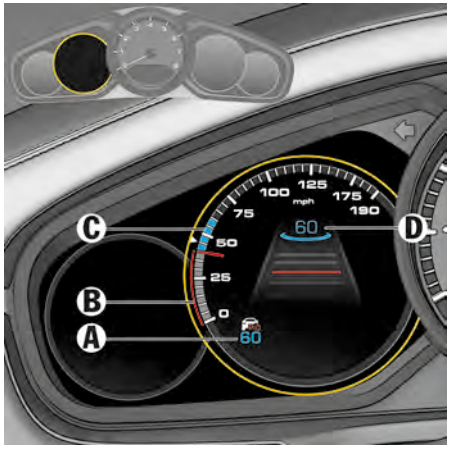


Fig. 12: Porsche InnoDrive in the Speed & Assist display

A Status display and desired speed
B Status display and desired speed
C Speed prediction, e.g. speed limit
D Forthcoming event (speed limit, bend, rotary intersection)

Status display

When Porsche InnoDrive is switched on, the status display **A** appears on the Speed & Assist display on the instrument cluster.

The status display **A** is red when control is active.

The status display **A** is gray when control is inactive.

Porsche InnoDrive is passive in AUTO mode.

Porsche InnoDrive is active in AUTO mode.

Porsche InnoDrive is active and a desired speed is set.

Porsche InnoDrive is active and a forthcoming event (speed limit) has been detected.

Information

If a vehicle is detected ahead, a vehicle symbol appears instead of the speedometer symbol on the status display (**D**).

Display of forthcoming event

Speed limits known in advance are displayed (Fig. 12) **A** and **D**. In this case, Porsche InnoDrive reduces the vehicle speed at an early stage. Speed limits that are not known in advance are not displayed. In this case, gentle deceleration is performed when passing the traffic sign at the earliest.

Tight bends known in advance are displayed (Fig. 12) **D**. In this case, Porsche InnoDrive reduces the vehicle speed at an early stage. The speed calculated for the bend is also displayed through the speed prediction (Fig. 12) **C**. If no bend ahead warning is displayed, Porsche InnoDrive only decelerates slightly or not at all.

Activating and deactivating Porsche InnoDrive

Activating Porsche InnoDrive

✓ Porsche InnoDrive readiness switched on (button **R**).

1. Press button **S** on the control lever.
   The options menu for the driver assistance systems appears on the instrument cluster.
2. Select **PID** using the **left** rotary knob on the steering wheel and press to confirm.

The gray status display appears on the instrument cluster. Porsche InnoDrive is passive.

3. Press the control lever up (position **4**, **RESUME**)
   Porsche InnoDrive is active.

Deactivating Porsche InnoDrive

▸ Press the brake or push the control lever down (position **3**, **CANCEL**)
  The desired speed and distance settings are retained.

Adjusting Porsche InnoDrive

The maximum speed for the Porsche InnoDrive control range and the allowance for the detected speed limit can be set on the PCM.

Configured speed limit:

▸ **SET** ▸ **Assistance systems** ▸ **Porsche InnoDrive** ▸ **Configured speed limit**

– This gives the driver the option of setting an individual maximum speed (configured speed limit). The configured speed limit can either be set above or below the legally required maximum speed. If the configured speed limit is above the maximum legal speed, the vehicle speed is automatically limited to the maximum legally required speed. If the configured speed limit is below the legally required maximum speed, the configured speed limit is adhered to by Porsche InnoDrive.
– The set maximum speed is adopted as the desired speed on roads without a general speed limit (e.g. on unrestricted German highways).
– **The maximum speed setting remains active until it is reset, even with a change of driver and when the vehicle is restarted.**
– On delivery, the maximum speed is configured to 80 mph (130 km/h).
– The configured maximum speed is only exceeded when the driver increases the desired speed above this value.

▹ Please see chapter "Increase desired speed (Speed +)" on page 52.

Consider speed limits:

▸ **SET** ▸ **Assistance systems** ▸ **Porsche InnoDrive** ▸ **Consider speed limits**

– When the **Consider speed limits** function is deactivated, Porsche InnoDrive continues to react automatically to the vehicles, bends and inclines detected ahead. Speed limits are adopted as the desired speed following confirmation by the driver.
– When the **Consider speed limits** function is activated, Porsche InnoDrive also reacts automatically to detected speed limits and place name signs.

Porsche InnoDrive operating modes

When Porsche InnoDrive is switched on, 4 operating modes are possible.

Porsche InnoDrive is active in AUTO mode (standard setting)

Porsche InnoDrive automatically regulates the speed and distance from the vehicle ahead, taking into account the speed limit and the road features.
The status display **A** is red.

Porsche InnoDrive is active with set desired speed

The driver sets a desired speed. The currently applicable speed limit is overridden and the speed continues to be adapted to the road features.

▹ Please see chapter "Changing the desired speed" on page 51.

Porsche InnoDrive ready

Speed and distance control is deactivated after the brakes are applied or when the control lever is pressed down (position **3**, **CANCEL**).
The desired speed setting and the selected distance are retained. The status display **A** turns gray. For information about resuming speed and distance control:

▹ Please see chapter "Interrupting and resuming speed and distance control" on page 52.

Porsche InnoDrive is passive

Speed and distance control are inactive while the accelerator pedal is pressed.
A message indicating that Porsche InnoDrive is in passive mode appears on the instrument cluster.
The desired speed setting and the selected distance are retained.
The status display **A** turns gray.
Porsche InnoDrive is active again after the accelerator pedal is released.

Information

When route guidance is active in the navigation system, Porsche InnoDrive always orients itself according to the proposed route. When route guidance is deactivated, Porsche InnoDrive orients itself to the straightest possible path.

Changing the desired speed

✓ Porsche InnoDrive active.
In AUTO mode, Porsche InnoDrive automatically selects the speed specified through the detected speed limit. Using **Speed +** or **Speed –**, the driver can

however increase or decrease the speed individually based on the detected speed limit, e.g.
75 mph (120 km/h) (speed limit) + 3 mph (5 km/h) (deviation) = 78 mph (125 km/h) (desired speed).

Increase desired speed (Speed +)

The desired speed can be increased beyond the set maximum speed.

- Briefly press the control lever on the steering wheel forwards (position **1**) (increments of 1 mph (1 km/h)) or keep it pressed (increments of 5 mph (10 km/h)).
  The red bar **B** and the status display **A** indicate the set desired speed.

Reduce desired speed (Speed –)

- Briefly pull the control lever toward the steering wheel (position **2**) (increments of 1 mph (1 km/h)) or keep it pulled (increments of 5 mph (10 km/h)).
  The red bar **B** and the status display **A** indicate the set desired speed.

Adopt the desired speed setting (RESUME)

- When changing the speed limit, press the control lever on the steering wheel up again (position **4**, **RESUME**).
  The set deviation will be transferred to the next speed limit.

Information

In the event of a speed limit change, the new speed limit will always be set, even if a desired speed has already been set.

Discard the desired speed setting (RESUME)

- At the preset desired speed, press the control lever on the steering wheel up again (position **4**, **RESUME**).
  The current speed limit is set.

Information

When the **Consider speed limits** function is activated, you can switch between the speed limit and the previously set desired speed as often as required.

Setting the desired distance

▷ Please see chapter "Setting the desired distance" on page 44.

Automatic braking to a standstill and driving off again

▷ Please see chapter "Automatic braking until the vehicle comes to a standstill" on page 45.
▷ Please see chapter "Moving off again" on page 45.

Interrupting and resuming speed and distance control

Interrupting speed and distance control – CANCEL

- Press the brake pedal.
  – or –
  Press the control lever on the steering wheel down (position **3**, **CANCEL**).
  Porsche InnoDrive is ready.
  The desired speed and distance settings are retained.
  The status display **A** changes from red to gray.

Information

Porsche InnoDrive cannot be activated when the brake is pressed when driving.

Resuming speed and distance control – RESUME

Resuming AUTO mode:

- Press up the control lever on the steering wheel (setting **4**, **RESUME**).
  The status display **A** changes from gray to red.

Resuming desired speed:

- Press the control lever on the steering wheel up again (position **4**, **RESUME**).
  Porsche InnoDrive regulates the speed to the set desired speed.

Examples of Porsche InnoDrive control

Consider speed limits activated

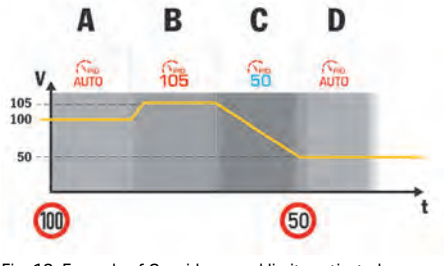


Fig. 13: Example of Consider speed limits activated

A The vehicle regulates the speed to the detected speed limit of 60 mph (100 km/h) in AUTO mode.

B The driver sets the speed 3 mph (5 km/h) higher based on the detected speed limit. The vehicle regulates the speed to 63 mph (105 km/h).

C An imminent speed limit of 30 mph (50 km/h) has been detected (e.g. boundary to a built up area). The vehicle progressively reduces the speed until it reaches the built-up area boundary.

D When the boundary to the built up area is reached, Porsche InnoDrive regulates the vehicle speed to the new speed limit of 30 mph (50 km/h) in AUTO mode.

Consider speed limits deactivated

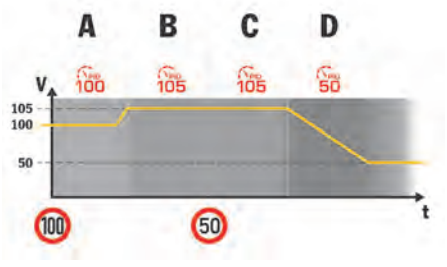


Fig. 14: Example of Consider speed limits deactivated

A The vehicle regulates the desired speed of 60 mph (100 km/h) set by the driver.

B The driver sets the speed 3 mph (5 km/h) higher. The vehicle regulates the speed to 63 mph (105 km/h).

C After driving past a 30 mph (50 km/h) speed limit sign, the vehicle continues to regulate to the desired speed of 63 mph (105 km/h) set by the driver.

D The driver can set the desired speed to the currently detected speed limit of 30 mph (50 km/h) by pushing the control lever to the **RESUME** position. The vehicle regulates the speed to 30 mph (50 km/h).

Airbag Systems

The vehicle is equipped with airbags and lap/shoulder belts at both front and rear seating positions. The airbags are a supplemental restraint at those seating positions.

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

Even though your vehicle is equipped with airbags, **the seat belts must be worn at all times**, because the front or side airbags deploy depending on the force and angle of impact. Below the deployment threshold of the airbag system, and during types of collisions which do not cause airbag deployment, the seat belts provide the primary protection to the occupants when correctly worn. **Therefore, all occupants, including the driver, should always wear their seat belts whether or not an airbag is also provided at their seating position to minimize the risk of severe injury or death in the event of a crash.**

In many states, state law requires the use of seat belts.

▷ Please see chapter "Seat Belts" on page 246.

The **front airbags** are installed under the steering wheel pad on the driver's side, in the dashboard on the passenger's side and at knee level on the driver's and passenger's side.

The **side airbags** on the front seats are located in the side of the seat side bolsters. The side airbags of the rear seats are located in the side bolster.

The **side curtain airbags** are located in the side roof rails. In a rollover event i.e., they deploy to reduce the risk of occupant ejection.

⚠ DANGER Seat Belts and Positioning

Airbags are most effective when occupants wear seat belts and maintain a proper seating position.

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

- **Always fasten seat belts.**
- Make sure there are no persons, animals or objects between the driver or passenger and the area into which the airbags inflate.
- Sit back as far from the dashboard or steering wheel as is practical, while still maintaining full vehicle control.
- Always hold the steering wheel by the outer rim. Never rest your hands on the center of the steering wheel where the airbag module is located.
- Always keep your feet in the footwell while driving. Keep your feet off the dashboard or the seat area.
- Do not lean against the inside of the door or outside the window while the vehicle is moving.

⚠ DANGER Safe Storage of Objects

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

- Do not transport heavy objects on or in front of the passenger seat. These could impair the function of the airbags and the seat belts.
- Do not hang objects (e.g. jackets, coats, coat hangers) over the backrest.
- Objects must not protrude out of the door storage compartment.
- Do not add any additional coverings or stickers to the steering wheel or in the area of the passenger airbag, side airbags, knee airbags, and head airbags. Doing so may adversely affect the functioning of the airbag system or cause harm to the occupants if the airbag system should deploy.
- No objects should be placed over or near the airbag on the instrument panel, because any such objects could cause harm if the vehicle is in a crash severe enough to cause the airbag to inflate.
- Give your passenger all of the information in this chapter.

⚠ DANGER Modification to Airbag System

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

- Do not modify the seat coverings, since such changes can block the seat-mounted side airbag. Do not attach additional cushions, protective coverings, or pillows to the 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, the cushion or foam, the capacitance occupant sensor or to the seat base frame.

- Do not modify any wiring or components of the airbag system
- Do not install any wiring for electrical accessory equipment in the vicinity of the airbag wiring harnesses. Doing so may disable the airbag system or cause inadvertent inflation.
- If the airbag warning light on the tachometer illuminates, the airbag system should be repaired immediately by your authorized Porsche dealer.
- Using accessories not approved by Porsche can cause the capacitance occupant sensing system to be impaired.
- Do not squeeze objects, such as the fire extinguisher, or first aid kit under the seat.
- Only have seats removed and installed by an authorized Porsche dealer so that capacitance occupant sensing components will not be damaged.

DANGER No Activation of already triggered Airbag Systems

Airbag systems were designed to trigger only once.

- Have triggered airbag systems replaced immediately.

Information

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

Airbags are a supplemental safety system. Your primary protection comes from your seat belts. The front airbags are triggered during a frontal collision of sufficient force and direction.

In the event of a side impact of corresponding force, the side airbag on the impact side is triggered.

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

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

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

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

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

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

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

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

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

Advanced Airbag

Your vehicle is equipped with capacitance occupant sensing for the front passenger seat in accordance with U.S. Federal Motor Vehicle Safety Standard 208.

The components of the advanced passenger airbag system include a capacitance occupant sensing system for the front passenger seat and a **PASSENGER AIR BAG OFF/ON** indicator light. The system measures the electrical capacitance acting on the seat to determine whether the front passenger airbag should be switched on or off.

Depending on the angle and force of impact, only a passenger airbag that is switched-on by the capacitance system will be triggered during a collision. You

can determine the on/off status of the passenger airbag system from the indicator lamp on the overhead console.

▷ Please see chapter "Automatic deactivation of the passenger airbag" on page 56.

If the front passenger airbag is turned on, the **PASSENGER AIR BAG OFF** indicator light will go out and the **PASSENGER AIR BAG ON** indicator light is continuously illuminated when the ignition is switched on and/or the engine is running. If the **PASSENGER AIR BAG OFF** indicator light stays illuminated, the passenger airbag will not deploy.

⚠ DANGER Improper Use of Front Passenger Seat

Improper use of the front passenger seat can unintentionally impair operation of capacitance occupant sensing for the passenger's airbag.

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

- Always make sure that there is nothing on the front passenger seat that could cause the capacitance occupant sensing system to judge that the seat is occupied by a person when it is not.
- Never use cushions, pillows, blankets or similar items on the front passenger seat. The additional layers prevent the capacitance occupant sensing for the front passenger seat from accurately measuring the capacitance of the child restraint system and/or the person on the seat and thus keep the advanced airbag system from working properly.
- Never place or use any electrical device (such as a cell phone, tablet, laptop, CD player, electronic games device or power inverter) on the front passenger seat if the device is connected to the cigarette lighter socket. Such device can influence the capacitance registered by the capacitance occupant sensing for the front passenger seat, so that incorrect information is provided to the airbag control unit.

⚠ DANGER

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

- If the front passenger seat gets wet, dry it immediately.
- If liquid soaks into the front passenger seat, this can keep the airbag system from working properly and may, for instance, deactivate or activate the passenger frontal airbag. If this happens, the **PASSENGER AIR BAG OFF/ON** indicator light and the airbag warning light on the instrument cluster may come on.
- If liquid is pooled on the front passenger seat, but has not soaked in, this may also keep the capacitance occupant sensing for the front passenger seat from working properly and cause the passenger frontal airbag to be enabled (turned on), even though there is a properly installed child restraint system on the seat. Wet towels or other wet things on the seat cushion can have the same effect.

⚠ WARNING Improper Front Passenger Seating

Improper use of the front passenger seat can unintentionally impair operation of capacitance occupant sensing for the passenger's airbag.

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

- Select an upright seat position, and do not support weight on the armrests or center console, or lean out of the window while driving.
- Always keep feet positioned on the floor in the footwell while driving. Do not put feet on the dashboard or the seat area.

Adjusting the front seats

⚠ WARNING Reclining Seatback

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

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

Modify vehicle to accomodate persons with disabilities

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

Automatic deactivation of the passenger airbag

⚠ DANGER Child Restraint in Front Seat

The use of a child restraint system in the front passenger seat can result in serious personal injury or

death to the child from an airbag deployment.

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

- 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.

Before transporting a child on the passenger seat:

- ▷ Please see chapter "Automatic locking retractor" on page 98.
- ▷ Please see chapter "Child Restraint Systems (Child Seats)" on page 97.
- – When an **up to one-year old child** is seated in the child restraint system on the front seat, the passenger airbag will be automatically deactivated.
- – When an adult is seated in the front passenger seat the front airbag is automatically activated.

Fig. 15: PASSENGER AIR BAG OFF/ON indicator light

Information

Depending on the electrical capacitance acting on the front passenger seat, it may be the case that with heavier children the passenger airbag is activated or, in the case of very light adults, that the passenger airbag is deactivated.

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

- If the indicator light shows the passenger airbag is off for a full-size person, that person should sit in the rear seat.

  If the indicator light shows the passenger airbag is on for a child/child in child restraint system, the child/child in child restraint system must be secured in the rear seat.

The **PASSENGER AIR BAG OFF/ON** indicator lamp is located on the overhead console. Depending on whether the airbag on the passenger seat is switched off or on, the following indicator lights will illuminate:

OFF ON **Lamp check**

After switching on the ignition, the **PASSENGER AIR BAG OFF/ON** indicator light illuminates for approx. 5 seconds for a lamp check.

OFF **Passenger airbag switched off**

If the airbag on the passenger's side is switched off, the **PASSENGER AIR BAG OFF** indicator light is continuously illuminated when the ignition is switched on and/or the engine is running.

ON **Passenger airbag switched on**

If the front passenger seat is occupied with an adult and the airbag on the passenger's side is switched on, the **PASSENGER AIR BAG ON** indicator light is continuously illuminated when the ignition is switched on and/or the engine is running.

DANGER

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

When the ignition is on and the child less than one year old is seated in the child restraint system on the passenger seat the indicator light **PASSENGER AIR BAG OFF** must be illuminated.

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

In this case:

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

Detecting faults

Faults are indicated by the red **airbag warning light** on the instrument cluster.

The airbag warning light illuminates when the electronic monitoring of the airbag system detects a malfunction of the sensors, seat belt system, capacitance occupant sensing system, PASSENGER AIR BAG OFF/ON indicator light, related wiring, airbag modules and control units.

- **In the following cases you should immediately consult an authorized Porsche dealer in order to assure the airbag system is functioning properly:**
- – If the warning light does not light up when the ignition is switched on **or**
- – If the warning light does not go out after having the ignition switched on for approx. 4 seconds **or**

– If the warning light appears while driving.

Information

Further information on the airbag system can be found on stickers attached to the sun visors, as well as on all airbag components.

For special recommendations on the use of child restraints:

▷ Please see chapter "Child Restraint Systems (Child Seats)" on page 97.

Air Conditioning (2/4-Zone Air Conditioning)

Brief Overview – Air Conditioning

Front control panel

This brief overview does not replace the comprehensive descriptions. Safety messages and warnings, in particular, are not replaced by this brief overview.

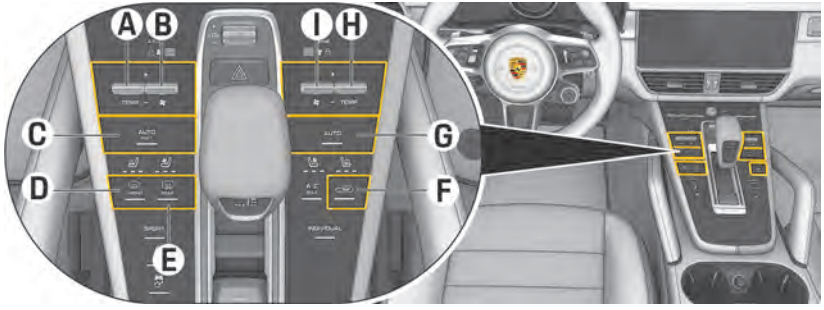


Fig. 16: Brief Overview – Front Air Conditioning

What do I want to do?	What do I have to do?	Where?
Operate air conditioning using voice control	Select voice control and use global voice commands for the air conditioning system.	▷ p. 287
Switch on automatic mode	Press button **C** for the left side or button **G** for the right side.	▷ p. 61
Set temperature	Press button **A** for the left side or button **H** for the right side.	▷ p. 62
Set the strength of the air flow in automatic mode	**CLIMATE** ▸ **COMFORT** ▸ **Style**	▷ p. 63
Set the footwell temperature[1]	**CLIMATE** ▸ **COMFORT** ▸ **Footwell**	▷ p. 63
Set air flow	Press button **B** for the left side or button **I** for the right side.	▷ p. 62

1. Prerequisite: 4-zone air conditioning

What do I want to do?	What do I have to do?	Where?
Adjust the air distribution	**CLIMATE** ▸ **AIR**	▷ p. 63
Defrost windshield	Press button **D**.	▷ p. 64
Switch on heated rear screen/door mirror heating	Press button **E**.	▷ p. 65
Switch on air-recirculation manually	Press button **F**.	▷ p. 64

Rear control panel (4-zone air conditioning)

This brief overview does not replace the comprehensive descriptions. Safety messages and warnings, in particular, are not replaced by this brief overview.

Fig. 17: Brief Overview – Rear Air Conditioning

What do I want to do?	What do I have to do?	Where?
Switch on automatic mode	Press button **C** for the left side or button **D** for the right side.	▷ p. 61
Set temperature	Press button **A** for the left side or button **E** for the right side.	▷ p. 62

What do I want to do?	What do I have to do?	Where?
Set air flow	Press button **B** for the left side or button **F** for the right side.	▷ p. 62
Adjust the air distribution	Air at head level for left or right side: Press button  . Air to central and side vents for left or right side: Press button  . Air to footwell for left or right side: Press button  .	▷ p. 63

Depending on various factors like interior temperature, sunlight or air quality, the air conditioning system adjusts the air distribution and air flow fully automatically in automatic mode.

Automatic mode is deactivated as soon as the settings for the relevant function selected are adjusted manually.

The air conditioning system can be operated both using the buttons in the center console and in the rear, as well as using the touch display in the dashboard.

The air conditioning system operates most effectively with the windows closed.

If heat builds up in the vehicle interior:

- briefly air the interior by opening the windows.

Depending on the outside temperature and humidity, condensation may drip from under the vehicle. This is quite normal and is not a defect.

If the battery voltage is too low, the air conditioning functions are initially restricted and then switched off.

2-zone air conditioning

The temperature, air flow, air distribution and type of air conditioning can be set individually for the **left** and **right** air-conditioned areas.

4-zone air conditioning

Temperature, air flow, air distribution and type of air conditioning control can be set individually for the **front left**, **front right**, **rear left** and **rear right** air-conditioned areas.

Switching air conditioning on and off

Switching air conditioning on and off in the entire vehicle

Touch display in dashboard:

- **CLIMATE** ▸ **AIR** ▸ **OFF**

Reducing the air flow to the rear air-conditioned areas or switching the rear air conditioning system off does not improve passenger comfort in the front air-conditioned areas.

Switching on automatic mode

The front and rear air-conditioned areas can be switched to automatic mode independently of one another.

- Press button **AUTO** for the relevant air-conditioned area on the front or rear air-conditioning control panel.

  The light indicator on button **AUTO** lights up. Air flow and distribution are automatically controlled.

If necessary, the automatic system can be controlled manually. The manual setting is retained until the appropriate function button is pressed again or until button **AUTO** is pressed.

Switching the cooling function on and off

The cooling function cools and dries the air.

In automatic mode, the cooling function is activated by default. The cooling output is automatically controlled.

- **CLIMATE** ▸ **AIR** ▸ **A/C**
  The cooling function is switched off or on.

Switching maximum cooling output on and off – A/C MAX mode

In A/C MAX mode, the vehicle interior is cooled at maximum power.

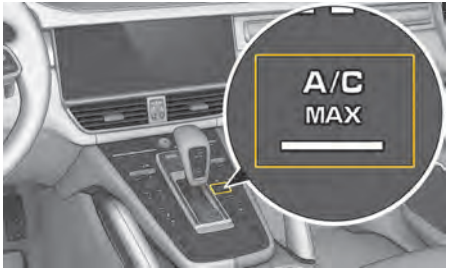


Fig. 18: Activating and deactivating A/C MAX mode

Switching maximum cooling output on

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

Switching maximum cooling output off

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

Setting temperature

The temperature can be adjusted to between 60 °F (16 °C) and 85 °F (29.5 °C). Recommendation: 72 °F (22 °C).

Temporarily setting the temperature to a lower or higher value does not cool or heat the vehicle interior to the desired temperature more quickly.

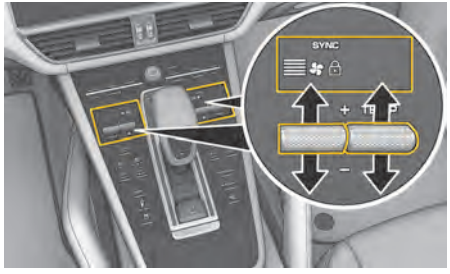


Fig. 19: Setting temperature and air flow in the front

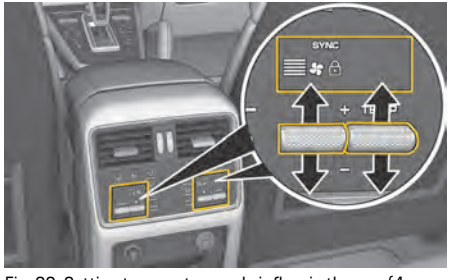


Fig. 20: Setting temperature and air flow in the rear (4-zone air conditioning)

Increasing and reducing temperature

- Press button TEMP for the relevant air-conditioning zone upward or downward.
  The selected temperature is indicated in the display above the button for the relevant air-conditioned area.

If **LO** or **HI** appears on the display, the system is operating at maximum cooling (LO) or heating (HI) power. Automatic mode is switched off.

Setting air flow

Increasing and reducing air flow

- Press button for the relevant air-conditioning zone upward or downward.
  The selected air flow is shown in a bar display above button . The more bars that are displayed, the more air flows into the vehicle interior.

Pressing button AUTO switches back to automatic mode.

If the air flow in all air-conditioned areas has been reduced so much that **OFF** appears on the air conditioning displays, the outside-air supply is interrupted and the air conditioning is switched off.

Deactivating OFF mode in the rear from the front

For 4-zone air conditioning, **OFF** mode can be deactivated using the touch display in the dashboard.

▷ Please see chapter "Setting rear air-conditioned areas from front" on page 64.

OFF mode in the rear is **not** deactivated via the **SYNC** function.

⚠ WARNING Impaired vision with air flow OFF

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

- To increase the air flow again, press button upward or switch on automatic mode again.

Adjusting air vents

Air vents, which can be opened and closed **manually** are located in the **dashboard** the front and rear **center console** and the **door pillars**. The direction of the air flow can also be adjusted.

NOTICE

Risk of damage to air vents.

- Do not insert any objects (e.g. smartphone cradle, air freshener) into the air vents.

Opening and closing air vents

- Turn the thumb wheel on the air vent.

Changing air flow direction

- Swivel vent vanes in the desired direction.

Enable fresh-air intake

- Keep the fresh-air intake between the windshield and the hood free from snow, ice and leaves.

Adjusting air distribution

Adjusting front air distribution

1. **CLIMATE** ▸ **AIR**
2. Select the air distribution for the relevant air-conditioned area:

The air flows toward the windshield and the side windows.

The air flows from the center air vent and side vents.

The air flows to the footwell.

Adjusting rear air distribution

- Select the air distribution for the relevant air-conditioned area:

The air flows to head level.

The air flows from the center vent and from the air vents in the door pillars.

The air flows into the footwell and from the air vents in the door pillars.

Adjusting the upper ventilation panel

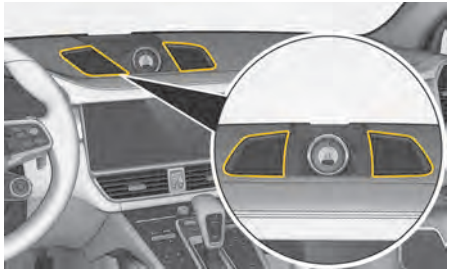


Fig. 21: Upper ventilation panel

The ventilation panel on top of the dashboard provides additional ventilation for the vehicle interior. The ventilation panel can be activated or deactivated separately. The air-conditioning system regulates the air flow automatically.

1. **CLIMATE** ▸ **AIR**
2. Select **Ventilation panel** OFF.

Setting climate style

Three air flow settings are available in automatic mode.

1. **CLIMATE** ▸ **COMFORT** ▸ **Style**
2. Select the climate style for the respective air-conditioning area:

Switching Eco mode on and off

When Eco mode is switched on, the air conditioning system operates particularly energy efficiently. The level of comfort in the vehicle may be reduced in order to improve fuel economy (e.g. the vehicle interior may take longer to heat up or cool down).

Touch display in dashboard:

- **CLIMATE** ▸ **COMFORT** ▸ **A/C ECO**

Setting the footwell temperature

The footwell temperature can be individually adjusted relative to the overall interior temperature for the front air-conditioned areas.

Touch display in dashboard:

1. **CLIMATE** ▸ **COMFORT** ▸ **Footwell**
2. Select the desired footwell temperature for the relevant air-conditioned area.

Switching the ionizer on and off

✓ Vehicles with ionizer.

In regions with poor air quality – e.g. in large cities – the ionizer can help achieve better air quality in the vehicle interior.

Ionization itself does not produce any odor.

- **CLIMATE** ▸ **COMFORT** ▸ **Ionizer**

Switching automatic air-recirculation mode on and off

In automatic air-recirculation mode, the outside air supply is regulated depending on the air quality. At outside temperatures below approx. 41 °F (5 °C),

air-recirculation mode is deactivated automatically to prevent the windows from misting.

Touch display in dashboard:

▸ **CLIMATE** ▸ **COMFORT** ▸ **Auto air circ.**

Switching air-recirculation mode on and off manually

WARNING Impaired vision in manual recirculation mode

In prolonged manual air-recirculation mode, the windows may mist up. As no fresh air is supplied, the driver can get tired and become less attentive.

▸ Do not switch on manual air-recirculation mode for an extended period.

Fig. 22: Switching air-recirculation mode on and off

Switching on air-recirculation manually

▸ Press button .
The light indicator on the button lights up.

Information

When the cooling function is switched off manually or automatically, air-recirculation mode ends after approx. 5 minutes.

Switching off air-recirculation mode manually

▸ Press button .
– or –
Press button **AUTO**.
The light indicator on the button goes out.

Using air conditioning settings for entire vehicle – SYNC mode

Switching SYNC mode on and off on the touch display in the dashboard

▸ **CLIMATE** ▸ **AIR** ▸ **SYNC**
SYNC mode is switched on or off. When SYNC mode is activated, the values displayed for the other air-conditioned zones change to the **driver's values**.

Recommended air-conditioning settings for lone drivers

▸ Switch on SYNC mode on the touch display in the dashboard for maximum passenger compartment comfort.

4-zone air conditioning: Reducing the air flow to the rear air-conditioned areas or switching the rear air conditioning system off does not improve passenger comfort in the front air-conditioned areas.

Setting rear air-conditioned areas from front

In the case of 4-zone air conditioning, the air-conditioned areas in the rear can be adjusted using the touch display in the dashboard.

1. **CLIMATE** ▸ **REAR**
2. Adjust the setting as required.

Defrosting windshield

Fig. 23: Defrosting windshield

Switching defroster mode on

▸ Press button .
The light indicator on the button lights up.
The air flows toward the windshield and the front side windows.
The windshield is defogged/defrosted very quickly.

In defrosting mode, the air supply to the rear is regulated as needed to achieve maximum defrosting efficiency.

4-zone air conditioning: The air conditioning control panel in the rear is disabled.

✓ Vehicles with windshield heating

Vehicles with windshield heating also have a strip of metal foil in the windshield and heating wires on the contact surfaces of the windshield wipers. The windshield can therefore be heated to prevent it from frosting over and fogging up. Frozen windshield wipers are thawed as quickly as possible.

- Press button .
  The light indicator on the button lights up.
  The windshield is heated.
  The windshield is defogged/defrosted very quickly.

Windshield heating is deactivated automatically after max. 10 minutes and the windshield is no longer heated. Defroster mode continues to run and the light indicator on button stays on.

Switching defroster mode off

- Press button .
  The light indicator on the button goes out.

Switching the heated rear screen and door mirror heating on and off

Fig. 24: Heated rear screen/door mirror heating button

Switching on heated rear screen and door mirror heating

✓ Engine is running.

- Press button .
  The light indicator on the button lights up.

Depending on the outside temperature, the heated rear screen/door mirror heating switches off automatically after approx. 5 to 20 minutes.

Switching off heated rear screen and door mirror heating

- Press button .
  The light indicator on the button goes out.

Using engine residual heat – REST mode

Fig. 25: Activating and deactivating REST mode

The residual heat of the engine at operating temperature can be used to heat the interior for up to 20 minutes after the ignition has been switched off.

✓ Ignition is switched off.

- Press button **AUTO REST** on the front control panel.
  The light indicator on the button lights up. The air-conditioning settings cannot be changed in REST mode.
- Press button **AUTO REST** on the front control panel again to end the function.
  The light indicator on the button goes out.

Using the precool/heat timer and precooling/heating (E-Hybrid)

✓ High-voltage battery is sufficiently charged (minimum 10 %).

✓ Low fuel not yet reached.

The precooling/heating system regulates air flow, air distribution and temperature. It can be set individually. The vehicle also regulates precooling/heating intelligently according to the outside temperatures to ensure the greatest possible comfort. This is the case regardless of whether precooling/heating was activated using a **Pre-cool/heat timer**, the vehicle key or using the PCM function **START PRE-COOL/HEAT**.

The precooling/heating system can be used to precool/heat the following (depending on equipment):

- the vehicle interior,
- the seats,
- the steering wheel,
- the door mirrors,
- the rear window,
- and the windshield,

without the combustion engine running. This is also the case regardless of whether or not the vehicle plug is connected.

▷ Please see chapter "Charging" on page 91.

Information

The door mirrors, rear window and windshield (depending on equipment) are heated automatically at low temperatures in order to de-ice the windows and mirror glass.

Information

The precooling/heating system is used to heat the battery at low temperatures. If the battery is cold, the vehicle starts precooling/heating without blowing air into the interior of the vehicle. This enables improved driving-off under electric power.

Switching on precooling/heating

1. **CLIMATE** ▸ **TIMER**
2. Select **START PRE-COOL/HEAT**.

The available electric range is reduced when precooling/heating is switched on.
Precooling/heating switches off after 30 minutes at the latest when the vehicle is ready for operation and when the vehicle is stationary.

Switching off precooling/heating

1. **CLIMATE** ▸ **TIMER**
2. Select **STOP PRE-COOL/HEAT**.

This also stops precooling/heating that was started using a precool/heat timer.

Programming and activating precooling/heating using a precool/heat timer

The interior temperature can be precooled/heated by the departure time using the precool/heat timer. Each precool/heat timer can be set to start once (single timer) or at regular intervals (recurring timer).

1. **CLIMATE** ▸ **TIMER**
2. Select **Pre-cool/heat timer**.
3. Set the days or date and time of the desired departure time and enable the timer entry ☑.
4. Set the temperature and seat activation individually.

The selected climate type is maintained for up to 10 minutes after the programmed time. The air flow, air distribution and temperature can be adjusted manually after the ignition is switched on.

Deactivating the precool/heat timer

1. **CLIMATE** ▸ **TIMER**
2. Select **Precool/heat timer**.
3. Disable the option ☐.

Setting precooling/heating individually

Setting air-conditioning zones

1. **CLIMATE** ▸ **TIMER** ▸ Options ▸ **Extended pre-conditioning** ▸ **Preconditioning areas**
2. Enable the desired air conditioning settings ☑.

The vehicle seats are heated or ventilated (depending on equipment). The vehicle automatically regulates the settings for the vehicle seats, depending on the outside temperature.

Setting the required temperature

1. **CLIMATE** ▸ **TIMER** ▸ Options ▸ **Extended pre-conditioning** ▸ **Temperature**
2. Set the desired temperature.
3. Save the setting with **Confirm**.
   The vehicle regulates the interior temperature to the set temperature during the precooling/heating process.

Setting quick precooling/heating

1. **CLIMATE** ▸ **TIMER** ▸ Options ▸ **Extended pre-conditioning** ▸ **Quick preconditioning**
2. Enable the option ☑.
   When the vehicle is unlocked, precooling/heating starts and remains on for 5 minutes.

This function can be activated twice per trip in order to prevent it from being activated accidentally.

Alarm System

The alarm system monitors the following alarm contacts:

- Alarm contacts in doors, tailgate and hood
- Passenger compartment monitoring system: Movement in the interior when the vehicle is locked, e.g. attempted theft by breaking a window
- Inclination sensor: Vehicle incline (e.g., during an attempt to tow the vehicle away)
- Diagnostic socket
- Trailer hitch socket

If one of these alarm contacts is triggered, the alarm horn sounds for approx. 25 seconds and the emergency flasher flashes for approx. 300 seconds.

After a 5 second interval, the acoustic alarm is triggered again. This cycle is repeated up to ten times (country-dependent).

Switching the alarm system on/off

- The alarm system is activated after approx. 30 seconds when the vehicle is locked.
- The alarm system is deactivated when the vehicle is unlocked.

Information

If you unlock the vehicle with the emergency key in the door lock, you must switch the ignition on within 15 seconds of opening the door in order to prevent the alarm system from being triggered.

The time it takes to trigger the alarm system differs from country to country.

Switching off the alarm system after the alarm has been triggered

- Unlock the vehicle
  – or –
- Switch on ignition.

Switching off passenger compartment monitoring system and inclination sensor

If people or animals are remaining in the vehicle, the passenger compartment monitoring system and inclination sensor together with SAFELOCK can be deactivated when locking the vehicle (country-dependent).

▷ Please see chapter "Central Locking" on page 85.

Alarm system function indication

The locking condition is indicated by the light indicators in the doors flashing at different frequencies.

Alarm system is activated

The light indicators flash rapidly when the vehicle is being locked, then flash in normal mode.

The alarm system is activated and the passenger compartment monitoring system and inclination sensor are deactivated

The light indicators flash rapidly while you are locking the vehicle, go out for 28 seconds and then flash in normal mode.

Faults in the central locking system and alarm system

During locking of the vehicle, the light indicators flash rapidly, light up continuously for 28 seconds and then flash in normal mode.

Preventing theft

Before leaving the vehicle, always:

- Close the windows and the Panoramic roof system. This will also prevent a false alarm by the passenger compartment monitoring system.
- Activate the parking lock **P** and the electric parking brake.
- Switch ignition off.
- Close the glove compartment.
- Close all storage compartments.
- Remove valuables, car papers, phone and house keys from the vehicle.
- Close the doors and tailgate.
- Close the hood.
- Lock the vehicle.

Immobilizer

Every vehicle key contains a transponder (electronic component) with a stored code.

An authorized vehicle key is required in order to deactivate the immobilizer and start the engine.

Apple CarPlay

Information

Apple CarPlay® must be selected when connecting for the first time. It is then possible to switch between iPod and Apple CarPlay as desired.

▷ Please see chapter "Switching between Apple CarPlay and using the iPhone as iPod" on page 69.

Opening Apple CarPlay in the PCM

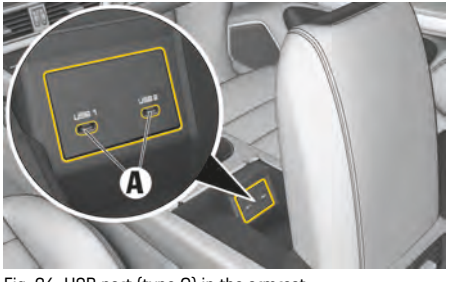


Fig. 26: USB port (type C) in the armrest

✓ iPhone 7 or later, iOS 12.2 or higher.
✓ Siri and Apple CarPlay have been enabled in the settings of the iPhone that you are using.
✓ Use undamaged original cables from Apple without a USB adapter to ensure trouble-free use.

1. Connect your iPhone to the USB port (type C) **A** in the armrest.
2. Confirm that Apple CarPlay is being used. The available apps are displayed.
   Apple CarPlay is opened.

▸ To switch from another function to Apple CarPlay, select **Apple CarPlay**.

Information

– Recommendation: Install the latest iOS version.
– Only those apps in the iPhone that are supported by Apple CarPlay™ can be displayed. For information on supported apps, go to www.apple.com/ios/carplay.
– The content and functions displayed within the Apple CarPlay™ function are provided exclusively by the connected iPhone.
– When Apple CarPlay™ s used, active Bluetooth® connections (such as telephony, media playback, or messages) are automatically disconnected.
– Some apps require an active data connection. You may incur additional charges, depending on your cellphone tariff, and particularly if using abroad. The use of a flat-rate data plan is recommended.

For information on operating the Porsche Communication Management system (PCM):

▷ Please see chapter "Porsche Communication Management (PCM)" on page 215.

Operating Apple CarPlay in the PCM

All available apps can be operated using the touch display, the rotary push button and the Undo button of the PCM.

▸ To open the main menu in **Apple CarPlay**, press the Home button on the touch display of the PCM.

▸ To change to the main functions of the PCM, select **Apple CarPlay** ▸ **Porsche**.

– or –

▸ Select any function (e.g. **MEDIA**).

Operating Apple CarPlay with Siri voice recognition

Activating Siri

✓ Siri has been enabled in the settings of the iPhone that you are using.
✓ The ignition and PCM are switched on.
✓ There are no active phone calls.
✓ ParkAssist is not active.
✓ PCM voice control is not active.

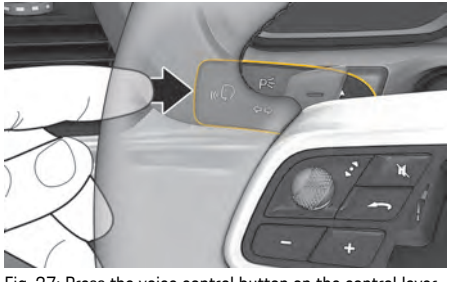


Fig. 27: Press the voice control button on the control lever.

1. Press and hold the button on the control lever.
2. Say the desired voice command.

Deactivating Siri

✓ Siri is active and awaiting a voice command.

▸ Press the button on the control lever.
A fading acoustic signal sounds.

For information on voice control:

▷ Please see chapter "Voice control" on page 287.

Switching between Apple CarPlay and using the iPhone as iPod

If the connected iPhone is connected as iPod, Apple CarPlay is not available. Use the Device Manager to switch between use of the iPhone as an iPod or Apple CarPlay.

1. To call up the Device Manager, select or in the header (depending on the connection status).
2. Select **Link** for the iPhone you are using.

Calling up Wireless Apple CarPlay (availability dependent on equipment)

Wireless CarPlay allows you to use Apple CarPlay without wires or cables. Wireless CarPlay always supports only one active cellphone.

✓ The Bluetooth® function of the cellphone is activated and is visible for other devices.

✓ The cellphone WiFi function is activated.

1. Press or in the header (depending on the connection status) or select ▸ **Apple CarPlay** or **Link** under Connection Manager in the menu.
2. Select the device from the list.
3. Confirm the notice that Apple CarPlay is being used.
   Apple CarPlay is opened. The available apps are displayed.

After you have connected the iPhone once, Apple CarPlay starts automatically when you get into the vehicle. You can leave the cellphone in your bag or trouser pocket, for example. (The Bluetooth® function and WiFi function must be activated).

▸ To switch from another menu item to Apple CarPlay, select **Apple CarPlay**.

Deleting stored iPhone from list of devices

1. Select or in the header (depending on the connection status) ▸ Options .
2. Select the desired device.

Auto Start Stop Function

When the vehicle stops, e.g. at a traffic light or in a traffic jam, the engine automatically stops, provided all the requirements for the auto stop function are met. In addition, the engine can also stop automatically when the vehicle stops while moving at walking speed. In this way, the automatic Start/Stop function helps to save fuel.

The ignition remains on, even when the engine is stopped automatically. All safety functions continue to operate.

Prerequisites for the auto engine stop

✓ Auto Start/Stop function switched on.
✓ Hood closed.
✓ Brake pedal pressed.
✓ Tiptronic S operating mode **D**, **M**, **N** or **P** selected.
✓ Engine, transmission and air conditioning have reached operating temperature.
✓ The vehicle has traveled at least at walking speed since the last automatic engine stop.
✓ Driver's seat belt fastened or driver's door closed.

Auto Stop and Auto Start

Engine stop

1. Brake the vehicle with the footbrake.
2. Press and hold the footbrake.
   – or –
- ▸ Press the **P** button on the selector lever when the vehicle is stationary.

Information

The HOLD function can be activated by flooring the pressed brake pedal while the vehicle is stationary. This keeps the vehicle at an engine stop without having to continuously press the brake pedal.

The engine starts automatically when the accelerator pedal is pressed or when the engine needs to be started.

Information

If Adaptive Cruise Control (ACC) is switched on, the engine stops automatically when the vehicle is stationary if the vehicle ahead has also come to a standstill.

The vehicle is held in a stationary position by the HOLD function.

Engine start

✓ Operating mode **D**, **M**, **N** or **P** selected.
- ▸ Release the footbrake (not in operating mode **P**).
  – or –
- ▸ Press the accelerator pedal.
  – or –
- ▸ Move the steering wheel.
  – or –
- ▸ Select operating mode **R**.

You can move off as normal.

Information

The engine will start automatically in certain situations, e.g. in order to maintain a comfortable temperature. In some cases, a message prompting you to press the brake pedal will also be displayed on the instrument cluster.

Information

If Adaptive Cruise Control (ACC) is active, the engine starts automatically when the vehicle in front moves off again.

Reaction after leaving the vehicle

After leaving the vehicle after the engine has stopped automatically (driver's seat belt unfastened, driver's door open and brake pedal released), the engine will **not start automatically**. Additionally, in operating mode **D**, **R** or **M**:

– The electric parking brake is engaged.Please see chapter "Brakes" on page 76.
– The transmission parking lock **P** is engaged. Please see chapter "Transmission" on page 277.

The vehicle can still be moved with the driver's door open and the driver's seat belt unfastened by releasing the electric parking brake manually. In this case, the parking brake remains released and the selected transmission range is still engaged.

If the parking brake is released in operating mode **D**, **R** or **M**, or if operating mode **D**, **R** or **M** is selected while the brake pedal is pressed, the engine starts again.

Auto Start Stop mode is resumed if one of the following conditions is detected within 30 seconds of leaving the vehicle:

– The brake pedal is pressed and either the driver's door is closed or the driver's seat belt is fastened.
  – or –
  The driver's door is closed and the driver's seat belt is then fastened.
  – or –
  The accelerator pedal is pressed with the driver's door closed and the driver's seat belt fastened.

Switching off the Auto Start Stop function within 30 seconds after leaving the vehicle results in an engine

start only after the driver's door has been closed and the seat belt has been fastened. If none of these requirements are met, the engine has to be started **manually** 30 seconds after leaving the vehicle. A message prompting you to start the engine manually appears on the instrument cluster.

▷ Please see chapter "Warning and Information Messages" on page 293.
▷ Please see chapter "Starting and Stopping the Engine" on page 261.
▷ Please see chapter "Seat Belts" on page 246.

Exceptional conditions for the Auto Start Stop function

The Auto Start Stop function is not available e.g.:

– SPORT/SPORT PLUS mode active
– When the off-road driving program is switched on
– PSM switched off or in SPORT mode
– In maneuvering mode
– Porsche Hill Control (PHC) active
– When the "Maximum cooling" function is activated
– Activated "Defrost windshield" function
– At high altitudes
– While adjusting the chassis level
– Trailer detected (bicycle carrier connector or trailer connector plugged in). The Auto Start Stop function must be deactivated manually if a trailer hitch from another manufacturer is installed on the vehicle.

The Auto Start Stop function is only available to a limited extent, e.g.:

– When the demands placed on the air conditioning or interior heating are high
– When the battery state of charge is low
– On upward or downward slopes
– During internal tests, e.g., automatic engine diagnostics
– Very low or very high outside or battery temperature

Information

If one of these states occurs after the engine has been stopped automatically, the engine can be restarted automatically.

Switching the Auto Start Stop function on and off

Switching off

▸ **CAR** ▸ **DRIVE** ▸ **Start/Stop**

The automatic engine shut-off is suppressed.

Switching on

▸ **CAR** ▸ **DRIVE** ▸ **Start/Stop**

The engine is switched off automatically when the vehicle comes to a standstill.

Auto Start Stop function display

Automatic engine stop and restart readiness

If the engine has been automatically stopped by the Auto Start Stop function and it is possible to start the engine automatically, the light indicator on the instrument cluster lights up green.

Engine is not ready to stop or restart

If it is not possible to stop the engine automatically or it is not possible to restart the engine after the engine has been stopped automatically, the light indicator on the instrument cluster lights up yellow when the vehicle is stationary.

The Auto Start Stop system has detected that:

– at least one prerequisite for the auto engine stop is not met
– or –
– at least one exceptional condition for the Auto Start Stop function is met.

▷ Please see chapter "Prerequisites for the auto engine stop" on page 70.
▷ Please see chapter "Exceptional conditions for the Auto Start Stop function" on page 71.

Responding to warning symbols

If there is a fault, a message will appear on the instrument cluster to indicate that Start Stop mode is deactivated.

▸ Have the fault repaired by an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Battery

This vehicle is equipped with a 12-volt lithium battery ($LiFePO_4$), the properties of which differ to those of conventional lead-acid batteries.

⚠ WARNING Electric shock, short circuit, fire or explosion

Touching conductive parts of the vehicle can give you an electric shock. Working on the vehicle's electrical system can cause a short circuit. The short circuit can cause a fire. Many automotive fluids are highly flammable, e.g. fuel, engine or transmission oil. Fuel vapors can combust.

- Work on the electrical system and the steps required for removing and installing the battery should only be performed by an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

⚠ WARNING Escaping electrolyte fluid and toxic gas

Risk of electrolyte fluid and toxic gases escaping in exceptional cases if the battery is damaged or handled incorrectly.

- Avoid any inhalation of the vapors and any skin contact with the electrolyte fluid.
- Keep people away and on the side facing into the wind.
- Only charge lithium batteries in well-ventilated spaces.

NOTICE

Risk of short circuit, fire and damage to the alternator and electronic control units and components.

- Work on the electrical system and the steps required for removing and installing the battery should only be performed by an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.
- Always disconnect the negative terminal on the battery when working on the electrical system.

The 12-volt lithium battery is located under a separate cover in the vehicle floor in front of the passenger's seat.

The 12-volt lithium battery is automatically disconnected from the vehicle electrical system if the battery charge condition is low. The electrical system is deactivated temporarily. When the battery is charged (for at least 10 minutes) or when emergency starting or connection to an external power supply take place, the electrical system is automatically reactivated. The 12-volt lithium battery is automatically connected to the vehicle electrical supply again.

- ▷ Please see chapter "Emergency Starting" on page 111.
- ▷ Please see chapter "Charging the battery" on page 73.
- Never connect jumper cables directly to the battery.

Safety symbols on the battery

Consult the Manual

Wear protective goggles

Risk of explosion

Fire, sparks, naked flames and smoking are prohibited

Avoid sparking and short circuits when handling cables and electrical devices.

Risk of chemical burns

Electrolyte fluid is highly corrosive: wear safety gloves and eye protection.

First aid

If electrolyte fluid splashes into your eye, rinse immediately for a few minutes with clean water. Immediately seek medical attention from a doctor. If electrolyte fluid splashes onto your skin or clothing, neutralize immediately with soapsuds and rinse with plenty of water. If you accidentally drink electrolyte fluid, consult a doctor immediately.

Keep children away

Disposal

Hand in old batteries at a battery collection point.

Never dispose of old batteries as household waste.

Always have maintenance work carried out by qualified technicians

Never attempt to replace the battery yourself. Only have the lithium battery of this vehicle replaced with a lithium battery explicitly intended by Porsche for this vehicle. The use of other lithium or lead-acid batteries results in significant malfunctions including total failure of the electrical system.

Always have the battery replaced by an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer,

as they have trained technicians and the necessary parts and tools.

Battery care

What do I want to do?	What action do I need to take?
Prevent battery from discharging	▶ Switch off any electrical consumers not required on short trips. ▶ Switch off the ignition when leaving the vehicle.
Prepare for winter use	▶ Have the battery checked before winter begins.
Charge the battery	▶ Never attempt to charge a damaged battery. ▷ Please see chapter "Charging the battery" on page 73.
Laying up the vehicle	▶ If the vehicle is parked up for long periods, always keep the doors, flaps and lids of the vehicle closed. ▶ Switch ignition off.

Information

The battery will run down even if the vehicle is out of operation.

- ▶ To maintain its function, charge the battery approximately every 6 weeks or connect it to a trickle charger suitable for lithium batteries with a CC/CV or pure CV characteristic. Porsche recommends the charger and charge maintenance unit from Porsche Tequipment.

Charging the battery

CAUTION Escaping irritating gases due to a damaged battery

The use of boosters or non-approved chargers can result in the battery being charged with excessively high charging voltage and excessively high charging current. This can damage the battery and irritating gases can escape. This can cause considerable damage to the vehicle and chemical burns.

- ▶ Do not use boosters.
- ▶ Only use chargers that have been approved by the equipment manufacturer for $LiFePO_4$ batteries with integrated electronic protection circuits.
- ▶ The following maximum values must never be exceeded:
  - – Max. charging voltage: 14.8 V (even in the event of a fault with battery disconnected; no voltage peaks permitted)
  - – Max. charging current: 90 A
- ▶ If in doubt, contact an authorized Porsche dealer.

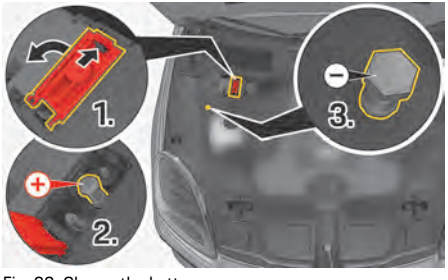


Fig. 28: Charge the battery

- ▶ Observe the instructions of the charger manufacturer.
- ▶ Batteries should only be charged in a well ventilated area.

1. Open the hood.
2. Open the cap on the positive terminal for emergency starting **+**.
3. Connect the red positive cable of the charger to the positive terminal for emergency starting **+**.
4. Connect the black **negative cable** of the charger to the ground point **–**.
5. Switch on the charger.
6. After charging, switch off the charger before disconnecting it.
7. Close the cap on the positive terminal for emergency starting **+**.

For recommendations for a suitable charger:

- ▶ Contact an authorized Porsche dealer.

Replacing the battery

WARNING Danger of fire due to unsuitable lithium battery

In addition to significant malfunctions of the vehicle electrical system, use of an unsuitable lithium battery or its incorrect installation may, in exceptional cases cause a fire (e.g. during charging).

- ▶ Never attempt to replace the battery yourself. Only have the lithium battery of this vehicle replaced with a lithium battery explicitly intended by Porsche for this vehicle. The use of other lithium or lead-acid batteries results in significant malfunctions including total failure of the electrical system.
- ▶ Always have the battery replaced by an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained

technicians and the necessary parts and tools.

- ▶ Observe the disposal instructions for lithium batteries.

Power interruption

Following a temporary power interruption, some equipment must be reinitialized.

1. Store the final position of the power windows.
   - ▷ Please see chapter "Windows" on page 327.
2. Teach wheels and tires in the Tire Pressure Monitoring System (TPMS).
   - ▷ Please see chapter "Vehicle Settings" on page 285.

Brake Fluid

▷ Please see chapter "Engine compartment filler openings" on page 30.

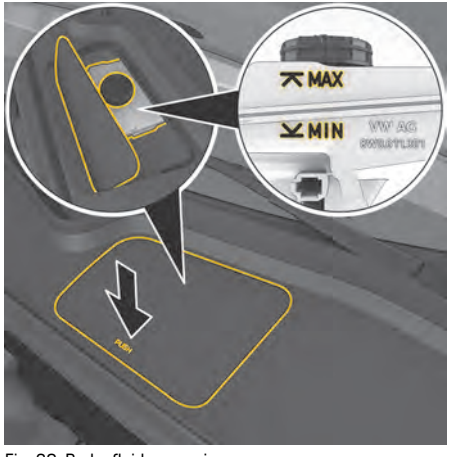


Fig. 29: Brake fluid reservoir

The brake fluid reservoir is located under a separate cover in the engine compartment.

- ▶ Press on the front of the cover to open it (**PUSH** marking).

Responding to warning symbols

If the brake fluid level is too low, the warning light (USA: **BRAKE**, Canada: (!)) appears in the instrument cluster and a warning message is displayed. If the warning light comes on and more force must be applied to the pedal, this may indicate a fault in the brake system.

- ▶ Stop as soon as it is safe to do so and do not continue driving.
- ▶ Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

▷ Please see chapter "Warning and Information Messages" on page 293.

Checking the brake fluid level

- ▶ Read off the brake fluid level on the brake fluid reservoir. The fluid level must always be between the **MIN** and **MAX** markings.
- ▶ Have the brake fluid topped up if the brake fluid level is below the **MIN** marking: Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Changing the brake fluid

⚠ DANGER Swallowing Brake Fluid

Brake fluid is hazardous to your health and may be fatal if swallowed.

- ▶ Keep brake fluid out of children's reach.
- ▶ Keep brake fluid away from pets. They can be attracted to it should there be a spill, or to used brake fluid left in an open container.
- ▶ If brake fluid gets on your skin or into your eye, immediately rinse the affected party of your body with clean water for a few minutes. Then see a doctor immediately.
- ▶ Note all the information on the refill container of the brake fluid.

The brake fluid is regularly checked and changed as part of servicing.

- ▶ Do **not** change the brake fluid yourself. Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

▷ Please see chapter "Safety and Driving Pleasure" on page 7.

Brakes

Electric parking brake

The electric parking brake acts on the rear wheels and is used to secure the vehicle when it is stationary.

Fig. 30: Applying the electric parking brake

Applying the parking brake

- Pull switch (P).
  The light indicator in the switch (P) and the brake warning light (USA: **BRAKE** /Canada: (!)) light up.

For information on warning lights and light indicators:

▷ Please see chapter "Instrument Cluster" on page 139.

Manually releasing the parking brake

✓ Ignition is switched on.

1. Press the brake pedal.
2. Press switch (P).
   The brake warning light (USA: **BRAKE** /Canada: (!)) goes out.

Automatically releasing the parking brake

✓ Engine running/vehicle ready for operation (E-Hybrid vehicles).

✓ Driver's door closed.

✓ Driver's seat belt fastened or operating mode **D**, **R** or **M** selected.

Despite the active parking brake, you can drive off as normal. The electric parking brake detects the start request and opens automatically.

If one of these prerequisites is not fulfilled, the electric parking brake is not automatically released when the driver attempts to drive off.

A message appears on the instrument cluster. The brake warning light (USA: **BRAKE** /Canada: (!)) and the light indicator on the switch (P) flash.

▷ Please see chapter "Warning and Information Messages" on page 293.

Automatic engagement of the parking brake

✓ Vehicle is stationary.

✓ Operating mode **D**, **R** or **M** selected.

✓ Driver's door is opened.

✓ Driver's seat belt is unfastened.

The electric parking brake engages automatically.

The light indicator on switch (P) and the brake warning light (USA: **BRAKE** /Canada: (!)) on the instrument cluster light up.

For information on warning lights and light indicators:

▷ Please see chapter "Instrument Cluster" on page 139.

Information

If automatic engagement of the electric parking brake is interrupted through manual release, the function is only available after the door has been opened or the driver's seat belt has been unfastened again.

Activating the emergency braking function

⚠ WARNING Severe deceleration

Emergency braking results in a very high braking force. This can endanger the traffic behind and control over the vehicle may be lost.

- Only use the emergency braking function in an emergency.
- Do not use the emergency braking function when driving normally.

In the event of failure of the conventional brakes, the vehicle can be decelerated significantly and brought to a stop using the electric parking brake.

- Pull and hold switch (P).
  The brake warning light (USA: **BRAKE** /Canada: (!)) and the light indicator on the switch (P) flash.
- To deactivate the emergency braking function, release switch (P).

Responding to warning symbols

If the electric parking brake cannot be fully applied when the vehicle is stationary, the light indicator on switch (P) and the brake warning light (USA: **BRAKE** / Canada: (!)) flash.

▷ Please see chapter "Warning and Information Messages" on page 293.

Footbrake

⚠ WARNING Obstructed pedals

Unsuitable floor mats or floor mats that are not properly secured can restrict the movement of the pedals or interfere with actuation of the pedals. The accelerator pedal can be depressed unintentionally or the brake pedal blocked. This can result in an unexpected increase in the driving speed or make braking difficult.

- Only use floor mats that are suitable for the vehicle.
- Secure the floor mats properly and do not lay them loosely.
- Do not lay several floor mats on top of each other.
- Ensure that the floor mats are securely fitted again after they have been removed, e.g. for cleaning.

⚠ WARNING No brake force boosting

The brake booster is only operative when the engine is running. Consequently, much greater force needs to be applied to the pedal during braking when the engine is switched off or in the event of a faulty brake booster.

- Vehicles with defective brakes must not be towed.

▷ Please see chapter "Towing" on page 270.

⚠ WARNING Water film on brake disk

In heavy rain, when driving through water or after washing the vehicle, the braking effect may be delayed and increased pressure on the brake pedal may be required.

- Allow a greater braking distance from the vehicle in front and "brake" the brakes dry at intervals. Always ensure that this does not affect the traffic behind.

⚠ WARNING Reduced braking action

After a long drive over salted or gritted roads, a coating may form on the brake disks and pads that significantly reduces friction and therefore the braking action as well.
The brake disks will inevitably begin to corrode if your vehicle is parked for an extended period, leading to a tendency for the brakes to "rub".

- To prevent corrosion on the brake disks, the brakes should be "braked dry" before parking the vehicle (this does not apply to vehicles with Porsche Ceramic Composite Brakes).
- If braking comfort is noticeably impaired, it is recommended that you have the brake system checked by experts.
  Go to a qualified specialized repair shop. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

- To relieve the brake system on steep slopes, remember to shift to a lower gear in good time (engine braking effect).
  If the engine braking effect on slopes is not sufficient, use the footbrake at intervals. Continuous braking can cause the brakes to overheat, impairing their effectiveness.

For Information on brake fluid and checking the brake fluid level:

▷ Please see chapter "Brake Fluid" on page 75.

Brake system function

Porsche cars are equipped with a power assisted hydraulic dual circuit brake system with disk brakes at the front and rear.

Both circuits function independently. One brake circuit operates the front left and rear right wheel and the other operates the front right and rear left wheel.

If one brake circuit fails, 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.

Responding to warning symbols

The functionality of the brake system warning light can be checked by switching the ignition to the "On" position (position **1**) and verifying that the warning light illuminates.

The warning light in the instrument panel lights up. A message will be displayed in 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.

For information on warning lights and light indicators:

▷ Please see chapter "Instrument Cluster" on page 139.
▷ Please see chapter "Warning and Information Messages" on page 293.

Brake pads and brake disks

The wear on the brake pads and brake disks largely depends on the driving style and the conditions of use and cannot therefore be expressed in terms of mileage covered.

The high performance brake system is designed to ensure the best possible braking effect at all speeds and temperatures.

Braking noise may occur, depending on the speed, braking force and ambient conditions (e.g., temperature, humidity).

Responding to warning symbols

If the wear limit of the brake pads is reached, a warning symbol is displayed.

▷ Please see chapter "Warning and Information Messages" on page 293.

▶ Have the brake pads replaced immediately. Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Porsche Ceramic Composite Brake (PCCB)

The high performance brake system is designed to ensure the best possible braking effect at all speeds and temperatures.

The wear of various components of the braking system, such as brake pads and brake disks, largely depends on the individual driving style and the conditions of use and thus cannot be expressed in terms of mileage covered.

The values quoted by Porsche are based on normal use in line with general traffic conditions. Wear increases significantly if the vehicle is used on race tracks or if a forceful driving style is adopted.

▶ Before driving your vehicle in this way (e.g. on race tracks), ask an authorized Porsche dealer about currently applicable guidelines.

Porsche Surface Coated Brake (PSCB)

The high-performance brake system is designed for optimal protection against wear and corrosion on friction surfaces. Wear on different components of the brake system, e.g. brake disks or brake pads, depends to a great extent on the individual driving style and therefore cannot be expressed in actual kilometers on the road. In addition to the advantages listed here, the innovative hard coating of the brake disk friction surfaces gives the disks a very specific look and cannot be compared to a standard brake disk. Owing to the hard-coated brake disk, a longer bedding-in period of the PSCB must be taken into account, during which, a technically insignificant friction noise may occur. When a vehicle is driven normally in line with traffic conditions, a shiny chrome-like friction surface covered with fine cracks appears after several thousand kilometers. Wear, cracks and darkening of the shiny silver friction surface increase when the vehicle is driven on race tracks, or if a forceful driving style is adopted. These visual changes have no relevant effect on braking and often just disappear partially after driving several thousand kilometers.

▶ Before driving your vehicle in this way (e.g. on race tracks), ask an authorized Porsche dealer about currently applicable guidelines.

Car Care

General care instructions

⚠ WARNING Water film on brake disks

After washing the vehicle, the braking effect may be delayed and increased pressure may be required.

- Check the brakes after washing the vehicle.
- Allow a greater braking distance from the vehicle in front and "dry" the brakes by applying them at intervals. Make sure that this does not affect the traffic behind you.

⚠ WARNING Chemical cleaners

Cleaning agents may be hazardous to your health.

Most chemical cleaners are concentrates which require dilution. High concentrations might cause problems ranging from irritation to serious injury.

- Keep cleaning agents out of the reach of children.
- Observe all caution labels.
- Always read the directions on the container before using any product. These directions may contain information necessary to avoid personal injury.
- Do not use fuel, kerosene, naphtha, nail polish remover or other volatile cleaning fluids. They may be toxic, flammable or hazardous in other ways. Only use spot removing fluids in a well ventilated area.
- Do not clean the underside of the chassis, fenders, wheel covers, etc. without protecting your hands and arms as you may cut yourself on sharp-edged metal parts.

Regular and expert car care helps maintain the value of your vehicle and can be a prerequisite for making claims under the vehicle warranty.

Porsche recommends car care products from Porsche Tequipment.

- Please read the application instructions on the packaging of the car care product.
- Store car care products out of the reach of children.
- Dispose of car care products in the correct manner.

To ensure that the condition of the vehicle is checked professionally and the warranty is retained for the full period: Contact an authorized Porsche dealer. The dealer will prepare a condition report and will certify the level of care of the vehicle.

NOTICE

High-pressure cleaning equipment or steam cleaners may damage the following components:

- Tires
- Logos, emblems, decorative films
- Painted surfaces
- Alternator
- Electrical components and plug connections in the engine compartment
- ParkAssist sensors
- (Radar) sensors of the Adaptive Cruise Control (ACC) and other assistance systems
- Rear view camera
- Windshield wipers

- Follow the operating instructions provided by the equipment manufacturer.
- Do not use high-pressure cleaners or steam cleaners to clean decorative films.
- Always observe a minimum distance of 20 in. (50 cm) when cleaning.
- Never use high-pressure cleaning equipment or steam cleaners with round-jet nozzles. A high-pressure cleaning device or steam cleaner fitted with a round-jet nozzle will damage your vehicle. Tires are particularly susceptible to damage.
- Do not point the cleaning jet directly at any of the aforementioned components.
- Always turn off the engine and allow it to cool down before working in the engine compartment.
- Never point the cleaning jet directly into openings, e.g. spark plug shafts and air filter housing or at the air filter. Cover the openings before cleaning.

Washing your vehicle

The best way to protect your vehicle against damaging environmental effects is regular washing and preservation. The longer grit, road and industrial dust, insect residues, bird droppings, tree secretions (e.g., resin, pollen), etc. remain on the vehicle, the more harmful their effect.

To ensure your car is cleaned thoroughly and the paintwork washed gently, please observe the following points:

- Wash the underside of the vehicle thoroughly at the end of the gritting season at the latest.
- Only wash the vehicle in areas intended for this

purpose to ensure that soot, grease, oil, and heavy metals do not harm the environment.

- Do not wash the vehicle in direct sunlight or if the bodywork is hot.
- If washing by hand, use a car shampoo, plenty of water, and a soft sponge or washing brush.
- Start washing the vehicle by wetting the paintwork thoroughly and rinsing off any heavy dirt.
- After washing the vehicle, rinse thoroughly with water, and rub with a chamois leather. When wiping with the chamois leather, do not use the same leather as you do for cleaning the windows.

Cleaning in the car wash

NOTICE

Car washes may damage optional add-on parts or parts that project beyond the contours of the vehicle.

- Before using an automatic car wash, consult the car wash operator.
- Retract all spoilers before using an automatic car wash.

Hazard	What should be observed?
Windshield wipers can start to move and become damaged in the car wash.	▸ Switch windshield wipers off. ▸ Do not operate the headlight cleaning system in car washes.
Damage to exterior parts	▸ Fold in door mirrors. ▸ Completely remove roof transport system.
Damage to wheels	▸ Adequately dimensioned car wash guide rails. The wider the wheel rim and the lower the tire height, the greater the risk of damage.
Scratches on wheels with high-gloss or silk-gloss finish	▸ Do not clean with the wheel-washing brushes in the car wash.

Paint care

NOTICE

Dust particles on painted surfaces can damage the paintwork if not properly dealt with.

- Do not rub dust with a dry cloth.

NOTICE

The matt effect of components may be lost if not cared for properly.

- Do **not** treat matt-effect bodywork sections with preservatives or polishes.

Preserving paint

The paint surface will dull over time due to weathering and should therefore be regularly protected with a paint preservative after washing the vehicle. This keeps the paint shiny and elastic, and prevents dirt from adhering to the paint surface and industrial dust from penetrating the paint.

Polishing paintwork

Paint polish should only be used to clean the paintwork when the original shine can no longer be obtained using preservatives.

Removing marks

Remove tar spatters, traces of oil, insects, etc. as soon as possible using an insect remover and wash the area carefully afterwards as they discolor the paint if left to work on it over time.

Repairing paint damage

Have minor paint damage (cracks, scratches or stone chips) repaired immediately, before corrosion begins. Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

If traces of corrosion have already formed, these must be thoroughly removed. An anti-corrosion primer must then be applied to these spots, followed by top-coat paint.

Caring for windshield wipers

Windshield wiper blades in perfect condition are vital for ensuring a clear view.

- Clean the windshield regularly with a window cleaning agent, particularly after going through a carwash.
- If extremely dirty (e.g. due to insect residues), clean the windshield using a sponge or cloth.

Cleaning windows

The front side windows have a water-repellent (hydrophobic) coating, which reduces soiling of the windows. This coating is subject to natural wear and can be renewed.

- Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

To ensure proper cleaning of your vehicle, please observe the following:

- Clean all windows regularly, inside and out, using a window cleaning agent.
- Do not dry the windows with the same chamois leather you use for the painted surfaces. Residue from preservatives could impair visibility.
- Remove insect residues with insect remover.

Repairing the underbody protection

⚠ WARNING Flammable material close to the exhaust system

Additional rust or underbody protection agents in the area of the exhaust system can become too hot when driving and ignite.

- Do not apply additional underbody protection or rustproofing agents on or near the exhaust manifold, exhaust pipes, catalysts, or heat shields.

The underside of your vehicle is permanently protected against chemical and mechanical influences. Damage to this protective coating cannot be excluded in day-to-day driving.

- Have the underside of the vehicle inspected at regular intervals by an authorized Porsche dealer and the protective coating restored as necessary. Contact an authorized Porsche dealer.

Cleaning decorative films

NOTICE

Risk of damage through detachment of the decorative films during cleaning.

- Do not use polish or hot wax.
- Do not use high-pressure cleaning equipment or steam cleaners.
- Use a soft sponge, pH-neutral soap and plenty of water.

Cleaning headlights, lights, plastic components and surfaces, sensors and cameras

NOTICE

Cleaning agents can seep into the controls or switches, for example, and damage them. Unsuitable cleaning agents can damage the plastic surfaces.

- Do not spray water and interior window cleaner directly onto the plastic components in the vehicle interior.
- Only use clean water and a little washing-up liquid or interior window cleaner to clean headlights, lights, plastic components and surfaces, radar sensors for Adaptive Cruise Control and vehicle cameras. Use a soft sponge or a soft, lint-free cloth for this purpose.
- Headlights must not be polished.
- Only clean the center console with touch-sensitive buttons using a microfiber cloth.
- Never use other chemical cleaning agents or solvents.

Wheel care

⚠ WARNING Cleaning agent film on the brake disks

If cleaning agent (e.g. wheel cleaning agents) comes into contact with the brake disks, the film that forms on the brake disks may impair braking performance.

- Make sure that no cleaning agent comes into contact with the brake disks.
- If cleaning agents do come into contact with the brake disks, clean the brake disks thoroughly with a strong jet of water.
- Paying attention to any traffic behind you, dry the brake disks by applying the brake.

Metal particles (e.g. brass or copper in brake dust) must not remain too long on alloy wheels. Contact corrosion can cause pitting.

Cleaners with an oxide-removing effect or incorrect pH value, as are commonly used for other metals, as well as mechanical equipment and products, will damage the surface and are therefore unsuitable.

- Only use acid-free cleaners for alloy wheels (pH value between 4 and 10). Products with the incorrect pH value can destroy the surface of the wheels.
- If possible, wash the wheels every two weeks with a sponge or washing brush. If the wheels are exposed to grit or industrial dust, weekly cleaning is necessary.

▷ Please see chapter "Washing your vehicle" on page 79.

Cleaning door, roof, lid, and window seals

NOTICE

The lubricant coating on the inner door seals may be damaged by unsuitable cleaning agents and care products.

- Do not use chemical cleaning agents or solvents.
- Do not use care products.

To ensure proper cleaning of your vehicle, please observe the following:

- Wash dirt (e.g. abrasion, dust, road salt and grit) from all seals regularly using warm soapy water.
- If there is a risk of frost, protect the outer door seals and lid and flap seals from freezing using a suitable care product.

Leather care

NOTICE

The leather may become damaged by the use of unsuitable cleaning agents and care products, and by inappropriate treatment.

- Do not use aggressive cleaners or hard cleaning objects.
- Make sure that perforated leather does not get wet on its reverse side.
- Remove water drops from the leather immediately.

To ensure proper cleaning and care of your vehicle, please observe the following:

- Clean all types of leather regularly to remove fine dust using a soft, white woolen cloth, or a commercially available microfiber cloth.
- Remove heavy soiling (**not** water or moisture stains) with a leather cleaning agent. Read the instructions for use on the containers.
  Porsche recommends car care products from Porsche Tequipment.
- Treat cleaned leather only with a leather care product.

Cleaning seats with seat ventilation

Rain water or moisture can stain the perforated leather of the seats.

Removing water and moisture stains

✓ Seat heating and seat ventilation is switched off.

✓ Ensure there is no direct sunlight.

1. Blot the entire seat and backrest surface using a clean, absorbent sponge and distilled water.
   Make sure that perforated leather does not get wet on its reverse side.
2. Allow the seat covering to dry completely at room temperature out of direct sunlight. Do not switch on the seat heating and seat ventilation to do this.
3. Once dry, wipe the seat covering with a dry, lint-free cloth.

Cleaning carpet, floor mats

⚠ WARNING Obstructed pedals

Unsuitable floor mats or floor mats that are not properly secured can restrict the movement of the pedals or interfere with actuation of the pedals. The accelerator pedal can be depressed unintentionally or the brake pedal blocked. This can result in an unexpected increase in the driving speed or make braking difficult.

- Only use floor mats that are suitable for the vehicle.
- Secure the floor mats properly and do not lay them loosely.
- Do not lay several floor mats on top of each other.
- Ensure that the floor mats are securely fitted again after they have been removed, e.g. for cleaning.

To ensure proper cleaning of your vehicle, please observe the following:

- Clean using a vacuum cleaner or a brush that is not too soft.
- Remove heavy dirt and stains using a stain remover.
  Porsche recommends car care products from Porsche Tequipment.

To protect carpets, the Porsche range of accessories includes the correct size of floor mats with the appropriate fastening.

Cleaning airbag covers

DANGER Improper cleaning

Unsuitable cleaning and care agents can penetrate into the airbag system. Risk of damage to the airbag system if incorrectly handled. In the event of an accident, the airbag systems may not be triggered.

- Do not make any modifications whatsoever to individual components, such as the covers of the steering wheel, dashboard, front seats and door and roof frame panels.
- Do not use cleaning agents or other liquids in the area of the airbags.

Cleaning fabric linings

Fabric linings on pillars, roofliner, and sun blinds, etc. must only be cleaned using suitable cleaning agents, suitable dry foam and a soft brush.

Alcantara® care

Do not use leather care products to clean **microfiber covers** made of Alcantara®. For regular care, it is sufficient to clean the cover with a soft brush. Strong abrasion or rubbing when cleaning will create a lasting change to the surface.

- When lightly soiled, wet a soft cloth with water or a pH neutral soap solution and wipe off the dirt.
- When heavily soiled, wet a soft cloth with lukewarm water or thinned white spirit and dab the dirt from the outside in.

Steering wheels with a microfiber cover can become more heavily soiled as a result of permanent contact with the skin.

- When lightly soiled, wet a soft cloth with a pH neutral soap solution and wipe the outer rim of the steering wheel with this.
- When heavily soiled, the outer rim of the steering wheel can be cleaned by rubbing/dabbing it lightly with a soft cloth and a commercially available upholstery foam cleaner in accordance with the instructions provided by the foam manufacturer.

Cleaning seat belts

To ensure proper cleaning of your vehicle, please observe the following:

- Use mild detergent for soiled seat belts.
- When drying, avoid direct sunlight.
- Only use suitable cleaning agents.
- Do not tint or bleach seat belts. The belt fabric could be weakened and could therefore impair safety.

Cleaning screens and touch displays

NOTICE

Unsuitable cleaning and care agents and incorrect treatment can damage screens and touch displays.

- Do not use solvents such as mineral spirits, thinners, gas or acetone; alcohol (ethanol, methanol or isopropyl alcohol) or abrasive agents for cleaning.
- Do not spray cleaning agents or other liquids directly onto screens or touch displays. The electronics can be damaged irreparably if liquids leak in. Instead, moisten a cloth and carefully wipe the screen.

To ensure proper cleaning of your vehicle, please observe the following:

- Screens and touch displays are susceptible to scratching. From time to time, clean the screens and touch displays carefully with a dry, clean and soft cloth (microfiber cloth). Do not exert excessive pressure on the surface when cleaning.
- Remove finger prints with a slightly damp cloth or a mild cleaning agent.

Laying up your vehicle

If you intend to store your vehicle for a prolonged period: Contact an authorized Porsche dealer. They will be glad to give you information and advice about the necessary measures, e.g. corrosion prevention, care, maintenance and storage.

▷ Please see chapter "Towing" on page 270.

For information on locking the vehicle when the battery is disconnected:

▷ Please see chapter "Central Locking" on page 85.

Refrigerant

Depending on the market, the air-conditioning system uses refrigerant named R1234yf or R134a. If refrigerant R1234yf is used, there´s a label located on the inside of the luggage compartment lid.

WARNING Pressurised refrigerant

The air conditioning system contains pressurised refrigerant R1234yf or R134a.

- The refrigerant system should only be serviced by trained and certified technicians to insure proper and safe operation (According to SAE J2845 Technician Training for Safe Service and Containment of Refrigerants Used in Mobile A/C

System).
- Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Label for R1234yf

Fig. 31: Label for R1234yf

Observe the safety symbols on the Label for R1234yf


Caution


Lubricant type


Mobile air conditioning system (MAC)


An authorised service technician is required in order to service the mobile air conditioning system (MAC)


Flammable refrigerants

Evaporator

The air conditioning evaporator (cooling coil) shall **never** be repaired or replaced with one removed from a used or salvaged vehicle. New replacement MAC evaporators shall be certified (and labeled) as meeting SAE Standard J2842 HFO-1234yf and R744 Design Criteria and Certification for OEM Mobile Air Conditioning Evaporator and Service Replacements.

Central Locking

Brief overview – opening and locking doors from outside

This brief overview does not replace the comprehensive descriptions provided in the "Central Locking" chapter. Safety messages and warnings, in particular, are not replaced by this brief overview.

Fig. 32: Vehicle key

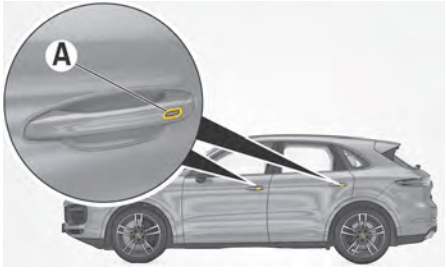


Fig. 33: Porsche Comfort Access

What do I want to do?	What do I have to do?	What happens?	Where?
Unlock (with the vehicle key)	▶ Press button on the vehicle key once. **– or –** Press button on the vehicle key twice (within approx. 2 seconds).	The emergency flasher emits one flash. The driver door and tailgate can be opened. **- or -** The doors and tailgate can be opened.	▷ p. 87
Unlock (with Porsche Comfort Access)	▶ Grip the door handle.	The emergency flasher emits one flash. The relevant door can be opened. The tailgate is also unlocked together with the driver door.	▷ p. 87

What do I want to do?	What do I have to do?	What happens?	Where?
Lock	With the vehicle key: ▶ Press the button on the vehicle key. With Porsche Comfort Access ▶ Touch proximity sensor **A** at the door handle.	The emergency flasher flashes twice and an acoustic signal sounds twice. The doors and tailgate are locked and can be opened from inside by pulling the door opener.	▷ p. 87
Lock when persons/animals are remaining in the vehicle ▶ Switch off the alarm system's passenger compartment monitoring system.	With the vehicle key: ▶ Press the button on the vehicle key twice (within approx. 2 seconds). With Porsche Comfort Access ▶ Touch proximity sensor **A** on the door handle twice (within approx. 2 seconds).	The emergency flasher emits one long flash. The doors and tailgate are locked and can be opened from inside by pulling the door opener.	▷ p. 87
Switch off the alarm system's alarm sound	▶ Press the button on the vehicle key. **– or –** Switch on ignition.	The alarm sound is switched off.	▷ p. 67

Using the central locking

Information

▶ Only use the vehicle key when the vehicle is in your sight.

Depending on equipment, the vehicle can be unlocked and locked either with the vehicle key or without a key by means of Porsche Confort Access. You can set whether only the driver's door and filler flap or the entire vehicle is to be unlocked when unlocking the vehicle.

▷ Please see chapter "Vehicle Settings" on page 285.

All doors can be unlocked irrespective of the selected setting:

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

Information

This section describes the vehicle's factory settings.

Porsche Comfort Access

Vehicles with Porsche Comfort Access can be unlocked and locked without using the vehicle key. The vehicle key must however be carried by the driver, e. g. in the trouser pocket.

If the door handles are heavily soiled, the operation of Comfort Access may be impaired.

To ensure that the vehicle cannot be unlocked and started by unauthorized third parties, the Comfort Access functions can be temporarily deactivated using the vehicle key.

Deactivating Comfort Access using the vehicle key

- Press the and buttons at the same time and hold down until the light indicator on the vehicle key lights up continuously.
  Deactivation using the vehicle key is confirmed when the light indicator on the vehicle key lights up continuously.

The Comfort Access functions are activated automatically when you press the buttons on the vehicle key.

- Do not expose the vehicle key to a high level of electromagnetic radiation. This can adversely affect Porsche Comfort Access.

Unlocking doors

Information

If the vehicle is unlocked and if a door or the tailgate is not opened within 45 seconds, the vehicle is locked again automatically.

Information

In the event of an accident in which the airbag is triggered, the entire vehicle is unlocked automatically to facilitate fast access for helpers. The emergency flasher is also activated automatically.

Unlocking doors with the vehicle key

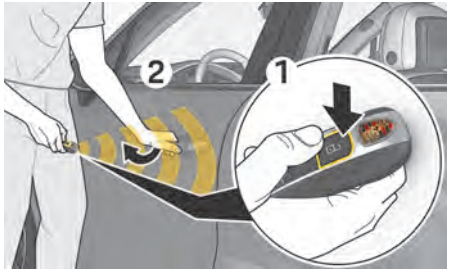


Fig. 34: Unlocking the doors with the vehicle key

1. Press button .
   The emergency flasher emits one flash.
   The vehicle is unlocked, depending on the setting.
2. Pull the door handle.

Unlocking doors with the proximity sensor in the door handle

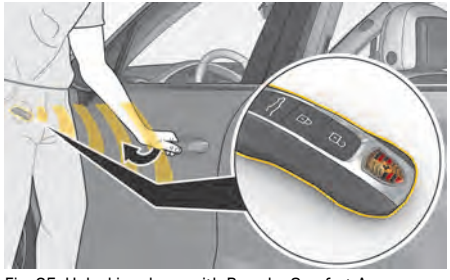


Fig. 35: Unlocking doors with Porsche Comfort Access

✓ Vehicles with Porsche Comfort Access
✓ The driver must be carrying the vehicle key, e.g. in the trouser pocket.
✓ The doors can be unlocked on the side of the vehicle where the vehicle key is located.

1. Grip the door handle. Do **not** touch the proximity sensor on the font of the door handle when doing so.
   The emergency flasher emits one flash.
   The vehicle is unlocked, depending on the setting.
2. Pull the door handle.

Information

In order to prevent the battery from discharging, unused comfort functions are progressively turned off. The vehicle can then be unlocked using the vehicle key.

Unlocking doors from inside

- Press button in the door panel.
  – or –
  Pull door opener.
  All doors and the tailgate are unlocked.
  The light indicator **A** goes off.

Information

The doors cannot be opened from inside if the vehicle was locked using the emergency key.

Automatic unlocking

The vehicle is automatically unlocked when a door is opened.

Locking doors

Locking the doors with the vehicle key

✓ Operating mode **P** selected.
✓ All doors closed.

- Press button 🔒 once.
  The emergency flasher emits two flashes.

If persons or animals remain in the vehicle:

- Press button 🔒 twice within 2 seconds.
  The emergency flasher emits one long flash.
  The doors are locked but can be opened from the inside by pulling the door opener.
- Inform any persons remaining in the vehicle that the alarm system will be triggered if the door is opened.

Information

The vehicle cannot be fully locked if the doors, hood and tailgate are not fully closed. A warning signal sounds and the emergency flasher does not flash.

Information

If the key is inside the vehicle when you lock it, the vehicle will be unlocked again. Several warning signals sound, and the vehicle flashes four times. Only if a door or the tailgate is not opened within approx. 45 seconds is the vehicle locked and can only be unlocked using a second key.

- Make sure that the vehicle key is not left inside the vehicle when locking it.

Locking doors with the proximity sensor in the door handle

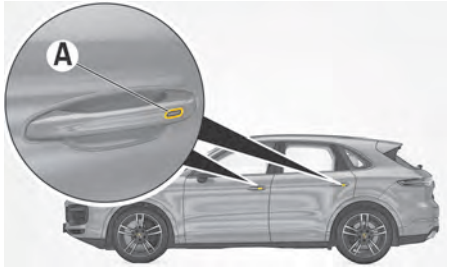


Fig. 36: Locking the doors with Porsche Comfort Access

✓ Vehicles with Porsche Comfort Access
✓ Operating mode **P** selected.
✓ The driver must be carrying the vehicle key, e.g. in the trouser pocket.
✓ All doors closed.

- Touch proximity sensor **A** at the door handle.
  The emergency flasher emits two flashes.
  Opening at the door handle is briefly deactivated. Pull on the door handle to check whether the vehicle is locked.

If persons or animals remain in the vehicle:

- Touch proximity sensor **A** at the door handle twice within 2 seconds.
  The emergency flasher emits one long flash.
  The doors are locked but can be opened from the inside by pulling the door opener.
- Inform any persons remaining in the vehicle that the alarm system will be triggered if the door is opened.

Information

- The vehicle cannot be fully locked if the doors, hood and tailgate are not fully closed. A warning signal sounds and the emergency flasher does not flash.
- The vehicle key must be outside the vehicle when locking the vehicle doors, otherwise the doors cannot be locked. Only if a door or the tailgate is not opened within approx. 45 seconds is the vehicle locked and can only be unlocked using a second key.

Locking doors from inside

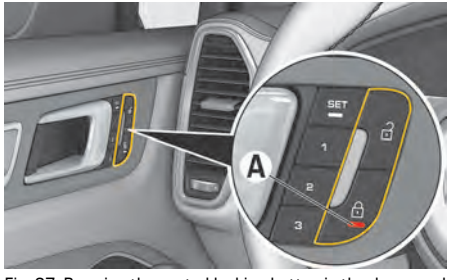


Fig. 37: Pressing the central locking button in the door panel

✓ The doors must be closed.

- Press button 🔒 in the door panel.
  All doors and the tailgate are locked. The filler flap is not locked.
  The light indicator **A** comes on.
  The doors can only be opened from inside by pulling the door opener.

Automatic locking (Auto Lock)

✓ Function activated.

The vehicle is locked automatically when a speed of approx. 9 mph (15 km/h) is exceeded.

▷ Please see chapter "Vehicle Settings" on page 285.

Activating and deactivating child lock

The rear doors can be prevented from opening from inside.

The child locks are fitted in the lock area of the rear doors.

Activating and deactivating child locks in vehicles without soft close

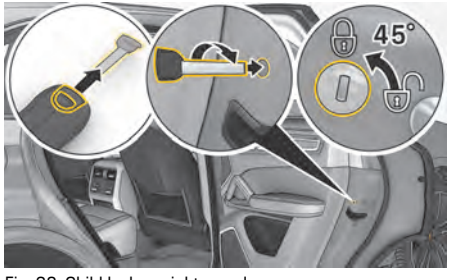


Fig. 38: Child lock on right rear door

Activating

- Using the emergency key, turn the child lock approx. 45° counter-clockwise on the right rear door and approx. 45° clockwise on the left rear door.

  When the child lock is activated, the slot is in a vertical position.

  The rear doors cannot be opened from inside.

Deactivating

- Using the emergency key, turn the child lock approx. 45° clockwise on the right rear door and approx. 45° counter-clockwise on the left rear door.

  ▷ Please see chapter "Vehicle Key" on page 282.

  The rear doors can be opened from inside.

Activating and deactivating child locks in vehicles with soft close

The child locks are activated in conjunction with child protection.

▷ Please see chapter "Disabling controls in the rear – child protection" on page 254.

Closing doors (vehicles with soft close)

Vehicles with soft close have a power closing mechanism on all four doors.

⚠ CAUTION Power closing mechanism

If the door is pressed or pulled gently into the lock, the door is automatically pulled completely into the lock.

- Make sure that you do not trap your fingers between the door and stationary vehicle parts.
- Keep foreign objects or limbs away from moving parts (rotary latch in the lock) of the power closing mechanism.
- Do not leave children unattended in the vehicle.

- Press or pull door gently into the lock.

  The door is automatically pulled closed.

Interrupting the closing operation in the event of danger

- Pull door opener on the inside.

  – or –

  Pull door handle on the outside.

Emergency unlocking and emergency locking of doors

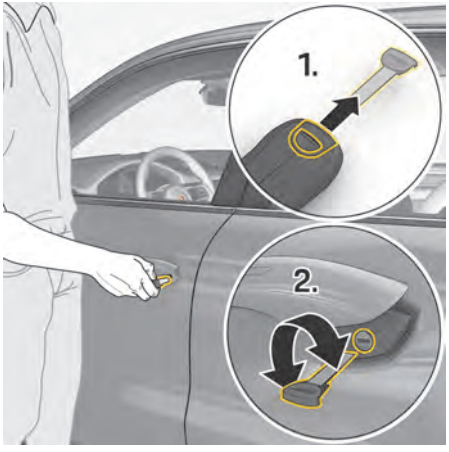


Fig. 39: Emergency unlocking/emergency locking

If the vehicle key remote control does not work, the doors can also be unlocked and locked without the remote control.

Emergency unlocking of the doors

- Hold the vehicle key at the top right of the rear window and press the button at the same time.

If the vehicle still cannot be unlocked:

1. Remove the emergency key from the vehicle key.
   ▷ Please see chapter "Vehicle Key" on page 282.
2. Pull and hold the door handle.
3. Insert the emergency key with the wide handle end facing up into the door lock.
4. Turn the emergency key counter-clockwise to the first point of noticeable resistance and then

turn it further to the stop using a certain amount of force.

5. Turn the emergency key back to its initial position and remove it.
6. Switch on the ignition within 15 seconds to prevent the alarm system from triggering.

Information

The time it takes to trigger the alarm system differs from country to country.

Performing emergency door locking

Information

Only emergency lock the doors when the vehicle is parked.

- Unlock the doors before starting to drive.

1. Remove the emergency key from the vehicle key.
   - Please see chapter "Vehicle Key" on page 282.
2. Pull and hold the door handle.
3. Insert the emergency key with the wide handle end facing up into the door lock.
4. With the door open, turn the emergency key clockwise to the first point of noticeable resistance and then turn it further to the stop using a certain amount of force.
5. Turn the emergency key back to its initial position and remove it.
6. Close the door.
7. Check that the vehicle is locked.

Information

In the event of a central locking fault, all functional locks in the central locking system can be locked via the lock in the driver's door.

- Have faults in the central locking system repaired.
- Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Performing emergency locking of the doors if the central locking system has failed

✓ Perform the procedure for the passenger door and the rear doors.

Fig. 40: Performing emergency locking of the passenger's door

1. Open the door.
2. Remove the emergency key from the vehicle key.
3. Remove protective plug.
4. Turn the lock outward using the emergency key.
5. Pull and hold the door handle.
6. With the door open, turn the emergency key clockwise to the first point of noticeable resistance and then turn it further to the stop using a certain amount of force.
7. Turn the emergency key back to its initial position and remove it.
8. Re-insert protective plug in the door lock.
9. Close the door.
10. Check that all doors are locked.
    The doors can be opened from inside by pulling the door opener.

Charging

Charging high-voltage battery

For maximum electric driving frequency:

- Charge the high-voltage battery when the vehicle is parked, for example overnight.

DANGER Incorrect charging

An incorrect charging process, non-observance of the generally applicable safety precautions and improper handling of the high-voltage battery can cause electric shocks, short circuits, explosions, fire or burns.

- Before starting the vehicle, remove the vehicle charging cable, close the cover and charge port door and store the vehicle charging cable in a safe place.
- Always observe the specified sequence when charging the high-voltage battery. Do not unplug the vehicle charging cable from the electrical socket during the charging process. Finish charging before disconnecting the vehicle charging cable from the electrical socket.
- Observe the safety notes in the instructions for the Porsche charging equipment.
- Do not work in or on the vehicle during the charging process.

DANGER Unsuitable or damaged electrical sockets and vehicle charging cables

The use of unsuitable or damaged electrical sockets and vehicle charging cables and improper handling of the high-voltage battery can cause electric shocks, short circuits, explosions, fire or burns.

- Only use vehicle charging cables that have been tested and approved by the manufacturer for charging the high-voltage battery in a plug-in hybrid vehicle.
- Only connect vehicle charging cables to electrical sockets that were installed professionally.
- Do not connect vehicle charging cables to damaged or dirty electrical sockets.
- Do not use a damaged vehicle charging cable.
- Do not use extension cables, cable reels, multiple sockets or travel adapters.
- Do not modify or repair any of the electrical components.
- Protect electrical sockets and plug connections from water, moisture and other fluids and liquids.
- Do not use sharp-edged or pointed objects to remove dirt, ice and snow from the charging socket.

WARNING Unsecured vehicle charging cable

An unsecured, incorrectly secured or incorrectly positioned vehicle charging cable can slip out of place and endanger the vehicle occupants during braking, direction changes or in the event of an accident.

- Never transport the vehicle charging cable unsecured in the vehicle and always store it in the charge bag in the luggage compartment.
- Always transport the vehicle charging cable in the luggage compartment, never in the passenger compartment (e.g. on or in front of the seats).

WARNING Engine compartment blowers and other moving parts in the area of the engine

While work is in progress, hands, fingers, articles of clothing, necklaces or long hair can become trapped by moving parts in the engine compartment, e.g. engine compartment blowers or drive belts. The engine compartment blowers are installed under the hood. The engine compartment blowers may start up during the charging process to cool the high-voltage battery and on-board charger.

- Carry out work in this area only with the engine off, when charging is inactive and while exercising extreme caution and take great care to ensure that parts of the body, articles of clothing or jewelry cannot be caught up by the radiator fan, engine compartment blower, drive belt or other moving parts.

NOTICE

Risk of damage to the charging equipment and vehicle from overvoltages in the power supply.

- Do not charge the high-voltage battery via the vehicle charge port during a thunderstorm.
- If possible, disconnect the charging equipment from the power grid during a thunderstorm.

Instructions for charging the high-voltage battery

– Only use a vehicle charging cable that has been tested and approved for charging the high-voltage battery in a plug-in hybrid vehicle (vehicle plug standardized in accordance with IEC 62196-2, SAE J1772 or GB/T 20234-2 and

charging process in accordance with IEC 61851-1, SAE J1772 or GB/T 18487 (modes 2 and 3)), and complies with national standards and legislation.

- Porsche recommends using the Porsche Universal Charger (AC) together with the Charging Dock or the basic wall mount. Refer to the separate instructions for the Porsche charging equipment and instructions for the vehicle charging cable used.
- Vehicle charging cables without protection (standardized in accordance with IEC 61851-1, SAE J1772 or GB/T 18487 (mode 1)) are not supported.
- The temperature of the vehicle should be between approx.–4 °F (–20 °C) and +104 °F (+40 °C) during the charging process.

Inserting the vehicle plug into the vehicle charge port and starting the charging process

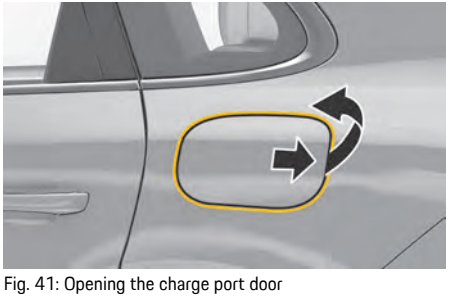


Fig. 41: Opening the charge port door

✓ Transmission parking lock **P** activated.

✓ Ignition switched off / operating device **not** in ignition position **2**.

✓ Vehicle unlocked.

✓ Vehicle charging cable connected to the power grid.

1. Refer to the separate instructions for the Porsche charging equipment and instructions for the vehicle charging cable used.
2. Open the charge port door by pressing on the rear part of the door.

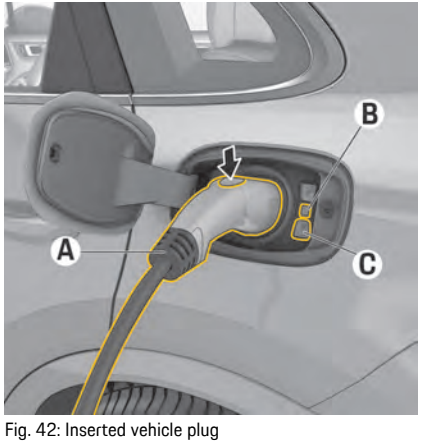


Fig. 42: Inserted vehicle plug

3. Press the release button (**arrow**) and insert the vehicle plug **A** completely into the charge port.
   After letting go of the release button (**arrow**) the vehicle plug is locked and the charging process started. The light indicator **B** and the light indicator on the button **C** indicate the charge state of the high-voltage battery and the locking status of the vehicle plug.

▷ Please see chapter "Display of the charge and locking status on the vehicle charge port" on page 93.

Information

- If the vehicle plug is inserted when you lock the vehicle, the vehicle plug remains locked.
- The ignition can be switched on after charging starts.
- If the vehicle key or operating device is turned to ignition lock position **2** during the charging process, the charging process is interrupted. If the vehicle plug is not removed, charging resumes after approx. 20 seconds.
- If the charging timer function is activated, the charging timer controls when the charging process starts and the charging process may not start immediately after you insert and lock the vehicle plug.

Ending the charging process and removing the vehicle plug from the vehicle charge port

1. Unlock the vehicle.
2. Press button **C** on the vehicle charge port.
   The vehicle plug is unlocked. If a charging process was started, it will be stopped.
3. Press the release button (**arrow**) on the vehicle plug and pull the vehicle plug from the vehicle charge port within approx. 20 seconds.
4. Disconnect the vehicle charging cable from the power supply and store in a safe place.
5. Close the charge port door.

Information

- Observe the specified sequence for charging the high-voltage battery.
- End the charging process before disconnecting the vehicle cable from the electrical socket.
- Observe the safety instructions for charging the high-voltage battery.

Display of the charge and locking status on the vehicle charge port

The light indicator **B** shows the charge state of the high-voltage battery and the light indicator on button **C** shows the locking status of the vehicle plug.

B	C	Meaning
Off	Off	Vehicle plug not inserted or no connection to the power grid established. **or** Vehicle plug inserted: Vehicle in idle state. To detect the current connection and charge status: press the or button on the vehicle key.
Off	flashes	Vehicle plug inserted and not locked (e.g. incorrect voltage at vehicle plug).
lights up	lights up	Vehicle plug inserted and locked. Connection to the power grid established (e.g. timed charging).
flashes	lights up	Vehicle plug inserted and locked. The high-voltage battery is being charged. The lighting duration corresponds to the current charge state of the high-voltage battery.
lights up	lights up	Vehicle plug inserted and locked. The charging process is finished.
lights up	lights up	An error occurred when charging the high-voltage battery.

If the charging process was not started:

- ▶ Check that the vehicle plug is inserted correctly.
- ▶ Refer to the separate instructions for the Porsche charging equipment and instructions for the vehicle charging cable used.
- ▶ Remove and insert the vehicle plugs again.

Using the charge timer function

When the departure timer is active, the high-voltage battery is fully charged at a programmed departure time. The vehicle interior can also be precooled/heated.

In the vehicle, the current charge of the high-voltage battery is indicated by the battery charge condition display on the instrument cluster.

The high-voltage battery is always charged to a state of charge of approx. 10% in this mode, even if a charge timer is active.

Programming and activating the departure timer

The departure timer is programmed and activated via the PCM.

Each departure timer can be set to start once (single timer) or at regular intervals (recurring timer). Additionally, the vehicle interior can be precooled/heated at the departure time by selecting the **Additional precool/heat** option.

✓ Departure time is in the future.

✓ Vehicle plug inserted.

✓ Precool/heat timer: Fuel tank reserve not yet reached.

At some public charging stations, the charging process cannot be started if a departure timer has been programmed.

1. **HYBRID** ▸ **TIMER**
2. Select the desired **Departure timer**.
3. Set the days or date and time of the desired departure time. Activate or deactivate the precool/heat timer (passenger compartment precooling/heating) as necessary via the **Additional precool/heat** option. Activate the entry with the option **Timer**.
   - ▷ Please see chapter "Using the precool/heat timer and precooling/heating (E-Hybrid)" on page 65.

Information

Vehicle interior preheating/cooling works most effectively if the ignition remains switched off while it is working. In the case of charge timers, precooling/heating is only performed when the vehicle plug is inserted.

Deactivating the departure timer

1. **HYBRID** ▸ **TIMER**
2. Select the desired **Departure timer**.
3. Disable the option **Timer**.

Fig. 43: Charge timer function

Starting charging with the charge timer

✓ Departure timer programming and activated in the PCM.
✓ Vehicle unlocked.
✓ Vehicle plug inserted.
✓ Precool-heat timer: Fuel tank reserve not yet reached.

The light indicator on button **A** lights up.

The charge timer function defines when the charging process will start. The high-voltage battery is fully charged until the programmed departure time.

The high-voltage battery may not be fully charged with the precool/heat timer programmed.

If no departure timer is programmed, the light indicator in button **A** flashes three times and then goes out when the button is pressed.

Ending charging with the charge timer

✓ Vehicle plug inserted.
✓ Charge timer function is activated.
▸ Press button **A**.

The light indicator on button **A** goes out.

High-voltage battery charging starts immediately. The remaining charging time for the high-voltage battery is displayed on the instrument cluster.

To resume charging with the charging timer, press button **A** again.

The time required for the charging process can vary due to the following factors:

– Electrical socket used (household electrical outlet or industrial electrical outlet).
– Country-specific power grid voltage and electric current.
– Settings for charging current limiting on the control unit.
– Fluctuations in the power grid voltage.
– Ambient temperature of the vehicle and of the charging equipment.
– Temperature of the high-voltage battery and control unit.
– Passenger compartment temperature precooling/heating activated.
– Current-carrying capacity of vehicle plug.

Owing to physical charging losses, the amount of energy taken from the power grid supply is greater than the amount of energy stored during charging of the high-voltage battery.

Domestic electrical outlet

Connection standard	Charging time at 3.6 kW	Charging time at 7.2 kW
USA	approx. 19.1 hours	approx. 19.1 hours

Industrial electrical outlet

Connection standard	Charging time at 3.6 kW	Charging time at 7.2 kW
USA 240 V, 30 A	approx. 4.0 hours	approx. 2.8 hours
USA 240 V, 50 A	approx. 4.0 hours	approx. 2.4 hours
USA 240 V, 100 A (permanent connection)	approx. 4.0 hours	approx. 2.4 hours

Emergency unlocking of charge port door

If the electrical release mechanism is faulty, the charge port door can be opened manually.

Vehicles without DVD changer:

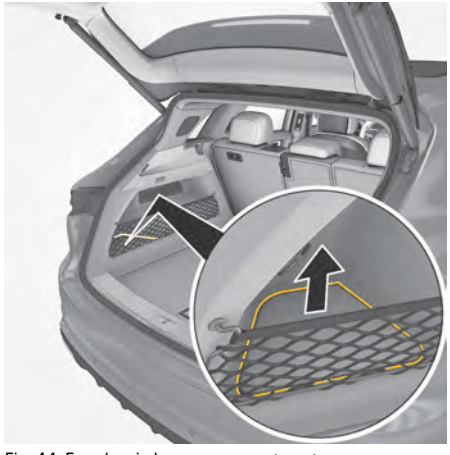


Fig. 44: Fuse box in luggage compartment

1. Carefully lever off the cover of the fuse box in the luggage compartment using a suitable object (e. g. screwdriver) and remove it.

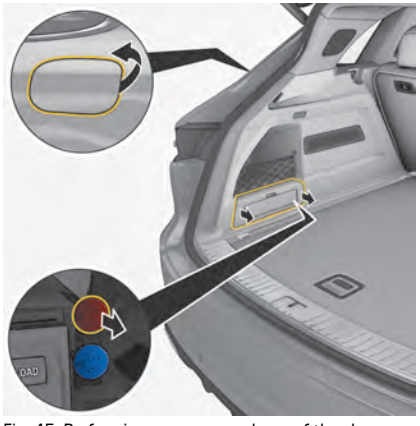


Fig. 45: Performing emergency release of the charge port (vehicles without DVD changer)

2. Pull the red emergency release button in the **direction of the arrow**.

Vehicles with DVD changer:

1. Lever off the DVD changer trim panel using a suitable object (e.g. screwdriver) and remove it.

Fig. 46: Performing emergency release of the vehicle plug (vehicles with DVD changer)

2. Pull the red emergency release button in the **direction of the arrow**.

To have the unlocking mechanism of the charge port door checked:

- Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Performing emergency release of vehicle plug

If the electrical release mechanism is faulty, the vehicle plug can be unlocked manually.

Vehicles without DVD changer:

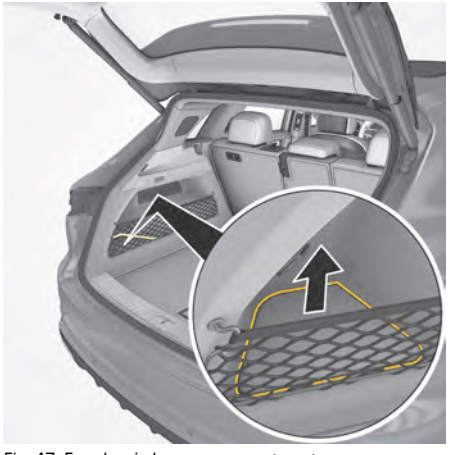


Fig. 47: Fuse box in luggage compartment

1. Carefully lever off the cover of the fuse box in the luggage compartment using a suitable object (e. g. screwdriver) and remove it.

Fig. 48: Performing emergency release of the vehicle plug (vehicles without DVD changer)

2. Pull the blue emergency release button in the **direction of the arrow**.
3. Disconnect the vehicle plug from the vehicle charge port.

Vehicles with DVD changer:

Fig. 49: Performing emergency release of the vehicle plug (vehicles with DVD changer)

1. Lever off the DVD changer trim panel using a suitable object (e.g. screwdriver) and remove it.
2. Pull the blue emergency release button in the **direction of the arrow**.
3. Disconnect the vehicle plug from the vehicle charge port.

To test the release of the vehicle plug:

- Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Child Restraint Systems (Child Seats)

General safety instructions

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

When possible, use only child restraint systems recommended by Porsche. These systems have been tested and adjusted to the interior of your Porsche and the appropriate child weight groups.

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

The use of infant or child restraints is required by law in all 50 US states and the Canadian provinces. The child restraint system should be one that complies with U.S. Federal/Canadian Motor Vehicle Safety Standards and should be secured by a lap belt portion of a lap-shoulder belt or for child seats equipped with the L.A.T.C.H. system (**L**ower **A**nchorage and **T**ether for **Ch**ildren, also known as ISOFIX) to the L.A.T.C.H. anchorages.

A statement by the seat manufacturer of compliance with U.S. Federal/Canadian standards can be found on the instruction label on the restraint and in the instruction manual provided with the restraint.

All child restraint systems are designed to be secured in vehicle seats by lapbelts or the lapbelt portion of a lap-shoulder belt.

You can obtain child seats that are L.A.T.C.H. compatible at your authorized Porsche dealer.

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

⚠ DANGER Improper use of child restraint systems

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

- Make sure that all child restraints are properly secured.
- Follow all child restraint instructions and warnings in this manual.

- Always observe the separate operating instructions for the child restraint system provided by the manufacturer of the child restraint for installation, use and proper securing of the child.
- Only use child restraint systems recommended for your Porsche. These systems have been tested and adjusted to the interior of your Porsche and the appropriate child weight groups. Other systems have not been tested and could present an increased risk of injury.
- Infants and small children should never be held on the lap or share a seat belt with another occupant while the vehicle is in motion.
- Children too big for a group III child restraint system must use regular seat belts. A child is too small for a seat belt if the shoulder belt crosses the face or the neck of the child.
- Choose a child restraint system according to the height and weight of the child.
- Child restraint systems that are damaged or have been heavily stressed in an accident must be replaced immediately.
- Children could be endangered in a crash if their child restraints are not properly secured in the vehicle.
- Do not affix objects to child restraint systems or cover them with other materials.
- For maximum safety and protection, install the child restraint system in the rear seat.

Installing child restraint systems

According to accident statistics, children are safer when properly restrained in the rear seating positions than in the front seating positions.

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

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

Children in group 0 and 0+: Up to 29 lbs. (13 kg)

Children of this weight must be transported in a restraint system **facing rearward**.

Children in group I: 20 to 40 lbs. (9 to 18 kg)

Children in this group are carried in child restraint systems **facing forward**.

Children in group II: 33 to 55 lbs. (15 to 25 kg)

Children in this group are carried in child restraint systems **facing forward**.

Children in group III: 48 to 79 lbs.(22 to 36 kg)

Children in this group are carried in child restraint systems **facing forward**.

Using child restraint systems in the front passenger seat

⚠ DANGER Child Restraint in Front Seat

The use of a child restraint system in the front passenger seat can result in serious personal injury or

death to the child from an airbag deployment.

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

- 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.

▷ Please see chapter "Automatic locking retractor" on page 98.

▷ Please see chapter "Automatic deactivation of the passenger airbag" on page 56.

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

The following instructions are provided to you solely for that purpose.

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

Child restraint system for up to one-year old children

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

- When an up to one-year old child is seated in the child restraint system, the front airbag is automatically deactivated on the passenger side.
- Make sure that the **PASSENGER AIR BAG OFF** indicator light lights up.
- Adjust the passenger's seat as far away from the airbag and adjacent car body parts as possible.

⚠ DANGER Child Seat Detection Fault

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

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

In this case:

- Install child restraint system on the rear seats.
- Have the fault remedied at your nearest authorized Porsche dealer immediatly.

Occupant size sensing

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

- In case of doubt, fasten the child restraint system on a rear seat.

Small adult passengers

Some smaller adults may not trigger the **PASSENGER AIR BAG OFF** indicator light to be turned off. If the light is lit when an adult occupies the seat, they should reposition their body properly, centered in the seat with feet on the floor and not leaning on adjacent body parts. If the lamp still does not turn off, the person should move to a rear seat for better protection, and the vehicle should be taken to an authorized Porsche dealer for evaluation.

- Make sure that the **PASSENGER AIR BAG OFF** indicator light does not light up.

⚠ DANGER Adult Use of Front Seats

When the ignition is on and the small adult passenger is seated on the passenger seat, the indicator light **PASSENGER AIR BAG OFF** must be off.

If the **PASSENGER AIR BAG OFF** indicator light lights up, it could indicate a fault in the system.

In this case:

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

Automatic locking retractor

The seat belts for the front passenger and rear seats are equipped with an automatic locking retractor for securing the child restraint system.

When activated, this retractor allows you to securely fasten the child restraint system in place so that inadvertent movements will not occur.

⚠ DANGER Child Restraint in Front Seat

The use of a child restraint system in the front passenger seat can result in serious personal injury or

death to the child from an airbag deployment.

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

- 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.

▷ Please see chapter "Automatic deactivation of the passenger airbag" on page 56.

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

Fig. 50: PASSENGER AIR BAG OFF/ON indicator light

DANGER Adjusting Child Restraint after Fastening

Moving the seat could misadjust the seat belt against the child restraint and cause the **PASSENGER AIR BAG OFF** indicator light to go off and activate the airbag system.

- After fastening the child restraint system, do not adjust the seat in any direction.
- Check the condition of the passenger airbag system shown by the indicator light in the overhead console.

Activating the automatic locking retractor

1. If a child restraint system must be fastened to the passenger seat, adjust the passenger seat as far away from the airbag as possible.
2. Position child seat according to the child seat's manufacturer instructions.
3. Pull the seat belt webbing completely out. At this point the locking mechanism is activated.
4. Insert the seat belt tongue into the buckle and make certain that it is properly latched. Make no more adjustments to the seat.
5. Allow the seat 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 seat belt

1. Unbuckle the seat 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.

Using the L.A.T.C.H. child restraint system

L.A.T.C.H. (**L**ower **A**nchorage and **T**ether for **Ch**ildren) child restraint systems are the best option for mounting a child seat in your Porsche.

Such L.A.T.C.H. restraint systems can be installed only using the L.A.T.C.H. system in the rear seats.

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

The middle rear seat is equipped with a top tether anchorage (anchor point for tether straps).

- Use only child restraint systems with the L.A.T.C.H. system recommended by Porsche.
  These systems have been tested and adjusted to the interior of your Porsche and the appropriate child weight groups.
  Other systems have not been tested and could entail an increased risk of injury.
- You can obtain child seats that are L.A.T.C.H.-compatible at your authorized Porsche dealer.

▷ Refer to the separate installation instructions for your child restraint system.

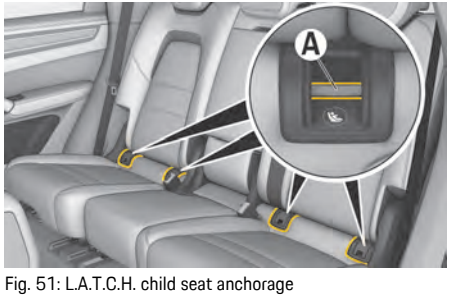


Fig. 51: L.A.T.C.H. child seat anchorage

Markings on the right and left for the L.A.T.C.H. child seat anchorage can be found on the backrests of the outer rear seats.

The retaining lugs **A** for the L.A.T.C.H. child seat anchorage can be found under the lower section of the backrest.

⚠ WARNING Misuse of Child Restraint Anchorages

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

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

▷ Please see chapter "Automatic unlocking" on page 87.

1. Secure the child restraint system to retaining lugs **A** as described in the instruction manual for the child restraint system.
2. Pull the child restraint system to check that both anchorage points are properly engaged.

Upper anchorage points for child restraint systems with L.A.T.C.H. top tether

Fig. 52: Top Tether

When using a child restraint system with L.A.T.C.H. top tether, the anchorage points on the rear of the rear seat backrest are used to secure the top tether.

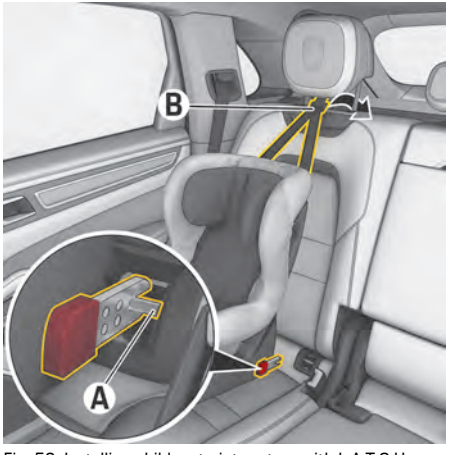


Fig. 53: Installing child restraint system with L.A.T.C.H. anchorage on the rear seats

1. Secure the child restraint system to retaining lugs **A** as described in the instruction manual for the child restraint system.
2. Pull on the child restraint system to check that both anchorage points are properly engaged.
3. Guide L.A.T.C.H. top tether **B** through the headrest.

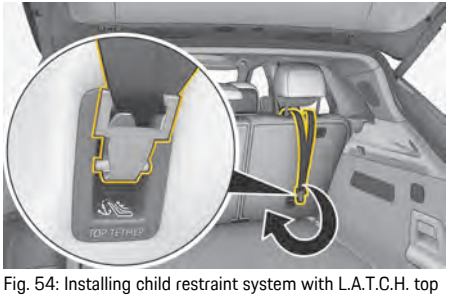


Fig. 54: Installing child restraint system with L.A.T.C.H. top tether on the rear seats

4. Fasten L.A.T.C.H. top tether **B** to the attachment point on the rear side of the backrest and tighten the strap.

Coolant

DANGER Swallowing Engine Coolant

Engine coolant is hazardous to your health and may be fatal if swallowed.

- Keep engine coolant out of children's reach.
- Keep engine coolant away from pets. They can be attracted to it should there be a spill, or to used engine coolant left in an open container.
- If engine coolant gets on your skin or into your eye, immediately rinse the affected party of your body with clean water for a few minutes. Then see a doctor immediately.
- Note all the information on the refill container of the engine coolant.

WARNING Engine compartment blowers and other moving parts in the area of the engine

When working in the engine compartment, hands, fingers, articles of clothing, necklaces or long hair can become trapped by moving parts, e.g. engine compartment blowers or drive belts. The engine compartment blowers are installed under the hood. After the engine is stopped, the engine compartment temperature is still monitored. Depending on temperature, the engine-compartment blowers may continue to run or start to run.

- You should only work in this area with the utmost care and the engine should always be stopped; make sure that body parts, articles of clothing or items of jewelry do not get trapped by radiator fans, engine compartment fans or other moving parts.

WARNING Hot engine parts and hot coolant

The engine and adjacent components, the exhaust system and the coolant become very hot when the engine is running.

The coolant reservoir is pressurized. The hot coolant may suddenly escape if the coolant reservoir is not opened carefully.

- Take care when working near hot vehicle parts, particularly the engine and exhaust system.
- Always turn off the engine and allow it to cool down before working in the engine compartment.
- Always carry out work in the engine compartment with the greatest care.
- Only top up coolant when the engine is stopped and the ignition is switched off.
- Do **not** open the cap of the coolant reservoir when the engine is hot. Wait until the coolant temperature gage displays a temperature below 140 °F/60 °C.

NOTICE

If you continue to operate the vehicle when a warning appears, you risk damaging the engine.

- Switch engine off and let it cool.
- Do not continue driving if the warning persists, even if the engine coolant level is correct.
- Have the fault rectified. Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

▷ Please see chapter "Warning and Information Messages" on page 293.

The coolant provides year-round protection against corrosion and freezing at temperatures as low as –35 °F / –37 °C.

The coolant level is regularly checked as part of servicing.

- Only use Porsche-approved freeze protection agents.

Porsche recommends Glysantin G40 (alternatively: freeze protection in accordance with G12++/VW TL 774 G) or Glysantin G65 (alternatively: freeze protection in accordance with G12evo/VW TL 774 LJ). These freeze protection agents can be mixed.

Points to note about E-Hybrid vehicles

E-Hybrid vehicles have a second cooling system with an inaccessible coolant reservoir. The coolant level does not need to be checked. Faults are displayed on the instrument cluster.

If a fault occurs in this second cooling system:

- Never attempt to add coolant.
- Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Checking the coolant level and adding coolant

▷ Please see chapter "Engine compartment filler openings" on page 30.

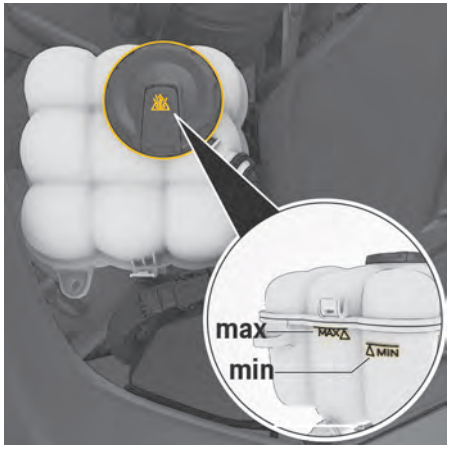


Fig. 55: Coolant reservoir

▷ Please see chapter "Instrument Cluster" on page 139.

✓ Vehicle is level.

✓ Engine is cold and the coolant temperature gage is below 140 °F / 60 °C.

1. Read the coolant level. The coolant level must be between the **min** and **max** markings.
2. If the coolant level is below the **min** mark, add coolant.
3. Carefully screw off the coolant reservoir cap and allow any excess pressure to escape.
4. Unscrew the cap completely.
5. Top up coolant. Only use a mixture consisting of equal parts of freeze protection agent and distilled water. Do not fill beyond the **max** mark.
6. Screw on the cap of the coolant reservoir until you feel it engage.
7. Significant coolant loss indicates leaks the coolant system. Check the cooling system and have the cause of the coolant leak rectified immediately. Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Information

If pure water has been used to refill the reservoir in an emergency, the mix ratio must be corrected. Significant coolant loss indicates leaks the coolant system.

▶ Find the cause and have it repaired immediately. Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Cruise Control

Cruise control maintains the chosen speed from approx. 20 mph (30 km/h) without the driver having to press the accelerator pedal.

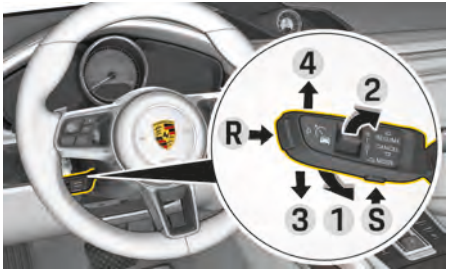


Fig. 56: Control lever

R Switch driver assistance systems on/off
S Switch between driver assistance systems
1 Set/increase the desired speed
2 Reduce the desired speed
3 Interrupt cruise control operation (CANCEL)
4 Resume the stored speed (RESUME)

Information

Active downshifting and braking intervention are carried out automatically to help maintain the preselected speed (especially when driving downhill).

⚠ WARNING Unsafe traffic situation and unfavorable road conditions

Using cruise control can lead to an accident if the prevailing traffic situation does not allow you to drive at a sufficient distance to the car in front and at a constant speed.

- Do not use cruise control in heavy traffic, on windy stretches of road or in unfavorable road conditions (e.g. wintery conditions, wet roads, varying road surfaces).

Switching cruise control readiness on

✓ Cruise control switched on (button **R**).

1. Press button **S** on the control lever.
   The options menu for the driver assistance systems appears on the instrument cluster.
2. Select **CC** using the **left** rotary knob on the steering wheel and press to confirm.

▷ Please see chapter "Operating the instrument cluster" on page 141.

Status display
The gray symbol on the instrument cluster indicates readiness. There is no speed stored.

Maintaining and storing the speed

1. Accelerate to the desired speed using the accelerator pedal.
2. Press the control lever on the steering wheel forward **1**.

Desired speed
The current desired speed is displayed under the red cruise control symbol, and automatically maintained.

Changing the speed

- To increase speed, press the control lever on the steering wheel forward **1**.
  Brief press = 1 mph (1 km/h), press and hold = 5 mph (10 km/h).
- To reduce the speed, pull the control lever toward the steering wheel **2**.
  Brief touch = approx. 1 mph (1 km/h), pull and hold = approx. 5 mph (10 km/h).

The new desired speed is displayed on the instrument cluster.

Information

The speed can be increased using the accelerator pedal as usual. This does not change the stored value; it is resumed after the accelerator pedal is released.

Interrupt cruise control operation – CANCEL

The speed driven before the interruption remains stored in the memory and can be resumed by pressing the control lever.

- Press the control lever down **3**.

– or –

- Press the brake pedal

– or –

- Move selector lever to operating mode **N**.

– or –

- Press button **S** on the control lever.

Cruise control operation is interrupted automatically in the following situations:

– The vehicle speed is above or below the set speed for a certain time.
– Porsche Stability Management (PSM) is active.

Resuming the stored speed – RESUME

- Press the control lever up **4**.

Cruise control accelerates/decelerates the vehicle to the stored speed.

Switching off cruise control

- Press button **R** on the control lever.
  The memory is cleared and the readiness symbol disappears.

Information

The stored speed is cleared when the ignition is switched off.

Device Manager

Opening the Device Manager

The Device Manager provides an overview of the available devices and of their connection status.

- ▸ Select  or  in the header (depending on the connection status).

Displaying connection status

Colors and meanings of the symbols

- Green symbol: Connection is active
- White symbol: Connection is possible, not yet active
- No symbol: Connection is not possible

Available functions

-  **Telephone**: Cellphones connected via Bluetooth®. Please see chapter "Mobile Phone" on page 177.
-  **Music**: External Bluetooth ® media sources connected via Bluetooth®. Please see chapter "Media" on page 172.
-  **Data**: Data connection established via access point. Please see chapter "Porsche Connect" on page 223.
-  **App**: App connected via WiFi.

For further information on the app, go to www.porsche.com/connect.

-  **Link**: iPhone connected via USB port with access to Apple CarPlay. Please see chapter "Apple CarPlay" on page 68.

Pairing a new device via Bluetooth®

1. Select  or  in the header (depending on the connection status) ▸ **Search for new device**.
2. Select the device from the list.
   A 6-digit Bluetooth® code is generated and displayed in the PCM and on the device.
3. Compare the Bluetooth® code in the PCM and on the device.
4. If the Bluetooth® code in the PCM and on the device match, confirm. Enter the PIN for the external SIM card in the PCM if necessary.
   If the cellphone has been successfully paired, it will appear in the list of devices.

For information on operating the Porsche Communication Management (PCM):

- ▹ Please see chapter "Porsche Communication Management (PCM)" on page 215.

Device Manager settings

- ▸ Select  or  in the header (depending on the connection status) ▸ Options  .

- **Phone**: Please see chapter "Mobile Phone" on page 177.
- **Bluetooth**:
  - Switch **Bluetooth** on or off.
  - Permit **Access to SIM card**.
  - Adapt **Bluetooth name** of the PCM.
- **WiFi**:
  - **Activate WiFi/Deactivate WiFi**
  - **Configure WiFi hotspot in PCM**: Display and set up the PCM's WiFi access data. This data is required to be able to connect a device (e. g. cellphone) to the PCM via WiFi and to use a WiFi hotspot.
  - **Connected WiFi devices**: List of all WiFi devices which have been registered.
  - **Search for WiFi hotspot**: Search for new WiFi hotspot and enter the access data for the external WiFi hotspot (user name and password). Be aware of upper and lower case when entering the data.
- **Mobile data service**:
  - Switch **Mobile data service** on or off.
  - **Share data connection**: Enable data connection for WiFi devices.
  - **Roaming**: Allow or block data connections in external networks.
- **Vehicle hotspot**: Activate or deactivate WiFi hotspot of the PCM.
- **Delete paired devices**

Drink Holders

⚠ CAUTION Spilling hot drinks

Hot drinks can cause scalding if spilled.

- Only use containers that fit.
- Never put overfull containers in the drink holder.
- Do not use hot drinks.
- Keep the drink holders closed while driving.

NOTICE

Risk of damage due to drinks being spilled.

- Only use containers that fit.
- Never put overfull containers in the drink holder.

Drink holders are located in the front center console, in the rear armrest and in the doors.

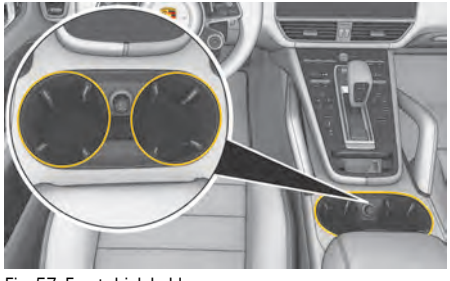


Fig. 57: Front drink holders

Rear drink holders

Fig. 58: Rear drink holders

Electrical Sockets

DANGER Electric shock, short circuit or fire

Touching conductive parts of the vehicle can lead to an electric shock.

Improper use of the electrical socket can result in a short circuit. The short circuit can cause a fire.

- Do not leave children unattended in the vehicle.
- Do not pour liquids into the electrical socket. If liquid gets into the electrical socket, make sure that the liquid has dried without leaving any residues before using the socket again.
- Do not use adapters or extension cables. Child protection in the 230 volt socket is disabled and the socket is live when adapters and extension cables are used.

NOTICE

Risk of damage to connected equipment.

- Only connect equipment designed for use with a 230 volt socket.
- The power consumption of the connected equipment must not exceed 150 watts.
- Do not connect lamps that contain a fluorescent tube.

Information

Connected equipment can become warm. This may cause the overcurrent shutdown mechanism to prevent it from switching on.

- Disconnect the equipment from the socket and reconnect it again after 10 seconds.

Electrical sockets are located at the following positions, depending on vehicle equipment:

- Under the glove compartment
- Front center console
- Luggage compartment side trim panel on left in direction of travel

Connecting the charging adapter

NOTICE

Danger of damage to the electrical system.

- Only use suitable charging adapters. Unsuitable charging adapters can damage the electrical sockets.

Information

- The electrical sockets also work when the ignition is switched off. The vehicle battery is discharged when the accessories are switched on. The power supply is interrupted after about 30 minutes to protect the vehicle battery. If the load is to be switched on again, the ignition must be switched on again.
- The maximum load capacity of the electrical sockets is 20 A. Do not exceed 10 A per electrical socket if several electrical loads are operating simultaneously.
- Unshielded devices and equipment can cause interference to reception as well as vehicle electronics.

Fig. 59: Charging adapter for 12 volt electrical socket and cigarette lighter

A: **Distance X** between the ground connection and the upper edge of the charging adapter must be **less** than **approx. 16 mm**.

B: **Distance X** between the ground connection and the upper edge of the charging adapter must be **less** than **approx. 16 mm**.

Emergency Call Systems

Different emergency call systems may be used depending on model, country and equipment. Help can be requested via the emergency call system in an emergency or in dangerous situations.

Despite activated private mode, location information for the vehicle can be transmitted in the event of a breakdown or emergency call as well as theft.

Emergency call

✓ Cellphone network available

✓ Emergency call system is ready for operation (approx. 20 seconds after switching on the ignition)

Information

The emergency call system does **not** require a cellphone registered in the vehicle as it has its own cellphone module.

Due to technical or organizational restrictions that lie outside the area of influence of Porsche (e.g. no roaming or no activated SIM card), it is possible that no emergency call to a particular emergency call center can be established under certain circumstances. In this case, an emergency call to a public emergency call center (911) is established depending on the country. A public emergency call center **cannot** process the data transmitted by the emergency call system for determination of the necessary rescue measures (for example, the current position of the vehicle is **not** automatically communicated).

▷ Please see chapter "Data transmission" on page 110.

Under unfavorable conditions, an emergency call to an emergency call center cannot be ensured (e.g. no cellphone network available).

If the vehicle battery is disconnected or defective, an integral battery ensures that the emergency call system remains available for at least one hour for queries from the emergency call center.

Information

When the cover is open, the SOS button can be accidentally pressed and therefore trigger an unintentional emergency call.

- Always keep the SOS button cover closed when driving.
- Only press the SOS button in an emergency.

Triggering an emergency call via SOS button

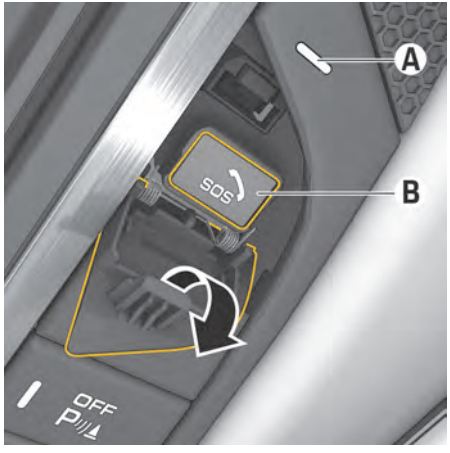


Fig. 60: SOS button and light indicator

A Light indicator
B SOS button

Information

When ignition is switched off, the emergency call **cannot** be triggered.

1. Open the cover.
2. Press SOS button **B** for at least 1 second. If SOS button **B** is pressed again for at least one second within 6 seconds, the emergency call is canceled. Light indicator **A** flashes green while the call to the emergency call center is being established.
3. If conditions permit, wait in the vehicle until the connection to the emergency call center is established. Light indicator **A** flashes green when the call to the emergency call center has been established.

If queries from the emergency call center remain unanswered, rescue measures are initiated automatically.

Information

If the light indicator flashes, but the emergency call center cannot be heard via the loudspeaker, the loudspeaker may be defective, for example. However, the emergency call center may be able to hear you.

Light indicator status display

Light indicator	Status
Off	Emergency call system is off
Lights up green	Emergency call system is ready for operation

Lights up or flashes red	Error – emergency call not or only restrictedly possible[1]
Flashes green	Active emergency call – emergency call is established and data transmission to emergency call center

Automatic emergency call

Information

When ignition is switched off, **no** automatic emergency call is possible.

A connection to the emergency call center is established automatically immediately after triggering of the airbags. The automatic emergency call cannot be prevented by pressing SOS button **B**.

If queries from the emergency call center remain unanswered, rescue measures are initiated automatically.

Data transmission

During an emergency call, data for determination of the necessary rescue measures is transmitted to the emergency call center, provided that this is available. This can include:

- Current vehicle position
- Vehicle identification number
- Vehicle type (e.g. hybrid vehicle)

Breakdown call

Help can be requested via the breakdown call in the case of breakdowns or accidents without personal injury.

✓ Cellphone network available.

✓ Breakdown call system is ready for operation (approx. 20 seconds after switching on the ignition).

✓ Private mode is deactivated.

▷ Please see chapter "Porsche Connect" on page 223.

Information

The breakdown call system does **not** require a cellphone registered in the vehicle as it has its own cellphone module.

Due to technical or organizational restrictions that lie outside the area of influence of Porsche (e.g. no roaming or no activated SIM card), it is possible that no emergency call to the Porsche Assistance Call Center can be established under certain circumstances.

Triggering a breakdown call

✓ **PHONE** ▸ **KEYPAD** is selected.

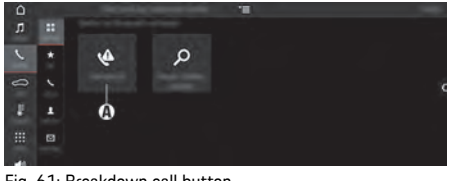


Fig. 61: Breakdown call button

1. Select breakdown call **A**.

   To end the test emergency call, select in the footer or the phone menu.

2. If conditions permit, wait in the vehicle until the connection to the call center is established.

Data transmission

During a breakdown call, data for determination of the required measures can be transmitted to the call center, provided that this is available. This can include:

- Current vehicle position
- Vehicle identification number
- Vehicle type (e.g. hybrid vehicle)
- Fault codes and other data for localizing the fault

1. Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Emergency Starting

The 12-volt lithium battery is automatically disconnected from the vehicle electrical system if the battery charge condition is low. The electrical system is deactivated temporarily. When the battery is charged (for at least 10 minutes) or when emergency starting or connection to an external power supply take place, the electrical system is automatically reactivated. The 12-volt lithium battery is automatically connected to the vehicle electrical supply again.

The battery of another vehicle can be used for starting and as an external power supply with the help of jumper cables. Both batteries must have a nominal voltage of 12 V. The capacity (Ah) of the donor battery must not be substantially less than that of the flat battery. The discharged battery must be connected correctly to the vehicle's electrical system.

▷ Please see chapter "Battery" on page 72.

Repeated emergency starting under normal operating conditions may indicate that the battery is damaged.

⚠ WARNING Unsuitable jumper cables and following incorrect procedures

Starting the vehicle using unsuitable jumper cables or following incorrect procedures can cause short circuits. The short circuit can cause a fire.

- Use only standard jumper cables with sufficient cross section and completely insulated clamps. Follow the instructions provided by the jumper cable manufacturer.
- The vehicles must not touch, otherwise current may flow as soon as the positive terminals are connected.
- Ensure that conductive jewelry (e.g. rings, chains, watch straps) do not come into contact with live parts of the vehicle.
- Never connect jumper cables directly to the battery. Only connect jumper cables to the emergency starting terminals.

⚠ WARNING Escaping electrolyte fluid and toxic gas

Risk of electrolyte fluid and toxic gases escaping in exceptional cases if the battery is damaged or handled incorrectly.

- Avoid any inhalation of the vapors and any skin contact with the electrolyte fluid.
- Keep people away and on the side facing into the wind.
- Only charge lithium batteries in well-ventilated spaces.

NOTICE

Risk of damage if emergency starting an exhaustively discharged lithium battery.

- If you suspect that the lithium battery is exhaustively discharged, do not start the vehicle using jumper cables.

Performing emergency starting

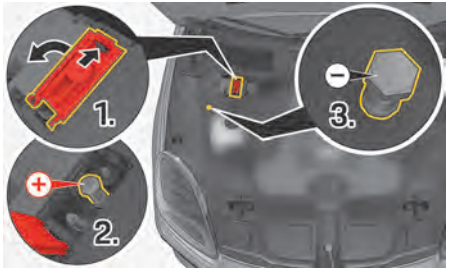


Fig. 62: Performing emergency starting

1. Open the hood.
2. Open the cap on the positive terminal for emergency starting **+**.
3. Connect the red positive cable to the positive terminal for emergency starting **+**.
4. Connect the red positive cable to the positive terminal of the donor battery.
5. Connect the black **negative cable** to the negative terminal of the donor battery.
6. Connect the black negative cable to the ground point **–**.
7. Let the engine of the donor vehicle run at a higher engine speed.
8. Start the engine. An attempted start using jumper cables should not last more than 15 seconds. Then wait for at least one minute.
9. With engine running:
   First, disconnect the black negative cable from the ground point **–** then from the negative terminal on the donor battery.
10. With engine running:
    Disconnect the red positive cable from the

positive terminal of the donor battery first, then from the positive terminal for emergency starting **+**.

11. Close the cap on the positive terminal for emergency starting **+**.

Emergency Stop Function

General safety instructions

⚠ WARNING Lack of attention and failure to detect objects

The system can only assist the driver within the limits of the system, but it cannot replace the driver. The assistance offered by the system should not induce you to risk your safety.

The system cannot prevent an accident under all circumstances. The driver is always responsible for responding in an appropriate manner.

The system cannot detect the following situations:

- Persons, cyclists and animals
- Objects on the road
- Oncoming vehicles and cross traffic

▶ Drive with extreme care.

▶ Always pay attention to the traffic situation and the vehicle surroundings.

System limitations

The function can be restrictedly available; may not react or deactivate automatically:

- The driver actuates the accelerator pedal, the brake or the steering wheel.
- The driving system such as Lane Keep Assist, Active Lane Keeping, Adaptive Cruise Control (ACC) or Porsche InnoDrive (PID) are accessible on a limited basis.
- In case of damage or soiling of the radar sensors or the front windshield in the area of the camera.

Responding to warning symbols

Always heed any warning and information messages displayed in the vehicle.

▷ Please see chapter "Warning and Information Messages" on page 293.

Operating principle

The system monitors the driver's steering, accelerator pedal and brake pedal activity and provides assistance in the speed range from 0 mph (0 km/h) to approx. 130 mph (210 km/h) – 155 mph (250 km/h).

When the emergency stop function is activated, it initiates visual, acoustic or tactile warnings in stages and brakes the vehicle to a standstill.

The following conditions must be met so that the switched-on emergency stop function can be activated:

In the speed range from 0 mph (0 km/h) to 40 mph (65 km/h):

- Active Lane Keeping is active and the driver does not react to the takeover prompts from Active Lane Keeping.

In the speed range from 40 mph (65 km/h) to 130 mph (210 km/h):

- Active Lane Keeping is active and the driver does not react to the takeover prompts from Active Lane Keeping.
- Active Lane Keeping is switched off, Lane Keep Assist is active and the driver does not react to the takeover prompts from Lane Keep Assist.
- Active Lane Keeping is switched off, Lane Keep Assist is switched off and the emergency stop function does not detect any steering, brake pedal or accelerator pedal activity.

In the speed range from 130 mph (210 km/h) to approx. 156 mph (250 km/h):

- Lane Keep Assist is active and the driver does not react to the takeover prompts from Lane Keep Assist.
- Lane Keep Assist is switched off and the emergency stop function does not detect any steering, brake pedal or accelerator pedal activity.

The emergency stop function is not available if Active Lane Keeping is switched off in the speed range below 40 mph (65 km/h).

These warnings prompt the driver to take over control of the vehicle:

- Driver instructions in instrument cluster
- Warning signals
- PCM muting
- Jerking belt
- Juddering brakes

If the driver still fails to act despite the warnings, the emergency stop function performs an emergency stop:

- The emergency flasher is activated.
- The vehicle is braked to a standstill in its own lane. Warning jerks can also be felt.

Once the vehicle has come to a standstill, the parking brake is applied, the transmission parking lock **P** is engaged, the doors are unlocked, the interior lighting is activated and an emergency call [1] is triggered.

To drive off again, select operating mode **D** or **R**.

1. Depending on the country and equipment

Overriding the emergency stop function

The emergency stop function can be overridden while driving. This temporarily deactivates the system. This also happens when the driver acts unknowingly. Override the emergency stop function by:

- Move the steering wheel.
  – or –
- Press the brake pedal.
  – or –
- Forcefully press the accelerator pedal.

The emergency stop function can be ended following triggering when stationary.

End the emergency stop function by:

- Releasing the parking brake.
  – or –
- Exit operating mode **P** (select transmission range)

Activating and deactivating the emergency stop function

- **ASSIST**  ▸ **Emergency Stop Fcn** 

Information

The emergency stop function is activated automatically when the ignition is switched on.

Information

The preconditions for the functioning of Lane Keep Assist or Active Lane Keeping apply.

▷ Please see chapter "Lane Keep Assist" on page 156.

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 vehicle 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:

- Have your vehicle maintained properly and in accordance with the recommendations described in your Maintenance Booklet. Lack of proper maintenance, as well as improper use of the vehicle, will impair the function of the emission control system and could lead to damage.
- Do not alter or remove any component of the emission control system.
- Do not alter or remove any device, such as heat shields, switches, ignition wires, valves, etc., which are designed to protect your vehicle's emission control system. In addition to serious engine damage, this can result in a fire if excess raw fuel reaches the exhaust system.
- Do not continue to operate your vehicle if you detect engine misfire or other unusual operating conditions.

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 vehicle 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. Additonal 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 sensors, installed in the exhaust pipe continuously sense the oxygen content of the exhaust and signal 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,
- Driving until the fuel tank is completely empty,
- By other unusual operating conditions.

- Do not continue to operate your vehicle under these conditions, since raw fuel might reach the catalytic converters. This could result in overheating of the converters. Federal law prohibits use of leaded fuel in this vehicle.

Fuel Economy

Fuel economy will vary depending on where, when and how you drive, optional equipment installed, and the general condition of your vehicle.

A vehicle tuned to specifications and correctly maintained, will help you to achieve optimal fuel economy.

- Have your vehicle tuned to specifications.
  - Air cleaner should be dirt free to allow proper engine “breathing”.
  - Battery should be fully charged.

  - Wheels should be properly aligned.
  - Tires should be inflated to the correct pressure.
- Always monitor your fuel consumption.
- Drive smoothly, avoid abrupt changes in speed as much as possible.
- Avoid "jack rabbit" starts and sudden stops.
- Do not drive longer than necessary in the lower gears. Shifting into a higher gear early without lugging the engine will help save fuel.
- Prolonged "warm up" idling wastes gas. Start the vehicle just before you are ready to drive. Accelerate slowly and smoothly.
- Switch off the engine if stationary for longer periods.
- Any additional weight carried in the vehicle reduces fuel economy. Always keep cargo to a minimum and remove all unnecessary items.
- Organize your trips to take in several errands in one trip.
- All electrical accessories contribute to increased fuel consumption.
- Only switch on the air conditioning when necessary.
- Do not drive with the Roof Transport System mounted unless you need it.

The EPA estimated miles per gallon (mpg) is to be used for comparison purposes, actual mileage may be different from the estimated mpg, depending on your driving speed, weather conditions and trip length. Your actual highway mileage may be less than the estimated mpg.

- Please observe all local and national speed limits.

Engine Oil

It is important to perform oil changes regularly in accordance with the intervals specified in your **Maintenance Schedule**.

Engine oil consumption

It is normal for your engine to consume oil. The rate of oil consumption depends on the quality and viscosity of oil, the speed at which the engine is operated, the climate, road conditions as well as the amount of dilution and oxidation of the 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. This is because the oil is gradually becoming diluted with fuel or moisture, making it appear that the oil level has not changed.

The diluting ingredients evaporate out when the vehicle is driven at high speeds, as on an expressway, making it then appear that oil is excessively consumed after driving at high speeds.

If the conditions you drive your vehicle in are dusty, humid, or hot, the frequency of the oil change intervals should be greater.

If the vehicle is driven at a high rate of speed, climatic conditions are warm, and the load is high, the oil should be checked more frequently, as driving conditions will determine the rate of oil consumption.

– The engine in your vehicle depends on oil to lubricate and cool all of its moving parts. Therefore, the engine oil should be checked regularly and kept at the required level.
– Make it a habit to have the engine oil level checked with every refueling.

The oil pressure warning light is not an oil-level indicator.

The oil pressure warning light indicates serious engine damage may be occuring when lit, if engine rpm is above idle speed.

Checking engine oil level

Depending on driving style and the conditions of use, the oil consumption can be up to 0.84 quarts/620 mls. (0.8 liters/1,000 km). The oil level should be checked at regular intervals (e.g. every time you refuel).

Responding to oil level warning

If the oil level is too low, a warning message appears on the instrument cluster, indicating that the engine must be topped up with oil immediately.

Measuring and displaying the oil level

NOTICE

Risk of engine damage.

If the oil level is below the minimum mark, the engine will not be sufficiently lubricated

- ▸ Check the oil level regularly.
- ▸ Do not allow the oil level to drop below the minimum mark.

Information

Under certain circumstances, the oil level cannot be measured. The reasons for this include:

– Engine is cold
– Vehicle has been stopped after full-load operation at high engine speeds
– Engine oil temperature is too high

✓ Vehicle is level.

✓ The engine is at operating temperature and has been stopped for at least one minute.

▸ **Vehicle** ▸ **Oil level**

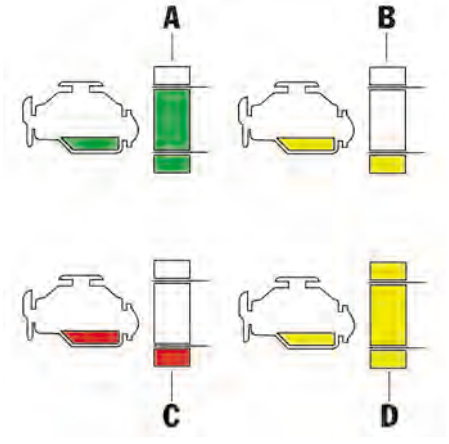


Fig. 63: Oil level display

A Oil level sufficient - maximum reached
B Minimum oil level reached
C Oil level below minimum
D Oil level above maximum

If the display is green **A**, the oil level has reached the maximum mark and is sufficient.

If the lower segment of the display is yellow **B**, the oil level has reached the minimum mark.

- ▸ Add the amount of engine oil displayed on the instrument cluster at the next opportunity. **Never** add more than the amount of engine oil displayed.

If the lower segment of the display is red **C**, the oil level has dropped below the minimum mark.

1. Stop when it is safe to do so.
2. Add the amount of engine oil displayed on the instrument cluster immediately.
   Never add more than the amount of engine oil displayed.

If the display is yellow right to the top **D**, the permissible max. engine filling level has been exceeded. This can result in damage to the vehicle.

Correct the oil level at the earliest opportunity.

- Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Engine oil – assignment by country

Group I

Andorra, Australia, Albania, Argentina, Belgium, Bosnia-Herzegovina, Brazil, Bulgaria, China, Germany, Denmark, Estonia, Faro Islands, French Guyana, Finland, France, Greece, Great Britain, Greenland, Guadeloupe, Hong Kong, Ireland, Iceland, Israel, Italy, India, Japan, Canada, Croatia, Latvia, Lithuania, Liechtenstein, Luxembourg, Malta, Macedonia, Martinique (French Antilles), Mexico, Monaco, Montenegro, Netherlands, Norway, Austria, Poland, Portugal, Reunion, Romania, Russia, San Marino, Switzerland, Sweden, Serbia, Slovak Republic, Slovenia, Spain, South Korea, Taiwan, Turkey, Czech Republic, USA, Hungary, Vatican, Cyprus

Group II

Abu Dhabi, Algeria, Armenia, Bahamas, Brunei, Costa Rica, Curacao, Chile, Dominican Republic, Dubai, Ecuador, French Polynesia, Guatemala, Ghana, Honduras, Indonesia, Iraq, Iran, Qatar, Cayman Islands, Kenya, Kuwait, Colombia, Laos, Lebanon, Mauritius, Macao, Morocco, Mongolia, Myanmar, New Caledonia, Oman, Pakistan, Panama, Paraguay, Peru, Puerto Rico, Philippines, Saudi Arabia, Singapore, Sri Lanka, Swaziland, Syria, Tanzania, Trinidad and Tobago, Uruguay, Vietnam, Yemen, Jordan, Jamaica

Choosing the engine oil

Porsche recommends Mobil 1.

If a sticker showing details of an approved engine oil is affixed in the engine compartment, this specification has priority over the specifications in this manual.

If in doubt and to find out the current approval status, please contact an authorized Porsche dealer.

Approval	Porsche A40	Porsche C40	Porsche C30	Porsche C20
	VW 502 00/505 00	VW 511 00	VW 504 00/507 00	VW 508 00/509 00
SAE viscosity class	0W-40 or 5W-40/5W–50	0W-40/5W-40	5W-30/0W-30	0W-20

Engine	Particle filter	Porsche A40	Porsche C40	Porsche C30	Porsche C20
			Group I		
2.0 liter R4 turbo engine	Yes	–	–	–	X
	No	–	–	–	X
2.9 liter V6 biturbo engine	Yes	–	–	X	–
	No	–	–	X	–

Engine	Particle filter	Porsche A40	Porsche C40	Porsche C30	Porsche C20
3.0 liter V6 turbo engine	Yes	–	–	–	X
	No	–	–	–	X
4.0 liter V8 biturbo engine	Yes	–	X	–	–
	No	–	X	–	–

Engine	Particle filter	Porsche A40	Porsche C40	Porsche C30	Porsche C20
		Group II			
2.0 liter R4 turbo engine	Yes	–	–	–	X
	No	X	–	–	–
2.9 liter V6 biturbo engine	Yes	–	–	X	–
	No	X	–	–	–
3.0 liter V6 turbo engine	Yes	–	–	–	X
	No	X	–	–	–
4.0 liter V8 biturbo engine	Yes	–	X	–	–
	No	–	X	–	–

For information on the correct engine oil, contact an authorized Porsche dealer. If engine oil needs to be added, use this engine oil.

Adding engine oil

DANGER Swallowing Engine Oil

Engine oil is hazardous to your health and may be fatal if swallowed.

- Keep engine oil out of children's reach.

WARNING Engine Oil Cancer Risk

Used engine oil contains chemicals that have caused cancer in laboratory animals.

- Always protect your skin by washing thoroughly with soap and water.

WARNING Engine compartment blowers and other moving parts in the area of the engine

When working in the engine compartment, hands, fingers, articles of clothing, necklaces or long hair can become trapped by moving parts, e.g. engine compartment blowers or drive belts. The engine

compartment blowers are installed under the hood. After the engine is stopped, the engine compartment temperature is still monitored. Depending on temperature, the engine-compartment blowers may continue to run or start to run.

- You should only work in this area with the utmost care and the engine should always be stopped; make sure that body parts, articles of clothing or items of jewelry do not get trapped by radiator fans, engine compartment fans or other moving parts.

⚠ WARNING Burning engine oil

Engine oil can ignite if it comes into contact with hot engine parts. Engine oil stored in non-ventilated areas or thrown-away cloths with engine oil residues can self-combust and result in a fire.

- Wipe up spilled engine oil with a cloth.
- Cloths soaked with engine oil must be stored in a well-ventilated area until disposal.
- Allow the engine to cool down before topping up engine oil.

⚠ WARNING Hot engine parts

The engine and adjacent components, and the exhaust system become very hot when the engine is running.

- Take care when working near hot vehicle parts, particularly the engine and exhaust system.
- Always turn off the engine and allow it to cool down before working in the engine compartment.
- Always carry out work in the engine compartment with the greatest care.
- Only top up engine oil when the engine is stopped and the ignition is switched off.

NOTICE

Too much or too little engine oil will damage the engine. Too much engine oil can result in blue smoke formation and cause damage to the emission control system in the long term.

- Do not allow the oil level to drop below the minimum mark.
- Only add engine oil to the maximum mark. In the event of overfilling, correct this at the earliest opportunity. Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Make sure to note the following points:

– Use only engine oils approved by Porsche. Observe the service intervals.
– Oils approved by Porsche can be mixed.
– Do not use oil additives.
– If you suspect an engine leak, have the engine checked immediately. Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

▷ Please see chapter "Engine compartment filler openings" on page 30.

1. Read the engine-oil level in the instrument cluster.
2. Unscrew the cap of the oil filler opening.
3. Add that the amount of engine oil displayed in the instrument cluster. Never add more than the amount of engine oil indicated.
4. Carefully close the cap of the oil filler opening.

Flat Tire

Depending on the model and vehicle equipment, the vehicle comes with either a tire sealing compound kit (Tire Mobility System - TMS) or a collapsible spare wheel.

Responding to Tire Pressure Monitoring System warning messages

If the Tire Pressure Monitoring System has detected a severe pressure loss, a message appears on the instrument cluster. This loss of pressure could indicate tire damage.

- ▶ Stop in a suitable place and check the indicated tire for damage.
- ▷ Please see chapter "Wheels and Tires" on page 316.

Parking the vehicle safely

1. Stop the vehicle as far away from the driving lane as possible. The vehicle must be parked on a firm and flat surface that is skid-proof.
2. Switch on the emergency flasher.
3. Activate the electric parking brake.
4. Activate the transmission parking lock using the P button on the selector lever.
5. Straighten the front wheels.
6. Get all passengers to leave the vehicle. Pay attention to the traffic as they do so.
7. Set up the warning triangle at a suitable distance.
8. Secure the vehicle to prevent it from rolling away, e.g. by means of wedges under the wheels on the diagonally opposite side.

- ▷ Please see chapter "Jack and Lifting Platform" on page 149.

Sealing defective tires

⚠ WARNING Risk of accident due to sealed tires

Damaged tires that are sealed with tire sealant can lose pressure or burst in the event of inappropriate speed or continuous loading.

- ▶ Sealing the tire with the tire sealant is only an emergency solution enabling you to drive to the nearest authorized Porsche dealer.
- ▶ Use the tire sealant only in the case of cuts or punctures no larger than 0.16 in. (4 mm).
- ▶ Never use tire sealant if the rim is damaged or if you have driven with low tire pressure or deflated tires.
- ▶ Do not use tire sealant at outside temperatures below -4 °F (-20 °C).
- ▶ Avoid rapid acceleration and high cornering speeds.
- ▶ Do not drive faster than 50 mph (80 km/h).
- ▶ 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.
- ▶ Have sealed tires replaced by an authorized Porsche dealer as soon as possible. Inform the authorized Porsche dealer that the tire contains tire sealant.
- ▶ Tire repairs are **not** permissible. Replace damaged tires.
- ▶ Observe the safety information and instructions for use in the separate operating instructions for the tire sealant and compressor.

In case of a flat tire, tire defects or tire damage can be sealed temporarily using the tire sealant provided in the vehicle.

The **sealant bottle** and the **compressor** are located in the luggage compartment.

- ▷ Please see chapter "Luggage Compartment" on page 164.

Filling tire sealant (Tire Mobility System - TMS)

⚠ WARNING Flammable and harmful sealant

The sealant is highly flammable and harmful to health. Prolonged or repeated exposure can cause irritation, allergic reaction or organ damage.

- ▶ Fire, naked flames and smoking are prohibited when handling tire sealant.
- ▶ Keep tire sealant away from children.
- ▶ Avoid contact with skin, eyes and clothing.
- ▶ If tire sealant gets on your skin or into your eyes, thoroughly rinse the affected part of your body immediately with plenty of water.
- ▶ If you feel unwell or have an allergic reaction, consult a doctor immediately.
- ▶ Change soiled clothing immediately.
- ▶ Do not inhale vapors.
- ▶ If tire sealant is swallowed, thoroughly rinse out your mouth immediately and drink plenty of water. Do not induce vomiting. Consult a doctor immediately.

⚠ CAUTION In the event of contact with the tire sealant

Irritation or allergic reactions after contact with tire sealant.

- Avoid contact with skin, eyes and clothing.
- If tire sealant gets on your skin or into your eyes, thoroughly rinse the affected part of your body immediately with plenty of water.
- Change soiled clothing immediately.
- Consult a doctor immediately in the event of an allergic reaction.
- If tire sealant is swallowed, thoroughly rinse out the mouth without delay and drink plenty of water. Do not induce vomiting. Consult a doctor immediately.

⚠ WARNING Failure to detect pressure loss in the tire

A tire pressure sensor that is soiled with tire sealant cannot determine the tire pressure correctly.

- When the defective tire is changed, have the tire pressure sensor replaced as well.

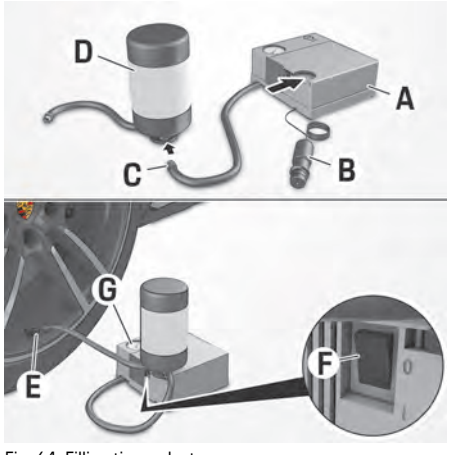


Fig. 64: Filling tire sealant

Preparing to fill

1. Leave the foreign object that caused the puncture in the tire.
2. Remove the sealant bottle, the supplied "max. 50 mph (80 km/h)" sticker and the compressor from the luggage compartment.
   ▷ Please see chapter "Luggage Compartment" on page 164.
3. Affix the sticker in the driver's field of vision.

Filling tire sealant (Tire Mobility System - TMS) and inflating the tire

▷ Refer to the operating instructions for the tire sealant.

▷ Follow the separate operating instructions for the compressor.

1. Pull plug **B** and pressure hose **C** out of compressor **A**.
2. Screw pressure hose **C** onto the sealant bottle flange **D**.
3. Position sealant bottle **D** in the recess of the compressor with the flange facing downward.
4. Unscrew the valve cap from tire valve **E** of the defective tire.
5. Screw filling hose of sealant bottle **D** onto tire valve **E**.
6. Connect the compressor to a 12-volt socket in the vehicle via plug **B**, switch on the ignition and activate the compressor via switch **F**. Inflate the tire to between 29 psi (2.0 bar) and 36 psi (2.5 bar) and read off the tire pressure from pressure gage **G**. Switch off the compressor. If this tire pressure cannot be reached within 6 minutes, the tire is too severely damaged. Do not continue driving with that tire.
7. Unscrew filling hose from tire valve **E** and refit the valve cap.

Depending on equipment, a compressor is supplied that must be connected to the emergency starting points via terminal clamps and cannot be connected to a 12-volt socket in the vehicle. Observe the sequence below:

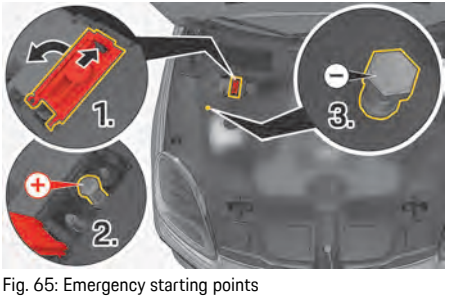


Fig. 65: Emergency starting points

1. Fold open the cap on the positive terminal for emergency starting **+**.
2. Connect positive lead (red) to the positive terminal for emergency starting **+**.
3. Connect negative lead (black) to the negative terminal for emergency starting **–**.

Checking pressure

- 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.

▷ Please see chapter "Technical Data" on page 334.

Changing tires

▷ Please see chapter "Wheels and Tires" on page 316.

Updating the Tire Pressure Monitoring System tire settings after changing a wheel

▷ Please see chapter "Setting Tire Pressure Monitoring (TPM)" on page 318.

Using the collapsible spare wheel

⚠ WARNING Changed vehicle handling

The use of a collapsible spare wheel can impair vehicle handling.

- 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, 0.06 in. (1.6 mm) high).
- Never deactivate Porsche Stability Management (PSM).
- Avoid rapid acceleration and high cornering speeds.
  The permitted maximum speed is **80 km/h (50 mph)** and must not be exceeded due to the altered driving characteristics and because of wear.
- Do not use a collapsible spare wheel from a different vehicle type.
- Do not fit the collapsible spare wheel from your vehicle on a different vehicle.
- Only fit one collapsible spare wheel on the vehicle at any time.

Fig. 66: Collapsible spare wheel in the luggage compartment

Depending on the equipment, the collapsible spare wheel is located in the luggage compartment, either under the cargo area or in a special bag.

1. Vehicles with collapsible spare wheel under the cargo area: unscrew the screw in direction of arrow and take out the collapsible spare wheel.
2. Mount the collapsible spare wheel on the vehicle before inflating it. Leave the vehicle jacked up.
   ▷ Please see chapter "Wheels and Tires" on page 316.
3. Inflate the tire.
   ▷ Please see chapter "Wheels and Tires" on page 316.

After using the collapsible spare wheel:

- Deflate the collapsible spare wheel. Unscrew the valve cap on the collapsible spare wheel for this purpose.

The tire will revert to its original shape only after several hours. Only then can it be stowed in the collapsible spare wheel recess under the cargo area or in the bag.

If the collapsible spare wheel is defective:

- Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Fuses

DANGER Electrical shock

Replacing fuses or relays with the engine running or the ignition on could cause electrical shock.

- Always switch off the engine and the ignition when working on the electrical system.

WARNING Short circuit

Working on the electrical system of the vehicle can result in a short circuit. The short circuit can cause a fire.

- Always disconnect the negative terminal on the battery when working on the electrical system.

WARNING Improper intervention and incorrect accessories

Improper intervention in the fuse box and the use of the incorrect accessories can result in damage and malfunctions in electrical and electronic systems.

- Do not attempt to replace any electrical components except the fuses listed here (e.g. relays).
- Go to a qualified specialized repair shop. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.
- Only use accessories that have been approved by Porsche. For information on approved accessories: Contact an authorized Porsche dealer.

Checking and changing fuses

To prevent short-circuits and overloading of the electrical system, the individual circuits are protected by fuses.

Fuse boxes are located in the front left footwell, at the outer ends of the dashboard and in the luggage compartment.

Depending on the equipment, further fuse boxes are located at various locations in the vehicle. Work on these fuse boxes must only be performed by an authorized Porsche dealer.

- Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Fuse ratings

Color		Amperage rating
	Light brown	5 A
	Brown	7.5 A
	Red	10 A
	Blue	15 A
	Yellow	20 A
	White / clear	25 A
	Green	30 A
	Blue-green	35 A
	Orange	40 A

Checking and changing fuses

Unassigned fuse slots are not listed in the following overviews.

1. If possible, switch off the load with the defective fuse.
2. Open the relevant fuse box cover. See descriptions of the individual fuse boxes below. Any tool you need is stored in the tool box in the luggage compartment.
   ▷ Please see chapter "Luggage Compartment" on page 164.
3. If necessary, remove the purple plastic strip over the fuses using a flat screwdriver.
4. Remove the fuse from its slot using the plastic gripper in order to check it. A blown fuse can be identified by the melted metal strip.
5. Insert a new fuse. The replacement fuse must have the same rated current as the one it is replacing.
6. Fit the purple plastic strip back into place.

If the same fuse blows repeatedly, the cause of the fault must be corrected immediately.

- Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Opening fuse box on the dashboard

Fig. 67: Fuse box on the dashboard

Required tools:
– Flat screwdriver (from tool box)
– Plastic gripper (in fuse box cover)

▸ Carefully lever off the cover using a flat screwdriver and remove it.

No.	Load
2	ETC toll system card reader
3	Center console switch module, instrument cluster, leveling system control unit, buttons for driver assistance systems
4	Head-up display
5	USB connection
6	Operator control unit in rear center console
7	Electric steering column lock
8	Central display
9	Instrument cluster
10	Operator control unit for multimedia system
11	Light switch
12	Steering column switch
14	PCM
15	Electric steering column lock
16	Steering wheel heating switch

Opening fuse-box in footwell

Left-hand drive vehicles

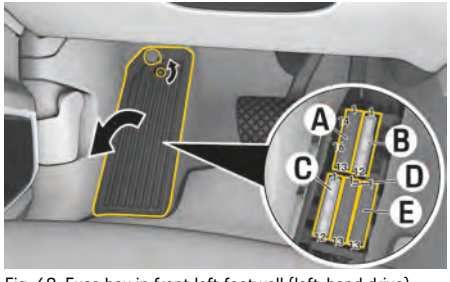


Fig. 68: Fuse box in front left footwell (left-hand drive)

Required tools:
– Flat screwdriver (from tool box)
– Torx screwdriver (from tool box)
– Plastic gripper (in fuse box)

1. Remove cover on the fastening screw using a flat screwdriver.
2. Unscrew upper part of the footrest using a Torx screwdriver, fold it towards the seats and remove it.

Right-hand drive vehicles

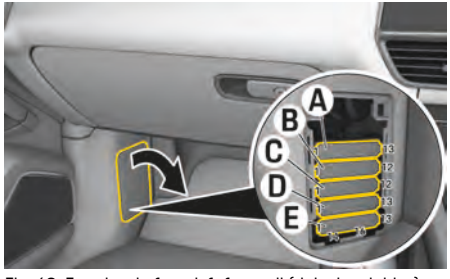


Fig. 69: Fuse box in front left footwell (right-hand drive)

Required tools:
– Plastic gripper (in fuse box)

▸ Pull off cover at the finger hole.

Row A

No.	Load
2	MAF sensor, crankcase heating, coolant circulation pump
3	Radiator shutter
4	Exhaust flaps, heating back-up pump, leakage diagnosis fuel tank
5	Brake light sensor
6	Engine valves

No.	Load
7	Oxygen sensors
8	Engine mount, thermal management valve
9	Motor relay
10	Thermal oil level sensor
11	Radiator shutter, accelerator pedal
12	Engine valves
13	Radiator fan
14	Injectors
15	Oxygen sensors
16	Fuel pump

Row B

No.	Load
1	Ignition coils
2	Motor relay
5	Engine mounts
6	Front left reversible seat-belt pretensioner
7	Dashboard
8	Front right reversible seat-belt pretensioner
9	Front heater fan
10	Driver assistance control
11	Thermal management control unit - E-Hybrid, starter
12	Allwheel drive

Row C

No.	Load
1	Front seat heating
2	Front left door control unit
3	Socket supply
4	Roof system
5	Additional lighting, left
6	Rear left door control unit
7	Windshield wiper
8	Rear right door control unit
9	Additional lighting, right
10	Headlight / windshield washer system
11	Air-conditioning control unit
12	Clutch actuator - E-Hybrid

Row D

No.	Load
1	DIA_15 (mirror with automatic dimming, climate control panel, seat ventilation, A/C pressure sensor on diagnostic socket)
2	Parking sensors/control units
3	Sound system (E-Hybrid), exhaust system, structure-borne noise control, engine sound generator
4	Transmission valve
5	Starter relay, term. 15 supply for power electronics
7	Pedal module on E-Hybrid
8	Night View Assist, ionizer, eAWS, garage door opener
9	Adaptive cruise control (ACC), laser scanner
10	Allwheel drive, differential lock
11	Assistance system camera
12	Seat ventilation

No.	Load
15	Right headlight
16	Left headlight

Row E

No.	Load
1	Alarm system
4	Transmission shift mechanism
5	Horn
6	Parking brake switch
7	Gateway control unit
8	Overhead console
9	Emergency call module, trailer hitch
10	Airbag control unit
11	ESC, ABS control unit
12	Diagnostic socket, light / rain sensor
13	Air conditioning system
14	Front right door control unit
15	Air-conditioning compressor
16	Smart actuator (E-Hybrid)

Opening the fuse box in the luggage compartment

✓ Vehicles without DVD changer

Vehicles with DVD changer:

▶ Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

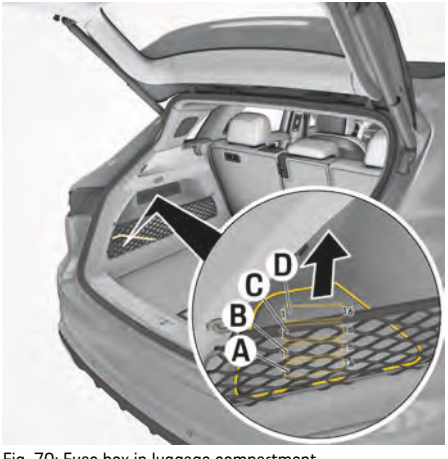


Fig. 70: Fuse box in luggage compartment

Required tools:

– Flat screwdriver (from tool box)
– Plastic gripper (from fuse box on the dashboard or in the footwell)

▶ Carefully lever off the cover using a flat screwdriver and remove it.

Row A

No.	Load
1	HV PTC, thermal management valves/ sensors, radiator shutter (E-Hybrid)
5	Air suspension
6	Transmission control unit
7	Rear roll-up blind, closing aid, KESSY, filler flap
8	Rear seat heating (not for E-Hybrid)
10	Trailer hitch
11	Tailgate control unit
12	Rear blower regulator

Row B

No.	Load
1	Left tail light
3	SCR heater, rear spoiler
4	Rear air-conditioning control panel
5	Trailer hitch (control unit)
6	Trailer hitch (pivot motor)
7	Trailer hitch (charging, electric release)
9	Trailer hitch (socket)

No.	Load
10	Differential lock
12	SCR heater (not for E-Hybrid)

Row C

No.	Load
1	Assistance systems control unit
2	Cellphone coupling antenna/booster
4	Lane Change Assist
5	Entertainment system
6	Tire Pressure Monitoring System
8	Auxiliary heater radio receiver
9	DVD drive
10	TV tuner, RTM, VTS
11	Roof antenna (ParkAssist)
12	Garage door opener control unit
13	Surround View
14	Right tail light
16	Subwoofer

Row D

No.	Load
1	eAWS
2	High-voltage battery
3	High-voltage battery water pump
4	Power electronics - E-Hybrid
5	Brake booster - E-Hybrid
6	Seat fans
8	Air-conditioning compressor - E-Hybrid
9	48-volt system
10	High-voltage battery
11	Charger - E-Hybrid
14	Thermal management water pumps

Garage door opener (HomeLink®)

⚠ WARNING Pinching, crushing or impact through operated equipment

If persons or animals are in the movement area of the operated equipment, there is a risk of injury while the garage door opener is being operated or programmed.

- Make sure there are no persons, animals or objects in the movement area of the operated equipment while the HomeLink® system is being operated or programmed.
- Observe the safety instructions for the original remote control.

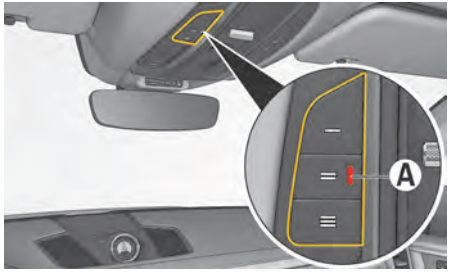


Fig. 71: Programming the garage door opener

With the HomeLink® system, up to three items of remote-controlled equipment (e.g. garage door/gate to your property, security systems, house lights) can be operated from inside the vehicle using the memory buttons on the overhead console.

▷ Observe the instructions for the original hand transmitter.

Information

For information on the compatibility of your vehicle's HomeLink® system with the original remote control:

- Contact an authorized Porsche dealer.
- ▷ Visit www.homelink.com or call the toll-free hotline on 1–800–355–3515.

Information

- Before selling your vehicle, remember to delete the garage door opener signals.

Programming the garage door opener

Configure the garage door opener via the touch display on the dashboard.

✓ The ignition is switched on.
✓ Engine is not running.
✓ Vehicle is positioned to allow visual contact with remote-controlled equipment and is within the receiver range (signal is transmitted).

Systems with remote control

1. Select **CAR** ▸ **CONTROL** ▸ **Vehicle** ▸ **Garage door opener** ▸ **Configure buttons**.
2. Choose the button you want to program.
3. Follow the instructions on the screen and make sure the remote control is facing the overhead console at the height of the center console during programming.
   The light indicator **A** on the button flashes orange when the vehicle is ready for reception. Press the remote control.
   Systems without rolling code system:
   The light indicator **A** on the button lights up green.
   Programming is completed successfully.
   – or –
   Systems with rolling code system:
   The light indicator **A** on the button flashes green.
   The remote control has been taught. Manual synchronization with the vehicle is still required to complete programming.
4. Follow the instructions on the screen.
   ▷ Read the instructions for the original remote control.

Information

If the signals cannot be assigned to the buttons despite having carefully read this chapter and the operating instructions for the original remote control:

- Contact an authorized Porsche dealer.
- Make sure that there is a new battery in the garage door opener remote control. Insufficient battery power can cause malfunctions in signal transmission. The system in the vehicle then learns an incorrect code, which cannot be reliably recognized.
- Check the compatibility of the vehicle's HomeLink[MD] system with the original remote control.

Systems without remote control (FixKit receiver)

1. Select **CAR** ▸ **CONTROL** ▸ **Vehicle** ▸ **Garage door opener** ▸ Options.
2. Follow the instructions on the screen.

Using the garage door opener

✓ Ignition is switched on.

✓ Vehicle is within the receiver range.

▶ Press and hold the relevant HomeLink® button on the overhead console.

The light indicator **A** lights up green during signal transmission.

Deleting stored signals from the buttons

This process deletes **all** the programmed button assignments. It is not possible to delete individual buttons.

▶ **CAR** ▶ **CONTROL** ▶ **Vehicle** ▶ **Garage door opener** ▶ **Delete button assignment**

The programming of individual buttons can be overwritten.

▶ Re-program the button.

▷ Please see chapter "Programming the garage door opener" on page 129.

If re-programming is canceled, the original programming is retained.

Head-up Display

The head-up display (HUD) supplements the instrument cluster as a display instrument. It projects important messages and selected information onto the windshield, where the driver can see it. This allows the driver to read the information without taking his eyes off the road.

NOTICE

Risk of damage from scratches on the glass cover.

- Do not place any objects on the glass cover of the head-up display.

Information

The driver's view of the information in the head-up display may be impaired by the following factors:

– Sunglasses with certain polarizing filters.
– Wet roads.
– Unfavorable lighting conditions.
– Objects on the glass cover.

- Check that the head-up display is fitted at the correct position and that the height is adjusted correctly.

Activating/Deactivating and adjusting head-up display

- **CAR ▸ CONTROL ▸ Displays ▸ Head-up Display**

HOLD Function: Standstill Management

General safety instructions

⚠ WARNING Slight rolling back on uphill slopes

If the vehicle comes to a standstill on steep gradients without the driver applying the footbrake, the vehicle can roll back until the HOLD function stops it. In this situation it is possible to reduce the roll-back by applying the footbrake.

- ▶ Assist holding of the vehicle by increasing the braking force with the brake pedal.

⚠ WARNING Loss of control over the vehicle

Despite the HOLD function, responsibility for stopping and starting on gradients lies with the driver. When stopping and starting on slippery surfaces (e. g. icy or loose substrate), assistance from the HOLD function is not always guaranteed. The vehicle can roll away.

- ▶ Always adjust your driving style to the road surface and the vehicle load; use the footbrake if necessary.
  If the HOLD function is not working, the driver cannot be assisted when driving off on gradients:
- ▶ Hold the vehicle with the footbrake.

Responding to warning symbols

Always heed any warning and information messages displayed in the vehicle.

▷ Please see chapter "Warning and Information Messages" on page 293.

Operating principle

As an assistance function, the HOLD function supports the driver when stopping the vehicle and driving off on steep gradients.

The vehicle is stopped and prevented from rolling back away from the desired direction of travel even without pressing the brake.

When the HOLD function is active, the light indicator HOLD on the instrument panel comes on.

When Adaptive Cruise Control is operating normally, the HOLD function actively holds the vehicle at a standstill following automatic braking.

If the driver's seat belt is unfastened and the driver's door is opened while the HOLD function is active, the electric parking brake is activated automatically. Driving off in the usual way is possible even when the HOLD function is active.

Information

If the electric parking brake is used to hold the vehicle on the gradient, you can drive off in the usual way.

The electric parking brake detects the start request and is automatically released.

▷ Please see chapter "Brakes" on page 76.

Information

The HOLD function is disabled:

- In operating mode **P** and **N**: If the Tiptronic S operating mode is selected while the HOLD function is active, the HOLD function is deactivated.
- If the vehicle is not stationary.
- If the engine has been switched off manually.
- On gradients of less than 5%.
- If the driver's door is opened and the driver's seat belt is not fastened.
- If the pressure on the brake pedal is insufficient.

Activating the HOLD function

✓ Operating mode **D**, **R** or **M** selected.

- ▶ Press the brake pedal until the vehicle comes to a standstill.

The HOLD function is activated. The vehicle is held stationary even without pressing the brake pedal.

Information

The HOLD function can be activated, irrespective of the gradient, by flooring the pressed brake pedal while the vehicle is stationary. This keeps the vehicle at a standstill without the brake pedal having to be pressed continuously. A quick change of the selector-lever transmission range position does not deactivate the HOLD function in this case.

Information

When the HOLD function is active, the driver may feel a difference in the brake pedal and hydraulic noises may be heard.
This behavior is typical of the system. There is no fault.

Hood

Opening and closing the hood

Opening the hood

NOTICE

If the windshield wipers are folded forward when you open the hood, the wipers or the hood can be damaged.

- Make sure that the windshield wipers are not folded forward when opening the hood.
- Always switch off windshield wipers before opening the hood (wiper lever in position **0**). Risk of collision! If the wiper arms are not at their final position, switch the wiper system on and off briefly so that the wipers move to their end position.

▷ Please see chapter "Windshield Wipers" on page 329.

Fig. 72: Unlocking the hood

1. Open the driver's door.
2. Pull the release lever.

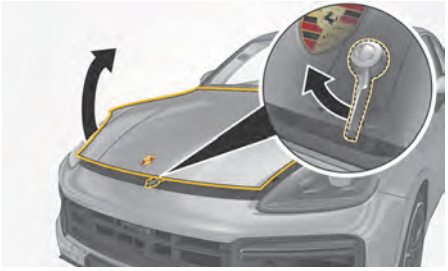


Fig. 73: Opening the hood

3. Lift the hood up slightly and press the release lever.
4. Open the hood fully.

Closing the hood

⚠ CAUTION Heavy hood

When closing the hood when it is open half way, the hood's own weight can cause it to fall into the two locks.

- Never put objects or your fingers near moving parts (hinges) or under the hood.

1. Let the half-open hood fall into the two locks. If necessary, push the hood closed with the palm of your hand in the two lock areas.
2. Check that the hood is engaged correctly in both locks and that the release lever (Fig. 72) is back in its initial position.

- A warning appears on the instrument cluster if the hood is not engaged properly. Open the hood again and let it fall into the lock. If necessary, push the hood closed with the palm of your hand in the area of the lock.

Hybrid Vehicle

Warning stickers

Hybrid system components are each labeled with one of the two warning stickers (illustration below), which warn against touching components and of high voltage.

- Never remove, deface or render warning stickers and warning signs illegible.
- Never remove covers of hybrid system components that are labeled with the warning sticker.

Key to pictograms

	Risk of electric shock due to improper use.
	Warning of dangerous electrical voltage.
	Danger!
	Follow the instructions on hybrid system components and in the Manual.

Hybrid operating modes

The parallel plug-in hybrid drive allows the vehicle to run in the following hybrid operating modes:

- Driving powered by the electric machine.
- Driving powered by the combustion engine (the combustion engine charges the high-voltage battery in parallel via the electric machine).
- Driving powered by the electric machine and combustion engine. The electric machine also assists the combustion engine in powering the vehicle (boost).
- Driving with recuperation (energy recovery): The electric machine charges the high-voltage battery, e.g. during braking, when the vehicle is overrunning with the combustion engine running and automatically when driving downhill.

Operating conditions for running the vehicle on electric power

Information

To prevent fuel from collecting in the engine oil, occasionally drive longer distances with the combustion engine running.

✓ The high-voltage battery is sufficiently charged.
✓ Minimum engine oil temperature approx. 32 °F (0 °C).
✓ Temperature of the high-voltage battery is neither too high nor too low.
✓ Temperature of the electric machine is not too high.
✓ Hood is closed.

A message appears on the instrument cluster if these conditions have not been met.

Starting the vehicle

✓ Vehicle plug not inserted in the vehicle charge port.

1. Press the footbrake.
2. Press the **P** button on the selector lever or select operating mode **N**.
3. Do not press the accelerator pedal.
4. Turn operating device briefly to ignition lock position **2**.
   READY appears on the instrument cluster.
   You can drive off normally.

Information

If the vehicle plug is inserted in the vehicle charge port when the vehicle is started, a message appears on the instrument cluster.

- Pull the vehicle plug from the vehicle charge port within approx. 20 seconds.

Reaction after leaving the vehicle

After leaving the vehicle after the engine has stopped automatically (driver's seat belt unfastened, driver's door open and brake pedal released), the engine will **not start automatically**. Additionally, in operating mode **D**, **R** or **M**:

- The electric parking brake is engaged.
- The transmission parking lock **P** is engaged.

The vehicle can still be moved with the driver's door open and the driver's seat belt unfastened by releasing the electric parking brake manually. In this case, the parking brake remains released and the selected transmission range is still engaged.

Automatic engine starting is enabled again if one of the following conditions is detected within 30 seconds of leaving the vehicle:

– The brake pedal is pressed and either the driver's door is closed or the driver's seat belt is fastened.

– or –

– The driver's door is closed and the driver's seat belt is then fastened.

– or –

– The parking brake is released manually and the vehicle is set to operating mode **D**, **R** or **M**.

– or –

– The brake pedal is actuated and the driving program is changed.

– or –

– The vehicle is traveling at more than 1.5 mph (2 km/h) and a pedal is pressed.

If none of these requirements are met, the engine has to be started **manually** 30 seconds after leaving the vehicle. A message prompting you to start the engine manually appears on the instrument cluster.

▷ Please see chapter "Starting the vehicle" on page 135.

The vehicle response after leaving it depends on correct use of the driver's seat belt.

▷ Please see chapter "Seat Belts" on page 246.

Information

In certain situations, a message prompting you to press the brake pedal may appear on the instrument cluster so that the combustion engine can be started automatically.

Displaying energy flow

The Hybrid Energy Flow display indicates the flow of energy between the combustion engine, high-voltage battery and wheels.

Touch display in dashboard:

▶ **HYBRID** ▸ **E-FLOW**

Instrument cluster:

▷ Please see chapter "Instrument Cluster" on page 139.

Power meter in instrument cluster

The current electric drive power is shown to the left of the 6 o'clock position and the current recuperation capacity is shown to the right of the 6 o'clock position in the power meter.

▷ Please see chapter "Instrument Cluster" on page 139.

Displaying Zero Emission in the PCM

The Hybrid Zero Emission display shows how long the vehicle was driven without the combustion engine as a percentage.

▶ **HYBRID** ▸ **STATISTIC**

Displaying E-Drive Assist on the instrument cluster

The **E-Drive Assist** is used as an aid for metering the electric drive power.

The green area shows the accelerator pedal travel. The further the accelerator pedal is pressed, the more electric power is made available. The combustion engine is switched on at the power threshold **E max**. The availability of power thresholds depends on the driving program selected.

The information in the center of the scale shows the approximate electric range. The arrows above and below indicate whether or not it is likely that the displayed range will be achieved with the current driving style and currently activated loads.

Displaying E-consumption on the instrument cluster

E-consumption shows the average electric consumption since the vehicle started as an instantaneous or cumulatively added value. Moreover, the ring displays how the consumption value is composed in terms of the vehicle drive and comfort feature share (e.g. air conditioning).

Displaying Boost assistant on the instrument cluster

Boost assistant shows the percentage of the electric vehicle drive used for acceleration.

The scale is gray if insufficient boost is available. The scale fills with white as the boost charges until the maximum is reached.

Selecting driving program using the mode switch

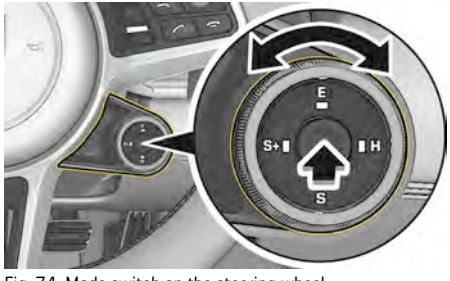


Fig. 74: Mode switch on the steering wheel

E E-POWER
H HYBRID (Hybrid Auto, E-Hold, E-Charge)
S SPORT
S+ SPORT PLUS
Center of switch SPORT Response button

▶ Turn the mode switch to the left or to the right to the desired driving program.

The light indicator for the selected driving program lights up and the driving program is displayed in the digital speedometer.

Information

The relevant driving program can also be selected in the PCM:

▸ **HYBRID** ▸ **MODE**

Information

On hybrid vehicles, the INDIVIDUAL driving program is usually selected using the INDIVIDUAL button in the center console.

E-POWER driving program

The E-POWER driving program is **activated by default** and allows driving purely on electric power. After the ignition is switched off, the selected driving program automatically switches back to E-POWER when the prerequisites for this driving program are met.

The electric range depends on the driving style, the climatic conditions and the use of energy-intensive loads.

An attentive driving style and restrained use of energy-intensive loads have a positive effect on the electric range available.

Information

In the E-POWER driving program, the accelerator pedal has a hybrid-specific end point. When this end point is exceeded, the combustion engine is started.

If the prerequisites of the E-POWER driving program are not met (e.g. high-voltage battery not sufficiently charged), a message appears on the instrument cluster after the E-POWER driving program is activated.

E-POWER driving program status display

The availability of electric power only is indicated in the Power & Drive gage on the instrument cluster.

E E-POWER driving program is available.

HYBRID driving program

Three different operating modes, HYBRID AUTO, E-HOLD and E-CHARGE, are available in the HYBRID driving program:

HYBRID AUTO mode

HYBRID AUTO mode is **activated by default** in switch position **H**. It enables the most efficient operation of the vehicle to be predicted taking into consideration route-specific data from the navigation system and the current speed. HYBRID AUTO mode is automatically activated as soon as the high-voltage battery charge is too low for operation in the E-POWER driving program.

E-HOLD mode

E-HOLD mode enables the currently available high-voltage battery charge to be deliberately maintained so the vehicle can run purely on electric power later on, for example. Boosting and restricted electric driving are still possible in this driving program, however this can result in fluctuations in the charge.

Activating E-HOLD mode

▸ **HYBRID** ▸ **MODE** ▸ **E-HOLD**

E-CHARGE mode

In E-CHARGE mode, the high-voltage battery can be charged while driving. This mode is useful for specifically increasing the electric range, particularly on journeys with a high level of combustion engine-powered driving. The high-voltage battery can be charged when driving on a highway, for example, so that an urban route can then be driven using purely electric power.

Activating E-CHARGE mode

✓ The high-voltage battery is **not** fully charged.

▸ **HYBRID** ▸ **MODE** ▸ **E-CHARGE**

On-road and off-road driving programs

For additional information on vehicle setup in the on-road and off-road driving program:

- ▹ Please see chapter "On-road Driving Programs" on page 195.
- ▹ Please see chapter "Off-road Driving Programs" on page 194.

SPORT driving program

The combustion engine is always in operation in the SPORT driving program. The engine and transmission also have a sporty tuning. The high-voltage battery is charged to a minimum level to provide the boost function.

SPORT PLUS driving program

The combustion engine is always in operation in the SPORT PLUS driving program. The engine and transmission also have the sportiest tuning possible. The high-voltage battery is fully charged as quickly as possible to enable more frequent and longer boosting.

Off-road driving programs

The combustion engine is always in operation in the off-road driving programs. The high-voltage battery is charged to a minimum level to provide the boost function.

Instrument Cluster

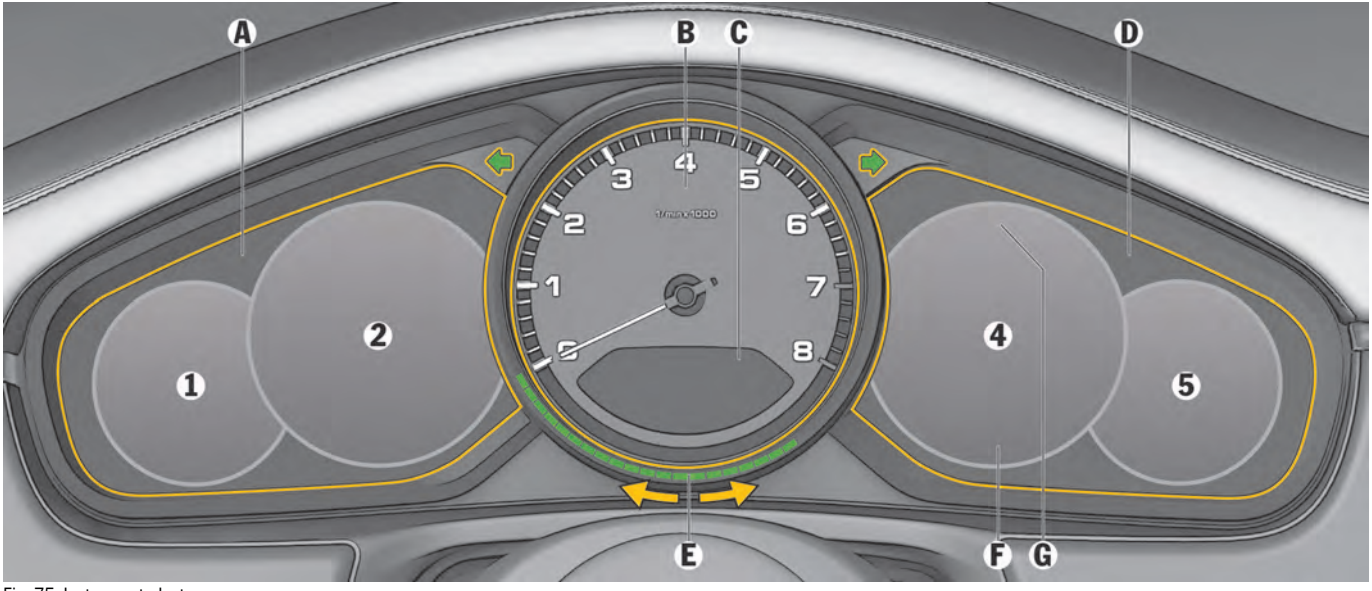


Fig. 75: Instrument cluster

A – Speed & Assist display

Information on the outside temperature, speed and assistance systems is shown in tubes **1** and **2**.

For information on the Speed & Assist display settings:

▷ Please see chapter "Vehicle Settings" on page 285.

B – Tachometer

The start of the red zone on the tachometer scale is a visual warning of the maximum permissible engine speed.

C – Digital speedometer/Power & Drive display

Information on the speed, selector lever position, engaged gear and activated drive mode is displayed in the digital speedometer.

D – Car & Info display

Information on the vehicle status, driver assistance and date and time is shown in tubes **4** and **5**.

For information on the Car & Info display settings:

▷ Please see chapter "Vehicle Settings" on page 285.

E – Power meter

✓ E-Hybrid vehicle

The current electric drive power is shown to the left of the 6 o'clock position and the current

recuperation capacity is shown to the right of the 6 o'clock position in the power meter.

F – Coolant temperature gage

NOTICE

Excessively high coolant temperature can cause engine damage.

If the coolant temperature is too high, the coolant temperature gage moves to the maximum mark. A warning message is displayed on the instrument cluster. The warning light lights up or flashes.

- If the red zone is reached, find a safe place to stop and switch off the engine. Do not continue driving.

Depending on the vehicle equipment, the coolant temperature may be displayed in the **Vehicle** display.

Bar in left area – engine cold

- Avoid high engine speeds and heavy engine loading.

Bar in center area – normal operating temperature

- The bar may move up to the red area when the engine is heavily loaded and the outside temperature is high.

Bar in red area – operating temperature is too high

- If the coolant level is low, warning signals may appear if the vehicle tilts at an extreme angle (e. g. steep slopes) or generates high lateral acceleration while negotiating long bends (e.g. circular course driving). If the warnings do not disappear once the vehicle has assumed "normal" operating state, check the coolant level.
  - ▷ Please see chapter "Coolant" on page 102.

F – Battery charge state

✓ E-Hybrid vehicle

Shows the battery charge state and the electric range.

Identification for location of charge port door

The arrow is pointing towards the side of the vehicle on which the charge port door is located.

F – Boost pressure display

Depending on the vehicle equipment, the boost pressure may be displayed in the **vehicle** display.

G – Fuel gage

NOTICE

A lack of fuel can damage the emission control system.

- Never drive the tank dry.
- If the remaining range warning has appeared, do not take bends at high speed.

If the vehicle's inclination changes (e.g. driving uphill or downhill), minor deviations may occur on the fuel gage.

Fuel reserve warning

If the fuel level falls below a model-dependent remaining range, a warning message regarding the fuel range is displayed.

- Refuel at the next opportunity.
  - ▷ Please see chapter "Refueling" on page 234.

Identification for location of filler flap

The arrow is pointing toward the side of the vehicle on which the filler flap is located.

Warning lights and light indicators

NOTICE

Faults are indicated by the warning lights. The relevant warning light goes out only when the cause of the fault has been corrected.

Consult an authorized Porsche dealer in the following cases:

- The warning light does **not** come on briefly when the ignition is switched on.
- The warning light comes on or flashes when the engine is running or while driving.

Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

- High beam warning light
- High Beam Assistant light indicator
- Low beam light indicator
- Light indicator for rear fog light
- Fog light light indicator
- Porsche Dynamic Light System (PDLS) warning light
- Lights warning light
- Coolant temperature warning light
- Engine control system warning light
- Engine control system warning light
- Hybrid warning light
- Hybrid warning light
- Distance warning warning light

Tire pressure warning light
During the teach-in process for newly fitted wheels or tire pressure sensors, in the event of pressure loss in a tire, a fault or a temporary malfunction of the Tire Pressure Monitoring (TPM) system, the warning light may flash or light up.

E-sound warning light

All-wheel warning light

Porsche Active Safe (PAS) warning light

Lane Change Assist light indicator

Electric parking brake warning light (USA)

Electric parking brake warning light (Canada)

Porsche Active Suspension Management (PASM) warning light

Anti-lock brake system (ABS) warning light (USA)

Anti-lock brake system (ABS) warning light (Canada)

Power steering warning light

Central warning light

Left turn signal

Right turn signal

Airbag warning light

Seat belt warning light

Brake warning light (USA)

Brake warning light (Canada)

Brake pad warning light (USA)

Brake pad warning light (Canada)

Porsche Stability Management (PSM) warning light

Porsche Stability Management (PSM) OFF warning light

Night Assist light indicator

HOLD function light indicator

Emission control warning light (Check Engine)
In the event of malfunctions (e.g. engine misfiring) that could increase pollutant emissions or cause consequential damage the warning light may flash or light up.

If the emission control (Check Engine) warning light flashes or lights up

- Reduce engine speed and load immediately.
- If necessary, stop when it is safe to do so. Make sure that combustible materials, such as dry grass or leaves, cannot come into contact with the hot exhaust system.
- Note measures for emission control faults.

Operating the instrument cluster

⚠ WARNING Configuring settings and operating while driving

Configuring settings and operating the multifunction steering wheel, infotainment system, etc. while driving can distract you from the traffic. You may lose control of the vehicle.

- Only operate these components while driving if the traffic situation allows.
- If in doubt, stop in a safe place and only carry out extensive operations and settings while the vehicle is at a standstill.

The instrument cluster is only ready for operation when the ignition is on. For safety reasons, some functions are only available when the vehicle is stationary.

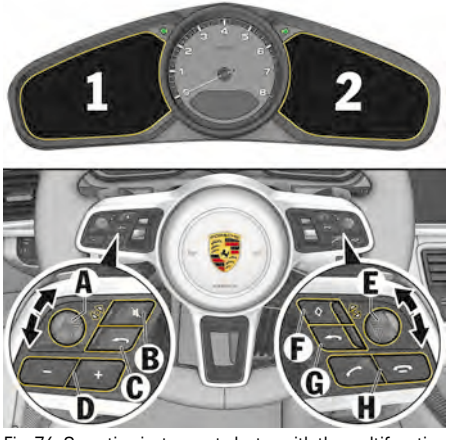


Fig. 76: Operating instrument cluster with the multifunction steering wheel

A - Scrolling to and selecting menus and functions in the Speed & Assist 1 display

- Scrolling: Turn rotary push button **A** up or down.
- Select/Enter: Press rotary push button **A**.

B - Muting the audio source

- Press the Mute button **B**.

C - Skipping back one or several selection levels in the Speed & Assist 1 display

- Press the Back button **C**.

D - Increasing or decreasing the volume

- Press the Volume buttons **D**.

E - Scrolling to and selecting menus and functions in the Car & Info 2 display

- Scrolling: Turn rotary push button **E** up or down.
- Select/Enter: Press rotary push button **E**.

F - Opening a saved function

- Press the ◊ button **F**. The button can be assigned individually.
  - Please see chapter "Vehicle Settings" on page 285.

G - Skipping back one or several selection levels in the Car & Info 2 display

- Press the Back button **G**.

H - Accepting, ending or rejecting phone calls

- Press the phone button **H**.

Information

To skip to the required list entry that begins with the selected letter in long lists, quickly turn the rotary push button up or down.

Selection of options and activation of functions

A preceding symbol indicates whether an option is selected or a function is activated.

Selecting one of several options

Option is selected.

Option is not selected.

Activating and deactivating function

The function is activated.

The function is not activated.

Instrument cluster display contents

Certain displays are only available when the vehicle is stationary.

Not all functions are explained in detail in the Manual. The examples will help you understand the functions quickly and clarify the menu structure.

Fig. 77: Instrument cluster display contents

Tube	Display	What can I do?/What is displayed?	Where?
1	▶ **Traffic signs**	Display up to 3 current traffic signs.	–
1	▶ **Outside temp.**	Display the outside temperature.	–
2	▶ **Speedometer**	Display the speedometer.	–
2	▶ **Mileage and trip mileage**	Display the odometer and trip counter. The trip counter reverts to "0" after exceeding 6,213 miles or 9,999 kilometers. **Resetting the trip counter** ▶ Press and hold the left rotary push button **A** (Fig. 76) on the multifunction steering wheel. The trip counter flashes. After the third flash, the trip counter reverts to "0".	–
2	▶ **Assistance screen**	Set and display Adaptive Cruise Control (ACC).	▷ p. 41
		Set and display Adaptive Cruise Control (ACC) with Porsche InnoDrive (PID).	▷ p. 48
		Display Lane Change Assist.	▷ p. 151
		Display Lane Keep Assist.	▷ p. 156
		Display cruise control.	▷ p. 104

Tube	Display	What can I do?/What is displayed?	Where?
		Display speed limiter.	▷ p. 256
		Display Porsche Hill Control.	▷ p. 227
2	▶ **E-Drive Assist**	Display the current share of electric drive power (green area). The combustion engine is switched on at the power threshold E max.	▷ p. 135
2	▶ **Speed limit**	Set and display a personal speed limit with speed warning.	▷ p. 145
2	▶ **Navigation**	Display navigation information (turning-off messages, etc.).	▷ p. 184
4	▶ **Telephone**	Use connected phone.	▷ p. 177
4	▶ **PDCC**	Display PDCC.	–
4	▶ **Drive distribution**	Display the current torque distribution between the front and rear axle in the form of bar charts.	–
4	▶ **Sport Chrono**	Measure times with the stopwatch.	▷ p. 258
4	▶ **Boost assistant**	Display the current share of electric drive power for acceleration.	▷ p. 135
4	▶ **Energy flow**	Display the energy flow.	▷ p. 135
4/5	▶ **E-consumption**	Display the electric consumption and its share for driving the vehicle and for comfort features (e.g. air conditioning).	▷ p. 135
4/5	▶ **Vehicle**	Display vehicle information (messages, service intervals and fill levels).	▷ p. 145
4/5	▶ **Trip**	Display and reset driving data (average fuel consumption, range, driving time, etc.).	▷ p. 281
4/5	▶ **G-Force**	Display the current and maximum longitudinal and lateral acceleration forces in the form of a circular diagram.	–
4/5	▶ **Tire pressure**	Display Tire Pressure Monitoring System.	▷ p. 316

Tube	Display	What can I do?/What is displayed?	Where?
4/5	▸ **Map**	Display and adjust the map display.	–
4/5	▸ **Night View Assist**	Display Night View Assist with thermal image detection.	▷ p. 188
5	▸ **Time and date**	Display the time and date.	–

Setting a personal speed limit with speed warning

If a personal speed limit with speed warning is set and activated, a warning message appears and a warning signal sounds if the limit is exceeded.

The function can be used as a reminder of the maximum permitted speed for a particular type of tire that has been fitted.

1. **Speed limit** ▸ **Lim 1:** or **Lim 2:**
2. Select the desired limit:

– **Reset**: Reset the speed limit.
– **Current**: Adjust the current driving speed.
– **Manual**: Set the value for the desired speed.
– **Active**: Activate or deactivate the speed limit.

☑ Speed limit activated.

☐ Speed limit deactivated.

Displaying vehicle information

Displaying various vehicle information

▸ **Vehicle** ▸ **View**

Select the desired vehicle information view.

To configure the user-defined view:

▷ Please see chapter "Vehicle Settings" on page 285.

Displaying messages

▸ **Vehicle** ▸ **Notifications**

Existing warnings or vehicle messages are displayed. The warning symbol in the lower area indicates the number of pending important warnings.

Displaying service intervals

▸ **Vehicle** ▸ **Inspections**

Select the desired service interval.

The display contains information about when the next service is due.

Interior Lighting

Adjusting brightness

▸ **CAR** ▸ **CONTROL** ▸ **Vehicle settings** ▸ **Light and visibility** ▸ **Interior lighting** ▸ **Brightness**

Switching interior lighting on and off

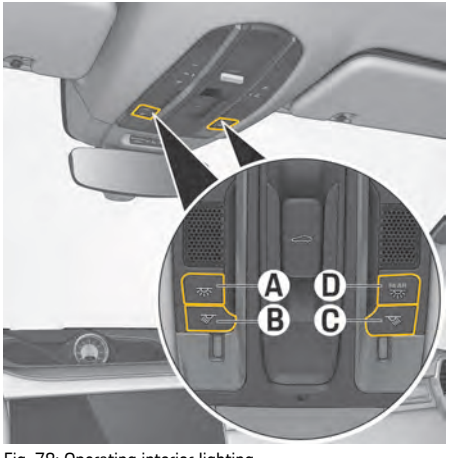


Fig. 78: Operating interior lighting

A Button for front interior lights
B Button for front left reading light
C Button for front right reading light
D Button for interior lights in the rear (depending on equipment)

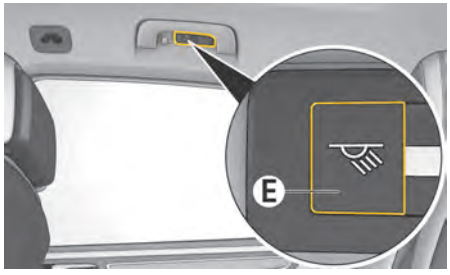


Fig. 79: Operating reading lights

Switching interior lights on and off

Interior lights

▸ Press button **A** or **D**.

Switching reading lights on and off

Front reading lights

▸ Press button **B** or **C**.

Rear reading lights

▸ Press button **E** above the relevant door.

Adjusting brightness

▸ Press and hold the button for the relevant light for at least 1 second until the desired brightness is achieved.

Switching interior lighting on and off automatically

▸ **CAR** ▸ **CONTROL** ▸ **Vehicle settings** ▸ **Light and visibility** ▸ **Interior lighting** ▸ **While opening doors**

Under dark conditions, the interior lighting is switched on in the following cases:
– When unlocking the vehicle or opening a door
– After switching off the ignition and unfastening the driver's seat-belt buckle

The interior lighting is switched off again in the following situations:
– After all the doors have been closed
– Immediately after the ignition is switched on
– Immediately after the vehicle is locked
– Automatically approx. 10 minutes after switching on

The off delay time for the interior lighting can be adjusted.
▹ Please see chapter "Vehicle Settings" on page 285.

Switching ambient lighting on and off

Switching ambient lighting on and off

1. **CAR** ▸ **CONTROL** ▸ **Ambient lighting**
2. Select **ON**.

Setting ambient lighting color

1. **CAR** ▸ **CONTROL** ▸ **Ambient lighting**
2. Select **Color**.
3. Set the desired light color.

Setting the brightness of the ambient lighting

Setting the brightness for the entire vehicle interior

1. **CAR** ▸ **CONTROL** ▸ **Ambient lighting**
2. Select **Brightness**.
3. Set the desired brightness value.

Setting the brightness in individual areas of the vehicle interior

1. **CAR** ▸ **CONTROL** ▸ **Ambient lighting**
2. Select **Roof**, **Doors**, **Center console** or **Footwell**.
3. Set the desired brightness value.

Intersection Assist

Intersection Assist monitors the areas around the front and sides of the vehicle at intersections and exits with the aid of the camera and radar sensors installed in the vehicle and can warn the driver of detected approaching cross traffic in complex intersection situations. Within the system limits, approaching, moving objects such as e.g. vehicles are detected.

Switching Intersection Assist on and off

Intersection Assist can be switched on and off in the PCM.

▸ **ASSIST** ▸ **Intersection Assist**

A switched-off system is switched on again the next time the ignition is switched back on.

Operating principle

Intersection Assist is active under the following conditions:

✓ Intersection Assist is switched on.
✓ PSM is switched on.
✓ Speed is not higher than approx. 20 mph (30 km/h).

If a critical situation is detected by the Intersection Assist, visual and acoustic warnings may be communicated to the driver via the instrument cluster, the head-up display and the PCM, depending on the vehicle speed and the time headway to the crossing vehicle. Intersection Assist can trigger a warning jolt via a braking intervention to warn the driver of a potential collision.

Information display

In the event of a possible collision, a visual warning is displayed on the instrument cluster and PCM.

– Red arrows indicate the direction from which the cross traffic is approaching.
– The display in the PCM only appears when ParkAssist is activated.
– The display in the instrument cluster only appears when the **ACC** main menu is activated.

Warnings

Fig. 80: Collision warning on the instrument cluster

If the system detects a crossing vehicle in the immediate vicinity, it can also warn the driver by issuing a warning tone and displaying a corresponding symbol in the instrument cluster and on the head-up display.

If the function detects a collision risk when driving slowly, a warning jolt is performed as a tactile warning at the last possible moment in order to draw the driver's attention to the danger.

Functional limitations

– People and animals may not be detected.
– Cyclists may not always be detected.
– Vehicles approaching very fast or very slowly may not always be detected in time.
– When turning off, if your vehicle is not facing in the direction of the driving lane (but is inclined diagonally, at a right angle to it or sharply upward or downward), approaching vehicles may not be detected or may not be detected in time.
– Highly reflective surroundings (e.g. steel bridges, railings) can cause incorrect warnings or prevent warnings from being issued.
– Acceleration or changes in the driving behavior of crossing objects (e.g. sudden turn-offs) can cause incorrect warnings or prevent warnings from being issued.

Jack and Lifting Platform

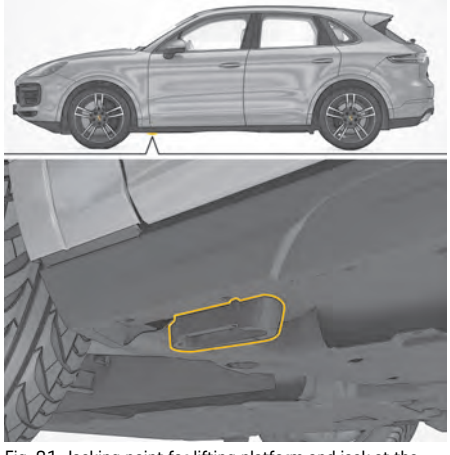


Fig. 81: Jacking point for lifting platform and jack at the front

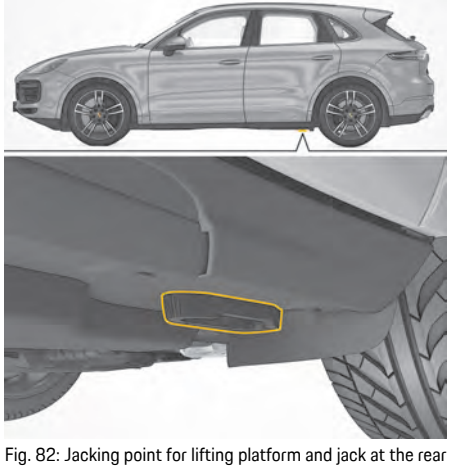


Fig. 82: Jacking point for lifting platform and jack at the rear

⚠ WARNING Inadequate securing of vehicle

An unsecured or incorrectly secured vehicle can move unintentionally or tip or fall off lifting equipment such as a jack or lifting platform. This can cause serious injuries and damage.

- Raise the vehicle using a jack on a solid and flat surface only.
- Raise the vehicle only at the prescribed jacking points on the vehicle underbody.
- Always place the vehicle on solid supports when working under the vehicle.
- Never start the engine when the vehicle is raised. Engine vibrations can cause the vehicle to fall.
- When working on the vehicle while the engine is running, always apply the electric parking brake **and** select the transmission parking lock **P**.

▷ Please see chapter "Wheels and Tires" on page 316.

⚠ WARNING Control operation of the leveling system

A vehicle on which the leveling system is activated can move unexpectedly or tip or fall off lifting equipment, e.g. a jack or lifting platform. This can cause serious injuries and damage.

- Manually set Normal level and switch off the leveling system before raising the vehicle.

▷ Please see chapter "Vehicle Settings" on page 285.

Securing vehicle to prevent it from rolling away

✓ Vehicles with collapsible spare wheel

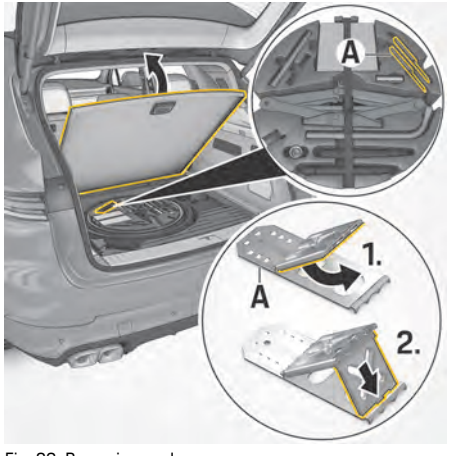


Fig. 83: Removing wedges

1. Remove two wedges **A**.
2. Unfold and engage both wedges **A**.

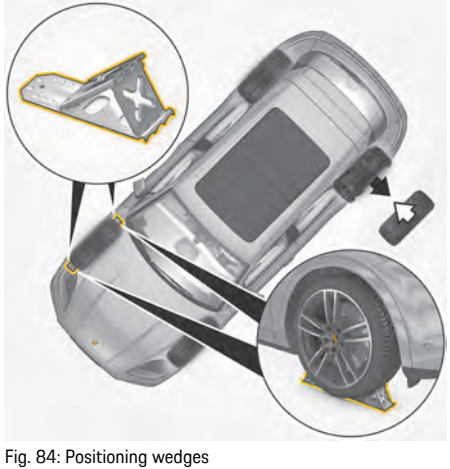


Fig. 84: Positioning wedges

3. Place one wedge each directly in front of and behind the diagonally opposite wheel.

Raising vehicle with the jack

Information

The jack is only supplied on vehicles with a spare wheel.

The jack is stored with the tool box under the cargo area floor in the luggage compartment.

▷ Please see chapter "Luggage Compartment" on page 164.

✓ On vehicles with leveling system: car jack mode is switched on.

▷ Please see chapter "Vehicle Settings" on page 285.

✓ Vehicle is secured to prevent it from rolling away.

✓ The jacking area for the jack on the vehicle is clean.

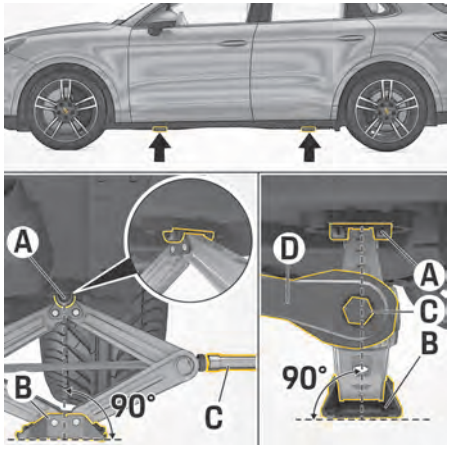


Fig. 85: Fitting the jack

1. Attach the jack at the jacking points provided. The jack must be resting on a solid surface. If necessary, use a suitable large, non-slip support.
2. Hold the jack and raise it by turning with the hexagon socket wrench **C** from the vehicle tool box until the head piece of the jack **A** is positioned under the jacking point on the vehicle.
3. Position the jack so that the head piece **A** engages in the jacking point on the vehicle and the jack base **B** lies flat on the ground. The jack base **B** must be located vertically under the jacking point on the vehicle.
4. To raise the vehicle, fit the appropriate side of the ratchet **D** (from tool box) onto the hexagon socket wrench **C**. Move the ratchet **D** back and forth clockwise until only the wheel to be changed is lifted completely off the ground.

Lowering:

▸ To lower the jack, fit the opposite side of the ratchet **D** onto the hexagon socket wrench **C**. After lowering the vehicle, remove the jack.

Lane Change Assist (LCA)

Lane Change Assist warns the driver about vehicles that are approaching from the rear or are located in the blind spot. This applies when overtaking other vehicles and when being overtaken. Integrated warning indicators in both door mirrors light up as soon as a dangerous situation is detected and changing lanes seems essential.

At driving speeds below the operating range of the Lane Change Assist, the additional rear turn assist also supports the driver by monitoring the area behind the vehicle in turning-off situations. The rear turn assist is always automatically activated together with the Lane Change Assist.

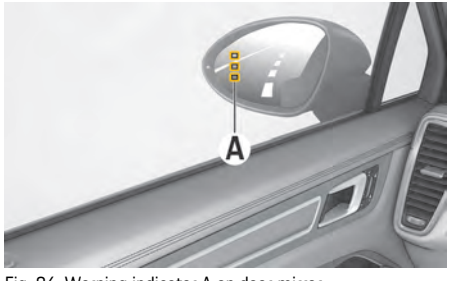


Fig. 86: Warning indicator A on door mirror

Switching Lane Change Assist on and off

Lane Change Assist can be switched on and off in the PCM.

▶ **ASSIST** ▶ **Lane Change Assist**

When Lane Change Assist is on, the symbol appears on the instrument cluster.

⚠ WARNING Lack of attention

The Lane Change Assist and Rear Turn Assist are not a substitute for the driver's attentiveness. The driver is still responsible for taking due care when changing lanes.

▶ Keep the direction of travel and the relevant area around the vehicle in view at all times.

⚠ WARNING Restricted range of the radar sensor

The range of the radar sensor may be restricted when driving round tight bends, over humps or in bad weather conditions (rain, snow, ice, heavy spray). Vehicles may not be adequately detected, or may not even be detected.

▶ Keep the direction of travel and the relevant area around the vehicle in view at all times.

⚠ WARNING Undetected vehicles

Vehicles cannot or may not be detected by the system in time in the following situations:

– The range of the radar sensors may be reduced in adverse weather conditions (rain, snow, ice, or heavy spray), in tight curves and when approaching hilltops.
– Lane Change Assist only alerts you to approaching vehicles or vehicles in the blind spot above a driving speed of approx. 9 mph (15 km/h).
– Vehicles that approach at high speed from behind or vehicles that are falling back.
– If the vehicle is not facing in the direction of the driving lane when turning but is facing diagonally or at right angles to it, approaching vehicles can no longer be detected by the radar sensors.
– In the case of Rear Turn Assist, it is possible that, owing to the small differences in speed between your vehicle and moving or stationary objects, fixed objects (e.g. a metal post) may also trigger a warning or that slow-moving vehicles will not be detected.
– Rear Turn Assist is activated when driving off. It may therefore occur that vehicles that are already moving or are driving off will not be detected or will only be detected late. Vehicles already located immediately next to your vehicle and therefore outside of the detection range of the sensor may not be detected either.
– The rear collision warning does not respond to cross traffic, vehicles with a small cross-section, narrow vehicles and objects that are not identified as vehicles.

▶ Keep the direction of travel and the relevant area around the vehicle in view at all times.

General information

- The system provides support when driving at speeds above approx. 10 mph (15 km/h).
- At speeds below 10 mph (15 km/h), the driver is supported by Rear Turn Assist, however, only when driving off and on the vehicle side on which the turn signal was actuated.
- Rear Turn Assist is active at speeds up to approx. 12 mph (20 km/h).
- Lane Change Assist and rear turn assist are not available if the system detects that the radar sensors are covered.
- The radar sensors can sometimes detect other objects (e.g. high or raised crash barriers), not only vehicles.
- The display is designed so that you notice it merely by glancing at the door mirror.

Information

If the position of the radar sensors was changed following an accident, for example, this can impair the function of Lane Change Assist.

- Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Information

To ensure that Lane Change Assist operates correctly:

- Do not cover the radar sensors on the rear bumper (e.g. with stickers). Keep the area clean and free of snow and ice.
- Do not cover the warning indicator in the exterior mirror (e.g. with stickers).
- Subsequent painting of the bumper may lead to a reduction in the sensor range owing to the thicker coating layer. The electrical properties may also differ from those of the approved paints.

Fig. 87: Radar sensors in rear bumper

Operating principle

Using the radar sensors integrated in the rear bumper, Lane Change Assist measures the distance and speed difference of the detected vehicles in relation to your vehicle. The radar sensors cover an area of up to 230 ft (70 m) to the rear (approach zone) and the blind spot.

Whenever Lane Change Assist regards the speed difference and distance as critical for changing lanes, this is indicated on the relevant door mirror. The two sides of the vehicle are shown separately here. The warning indicator on the left door mirror assists the driver when changing to the left lane, for example.

If a vehicle regarded as critical has switched on its turn signal, the respective warning indicator on the door mirror will flash brightly and briefly several times.

If you overtake another vehicle slowly (with a speed difference of less than approx. 10 mph (15 km/h)), the warning indicator lights up as soon as that vehicle is in your blind spot and is detected by Lane Change Assist. If the speed difference is greater, no warning indicator will be activated on the door mirror.

The speed range of the Lane Change Assist is not reached immediately after driving off. Until it is reached, the driver is supported by the Rear Turn Assist.

When the turn signal is on, the Rear Turn Assist detects objects located next to and behind your vehicle, but only at the side on which the turn signal has been activated. If a potential hazard is detected, the respective warning indicator on the door mirror lights up. If your own calculated driving path crosses that of a detected vehicle on the side of the vehicle on which the turn signal has been activated, the respective warning indicator on the door mirror will flash brightly and briefly several times.

Information

The radar sensors cover the adjacent lane to the left and right. Other lanes are **not** covered by the radar sensors.

Information and warning stage

Lane Change Assist has two indicator levels that are activated as appropriate, depending on whether or not the turn signal has been set.

Information stage

If the turn signal is not set, Lane Change Assist informs you about detected vehicles that are considered critical for a possible lane change. Whenever Lane Change Assist regards the speed difference and distance of a detected vehicle as critical, a **weak** light appears in the warning indicator on the relevant mirror.

Warning stage

If the turn signal is on and Lane Change Assist has detected a vehicle on this side that it regards as critical, the warning indicator on the door mirror on this side will start to flash **brightly**. When the warning stage flashes brightly and briefly several times, this is an indication for you to check the driving situation again by looking in the door mirror and looking over your shoulder.

Adjusting display brightness of Lane Change Assist

The brightness of the indicator for the information and warning stage is automatically adjusted according to the ambient brightness. The basic brightness of the warning indicator on the door mirror can also be adjusted.

▸ **ASSIST** ▸ ▸ **Assistance system settings** ▸ **Lane Change Assist**

Information

- The faster a vehicle is approaching, the earlier the warning indicator on the door mirror lights up. You are always alerted when the Lane Change Assist detects a vehicle in the blind spot.
- Changing lanes can already be critical for vehicles approaching at speed if there is still no warning activated on the door mirror.
- On vehicles with other assistance systems, the warning indicator on the door mirror can flash on briefly several times even if the turn signal is not on. If Lane Keep Assist detects that your vehicle is veering out of your lane toward a vehicle on the adjacent lane, Lane Change Assist alerts you to the possible danger by flashing on briefly and brightly several times.

Driving situations

The following driving situations describe possible scenarios and the associated Lane Change Assist and rear turn assist warning indicators.

Vehicles approaching fast

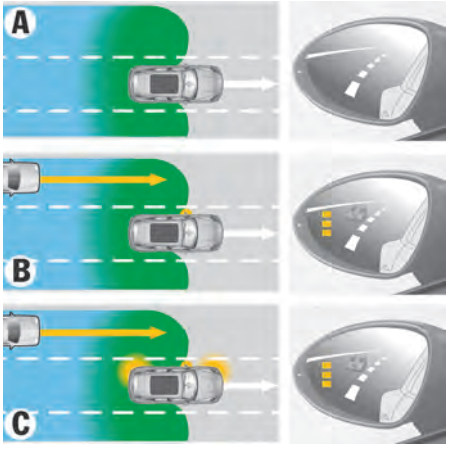


Fig. 88: Vehicle approaching at speed

A – Warning indicator on door mirror does not light up

The sensors have not detected a vehicle. There is no indication on the door mirror.

B – Warning indicator lights up in information stage

The sensors detect a fast approaching vehicle. In the example, the approaching vehicle is in the left lane. This vehicle is already considered critical for changing lanes due to the significant speed difference, even though it is still a good distance away. The warning indicator on the door mirror lights up.

C – Warning indicator flashes in warning stage

If the turn signal is switched on in driving situation **B**, the warning indicator on the door mirror flashes briefly several times. Lane Change Assist is informing you that you may have overlooked a vehicle.

Vehicles approaching slowly

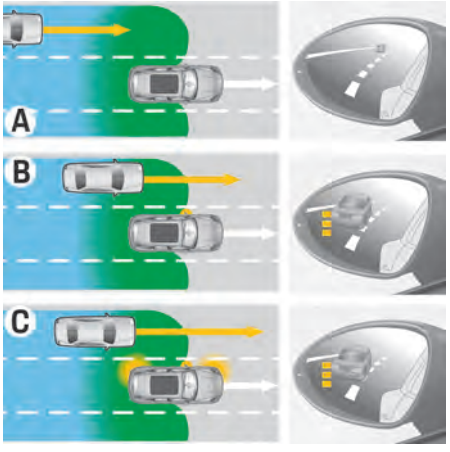


Fig. 89: Vehicle approaching slowly

A – Warning indicator on door mirror does not light up

The sensors detect a vehicle approaching at a slow speed. In the example, the approaching vehicle is in the left lane. Due to the small speed difference and the large distance, there is no indication on the door mirror.

B – Warning indicator lights up in information stage

The distance from the slow approaching vehicle is now smaller. The warning indicator on the door mirror lights up. Only when Lane Change Assist regards the speed difference and distance as critical for changing lanes will this be indicated on the door mirror. You are alerted to every vehicle detected by Lane Change Assist when they are in the blind spot.

C – Warning indicator flashes in warning stage

If the turn signal is switched on in driving situation **B**, the warning indicator on the door mirror flashes briefly several times. Lane Change Assist is informing you that you may have overlooked a vehicle.

Vehicles falling back slowly

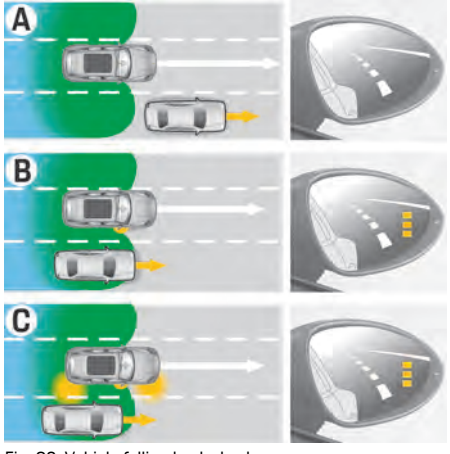


Fig. 90: Vehicle falling back slowly

A – Warning indicator on door mirror does not light up

Lane Change Assist has not yet detected the vehicle you have overtaken. There is no indication on the door mirror.

B – Warning indicator lights up in information stage

Lane Change Assist detects the vehicle that is falling back slowly on the right (less than approx. 10 mph (15 km/h) speed difference). In the example, this vehicle is in the right lane. The warning indicator on the door mirror lights up.

C – Warning indicator flashes in warning stage

If the turn signal is switched on in driving situation **B**, the warning indicator on the door mirror flashes briefly several times. Lane Change Assist is informing you that you may have overlooked a vehicle.

Vehicles falling back quickly

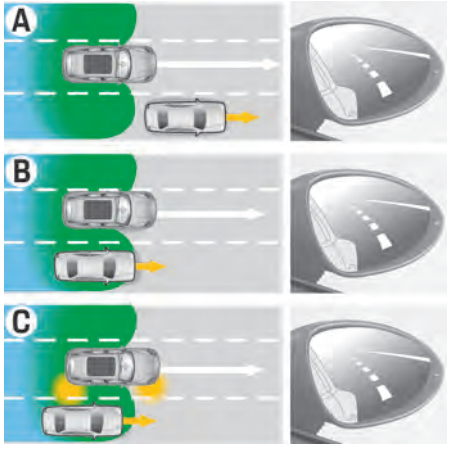


Fig. 91: Vehicle falling back fast

A – Warning indicator on door mirror does not light up

Lane Change Assist has not yet detected the vehicle you have overtaken. There is no indication on the door mirror.

B – Warning indicator on door mirror does not light up

Lane Change Assist detects the vehicle falling back fast on the right (more than approx. 10 mph (15 km/h) speed difference), but it does not consider it as critical for changing lanes owing to the speed with which it is falling behind. In the example, this vehicle is in the right lane. There is no indication on the door mirror.

C – Warning indicator on door mirror does not light up

If the turn signal is switched on in driving situation **B**, the warning indicator is still not activated on the door mirror.

Starting to turn off

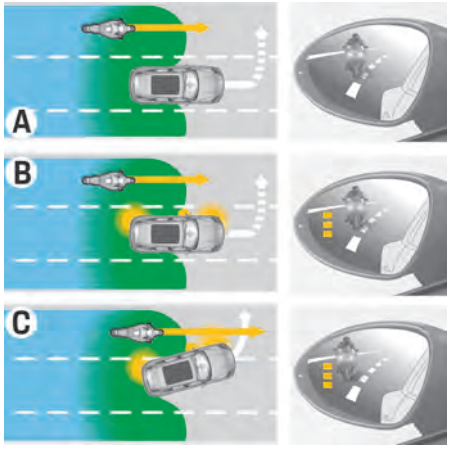


Fig. 92: Staring to turn off

A – Warning indicator on door mirror does not light up

No turn signal has been actuated, therefore the rear turn assist is not active after starting to turn off and the motorbike located in the blind spot is not detected. A fast approaching vehicle may also not be detected. There is no indication on the door mirror.

B – Warning indicator lights up in information stage

If the relevant turn signal is switched on in driving situation **A**, the warning indicator on the door mirror lights up. The rear turn assist alerts you to the fact that you may have overlooked a vehicle.

C – Warning indicator flashes in warning stage

If, in driving situation **B**, the driver has initiated turning off by steering to the relevant side and this results in his own calculated driving path crossing that of a detected vehicle, the warning indicator on the door mirror flashes briefly several times and then lights up. This warns you of a potential collision with a vehicle that may have been overlooked.

Cornering

When driving around a bend, Lane Change Assist may react to a vehicle driving in the next lane but one and the warning indicator in the door mirror may light up.

Lane Change Assist cannot detect vehicles in tight bends.

- Take additional care when driving around bends and where there are lanes with differing widths.

Lane width

The Lane Change Assist detection area covers the two adjacent lanes (left and right) on lanes of standard width regardless of whether you are driving exactly in the middle or at the edge of the lane.

When driving on narrow lanes, this area can cover even more lanes, particularly when driving at the edge of a lane. In such situations, vehicles driving two lanes away may be detected and Lane Change Assist may switch to the information or warning stage.

Likewise, when driving on very wide lanes, vehicles in the adjacent lane may not be detected as they are outside the detection area.

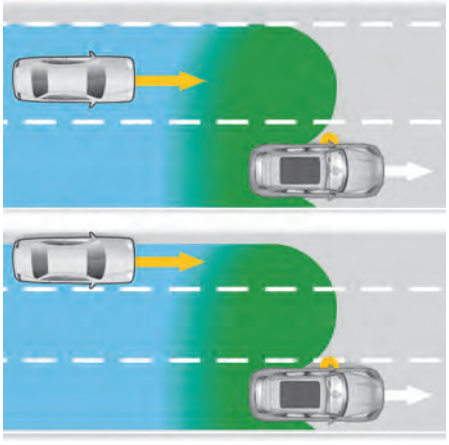


Fig. 93: Lane width and detection area

Lane Keep Assist

General safety instructions

⚠ WARNING Lack of attention

The system has a limited ability to help the driver keep the vehicle in its lane, but it does not drive itself. The driver remains responsible at all times when driving, such as staying in the lane, even if the system is active. The system does not replace the driver's attentiveness.

- Drive with extreme care. The driver must hold the steering wheel at all times.
- Always check the traffic situation and the area around the vehicle.
- If a warning appears on the instrument cluster, take over control of the vehicle immediately.
- Adapt your driving speed to road and weather conditions.
- Do not attach any objects to the steering wheel.

⚠ WARNING No or very little steering intervention

In the event of heavy braking, corrective steering intervention might not take place. Likewise, in the case of active steering by the driver, corrective steering intervention may be reduced or not take place at all.

- Drive especially carefully and keep your hands on the steering wheel at all times in order to always be ready to steer.
- Always check the traffic situation and the area around the vehicle.
- If a warning appears on the instrument cluster, take over control of the vehicle immediately.

⚠ WARNING Insufficient corrective steering intervention

Corrective steering intervention alone may not be sufficient to keep the vehicle in the driving lane in the case of track ruts, winding roads, inclined road surfaces or a crosswind.

- In such situations, assist by steering actively.
- Drive with extreme care.
- Always hold the steering wheel with both hands.

i Information

- If there is a fault in the system or if Lane Keep Assist does not function as described in this section, do not use Lane Keep Assist. Go to a qualified specialized repair shop. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

System limitations

⚠ WARNING Physical limits and system limits

In some situations, the system may not detect the lane correctly, corrective steering intervention may not be enough to keep the vehicle in the lane or the function may change suddenly from active to passive. There is a risk of accident! Such situations include:

- When increased attention is required on the part of the driver
- During sporty driving
- In adverse weather conditions (e.g. fog, snow or heavy rain)
- In unfavorable road conditions (including bad roads, pot holes and dirty road surface)
- In areas with road construction
- When approaching humps and dips
- In urban traffic
- On winding and narrow country roads

- Do not use the system in these situations.

⚠ WARNING Obscured camera view

The camera's view can be impaired by different influencing factors (e.g. rain, snow, ice, heavy water spray, oncoming headlights or damage). Sometimes, the camera cannot detect the lane markings, or cannot detect them correctly. When this happens, no steering intervention or an unexpected steering intervention can occur. Steering intervention can only take place if a lane marking has been detected. Other road structures or objects may be incorrectly identified as lane markings as well. This can lead to unexpected or missing steering interventions/ acoustic warnings.

- Drive with extreme care.
- Keep the direction of travel and the lane lines in view at all times.
- Clean the camera lens regularly and keep it free of snow and ice.
- Do not cover the camera lens.
- Check the windshield for damage in the area of the camera lens at regular intervals.

The system is available to a limited extent

The system function may be passive in the following situations:

- The vehicle speed is below the activation speed of approx. 40 mph (65 km/h).
- The lane markings of the lane currently driven in are not detected (e.g. due to snow, dirt, wet

conditions, oncoming headlights or driving close to the vehicle ahead).
- The quality of the lane markings is not sufficiently good for activation of Lane Keep Assist.
- The radius of a bend is too small.
- The distance to the nearest lane marking is too great.
- The lane markings are too close to the vehicle.
- Temporarily in conjunction with an extremely dynamic driving style.
- The turn signal is on.
- The system has detected that your hands are not on the steering wheel.

Responding to warning symbols

Always heed any warning and information messages displayed in the vehicle.

▷ Please see chapter "Warning and Information Messages" on page 293.

Operating principle

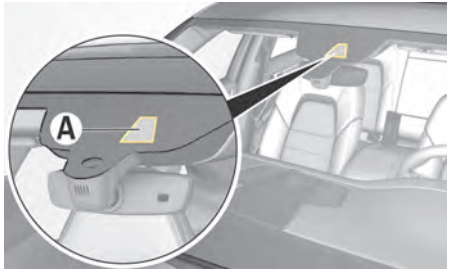


Fig. 94: Windshield camera

Lane Keep Assist helps the driver keep the vehicle in the lane. The system uses the front camera (**A**) to detect the course of the road ahead based on the lane markings and initiates corrective steering intervention when the vehicle approaches a detected lane marking and is in danger of leaving the driving lane. However, the driver can override this steering intervention at any time.

If the vehicle crosses a lane marking without activating a turn signal, the system can alert the driver acoustically. The acoustic warning must be switched on in the central display for this to happen. If the vehicle crosses a lane marking after the driver has activated a turn signal, the system does not issue a warning or steer because the lane change is interpreted as intentional in this case.

The system is designed for driving on highways and well-surfaced country roads in a speed range of approx. 40 mph – 156 mph (65 km/h – 250 km/h).

Vehicles with Lane Change Assist

If the vehicle is equipped with Lane Change Assist, the active system warns the driver through corrective steering intervention when changing lanes in a potentially critical situation. Steering intervention occurs even if the turn signal is activated for the direction in question. If the steering intervention is overridden by the driver, an additional warning is provided via a warning tone (if active).

▷ Please see chapter "Lane Change Assist (LCA)" on page 151.

Behavior if there is no steering activity

The driver's steering behavior is monitored when Lane Keep Assist is switched on and active. If there is no steering activity (e.g. hands not on the steering wheel or only resting lightly), a warning appears in the instrument cluster. The system prompts the driver to actively take over the steering. If the driver does not react to the takeover prompt, the system switches to a passive state.

Controls

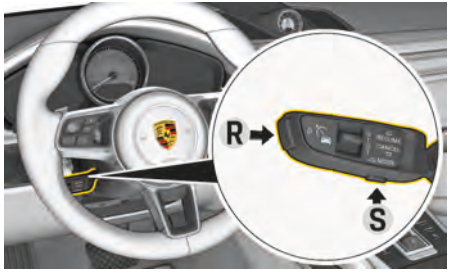


Fig. 95: Control lever

R Switch driver assistance systems on/off
S Switch between driver assistance systems

Display elements

Fig. 96: Speed & Assist display

A Lane Keep Assist display
B Display of lane markings
C Status display

Vehicles with Adaptive Cruise Control (ACC)

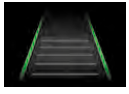
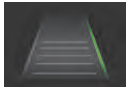
The Speed & Assist display in the **ASSIST** main menu shows the lane markings **B** and the status display **C**.

Vehicles without Adaptive Cruise Control (ACC)

The lane markings are only shown on the status display **C**.

Reading off the system states

The table shows the system states of the Lane Keep Assist and their display in the instrument cluster:

Lane Keep Assist display	Status display	Meaning
No display	No display	Lane Keep Assist is switched off.
		Lane Keep Assist is switched on but passive.
		Lane Keep Assist is switched on and active on both sides.
		The lane markings can only be detected on one side.
		The driver leaves the lane when Lane Keep Assist is active and is warned on the right.

When "Active Lane Keeping" is activated simultaneously, a combined display for both functions may be displayed instead of the Lane Keep Assist symbol.

▷ Please see chapter "Active Lane Keeping" on page 36.

Switching Lane Keep Assist on and off

Lane Keep Assist can be switched on and off in the PCM.

1. Press button **R** on the control lever.
   The driver assistance systems are switched on.
2. Press button **S** on the control lever.
   The available driver assistance systems are displayed on the instrument cluster.
3. Select Lane Keep Assist using the **left** rotary knob on the steering wheel and press to confirm.
   – or –
   Selecting Lane Keep Assist in the PCM:

▸ **ASSIST** ▸ **Lane Keep Assist**

If corrective steering intervention is performed while Lane Keep Assist is activated, the relevant lane marking is shown in red in the instrument cluster. In addition, a warning tone sounds when the vehicle drives over a lane marking.

Setting acoustic warning

▸ **ASSIST** ▸ ▸ **Assistance system settings** ▸ **Lane Keep Assist**

The acoustic warning can be switched on and off individually. The warning tone volume can also be selected in 3 levels.

Lights

Brief Overview - Lights

This brief overview does not replace the comprehensive descriptions. Safety messages and warnings, in particular, are not replaced by this brief overview.

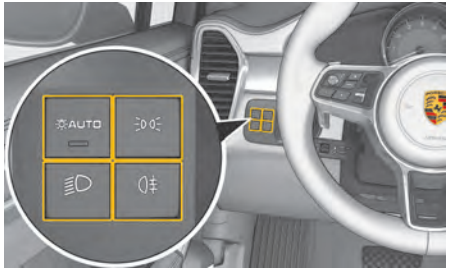


Fig. 97: Light control panel

What do I want to do?	What do I have to do?	Where?
Switch on automatic headlights	▶ Press button AUTO. Automatic headlights and the Porsche Dynamic Light System (PDLS/PDLS Plus) are switched on.	▷ p. 160
Switch on parking light	▶ Press button. License plate light, instrument lighting, and parking light are switched on.	–
Switch on low beam	✓ Ignition is switched on. ▶ Press button. The low beam is switched on. Automatic headlights, daytime running lights and the Porsche Dynamic Light System (PDLS/PDLS Plus) are switched off.	–
Switch on rear flog light	▶ Press button.	–
Switch exterior lights off completely	▶ Press button for approx. 2 seconds. The light indicator on button AUTO goes out. The exterior lights remain completely switched off until a speed of 6 mph (10 km/h) or a distance of 330 ft. (100 m) has been exceeded.	▷ p. 160

Switching automatic headlights/ exterior lights on and off

⚠ WARNING Driving without lights

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

- ▸ Carefully monitor the automatic headlights and switch the low beams on manually if necessary.
- ▸ Observe country-specific laws for driving with low beams.

Switching on automatic headlights

- ▸ Press button AUTO.
  The automatic headlights are switched on.

The low beams are switched on automatically in the following situations:

- – Dusk
- – Darkness
- – Driving through tunnels
- – Rain

When the low beams are switched on, the light indicator on the instrument cluster lights up.

Information

Fog is not automatically detected.

- ▸ In the event of fog, switch on the low beams and rear fog light manually.

Switching exterior lights off completely

- ▸ Press button for approx. 2 seconds.
  The light indicator on button AUTO goes out.

The automatic headlights are switched on again in the following situations (country-dependent):

- – from a speed of 5 mph (8 km/h)
- – when a distance of more than 328 ft. (100 m) has been driven after switching off the exterior lights

Rain function

The low beams are switched on automatically when continuous wiper operation is detected. The low beams are switched back off when wiping is paused.

Information

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

Adjusting Automatic Coming Home lights

✓ Automatic headlights switched on.

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

- – Daytime running lights
- – Courtesy lights in the folded-out door mirrors
- – Front and rear position lights
- – License plate light

Coming Home function (off delay)

When the vehicle is locked, the lights remain switched on for the duration of the off delay.

▹ Please see chapter "Vehicle Settings" on page 285.

Entry function/Exit function

When the vehicle is unlocked, the area around the vehicle is illuminated for the duration of the set off delay. The lights are switched off in the following cases:

- – Ignition switched on
- – Automatic headlights switched off

▹ Please see chapter "Vehicle Settings" on page 285.

Porsche Dynamic Light System (PDLS)

✓ LED headlights, incl. PDLS.
✓ Automatic headlights switched on.

Static cornering light

At speeds of up to 80 mph (130 km/h), static cornering light is switched on when the steering wheel is turned.

Dynamic cornering light

Above a speed of approx. 3 mph (5 km/h), the low beam or high beam headlights are swiveled in the direction of the curve to illuminate the road more clearly, depending on the speed of the vehicle and the extent to which the steering wheel is turned.

Porsche Dynamic Light System Plus (PDLS Plus)

✓ LED matrix headlights incl. PDLS Plus.
✓ Automatic headlights switched on.

PDLS Plus also includes the PDLS functions.

▹ Please see chapter "Porsche Dynamic Light System (PDLS)" on page 160.

High beam assist (USA only)

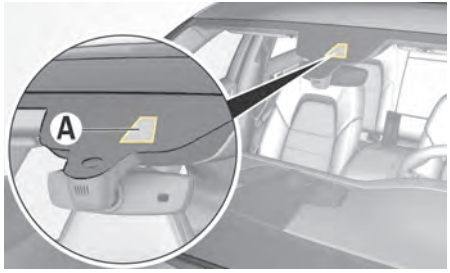


Fig. 98: Windshield camera

Light sources and other road users can be detected by means of a camera **A** in the area of the interior mirror. Depending on the position of other vehicles, the speed and other environmental and traffic conditions, the system switches from low beam to high beam and back again.

High beam is available from approx. 20 mph (30 km/h) and up to approx. 40 mph (60 km/h). High beam is also switched to low beam when the camera detects street lighting.

⚠ WARNING Lack of attention when driving with high beam assist

Despite the high beam assist, responsibility for manually adjusting the high beam to the light, visibility and traffic conditions when driving, for example, remains with the driver. The system is not a substitute for careful attention on the part of the driver. Manual intervention may be required in the following situations:

- In unfavorable weather conditions, such as rain, fog, snow, ice or heavy spray.
- On roads where oncoming traffic is party hidden, such as on highways.
- Where there are poorly lit road users, such as cyclists.
- On narrow curves, steep crests or hollows.
- In poorly lit areas.
- Where there are strong reflectors, such as road signs.
- If the windshield is obscured by mist, dirt, ice or stickers in the area of the camera.

▶ Drive with extreme care.
▶ Always check the traffic situation and the area around the vehicle.
▶ If necessary, manually adjust the high beam according to the light, visibility and traffic conditions.

Information

To avoid impairing the detection performance:
▶ Do not cover the camera area on the interior mirror with objects (e.g. stickers).
▶ The camera must always be kept free of dirt, ice and snow.

High Beam Assistant (Canada only)

Light sources and other road users can be detected by means of a camera **A** in the area of the interior mirror. Depending on the position of other vehicles, the speed and other environmental and traffic conditions, the individual LED segments of the high beam headlights are activated or deactivated. The beam in the relevant area in front of the vehicle is low, the rest remains high. This ensures that the environment is lit to best effect without dazzling other road users.

High Beam Assistant is switched on or off between 20 mph (30 km/h) and 37 mph (60 km/h) according to the navigation data. High beam is also switched from full high beam illumination to low beam when the camera detects street lighting.

⚠ WARNING Lack of attention when driving with High Beam Assistant

Despite High Beam Assistant, the responsibility during driving remains with the driver, such as for manually adjusting the high beam according to the light, visibility and traffic conditions. The system is not a substitute for careful attention on the part of the driver. Manual intervention may be required in the following situations:

- In unfavorable weather conditions, such as rain, fog, snow, ice or heavy spray.
- On roads where oncoming traffic is party hidden, such as on highways.
- Where there are poorly lit road users, such as cyclists.
- On narrow bends, steep crests or hollows.
- In poorly lit areas.
- Where there are strong reflectors, such as road signs.
- If the windshield is obscured by mist, dirt, ice or stickers in the area of the camera.

▶ Drive with extreme care.
▶ Always check the traffic situation and the area around the vehicle.
▶ If necessary, manually adjust the high beam according to the light, visibility and traffic conditions.

Encounter lights (Canada only)

✓ No vehicle ahead.
✓ Oncoming traffic with detected headlights.

The light distribution is briefly changed so that the lane being driven on is illuminated brightly. This

draws the direction of vision onto the lane being driven on. The driver is less dazzled by the oncoming traffic.

Signage glare reduction (Canada only)

✓ High Beam Assistant switched on.

The glare of reflective traffic signs and other signage can – particularly when driving with high beams – cause the driver to be dazzled.

The signage glare reduction briefly dims individual LED segments of the vehicle's low or high beam headlights in a targeted manner. The driver is dazzled less due to reflecting traffic signs and other signage.

Automatic headlight calibration (Canada only)

✓ No objects in the immediate vicinity of the vehicle.

✓ Vehicle positioned as straight as possible in front of a projection surface, e.g. wall (distance > 16.4 ft. (5 m)).

✓ Low beam active during reference run while stationary.

Automatic headlight calibration starts automatically provided the conditions are right (ambient lighting, good projection surface). The LED segments of the headlight are automatically activated and deactivated repeatedly from right to left during calibration and are detected by the camera **A**.

Calibration is used to check headlight alignment and does not replace manual headlight adjustment.

Operating turn signal and high beam lever

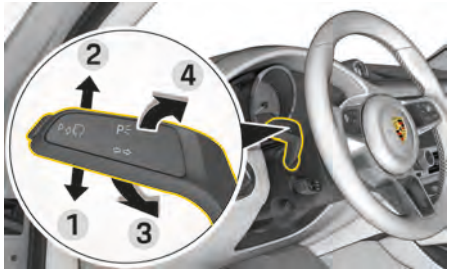


Fig. 99: Actuating turn signals, high beam and headlight flasher

1 Left turn signal/parking light
2 Right turn signal/parking light
3 High beam/high beam assist
4 Headlight flasher

Activating the turn signals

▸ Push the lever past pressure point **1** or **2**. The turn signal remains active until the lever is returned to the home position either manually or automatically when the steering wheel is turned.

Comfort turn signal

▸ Push the lever once to pressure point **1** or **2**.

The turn signal lights flash three times.

▸ In order to interrupt, comfort turn signals press the lever in the opposite direction.

Switching high beam on and off

✓ Vehicles without PDLS Plus

– or –

LED-Matrix high beam assistant setting deactivated.

Switching on

▸ Press the lever once to pressure point **3**.

The light indicator comes on.

Switching off

▸ Press the lever once to pressure point **4**.

The light indicator goes out.

Activating and deactivating high beam assist

✓ Vehicles with PDLS Plus.

✓ Automatic headlights switched on.

✓ **LED-Matrix high beam assistant** setting activated.

▹ Please see chapter "Vehicle Settings" on page 285.

Activating

▸ Press the lever once to pressure point **3**.

The light indicator comes on. Depending on various factors, e.g. the position of other vehicles and the speed, the system switches from low beam to high beam and back again. If high beam is activated, the light indicator lights up.

Deactivating

▸ Press the lever once to pressure point **4**.

High beam assist can only be deactivated when the light indicator lights up.

If the preconditions for high beam assist are not met, high beam can be switched on and off manually.

Switching on manually

▸ Press the lever twice to pressure point **3**.

The light indicator comes on.

Switching off manually

▸ Press the lever once to pressure point **4**.

The light indicator goes out.

Operating the headlight flasher

- Briefly press the lever once to the pressure point **4**.

  Light indicator comes on briefly.

Switching the parking light on and off

✓ Ignition is switched off.

- Press the lever past pressure point **2** or **1** to switch on the right or left parking light respectively.

  If the parking light is on, a message appears on the instrument cluster after the ignition is switched off and the door is opened.

Switching the emergency flasher on and off

Fig. 100: Switching the emergency flasher on and off

Switching the emergency flasher on and off

- Press the switch on the center console.

  All turn signal lights and the switch flash.

DANGER Emergency stopping

Other vehicles could collide with your vehicle if you are parked in a dangerous position. In this case:

- Whenever stalled or stopped for emergency repairs, move the car well off the road. Switch on the emergency flasher and mark the car with road flares or other warning devices.
- Do not remain in the car. Someone approaching from the rear may not realize your vehicle is stopped and cause a collision.

Changing bulbs

The vehicle lighting as well as the interior lights are equipped with light-emitting diodes and long-life LEDs. The LEDs cannot be changed individually.

Removing and installing lamps involves a great deal of effort.

- Always have faulty bulbs and lamps replaced or repaired by an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

NOTICE

The headlights can be damaged as a result of abrasion and excessive temperatures.

- Do not install any coverings (e. g. stone guards or films) in the headlight area.

Information

On vehicles featuring LED headlights with Matrix Beam, the hood has to be open in order to check the low beam setting.

- Adjustment of the headlights must only be carried out by an authorized Porsche dealer, using a suitable adjustment tool. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Luggage Compartment

Stowing Loads

DANGER Inhalation of toxic exhaust gases

Toxic exhaust gases may enter the passenger compartment when the tailgate is open or not closed properly and the engine is running.

- Always keep the tailgate fully closed when the engine is running.
- Never drive with the tailgate open.

WARNING Changed vehicle handling when loaded

The handling changes depending on the load condition.

- Adapt your driving style to the altered vehicle handling.
- Do not exceed the maximum gross weight or axle load.

WARNING Unsecured, incorrectly secured or incorrectly positioned loads

An unsecured, incorrectly secured or incorrectly positioned load can slip out of place and endanger the vehicle occupants during braking, direction changes or in accidents.

- Never transport objects that are not secured (accidents, braking, corners).
- Always transport loads in the cargo area, never in the passenger compartment (e.g. on or in front of the seats).
- Support the load against the seat backrests wherever possible. Always lock the backrests into place.
- Only transport heavy objects with the rear seat backrests upright and engaged.
- Place the load behind unoccupied seats whenever possible.
- Stow heavy objects as far forward as possible on the floor, with lightweight objects behind them.
- Never load the vehicle higher than the top edge of the seat backrest.
- Do not transport objects on top of the luggage compartment cover.
- If the rear seats are not occupied, the backrests can be additionally secured with the seat belts. Simply cross the outer seat belts and insert each into the opposite belt buckle.
- Do not transport heavy objects in open storage compartments.
- Always keep the covers of the storage compartments closed while driving.

WARNING Incorrect tire pressure

An incorrect tire pressure can impair driving safety.

- Adapt the tire pressure to the load.
- After changing the tire pressure, you must also update the setting for the Tire Pressure Monitoring System.

NOTICE

Danger of damage to the rear and side windows.

- Make sure that the load cannot damage the rear or side windows.

The maximum permissible load on the cargo area floor is 440 lbs (200 kg). The weight must be distributed evenly over the entire cargo area.

Securing loads with tie-down belts

- Do not use elastic belts or straps to tie down a load.
- Do not route belts and straps over sharp edges.
- Cross the belts over the load.
- Only tension belts by hand. Do not use additional tensioning aids (e.g. ratchet).
- Observe the operating instructions and information for the tie-down equipment.

E-Hybrid vehicles:

- Do not stow any objects under the cargo area floor. This does not apply to objects installed there at the factory (e.g. charging equipment).

Opening and closing the cargo area floor

Fig. 101: Opening the cargo area floor

Opening the cargo area floor

1. Press the rear of the handle downward and then lift at the front.
2. Unclip the support and insert it into the recess.

Closing the cargo area floor

1. Remove the support from the recess and clip into the cargo area floor.
2. Lift the cargo area floor and close.

Removing the tool box

The tool box is stored under the cargo area floor.

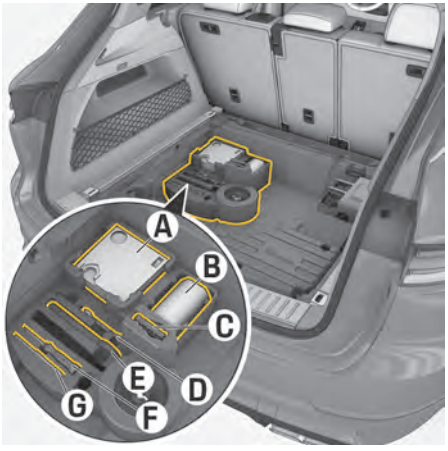


Fig. 102: Removing the tool box (without collapsible spare wheel)

A Compressor
B Tire sealant (Tire Mobility System – TMS)
C Emergency release wrench
D Wrench
E Towing hook
F Screwdriver
G Screwdriver blade

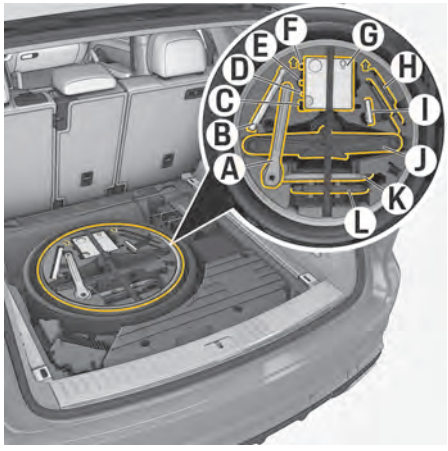


Fig. 103: Removing the tool box (with collapsible spare wheel)

A Ratchet
B Extension
C Screwdriver
D Screwdriver blade
E Wrench
F Assembly pin
G Compressor
H Wedges
I Emergency release wrench
J Jack
K Wrench
L Towing hook

- When reinstalling, ensure that the yellow arrows on the tool box case point in the direction of travel.

Information

The tools required for changing a wheel are not supplied as standard with the vehicle.

Removing compressor and tire sealant (Tire Mobility System – TMS)

The compressor and the tire sealant (Tire Mobility System – TMS) are located under the cargo area floor.

For information on inflating tires:

▷ Please see chapter "Wheels and Tires" on page 316.

For information on sealing tires:

▷ Please see chapter "Flat Tire" on page 121.

Using the luggage compartment cover

⚠ WARNING Objects on the luggage compartment cover

In the event of braking, direction changes or in an accident, objects can slide into the passenger compartment and endanger the occupants.

▶ Do not place objects on top of the luggage compartment cover.

✓ All Cayenne models except Cayenne Coupé

The luggage compartment cover is engaged behind the rear seats in recesses in the left and right side trim panels. It can be disengaged as required (e.g. for cleaning) and removed through the rear area.

✓ Cayenne Coupé

The luggage compartment cover is engaged behind the rear seats in recesses in the left and right side trim panels. It can be disengaged as required (e.g. for cleaning) and removed through the open tailgate.

Pulling out and retracting the luggage compartment cover

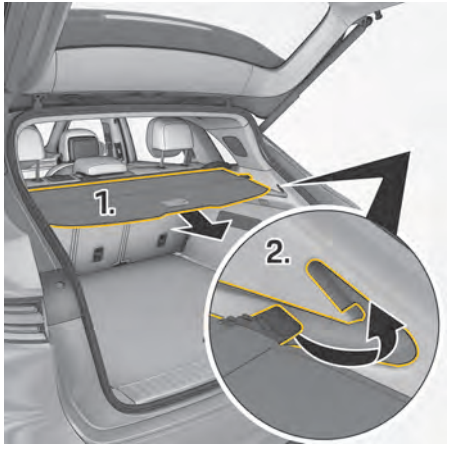


Fig. 104: Pulling out and inserting the luggage compartment cover

✓ All Cayenne models except Cayenne Coupé

Pulling out the luggage compartment cover

▶ Pull out the luggage compartment cover **1** and insert it into the guides on the left and right side trim panels **2**.

Retracting the luggage compartment cover

▶ Disengage the luggage compartment cover from the guides in the side trim panels and carefully guide it back into the retractor roller.

Removing luggage compartment cover

Unlocking/Removing luggage compartment cover

Fig. 105: Removing luggage compartment cover

✓ All Cayenne models except Cayenne Coupé

✓ Luggage compartment cover retracted.

✓ Rear seat backrests are folded forward.

1. From the rear seat, pull the release handle upward.
2. Detach the luggage compartment cover from the holder on the right side of the vehicle.
3. Detach the luggage compartment cover from the holder on the left side of the vehicle and set it down in the luggage compartment.

Detaching/Removing luggage compartment cover

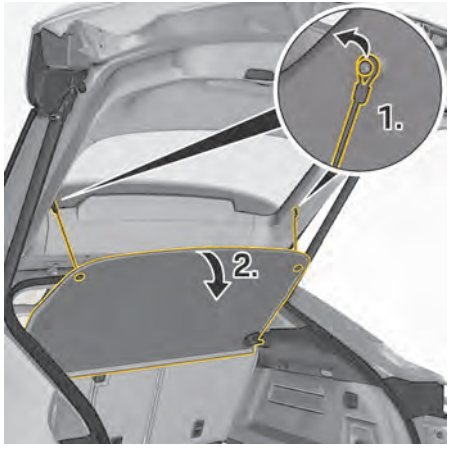


Fig. 106: Disengaging luggage compartment cover

✓ Cayenne Coupé

1. Disengage restraining straps on both sides.
2. Place the luggage compartment cover on the side supports.

Fig. 107: Removing luggage compartment cover

3. Pull the luggage compartment cover out of the latching mechanism in direction of arrow.
4. Take the luggage compartment cover out of the mounts.

Installing luggage compartment cover

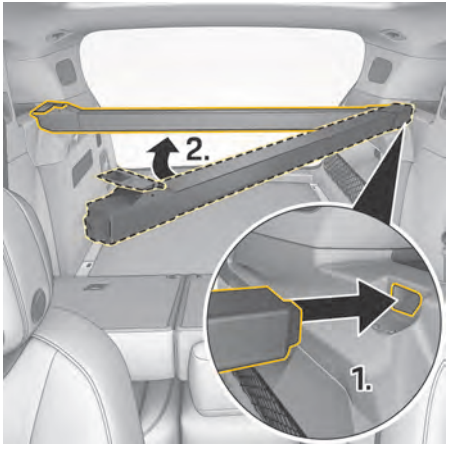


Fig. 108: Installing luggage compartment cover

✓ All Cayenne models except Cayenne Coupé

✓ Rear seat backrests are folded forward.

1. From the rear seat, insert the luggage compartment cover into the holder on the left side of the vehicle.
2. Grasp the luggage compartment cover at the release handle and insert from above into the holder on the right side of the vehicle.
3. Press the release handle downward until it engages.
4. Return rear seat backrests to upright position.

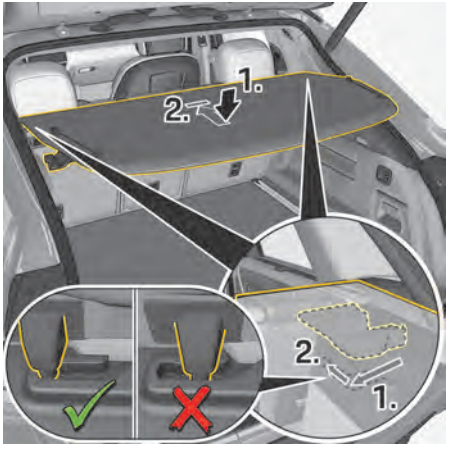


Fig. 109: Installing luggage compartment cover

✓ Cayenne Coupé

1. Insert the luggage compartment cover into the mounts from above.
2. Slide the luggage compartment cover in direction of arrow until the pins at the left and right engage at the front position.

Fig. 110: Engaging luggage compartment cover

3. Lift up the luggage compartment cover.
4. Engage restraining straps on both sides.

Using the ski bag

Skis or snowboards can be transported safely without damaging the vehicle interior.

NOTICE

Risk of damage to the ski bag from sharp edges on the load (e.g. snowboard).

- Protect sharp edges on the load.

Storing snowboard or skis in the ski bag

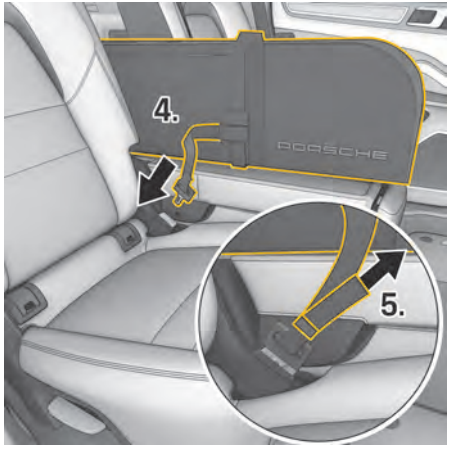


Fig. 111: Using the ski bag

The ski bag is stored in the relevant gear bag in the cargo area.

1. Fit edge protectors to the snowboard or skis.
2. Place the snowboard or skis in the ski bag and close it. The skis must be placed into the ski bag with the tails first. The zip on the ski bag must be facing the rear of the vehicle.
3. Fasten the skis with the tightening strap. The ski bindings must be behind this strap.
4. Fold down the pass-through facility between the rear seats.
5. Insert belt tongue of the tension straps into the buckle.
6. Tighten the tension straps.

Using tie-down rings

Fig. 112: Using tie-down rings

Tie-down straps can be fastened to the four tie-down rings to secure the load in the luggage compartment against slipping.

- Make sure that all rings are equally loaded when securing a load.

Information

The tie-down rings are not designed to restrain a heavy load in an accident.

Using cargo management

The cargo management system serves for securing objects in the luggage compartment.

Inserting and adjusting the telescopic rod

Fig. 113: Using the telescopic rod

1. Press button **B** on the end element and insert in the openings **A** of the mounting rails.
2. Press the button on the lashing point and press against the load so that it cannot move.
3. Release the button.
4. Check that the elements are locked in position by pushing against them.

Inserting and adjusting the strap reel

Fig. 114: Using the strap reel

1. Press button **B** on the end element and insert in the openings **A** of the mounting rails.
   At the same time, pull the strap reel to the desired length.
2. Press the button on the lashing point and press against the load so that it cannot move.
3. Release the button.
4. Check that the elements are locked in position by pushing against them.

Reversible mat

The underside of the reversible mat in the luggage compartment has an anti-slip texture to prevent dirt and marks on the upper side of the reversible mat when transporting wet or heavy objects.

Using the luggage compartment partition net

The luggage compartment partition net prevents light objects from being thrown into the vehicle interior.

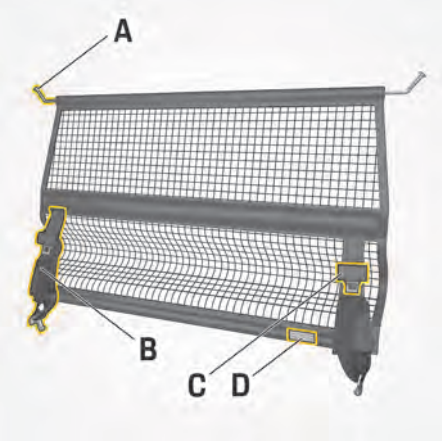


Fig. 115: Luggage compartment partition net

A Roof anchor
B Front tie-down belt fastening
C Tie-down belt loosener

Information

Removing and installing the luggage compartment partition net in the passenger compartment.

- Ensure that the tie-down belt loosener **C** is facing against the direction of travel.

Installing luggage compartment partition net at the rear

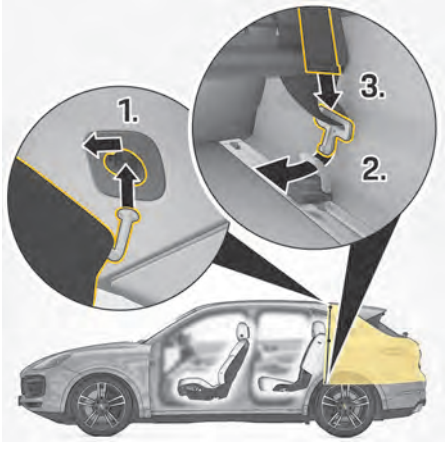


Fig. 116: Installing luggage compartment partition net at the rear

✓ Rear seat backrests are folded forward.

1. Engage the luggage compartment partition net in the rear rings on the left and right of the roof. Ensure that the roof anchor engages in the small ring.
2. Engage the luggage compartment partition net in the tie-down rings on the left and right of the loadspace floor using bottom hooks **B**.
3. Tension the luggage compartment partition net using the belt strap.
   Ensure that the luggage compartment partition net is tensioned vertically.
4. Return rear seat backrests to upright position.
   Cayenne Coupé: Ensure that there is no collision with the upper crossbar of the luggage compartment partition net.

Installing luggage compartment partition net at the front

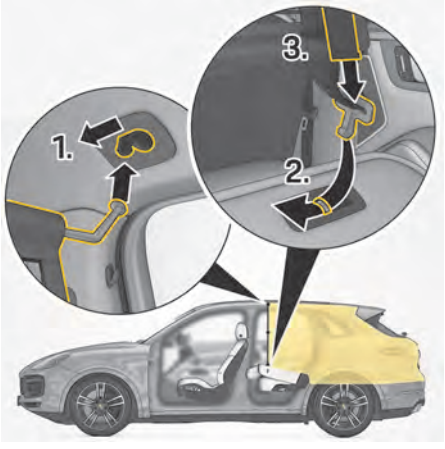


Fig. 117: Installing luggage compartment partition net at the front

✓ Rear seat backrests are folded forward.

1. Engage the luggage compartment partition net in the front rings on the left and right of the roof. Ensure that the roof anchor engages in the small ring.
2. Engage the luggage compartment partition net in the tie-down rings on the left and right of the backrest using the bottom hooks **B**.
3. Tension the luggage compartment partition net using the belt strap.
   Ensure that the luggage compartment partition net is tensioned vertically.

Removing luggage compartment partition net

1. Use the tie-down belt loosener **C** to loosen the belt strap.
2. Detach the luggage compartment partition net from the upper rings and bottom hooks.

Media

Brief Overview – Media

This brief overview does not replace the comprehensive descriptions. Safety messages and warnings, in particular, are not replaced by this brief overview.

For information on operating the Porsche Communication Management system (PCM):

▷ Please see chapter "Porsche Communication Management (PCM)" on page 215.

Fig. 118: Playing media

What do I want to do?	What do I have to do?	Where?
Load a media source	– Insert a CD/DVD. – Insert an SD card. – Connect an external device via USB.	▷ p. 220
	– Connect an external device via Bluetooth®.	▷ p. 106
Find station/track/album (search relates to the currently selected media source)	▸ **MEDIA** ▸ Call up media sources (see **A**) ▸ Enter the desired station/track.	–
Select media source/reception range	▸ **SOURCE** button ▸ Select media source (e.g. **FM**). **– or –** **MEDIA** ▸ **PLAY** ▸ Call up media sources (see **B**) ▸ Select media source (e.g. **FM**).	–
Add favorite content for tracking	▸ **MEDIA** ▸ **PLAY** ▸ Call up media sources (see **B**) ▸ **SiriusXM** ▸ **Add**	–
Tag current track	▸ **MEDIA** ▸ **PLAY** ▸ Call up media sources (see **B**) ▸ **SiriusXM/FM** ▸ **Tag**	–
Play/pause music	▸ Select **MEDIA** ▸ **PLAY** ▸ or (see **C**).	–

What do I want to do?	What do I have to do?	Where?
Play next/previous station/track	▸ Select **MEDIA** ▸ **PLAY** ▸ or .	–
Save station/track/album as favorite	▸ **MEDIA** ▸ (see **D**).	▷ p. 173
Display station/track list	▸ **MEDIA** ▸ **LIST** Depending on the selected media source, further subfolders such as **Playlists**, **Artists** are available.	–
Tune to stations using the frequency band or number entry	▸ Select **MEDIA** ▸ **TUNE** ▸ or .	–
Activate Online station tracking	▸ **SOURCE** button ▸ **FM** ▸ Options ▸ **Tuner settings** ▸ **Online station tracking**[1].	–

Playing media

Available radio and media sources

The radio supports FM, HD Radio™ Technology, AM, SiriusXM® and digital radio stations.

Depending on the equipment, the following media sources are available: HD Radio™, DVD changer, SD cards, external devices via USB or Bluetooth®, online media services.

The PCM additionally receives digital programs from HD Radio™ stations in the FM/AM band provided that the function HD Radio™[2] content is switched on.

HD Radio®

Information

When using a roof transport system, satellite radio reception interference may occur.

Technical data on supported media and file formats:
▷ Please see chapter "Porsche Communication Management (PCM)" on page 351.

Other functions during media playback

✓ **MEDIA** ▸ **PLAY** is selected.

In addition to the functions from the brief overview, the following functions are available:

- Display current playback list: Select (see **E** (Fig. 118))
- Activate random playback: Select (see **F** (Fig. 118))
- Replay track: Select (see **G** (Fig. 118))
- Have similar music suggested: Select **Play More Like This**.

Storing and editing a favorite

Storing a favorite

1. **MEDIA** ▸ **FAV**
2. Select the desired station/track from the **Recently played** area and move it to the **Favorites** area via drag & drop.

1. Prerequisite: Data connection is established.
2. HD Radio Technology manufactured under license from iBiquity Digital Corporation. U.S. and Foreign Patents. For patents see http://patents.dts.com. HD Radio and the HD, HD Radio, and "ARC" logos are registered trademarks or trademarks of iBiquity Digital Corporation in the United States and/or other countries.

Adding favorite content from SiriusXM® band to favorite list

▸ **MEDIA** ▸ **PLAY** ▸ Call up media sources ▸ **SiriusXM** ▸ Select **Add**.

The Icon is displayed when the favorite content is played.

Organizing favorites

1. **MEDIA** ▸ **FAV**
2. Press on the desired station/track and move to the desired position (drag & drop).

Deleting a favorite

1. **MEDIA** ▸ **FAV**
2. Select the desired station/track and move upward from the **Favorites** display area via drag & drop.
   – or –
   If available, select the icon under **MEDIA** ▸ **PLAY** /**LIST** in order to delete a previously stored favorite from the **Favorites** area.

Changing media settings

▸ **MEDIA** ▸ Options ▸ Select desired setting.

Mirrors

⚠ WARNING Incorrect assessment of traffic situation due to distorted representation of surroundings in door mirrors

Vehicles or objects appear smaller in convex mirrors and further away than they are in reality. This may lead to incorrect assessment of the driving situation and an accident.

- Take account of distortion when estimating the distance of vehicles behind you and when parking.
- Use the interior mirror for judging distance as well.

⚠ CAUTION Escaping electrolyte fluid

Electrolyte fluid may escape from a broken mirror. This fluid causes irritation to the skin and eyes.

- In the event of contact with the skin or eyes, immediately rinse off the electrolyte fluid using clean water.
- Seek medical attention from a doctor if necessary.

NOTICE

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

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

- Clean affected parts with water.

NOTICE

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

- Fold in door mirrors before using the car wash.
- Do not fold electrical folding door mirrors in and out manually.

Using door mirrors

Fig. 119: Door mirror control panel

A Selecting the door mirror on the driver's side
B Selecting the door mirror on the passenger's side
C Adjusting door mirrors
D Folding door mirrors in and out

Adjusting door mirrors

Fig. 120: Adjusting door mirrors

✓ Ignition switched on or
✓ Ignition switched off, driver or passenger door not yet opened (max. 10 minutes).

1. Select the desired exterior mirror by pushing **A** or **B**.
   The light indicator on the selected button lights up.
2. Move the glass of the door mirrors to the correct position by pressing the adjustment button **C**.

If the electric function fails

- Adjust the mirrors by pressing on the mirror surface.

Folding door mirrors in and out

Folding door mirrors in and out from the inside

✓ Maximum speed approx. 30 mph (50 km/h).

- Press button **D** (Fig. 119).
  The door mirrors fold in or out.
- Do not fold the door mirrors in by hand.

Folding door mirrors in and out automatically

Folding in the door mirrors during locking

- Press and hold the button on the vehicle key for at least 2 seconds or touch the proximity sensor on the door handle on the driver's side (depending on equipment) for at least 2 seconds.
  The door mirrors fold in.

Folding door mirrors in automatically

✓ Function activated.

▷ Please see chapter "Vehicle Settings" on page 285.

- Lock the vehicle.
  The door mirrors fold in.

Folding door mirrors out automatically

- Unlock the vehicle.
  The door mirrors fold out automatically.

Information

The door mirrors will not fold out automatically after unlocking the vehicle if they were folded in manually beforehand.

Swiveling mirror glass downward as a parking aid

In vehicles with the memory package, the mirror glass on the **passenger's side** swivels slightly downward **when reverse gear is engaged**, so that the area around the curb comes into view.

Swiveling mirror glass downward automatically

✓ Ignition is switched on.

✓ Function activated.

▷ Please see chapter "Vehicle Settings" on page 285.

Swiveling mirror glass downward manually

1. Engage reverse gear.
   The light indicator on button **A** for adjusting the door mirror on the driver's side lights up.
2. Press button **B** for adjusting the door mirror on the passenger's side.
   The mirror glass on the passenger's side swivels downward.

Making individual adjustments to the position of the lowered mirror glass:

- Move the glass of the door mirror into the appropriate position by pressing the adjustment button **C**.

Moving mirror glass to the initial position

The mirror glass swivels back to its initial position when the vehicle reaches a speed of more than 9 mph (15 km/h).

Manually moving mirror glass on passenger's side to the initial position

- Press button **A** for the door mirror on the driver's side.

Storing the door mirror settings

For information on storing and retrieving door-mirror settings

▷ Please see chapter "Personal Settings" on page 206.

Using automatic dimming of the mirrors

The door and interior mirrors each automatically change to the dimmed position as soon as bright light shines onto the mirror face of the interior mirror

The mirrors do not dim when reverse gear is engaged or when interior lighting is switched on.

The incident light onto the interior mirror or coming through the windshield to the front light sensor must not be restricted by stickers.

- Do not put any stickers on the front windshield in front of the interior mirror or on the rear windshield.
- Do not transport any luggage on top of the luggage compartment cover.
- Store luggage securely in the luggage compartment and close the luggage compartment cover.

Mobile Phone

Brief Overview – Phone

This brief overview does not replace the comprehensive descriptions. Safety messages and warnings, in particular, are not replaced by this brief overview.

For information on operating the Porsche Communication Management system (PCM):

▷ Please see chapter "Porsche Communication Management (PCM)" on page 215.

Fig. 121: Dial number (keypad)

What do I want to do?	What do I have to do?	Where?
Connect phone via Bluetooth® (cellphone preparation)	▸ Select **PHONE** ▸ **Search for new phone** or an already known phone.	▷ p. 178
Switch between two connected cellphones	▸ Select the currently connected cellphone at the top right in the header. The two devices already connected are displayed ▸ Select the desired cellphone.	▷ p. 179
Use PCM with an external SIM card for data connection	▸ Open the glove compartment or armrest ▸ Insert SIM card into the SIM card slot (missing corner at front left, chip facing downward) ▸ Enter PIN if necessary ▸ Confirm data connection.	▷ p. 179
Dial number	▸ **PHONE** ▸ **KEYPAD** (see **A**) ▸ Select (see **G**).	
Breakdown call/Emergency call	▸ **PHONE** ▸ **KEYPAD** (see **A**) ▸ Select **Breakdown call/Emergency call**.	▷ p. 109
Store contact as favorite	▸ **PHONE** ▸ **FAV** (see **B**) ▸ **Add favorite** ▸ Select desired contact from list ▸ .	▷ p. 179
Display call list	▸ **PHONE** ▸ **CALLS** (see **C**).	–

What do I want to do?	What do I have to do?	Where?
Display a contact	▸ **PHONE** ▸ **CONTACT** (see **D**).	–
Display messages	▸ **PHONE** ▸ **MESSAGE** (see **E**) ▸ Select the desired folder e.g. **Text messages**.	▹ p. 180
Check mailbox	▸ **PHONE** ▸ **KEYPAD** (see **F**) ▸ Keep button **1** pressed for a long time.	–
Accept/reject a call	▸ Select **Accept** or **Reject**.	–
End call	▸ Select in the footer or phone menu.	–

Various use options are available depending on model, country and equipment. The features described here are therefore not available in all models, countries and equipment versions.

⚠ WARNING Risk of accident through the use of cellphones

Using cellphones while driving can distract the driver from what is happening with the traffic and result in the driver losing control of the vehicle.

- ▸ Only make or receive calls using hands-free equipment.

⚠ WARNING Risk of injury

Cellphones must be switched off in certain danger areas, e.g. near service stations, fuel depots, chemical plants or during blasting work. They can disrupt technical equipment.

- ▸ Observe warnings, as well as statutory regulations and local restrictions.

Connecting a cellphone via Bluetooth®

Connecting a new cellphone

✓ The Bluetooth® function of the cellphone is activated and is visible for other devices.

✓ The PCM Bluetooth® function is activated.

▹ Please see chapter "Device Manager" on page 106.

1. **PHONE** ▸ **Search for new phone**
2. Select a cellphone from the device list. A 6-digit Bluetooth® code is generated and displayed in the PCM and on the cellphone.
3. Compare the Bluetooth® code in the PCM and on the cellphone.
4. If the Bluetooth® code in the PCM and on the cellphone match, confirm. Enter the PIN for the external SIM card in the PCM if necessary. When the phone is successfully connected, the numeric input (**KEYPAD** menu) is displayed in the PCM.

Information

- Depending on the Bluetooth® capability of the cellphone, it is possible to access the content of the phone book, call lists and messages. It is also possible to transfer an ongoing conversation to the cellphone after parking the vehicle and continue it outside the vehicle if the cellphone supports this function.
- You will find an overview of compatible cellphones on the Porsche website for your country under: Models ▸ Your model (e.g. 911 Carrera) ▸ Download Brochures ▸ Via Bluetooth®

Connecting a cellphone (Windows® and iOS® operating system)

For cellphones with Windows® and iOS® operating systems, it is recommended to start connection from the cellphone:

1. Search for available devices in the Bluetooth® menu of the cellphone. Press or in the

headline (depending on the connection status) to make the PCM visible.

2. Select the PCM from the list of available devices. The Bluetooth® device name of the PCM can be displayed in the **Device manager** under Options ▸ **Bluetooth** ▸ **Bluetooth name**.

Connecting to a known cellphone

✓ The Bluetooth® function of the cellphone is activated.

✓ The PCM Bluetooth® function is activated.

▷ Please see chapter "Device Manager" on page 106.

1. Select or in the header (depending on the connection status).
   A list with a maximum of 20 known cellphones is displayed.
2. Select a cellphone from the list.
   The cellphone is connected via Bluetooth®.

Connecting and using a second cellphone

✓ A cellphone is already connected to the PCM.

1. Select or in the header (depending on the connection status).
2. Select a cellphone from the list or connect a new cellphone.
   ▷ Please see chapter "Connecting a new cellphone" on page 178.
   Both connected cellphones can receive calls, but only the active cellphone can make calls.
3. Select the currently connected device at the top right in the headline in order to switch between the two connected cellphones.

The two devices already connected are displayed.

– or –

PHONE ▸ Options ▸ **Select a phone** ▸ Select the desired device.

Using the PCM with a SIM card

The SIM card can only be used for data connection. For information about the data connection:

▷ Please see chapter "Porsche Connect" on page 223.

Inserting and removing a SIM card

NOTICE

If you are using a SIM card adapter, the SIM card may fall out of the adapter due to vibrations and components of the card may get stuck in the drive.

▸ Do not use a SIM card adapter.

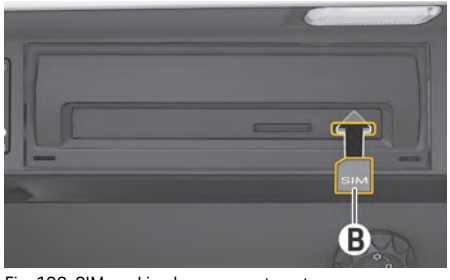


Fig. 122: SIM card in glove compartment

1. Insert SIM card **B** (mini-SIM, dimensions: 0.98 x 0.59 in. (25 x 15 mm)). The missing corner must be pointing front left with the chip facing down.
2. SIM card **with** PIN:
   a. Enter the PIN code of the SIM card and confirm with **OK**.
   b. Select **Store PIN**.
3. To remove the SIM card, press on the inserted card and remove it.

Displaying connection status

Depending on the model, country and equipment, the following displays are possible in the header:

- No phone connected.
- No data connection available (possible causes: no connection, poor network quality, interruption of the data connection during a voice connection).
- Data connection via the LTE cellphone network.
- Data connection via the UMTS/HSPA cellphone network (3G).
- Data connection via the EDGE cellphone network (GSM).
- Reception field strength of the cellphone network for the phone function.
- Data connection via external WiFi hotspot.

Storing and editing a favorite

Storing a favorite

1. **PHONE** ▸ **FAV**
2. Select the contact from the **Last contacted** area and move it to the **Favorites** area via drag & drop.

Organizing favorites

1. **PHONE** ▸ **FAV**
2. Select the desired contact and move it to the desired position via drag & drop.

Deleting favorites

1. **PHONE** ▸ **FAV**
2. Select the desired contact and move it upward from the **Favorites** area via drag & drop.
   – or –
   If available, select the icon.

Functions available during a phone call

✓ **PHONE** ▸ **KEYPAD** is selected.

Muting the microphone

✓ A phone call is active.

- Select to mute the microphone.

Holding a call

✓ A phone call is active.

- Select.
- To resume the call, select.

Start a conference call

✓ A phone call is active.

1. ▸ Adding a new call (enter number or select contact) ▸
2. Select to activate the conference call.
3. Select to end the conference call.

Switching (toggling) between two conversations

✓ First phone call is active.
✓ Second phone call is on hold.

- Select to activate the call on hold and put the previously active call on hold.

Displaying phone information in the instrument cluster

- Select the desired function in the Car & Info display on the instrument cluster:
  ▷ Please see chapter "D – Car & Info display" on page 139.

– **Incoming call**: **Accept** or **Reject** the incoming call using the phone buttons on the steering wheel.
– **Last call**: Display a list of the last numbers dialed using the phone button and rotary push button on the steering wheel.
– **Conference**: Make other calls or add the participants to a conference call during an active phone call using the rotary push button and phone button on the steering wheel.

For information on operating the instrument cluster:
▷ Please see chapter "Operating the instrument cluster" on page 141.

Displaying and editing messages

You can read text messages (SMS) and e-mails, have the messages read out to you or use the numbers contained in the messages for making phone calls if the cellphone supports this function. It is possible that the cellphone supports the text message function but not the e-mail function. For further information on these settings, see the operating instructions for your cellphone.

Information

– If the cellphone only supports display of the text messages stored in the device memory, the text messages received in the vehicle may not appear in the cellphone message list. Otherwise, received text messages are stored on the SIM card.
– The PCM does not support the Multimedia Messaging Service (MMS).

Writing a text message/e-mail

1. **PHONE** ▸ **MESSAGE** ▸ **Text messages/ E-mail**
2. Select.
3. Adding a new recipient (enter number or select contact).
4. Enter text using the input field and confirm with **OK**.
5. Select **Send**.

Replying to or forwarding a text message/e-mail

1. **PHONE** ▸ **MESSAGE** ▸ **Text messages/Email**
2. Select the text message/e-mail you would like to reply to/forward.
3. Select ▸ **Reply/Forward**.

Changing phone settings

General settings

▸ **PHONE** ▸ Options ▸ **Phone settings** ▸ Select desired setting.

Managing contacts

▸ **PHONE** ▸ **CONTACT** ▸ Options ▸ Select the desired setting:

- **Contact memory**: Display contact memory used.
- **Displayed contacts**: Sort contacts by last name or first name.
- **Synchronize contacts**: Transfer contacts on the SIM card or on the cellphone connected via Bluetooth® manually to the PCM.
- **Add to favorites list**: Store selected contact as favorite.

Editing messages

▸ **PHONE** ▸ **MESSAGE** ▸ Folder text message/e-mail ▸ Options ▸ Select desired setting:

- **Read out message**
- **Details**: Use content from the message (e.g. included number).
- **Delete**: Delete selected message.
- **New message**
- **Folder overview**: Select folder view (e.g. Inbox).
- **Activate delete mode**: Select the messages you would like to delete.

Stowing a cellphone (availability dependent on country)

FCC/ISED Notice
This is a CONSUMER device.

- BEFORE USE, you MUST REGISTER THIS DEVICE with your wireless provider and have your provider´s consent. Most wireless providers consent to the use of Compensators. Some providers may not consent to the use of this device on their network. If you are unsure, contact your provider.
- BEFORE USE, you must meet all requirements set out in CPC-2-1-05.
- You MUST operate this device with approved antennas and cables, as specified by the manufacturer. Antennas MUST be installed at least 20 cm (8 inches) from any person.
- You MUST cease operating this device immediately if requested by the FCC/ISED or a licensed wireless service provider.
- WARNING E911 location information may not be provided or may be inaccurate for calls served by using this device.

FCC RF Exposure Statement

This equipment complies with the specified FCC radiation exposure limits for an uncontrolled environment. End users must follow the specific operating instruction for satisfying RF exposure compliance.

This transmitter must not be collocated or operating in conjunction with any other antenna or transmitter.

FCC ID/IC ID

FCC ID: RK7MBC-NAR
IC 4774A-MBCNAR
FCC ID: RK7193-00
IC 4774A-19300

Fig. 123: Smartphone tray in the armrest

Depending on the equipment, a smartphone tray is installed in the armrest storage compartment. It provides a connection to the vehicle's external antenna and features USB connections for charging the cellphone and connecting it to the PCM. In the case of a cellphone connected via Bluetooth®, use of the external antenna ensures lower radiation levels in the vehicle and better reception quality.

✓ Keypad/code lock on the cellphone is activated.

▸ Place the cellphone with the display facing upward in the smartphone tray.

Wireless cellphone charging (availability dependent on country)

Depending on the equipment, wireless cellphone charging is available. This function can be enabled and disabled via the PCM.

⚠ CAUTION Metallic objects in the smartphone tray

Metallic objects located between the cellphone and the charging pad during wireless charging can become extremely hot and may cause injuries or material damage.

- ▸ Do not place any objects between the cellphone and the charging pad.

✓ Function enabled in the PCM (**SET** ▸ **Phone settings** ▸ **Phone** ▸ **Wireless charging** ☑
– or –
PHONE ▸ Options ▸ **Phone settings** ▸ **Phone** ▸ **Wireless charging** ☑).

✓ Wireless charging according to the Qi standard supported by the cellphone.

- ▸ Place cellphone on the marked area in the smartphone tray.

  The Qi symbol appears in the status bar of the PCM when the function is activated or when wireless charging is active.

The charging power may vary depending on the cellphone.

Information

An alternating magnetic field is used during wireless charging. Interactions are possible, such as irritation of the sensory organs or malfunction of active implants (e.g. pacemakers, infusion pumps or neurostimulators) or interference with passive implants (e. g. artificial joints).

- ▸ Always maintain a minimum distance of 4 inches (10 cm) from the charging pad.
  This distance complies with the limit values for long-term exposure according to ICNIRP1998.
- ▸ If you have an implant, please consult a medical specialist if you have any questions.

For USA:

This is a CONSUMER device.

- – BEFORE USE, you MUST REGISTER THIS DEVICE with your wireless provider and have your provider ´ s consent. Most wireless providers consent to the use of signal boosters. Some providers may not consent to the use of this device on their network. If you are unsure, contact your provider.
- – In Canada, BEFORE USE, you must meet all requirements set out in ISED CPC 2 1 05.
- – You MUST operate this device with approved antennas and cables as specified by the manufacturer. Antennas MUST be installed at least 20 cm (8 inches) from any person.
- – You MUST cease operating this device immediately if requested by the FCC (or ISED in Canada) or a licensed wireless service pr ovider.
- – WARNING. E911 location information may not be provided or may be inaccurate for calls served by using this device.

Link to ISED CPC-2-1-05:
https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/h_sf06136.html

- – CPC-2-1 – Fixed and Land Mobile
- – CPC-2-1-05 - Zone Enhancers

FCC RF Exposure Statement
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow t he specific operating instruction for satisfying RF exposure compliance. This transmitter must not be co located or operating in conjunction with any other antenna or transmitter.
Any changes or modifications not expressly approved by Molex could void the user's authority to operate this equipment.
FCC ID: RK7MBC NAR2
IC: 4774A MBCNAR2
This device complies with part 15 of the FCC rules and with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

- – This device may not cause harmful interference.
- – This device must accept any interference received, including interference that may cause undesired operation.

FCC ID: RK7193-00
IC: 4774A-19300
Any changes or modifications not expressly approved by Molex CVS Dabendorf GmbH could void the user's authority to operate this equipment.
NOTE: This device complies with RF exposure guidelines of the FCC rules and with Industry Canada license-exempt RSS standard(s) at a distance of 1.7in/4.2cm under normal use case conditions.
This Signal Booster fulfills the FCC requirements for the Network Protection Standard (NPS). It incorporates features to prevent harmful interference to wireless networks like:

– Anti-oscillation to detect and mitigate any unintended oscillations in uplink and downlink frequency bands,
– Adaptive gain control with self-monitoring and to power down automatically as approaching any affected base station.
– Uplink Inactivity to shut down the transmit amplifiers if not serving an active device connection.

This Signal Booster includes features to prevent harmful interference. These features are enabeld and operating at all times the sigal booster is in use, they may not be deactivated by the operator.

For Canada:

Pour les enrichisseurs de zone de consommation:
Ce produit est un appareil de CONSOMMATION.

– AVANT DE L'UTILISER, vous DEVEZ conformer à toutes les exigences établies dans la CPC-2-1-05.
– Vous DEVEZ utiliser cet appareil avec des antennes et des câbles approuvés, conformément aux indications du fabricant. Les antennes DOIVENT être installées à au moins 20 cm d'une personne.
– Vous DEVEZ cesser d'utiliser cet appareil immédiatement à la demande d'ISDE ou d'un fournisseur de services sans fil autorisé.
– AVERTISSEMENT: Les renseignements relatifs à l'emplacement du service E911 pourraient être non fournis ou inexacts pour les appels effectués au moyen de cet appareil.

lien vers la CPC-2-1-05 d'ISDE:
https://www.ic.gc.ca/eic/site/smt-gst.nsf/fra/h_sf06136.html

– CPC-2-1 — Mobile fixe et terrestre
– CPC-2-1-05 - Enrichisseurs de zone

Les changements ou modifications non approuvés expressément par Molex peuvent entraîner la caducité de l'autorisation d'utiliser l'équipement.
FCC ID: RK7MBC-NAR2
IC 4774A-MBCNAR2

Navigation

Brief overview – Navigation

This brief overview does not replace the comprehensive descriptions. Safety messages and warnings, in particular, are not replaced by this brief overview.

For information on operating the Porsche Communication Management system (PCM):

▷ Please see chapter "Porsche Communication Management (PCM)" on page 215.

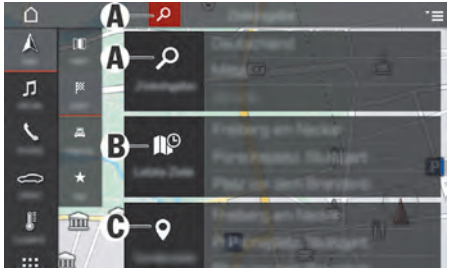


Fig. 124: Entering/finding a destination

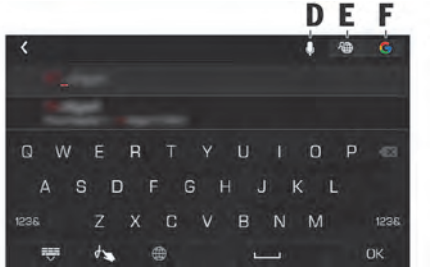


Fig. 125: Search options on the keyboard

What do I want to do?	What do I have to do?	Where?
Find a destination/enter a destination address	▸ Select **NAV** ▸ in the header (see **A**). **– or –** **NAV** ▸ **DEST** ▸ **Destination input** (see **A**) – Voice input (see **D**) – Integrated search: search in PCM memory (see **E**) – Online search (availability dependent on country)[1]: Internet search (see **F**)	–
Select previous destination	▸ **NAV** ▸ **DEST** /**FAV** ▸ **Recent destinations** (see **B**)/**My Destinations**	–
Enter POI	▸ **NAV** ▸ **DEST** ▸ **Points of interest** (see **C**)	–
Enter GPS coordinates	▸ **NAV** ▸ **DEST** ▸ Options ▸ **Enter GPS coordinates**	–
Start/End route guidance	▸ **NAV** ▸ Enter destination ▸ Select **Start route guidance** or **Stop**.	–
Select a stored destination	▸ **NAV** ▸ **FAV** ▸ **Stored destinations**	–

1. Prerequisite: Data connection is established. Online navigation and Porsche Connect services are activated.

What do I want to do?	What do I have to do?	Where?
Select a destination from contacts	▸ **NAV** ▸ **FAV** ▸ **Contacts**	–
Access map view	▸ **NAV** ▸ **MAP**	–
Display list of traffic information	▸ **NAV** ▸ **TRAFFIC**	▷ p. 186
Activate online navigation	▸ **NAV** ▸ Options ▸ **Navigation settings** ▸ **Online navigation services** ▸ **Online navigation**	–
Activate intelligent detour	✓ Route guidance is active. ▸ **NAV** ▸ Options ▸ **Intelligent detour**	▷ p. 187
Use Porsche Connect services (e.g. online map update)	✓ Data connection is established. Porsche Connect services are activated. Further information on Porsche Connect can be found at ▷ www.porsche.com/connect.	▷ p. 223

WARNING Risk of accident through disregarding road traffic laws

If a recommended driving instruction contradicts the road traffic laws in force, the road traffic regulations in the country of use always apply. The driver always bears responsibility for road safety.

- ▸ Always pay attention to the traffic situation.
- ▸ Adapt your speed and driving style in line with the visibility, weather, road and traffic conditions.

WARNING Risk of accident owing to system-related inaccuracies and malfunctions

Incorrect directions and malfunctions cannot be ruled out during satellite-based navigation. The driver always bears responsibility for guiding the vehicle.

- ▸ Always pay attention to the terrain.

Adopting a destination from a map

1. Select **NAV** ▸ **MAP**.
2. Press and hold the destination on the map.
3. Select to start route guidance.

Planning a tour (Entering a stopover)

A tour consists of one destination and between 1 and 8 stopovers.

Entering and starting a tour

1. **NAV** ▸ Enter destination ▸ **Start route guidance**.
2. Options ▸ **Edit route** ▸ **Add stopover**.
3. Enter or select a stopover.
4. **Add as stopover** ▸ **Start tour**.

Storing a tour

✓ Tour started.

- ▸ Options ▸ **Edit route** ▸ Options ▸ **Store tour**

Retrieving a tour

✓ Tour is stored.

1. **NAV** ▸ **FAV** ▸ **Stored destinations**
2. **Stored tours** ▸ Select the desired tour.

Information

You can also reorganize the stopovers at a later time. To do this, select **NAV** ▸ **DEST** ▸ Options ▸ **Edit route** then press and hold the relevant stopover and move it to the desired position (drag & drop).

Smart routes

A smart route is created automatically as soon as an identical route is traveled twice.

Activating smart routing

1. **NAV** ▸ Options ▸ **Navigation settings**
2. Under **Smart routes**, activate the **Smart routes** function.
   The symbol is displayed at the bottom right of the map.

Accessing smart routing

✓ Smart routing is activated.

1. **NAV** ▸ **MAP**
2. Select at the bottom right of the map.
3. Select the desired smart route from the list of suggestions.
4. Select **Start**.

Information

- Up to three destinations are created and up to three routes are available for each destination. Suggested routes are prioritized according to how frequently an identical route is traveled.
- The traffic situation for available smart routes is displayed depending on the current vehicle position.
- The PCM identifies whether the route is traveled during the week or at the weekend. Recorded smart routes are only displayed at the appropriate time - either at the weekend or on weekdays.
- Opening **Smart routes** stops active route guidance.

Information

Smart routes that have already been stored remain stored even after the function is deactivated and must be deleted manually under **NAV** ▸ **MAP** ▸ Options ▸ **Navigation settings** ▸ **Smart routes**.

Configuring map contents

1. **NAV** ▸ **MAP** ▸ (in the header)
2. Activate or deactivate the desired map content (availability dependent on country):

- **3D map**: Show or hide 3D map view (otherwise 2D view).
- **Auto zoom**: Activate or deactivate Auto zoom function in the map.
- **Google Earth**: Show or hide satellite view on the map.
- **Weather**[1]: Show or hide weather information on the map.
- **Display points of interest**: Show or hide points of interest on the map.
- **Compass**: Show or hide compass on the map.
- **E-range**: Show or hide electric range data.

Displaying traffic information

Displaying traffic information on the map[1]

You can display the following traffic information on the current location or on the selected route on the map:

- **Hatched areas**: Indication of the length of the traffic disruption.
- **Colored warning symbols**: Imminent traffic disruption on the selected route. If route guidance is not active, all current traffic disruptions are highlighted in color.
- **Grayed-out warning symbols**: Traffic disruption which is not on the selected route.

Displaying list of traffic information

1. **NAV** ▸ **TRAFFIC**
   The numbers displayed in the **TRAFFIC** icon show the number of traffic notices on the selected route.
2. Select traffic notice.
   – or –
   Select **Show all traffic notices** to display all traffic notices.

1. Prerequisite: Data connection is established. Porsche Connect services are activated.

Avoiding traffic disruptions

Traffic disruptions can be automatically avoided or displayed in route guidance.

- Activate **NAV** ▸ Options ▸ **Route options** ▸ **Dynamic reroute/Refer to traffic notices**.

The broadcasting companies or online content providers are responsible for traffic notices. We therefore accept no responsibility for the completeness or accuracy of the information.

Activate intelligent detour

✓ Route guidance is active.

- **NAV** ▸ Options ▸ Activate **Intelligent detour**.

Displaying map view and navigation information in the instrument cluster

For information on operating the instrument cluster:

▹ Please see chapter "Operating the instrument cluster" on page 141.

Displaying and configuring the map display

1. Select the map view on the Car & Info display in the instrument cluster.
2. Select the desired view using the multifunction steering wheel:

– **Man. zoom:** Adjust the magnification factor of the map display.
– **Auto zoom**: Map scale is set automatically.
– **3D map**: Three-dimensional map display.
– **North up**: The map always faces north.
– **Map info**: If no map view is selected in the Car & Info display on the instrument cluster, the map is displayed automatically in the event of a navigation event.
– **Arrow info**: If the **Navigation** menu is **not** selected in the Speed & Assist display in the instrument cluster, the menu is displayed automatically in the event of a navigation event.

Displaying navigation information in the instrument cluster

- Select the **Navigation** menu in the Speed & Assist display on the instrument cluster.
  ▹ Please see chapter "Instrument cluster" on page 139.

Changing navigation settings

- **NAV** ▸ Options ▸ **Navigation settings** ▸ Select the desired setting:

– **Map settings**
– **Notices**
– **Smart routes**
– **Online navigation services**

Toll devices

Fig. 126: Attaching toll devices

Attach the toll device at the marked position on the inside of the windshield in order to guarantee optimum reception.

Information

Reception may be restricted for operation of toll devices if they are attached to the inside of the windshield on vehicles with thermally and noise insulated glass.

Night View Assist

Fig. 127: Night View Assist thermal image

The Porsche Night View Assist has the following functions:

– Display of the thermal image
– Pedestrian and animal warning

The thermal imaging camera of the Night View Assist in the front of the vehicle provides a thermal image of the surroundings, which can be displayed in the Car & Info display in the instrument cluster. The system can detect persons and animals beyond the area illuminated by the headlights and highlight these in the camera image.

Because the thermal imaging camera is only sensitive in the heat radiation range, the image in the camera may differ significantly from the image as perceived by the human eye. Night View Assist detects persons and animals when it is sufficiently dark and at an ambient temperature below 82 °F (28 °C).

An impending collision or driving dangerously close past persons will trigger a warning within the system limits. In this case, the system warns the driver visually and acoustically. The camera image is displayed with the person marked in red. On vehicles with Porsche Dynamic Light System Plus, the endangered person flashes in order to enhance recognition.

Prior to an impending collision with wild animals outside urban areas, a warning is also issued within the limits of the system. In this case, the system warns the driver visually and acoustically. The camera image with the animal marked in red is also displayed in order to support the driver in locating the danger.

⚠ WARNING Lack of attention and failure to detect objects via Night View Assist

Night View Assist is a support system and cannot alert the driver of a collision under all circumstances. There is a risk of accident.

Responsibility for braking in time and for appropriate vehicle lighting always lies with the driver.

- Drive with extreme care.
- Always check the traffic situation and the area around the vehicle.

⚠ CAUTION Night View Assist unavailable or only available to a limited extent

Impacts or damage to the bumper, e.g. through parking collisions, can misadjust the camera. This may impair the performance of the system.

- Consult an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer as they have trained technicians and the necessary parts and tools.

Pedestrian warning

Fig. 128: Pedestrian warning on instrument cluster

If the system detects a possible collision with a pedestrian, it can warn the driver by means of a warning tone and an appropriate display in the instrument cluster. The pedestrian warning is output if a pedestrian is standing or moving onto the driving lane. On vehicles with Porsche Dynamic Light System Plus, the endangered person flashes in order to enhance detection. Even with this warning, the driver may still have to swerve or brake sharply in order to avoid a collision. The warning time varies according to the traffic situation and the driver's behavior.

Animal warning

Fig. 129: Animal warning on the instrument cluster

The animal warning reacts to hazards caused by large wild animals, e.g. deer, outside of built-up areas. The animal warning is triggered if an animal is in the projected driving lane or is dangerously close. The animal warning is deactivated automatically in urban areas in order to prevent it from being triggered by on-leash dogs for example.

Switching Night View Assist on and off

▶ **ASSIST** ▶ **Night View Assist**

Adjusting collision warning and image adaptation

The warning time for the collision warning and the image parameters of the Night View Assist can be adjusted on the PCM.

▶ **ASSIST** ▶ ▶ **Assistance system settings** ▶ **Night View Assist**

Night View Assist status display

Symbol	Instrument cluster	Meaning
	Speed & Assist display	Night View Assist is active in the background.
	Car & Info display	Indicates when the camera image is displayed that, owing to the prevailing ambient conditions (outside temperature and brightness), the system cannot reliably detect persons or animals. The warning function is currently not available.

Information

- Clean the thermal imaging camera of the Night View Assist in the front of the vehicle at regular intervals.

Cleaning Night View Assist camera

When the windshield washer system is operated repeatedly, the Night View Assist camera is automatically cleaned.

▷ Please see chapter "Operating the rear wiper" on page 331.

Off-Road Driving

This section explains the special benefits offered by the vehicle in off-road driving. Before you use the vehicle for off-road driving:

- Read through this section carefully.

Porsche recommends practicing on less rugged terrain.

⚠ WARNING High level stresses on vehicle components

Grains of sand, dirt particles and other abrasive materials can enter vehicle components such as the brakes during off-road driving. These can cause excessive wear or unpredictable braking action, leading to accidents or vehicle damage.

- Have regular professional inspections and service carried out on your vehicle.

NOTICE

Risk of damage. Front, rear and side skirts are painted on vehicles with the SportDesign package.

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

Observing the rules for off-road driving

- Always bear in mind the vehicle's ground clearance.
- Activate a suitable off-road driving program before starting to drive off-road.

▷ Please see chapter "Off-road Driving Programs" on page 194.

- Switch on terrain level or special terrain level, if necessary, before starting to drive off-road. Do not press the brake while adjusting the level.
- The level should only be adjusted on a flat surface.
- Stow or fasten luggage and loads securely.

▷ Please see chapter "Stowing Loads" on page 164.

- If unknown terrain is obscured from view, examine it on foot first and drive with extreme caution so that obstacles can be detected at an early stage.
- Always drive with the engine running. Power steering is active only with the engine running.
- Drive slowly and consistently.
- Always make sure that the wheels are touching the ground.
- Before driving through water, check the water depth, the condition of the surface beneath it and the flow speed of the water.
- Look out for obstacles, such as boulders, holes, tree stumps or channels.
- Always keep the roof system and side windows closed while driving.
- Do not deviate from marked routes or paths.
- Respect nature.
- Always obey off-limits signs.

Preparing for off-road driving

Checking wheels and tires

- Check tread depth and inflation pressure of tires.
- Check for damage and remove any foreign objects (e.g. stones) from the tread.
- Replace missing valve caps.
- Replace dented or damaged wheels before driving off-road.

Inspecting the vehicle after off-road driving

Off-road driving subjects the vehicle to greater stresses than normal driving on roads. Porsche recommends that you inspect the vehicle after off-road driving. Potential damage poses an accident risk and impairs driving comfort. Damage to the vehicle can be recognized in good time if the vehicle is checked.

⚠ WARNING Damage to the vehicle

Vehicle damage poses an accident risk for the vehicle occupants and other road users.

- If in doubt, have your vehicle checked at an authorized Porsche dealer.
- Examine tires for signs of damage, such as cuts, tears, bulges or foreign objects in the tread and replace if necessary.
- Have any damage to your vehicle repaired without delay. Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

When checking the vehicle, always remember the following:

- Switch off the off-road driving program.
- Clean headlights and tail lights and check them for signs of damage.
- Clean the front and rear number plates.
- Clean the tire tread with a jet of water and remove any foreign objects.
- Clean wheels, wheel housings and the underbody with a jet of water.
- Check whether the vehicle has picked up plant parts or branches.
  These materials increase the risk of fire and can damage fuel lines, brake hoses, boots of axle joints and drive shafts.
- After off-road driving, always check the entire floor assembly, tires, body structure, steering system, chassis and exhaust system for damage.
- After driving for an extended period through mud, sand, water or substances with a similar soiling effect, check the brake disks, brake pads, wheels and axle joints and have them cleaned.
- If you experience severe vibration after driving off-road, check the wheels for foreign bodies. These foreign bodies can produce an imbalance which may be responsible for the vibrations. Removing these deposits may remedy the problem.

Driving off-road on uphill gradients

DANGER Dangerous uphill gradients

Dangerous uphill gradients can cause the vehicle to overturn.

- Do not turn around when driving on uphill gradients.
- If it is not possible to climb an uphill gradient, the vehicle must be backed down in reverse gear.
- Do not drive over embankments or slopes at an angle.
- If the vehicle starts to tilt, immediately steer in the direction of the tilt (line of slope).
- When driving on uphill gradients, never let the vehicle roll back in neutral or with the clutch disengaged.
  Exclusive use of the footbrake is too risky in such situations.

When driving on uphill gradients, always observe the following:

- Activate a suitable off-road driving program before driving on extreme uphill or downhill gradients.
- Do not perform manual gear changes when driving and avoid stopping if possible.
- Avoid high engine speeds.

Increasing traction on uphill gradients

To improve traction on a hill, always remember the following:

- Activate a suitable off-road driving program.
- When driving uphill, go easy on the accelerator and make sure that wheels have sufficient traction (do not spin).
- Do not adjust the vehicle level on a slope.
- Do not over-rev the engine.
- Drive slowly.

Driving off-road on downhill gradients

DANGER Dangerous downhill gradients

Dangerous downhill gradients can cause the vehicle to overturn.

- Do not drive over embankments or slopes at an angle.
- Drive downhill slowly, with the front wheels pointing straight ahead.
- If the vehicle starts to tilt, immediately steer in the direction of the tilt (line of slope).
- When driving downhill, never let the vehicle roll in neutral.
- Use engine braking effect.
  If the engine braking effect is not sufficient to appropriately control the speed, gently apply the footbrake.
- Activate Porsche Hill Control (PHC).

When driving on downhill gradients, always remember the following:

- Activate a suitable off-road driving program.
  Off-road ABS is switched on automatically.

- Do not perform manual gear changes when driving and avoid stopping if possible.
- Do not adjust the vehicle level on a slope.
- When driving down steep hills on unpaved surfaces, brake carefully to prevent sliding.

Information

The special control mechanism of 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.

Driving over humps

When driving over humps, always remember the following:

- Always bear in mind the vehicle's ground clearance.
- Activate a suitable off-road driving program.
- Just before reaching the hump, ease off the accelerator slightly and use only the vehicle's momentum to cross the hump. This will prevent the vehicle from jumping over the hump and landing on the next downward slope at excessive speed.
- Do not over-rev the engine.

Driving through water

DANGER Ingress of water into the vehicle

Ingress of water into the vehicle can lead to dangerous situations with fatal consequences, as well as damage to the vehicle.

- Before driving through water, check the water depth, water flow speed and the condition of the surface beneath it.

  The water depth must not exceed the wading depth specified in the technical data.
- Make sure that the door sills and rubber seals are clean before starting to drive.
- Do not drive through deep or rapidly flowing water.

  Deep or rapidly flowing water, such as mountain streams, can cause the vehicle to deviate from the desired path.
- Avoid producing bow waves by driving at an appropriate speed.
- Never open the doors when driving through water.

WARNING Water or dirt film on the brake disk

When driving through water or mud, the braking force may be delayed and increased pressure may be required.

- Check and clean the brakes if they are soiled.

NOTICE

Risk of damage to electrical systems.

- Avoid driving through salt water.

Please note the following when driving through water:

- Always bear in mind the vehicle's ground clearance.
- Activate a suitable off-road driving program.
- Switch off the air-conditioning compressor.
- Switch off the headlights.
- Do not over-rev the engine.
- Do not perform manual gear changes when driving and avoid stopping if possible.

  Moving off in water can be difficult due to the high resistance and the loose surface underneath.
- Start driving through water at a shallow place at walking speed.
- After checking the water, take the shortest route through it.
- Never drive into water with momentum. The resulting bow wave could damage the engine and accessories.
- Adapt your driving style to unfamiliar surroundings.
- Drive through the water slowly and at a constant speed.
- Never turn around when driving through water.
- If it is not possible to get through the water, the vehicle must be backed out in reverse gear.

Information

The power-steering pump and alternator can fail if the vehicle is driven through water for an extended period.

Inspecting the vehicle after driving through water

The vehicle requires a particularly thorough check after driving through water.

- Remove mud from the tire tread.
- Briefly "brake" the brake pads dry after driving through water.

Crossing obstacles

NOTICE

There is a risk of damage to the underbody and chassis parts if you do not drive properly over obstacles.

- Always bear in mind the vehicle's ground clearance.
- Slowly drive over the middle of tree stumps, boulders or other obstacles with one of the front wheels.
- Cross the obstacle with the rear wheel in the same way.

When driving over obstacles, always remember the following:

- Activate a suitable off-road driving program.
- Get your passenger to direct you if necessary.
- Avoid high engine speeds.
- Drive slowly.

Driving on sand

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.

When driving on sand, always remember the following:

- Activate a suitable off-road driving program.
- Drive rapidly and do not stop under any circumstances. Otherwise, the vehicle will become bogged down.
- Follow existing tracks – provided they have not been covered by wind-blown sand, are not too deep and the vehicle's ground clearance is sufficient.
- Always bear in mind the vehicle's ground clearance.
- If you need to stop the vehicle on sand, choose a downward slope if possible to allow you to drive off again more easily.

When driving on slopes with soft sand:

- To achieve a high engine speed, use the manual Tiptronic S selection mode **M** as well as the off-road driving program if necessary.

If the vehicle still gets stuck:

- 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.

Following track ruts when driving off-road

NOTICE

The vehicle floor can be damaged when driving through track ruts that are too deep.

- Always bear in mind the vehicle's ground clearance.
- Do not drive through ruts that are too deep.

Other vehicles leave ruts on many off-road tracks or gravel roads.

- Always bear in mind the vehicle's ground clearance.
- Activate a suitable off-road driving program.
- If necessary, drive between the ruts with one side of the vehicle on the grass verge.
- Avoid high engine speeds.
- Drive slowly.

Off-road Driving Programs

The vehicle features various driving programs for driving on unpaved roads. Depending on equipment, the following drive and chassis systems are adapted to the currently selected driving program: engine, transmission, PTM, PTV Plus, PASM, chassis height, PSM, PDCC. This enables optimal vehicle handling for the respective driving scenario.

The following off-road driving programs are available:

GRAVEL

Suitable for driving on gravel roads or wet fields, for example.

MUD

Suitable for driving on muddy roads and tracks, for example.

SAND

Suitable for driving in deep sand, for example.

ROCKS

Suitable for driving on very rough rocky ground, for example.

Selecting driving program

1. Select **CAR** ▸ **OFFROAD** .
2. Select the required driving program in the touch display.
   The selected driving program is shown on the touch display.
   OFFROAD is displayed on the instrument cluster.

Information

After the ignition is switched off, the selected driving program automatically switches back to the NORMAL on-road driving program.

Information

An activated driving program remains activated even if the driving conditions change, e.g. if the vehicle is then driven on the road and/or at a higher speed. The transmission and chassis control systems then adapt to suit the changed driving conditions and speeds.

Responding to warning symbols

A warning appears on the instrument cluster if there is a fault in the gearshift system.

▷ Please see chapter "Warning and Information Messages" on page 293.

Tilt indicator

✓ Vehicles with Offroad package

The current angular position of the vehicle relative to the horizontal position can be displayed in the **OFFROAD** menu in the PCM and depending on vehicle equipment, also in the head-up display. The angular position is divided into a longitudinal and transverse tilt angle. The steering angle is also displayed.

Information

When a certain speed is exceeded, the tilt indicator display is deactivated and the value (- - -) is displayed.

CAUTION Discrepancies in display

The accuracy of the tilt indicator depends on the current driving situation and may differ from the actual angular position of the vehicle or there may be a time delay.

▸ Always pay attention to the vehicle surroundings.

WARNING Lack of attention

The vehicle can tip over or slip even at a slight tilt due to the driving situation and/or road surface.

▸ Responsibility for assessing the driving situation and obstacles ultimately lies with the driver.
▸ Drive with extreme care.

On-road Driving Programs

Depending on equipment, the vehicle offers various driving programs for a sportier overall setup when driving on paved roads. For information on off-road driving programs:

▷ Please see chapter "Off-road Driving Programs" on page 194.

For information on vehicle setup in the NORMAL, SPORT, SPORT PLUS and INDIVIDUAL driving program:

▷ Please see chapter "Overview of vehicle setup in the selected drive mode" on page 196.

For information on selecting the drive mode and the vehicle setup in E-POWER, HYBRID AUTO, E-CHARGE and E-HOLD mode on **E-Hybrid vehicles**:

▷ Please see chapter "Selecting driving program using the mode switch" on page 136.

The following driving programs are available:

Normal

During everyday driving, the control systems function in a balance between comfort and fuel economy.

Sport

Adjusts the control systems more toward emotionality and dynamics during everyday driving.

Individual

Allows individual combination of some settings of the NORMAL, SPORT and SPORT PLUS driving programs.

Performance

Maximum performance for racetrack-like operation.

Selecting driving program

Information

NORMAL driving mode is automatically active once operational readiness has been established.

Selecting driving program in the touch display in the dashboard

1. Select **CAR** ▸ **DRIVE**.
2. Select the desired driving program on the touch display.

Selecting the driving program in the center console

✓ Vehicles without Sport Chrono package

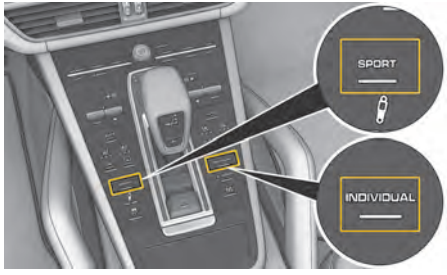


Fig. 130: Buttons for driving program in center console

▸ Press button **SPORT** or button **INDIVIDUAL**.

When a driving program is active, the light indicator on the button lights up and the driving program is displayed on the digital speedometer.

Selecting driving program using the mode switch

✓ Vehicles with Sport Chrono package

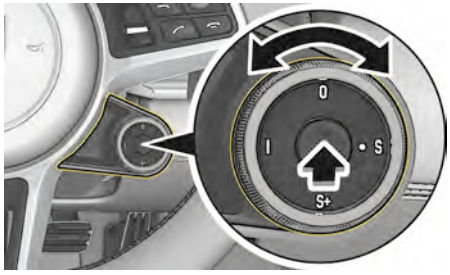


Fig. 131: Mode switch on the steering wheel

0 NORMAL
S SPORT
S+ SPORT PLUS
I INDIVIDUAL
Center of switch SPORT Response button

▸ Turn the mode switch to the left or to the right to the desired driving program.

The light indicator for the selected driving program lights up and the driving program is displayed in the digital speedometer.

Configuring INDIVIDUAL driving program

In the INDIVIDUAL driving program, the settings for the chassis, vehicle level, sport exhaust system and Auto Start Stop function (not on E-Hybrid vehicles) can be combined individually on the basis of the NORMAL, SPORT or SPORT PLUS driving programs. The stored combination can be retrieved by turning the mode switch to the **I** position or using the **INDIVIDUAL** button or using the corresponding button on the touch display.

Storing settings under INDIVIDUAL

1. **Select** ▸ **DRIVE**
2. Select the required settings in the touch display.
3. In order to save the settings, select in the header.

Using SPORT Response mode

✓ Vehicles with Sport Chrono package

Fig. 132: SPORT Response display timer

In SPORT Response mode, the engine and transmission are set to maximum response with timer-control.

Activating SPORT Response mode

- Press the **SPORT Response** button on the mode switch.
  The timer in the Car & Info display indicates how long the function is still available. Then, after approx. 20 seconds, the vehicle returns to the previously selected driving program.

Deactivating SPORT Response mode

✓ SPORT Response mode active

- Press the **SPORT Response** button on the mode switch again.
  The vehicle returns to the previously selected driving program.

Overview of vehicle setup in the selected drive mode

- Please see the relevant section for further information on the individual vehicle functions.

Driving program	NORMAL/HYBRID	SPORT	SPORT PLUS
Throttle blip during downshifting	Not active	Active	Active
Optimized engine sound in the vehicle interior	Not active	Active	Active

Driving program	NORMAL/HYBRID	SPORT	SPORT PLUS
Backfire	Not active	Active	Active
Performance Start	Cannot be activated	Cannot be activated	Activatable
Auto Start Stop	Active	Not active	Not active
Sport exhaust system	Off	On	On

NORMAL

During everyday driving, the control systems function in a balance between comfort and fuel economy.

SPORT

Adjusts the control systems more toward emotionality and dynamics during everyday driving.

SPORT PLUS

Maximum performance for racetrack-like operation.

Switching sport exhaust system on and off

The sport exhaust system can be switched to a sound-optimized mode in the PCM.

▸ **CAR** ▸ **DRIVE** ▸ **Sport exhaust system**

ParkAssist

General safety instructions

⚠ WARNING Lack of attention

The system must not induce you to take risks with your safety. The driver is always responsible for taking due care. The system is no substitute for the driver's attentiveness.

- Make sure that no persons, animals, or obstacles are within maneuvering range of the vehicle.
- When maneuvering, stop the vehicle if there are persons or animals in the red area.

⚠ WARNING Restricted detection ranges of sensors

Sensors do not cover all parts of the surrounding area. Persons, animals and obstacles may not be detected in this area or may only be detected to a limited extent. There is a risk of injuries and damage.

- Always pay attention to the traffic situation and the vehicle surroundings.

⚠ CAUTION Adverse environmental conditions

In the event of adverse environmental conditions, the system will be restricted or not available: There is a risk of injuries and damage.

- Only use the system in suitable environmental conditions.
- Adapt your driving style to the visibility, weather, road and traffic conditions.

System limitations

The system cannot detect the following:

- Sound-absorbing obstacles (e.g. wintery conditions, powder snow, clothing made from fabric, hide or fur).
- Sound-reflecting obstacles (e.g. glass surfaces, flat enameled surfaces).
- Very thin obstacles (e.g. thin posts).
- External ultrasound waves (e.g. air brakes from other vehicles, road sweeping machines, pneumatic hammers) can interfere with obstacle detection.
- Obstacles, if the sensors or cameras are very dirty or covered, e.g. by dust, dirt, snow or ice.

Scope of functions

ParkAssist visually and audibly indicates to the driver the distance between the vehicle and an obstacle during parking and maneuvering. ParkAssist's visual parking assistance is displayed on the touch display in the dashboard. Obstacles located in front of and behind the vehicle are indicated by means of different colored fields on the touchscreen. These fields show the contour of the obstacles as well as their distance from the vehicle.

Distance measurement

Fig. 133: Ultrasound sensors for distance measurement

The ultrasound sensors **A** in the front and rear bumpers measure the distance to the nearest obstacle. A detected obstacle is reported through an **intermittent tone**. The intervals shorten as the vehicle approaches the obstacle. When the distance is less than approx. 12 in. (30 cm), a **continuous tone** sounds.

Obstacles above and below the sensors cannot be detected.

The warning tone volume can be adjusted using the touch display in the dashboard.

▷ Please see chapter "Vehicle Settings" on page 285.

Activating ParkAssist

Activating automatically

✓ Ignition is switched on.

✓ Vehicle speed is less than approx. 10 mph (15 km/h).
✓ Reverse gear engaged.
– or –
✓ Distance in front is less than approx. 80 cm.
– or –
✓ Rolling backward is detected.

Activating manually

▸ **ASSIST** ▸ **ParkAssist**

Indication in touch display in dashboard

Fig. 134: ParkAssist display

Color	Front distance	Rear distance
White	Distance to obstacles that are not in the path of the vehicle.	
Orange	< 120 cm	< 180 cm
Red	< 40 cm	< 40 cm
Red plus continuous tone	< 30 cm	< 30 cm

Information

If ParkAssist detects a trailer, no rear distance information is displayed.

For information on operating the Porsche Communication Management system (PCM):
▹ Please see chapter "Porsche Communication Management (PCM)" on page 215.

Deactivating ParkAssist

Deactivating automatically

▸ Select operating mode **P**.

Deactivating manually

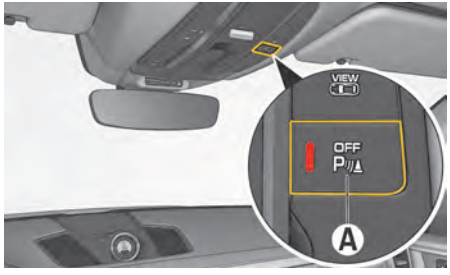


Fig. 135: Deactivating ParkAssist

▸ Press button **A** in the overhead console.
The light indicator on the button lights up.
There is no indication in the touch display in the dashboard. It is not possible to manually re-activate indication in the touch display in the dashboard.

Setting ParkAssist

▸ **ASSIST** ▸ ▸ **Assistance system settings** ▸ **ParkAssist**

Rear view camera

WARNING Risk of injury due to distorted display

The objects shown by the camera appear distorted. The image from the rear view camera does not show the entire area behind the vehicle.

▸ Always pay attention to the entire vehicle surroundings.
▸ Make sure that no persons, animals, or obstacles are within maneuvering range of the vehicle.

Scope of functions

The rear view camera facilitates monitoring of the area behind the vehicle during parking maneuvers. The picture from the rear view camera is displayed on the touch display in the dashboard.

Activating the rear view camera

Automatically

✓ Ignition switched on and operating mode **R** selected.

– or –

✓ Rolling backward is detected.

Manually

▸ **ASSIST** ▸ **ParkAssist**

Automatically deactivating rear view camera

✓ Speed is higher than 9 mph (15 km/h).

– or –

✓ Operating mode **P** selected.

Cleaning the rear view camera

The rear view camera is cleaned automatically when the rear window is cleaned.

▹ Please see chapter "Cleaning the rear window" on page 331.

Surround View

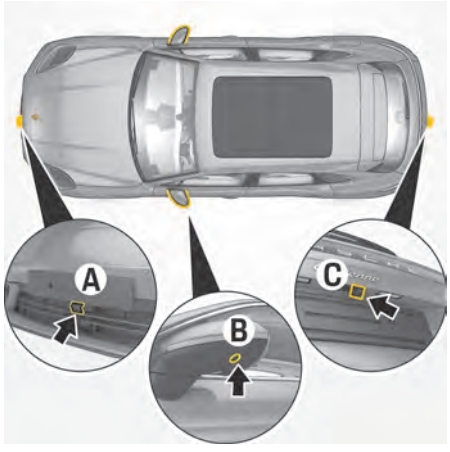


Fig. 136: Position of Surround View cameras

A Camera in center of front apron
B Camera in both door mirrors
C Camera between the license plate lights in the tailgate

⚠ WARNING Risk of injury due to distorted display

The objects shown by the cameras appear distorted. Many of the screen windows do not show the entire area around the vehicle.

- Always check the entire area around the vehicle.
- Make sure that no persons, animals or obstacles are within the maneuvering range of the vehicle.

Scope of functions

Surround View provides a birds' eye view of the vehicle and covers the area around the vehicle. Using the cameras, obstacles or markings as well as the exact position of the vehicle are detected. When Surround View is active, the courtesy lights are switched on for better illumination.

Activating Surround View

Automatically

✓ ParkAssist is activated.

Manually

- Press button in the overhead console.

– or –

▸ **ASSIST** ▸ **ParkAssist**

Use the relevant symbol to select the desired view (e.g. **Rear**) or press the Surround View button in the overhead console. The symbol for the active view is highlighted in red.

Symbol	View
	Parking (change front and rear view by tapping)
	Panorama (change front and rear view by tapping)
	Side
	Trailer (depending on equipment)

Information

Guide lines are superimposed on the front and rear camera views.
These guide lines indicate the direction the vehicle can follow with the steering wheel in the current position. The guide lines change as the position of the front wheels changes.

Deactivating Surround View

- Deactivate ParkAssist.

Active parking support

WARNING Lack of attention

The system must not induce you to take risks with your safety. The driver is always responsible for taking due care. The system is no substitute for the driver's attentiveness.

- Always pay attention to the traffic situation and the vehicle surroundings.
- If necessary, take over control of the vehicle.
- Observe the safety instructions and system limits of the supporting systems, sensors and cameras.

NOTICE

The system can guide the vehicle over curbs. The tires and rims of the vehicle may be damaged.

- If necessary, take control of the vehicle or cancel the parking procedure.

- For further information, see:
  - Please see chapter "General safety instructions" on page 198.
  - Please see chapter "Rear view camera" on page 199.
  - Please see chapter "Surround View" on page 200.

Information

Observe any country-specific laws relating to the use of parking assistance systems.

System limitations

The system is not available:

- When towing a trailer.
- In the "Offroad" driving program.
- In the "High Level" chassis setting.
- On uphill gradients above 10%.
- On tight bends.

The system is available to a limited extent:

- When there are unusual road surfaces, such as off-road, unpaved roads, loose substrate, inclined road surfaces or wheel ruts.
- With accessories attached to the steering wheel.
- In poor weather conditions (rain, snow or ice).

The system cannot detect:

- Low, narrow or protruding objects (e.g. trailer hitches, drawbars of parked trailers, chain barriers, poles or fences).
- Objects above the detection area (e.g. bumpers on parked vehicles, half-open garage doors and other objects that are not touching the ground).
- Objects with sound-absorbing or sound-reflecting surfaces and structures (e.g. fabrics).
- Unfavorable situations caused by pillars and columns in a parking garage (a combination of detection area, contour and surface structure).
- Precipices and embankments.
- Objects that move quickly into the detection area (e.g. other road users).

- For further information, see:
  - Please see chapter "System limitations" on page 198.
  - Please see chapter "Rear view camera" on page 199.
  - Please see chapter "Surround View" on page 200.

Scope of functions

The system can provide assistance when searching for a suitable parking space. The system can assume control of the steering movements, acceleration and braking required to park and pull out. The system monitors the vehicle surroundings using sensors. If an obstacle is detected, the system performs a braking intervention.

Parking space search

Parking space search works:

- When driving forward.
- If the distance to parked vehicles is a maximum of approx. 5.0 ft (1.5 m).
- For parking spaces parallel to the road up to a speed of 28 mph (45 km/h).
- For parking spaces perpendicular to the road up to a speed of 12 mph (20 km/h).
- For parking spaces between two parked vehicles.

Parking

Parking is active under the following conditions:

- Parking backward into parking spaces parallel to the road.
- Driving forward and backward into parking spaces perpendicular to the road, between two parked vehicles.

– Parking forward into parking spaces perpendicular to the road, when the front of the vehicle is already positioned in the parking space.

Pulling out

Pulling out works if the vehicle is moved forward out of a parking space parallel to the road and the parking space is approx. 20 in. (50 cm) longer than your vehicle.

Starting a parking space search

Fig. 137: Active parking support, parking space search

A Select the parking or pulling-out side
B Select the parking direction.

1. Tap .
   – or –
   ASSIST ▸ **ParkAssist** ▸ **SEARCH**
2. Drive past the parked vehicles at low speed.
3. Observe instructions in the PCM.
4. In order to change the parking side, activate the corresponding turn signal (left/right).
   – or –
   Tap the corresponding button in the PCM (item **A** (Fig. 137)).
   Parking space search is first active at the side of the lane you are driving in.
   When a parking space is found, it appears orange in the PCM. If several parking directions are possible, they will be displayed.
5. On reaching a suitable parking space, stop the vehicle.
6. If an orange arrow is displayed in front of the vehicle in the PCM, drive the vehicle further forward.
7. To select the parking space, tap the parking space symbol with the desired parking direction in the PCM (item **B** (Fig. 137)).

Canceling the parking space search

▸ Tap button .

The search is canceled automatically if the vehicle speed exceeds the maximum value permitted for the parking space search or when operating mode **R** is selected.

Starting the parking procedure

✓ Vehicle is stationary.
✓ Brake pedal pressed.
✓ Parking space selected in the PCM.

1. Take your hands off the steering wheel and keep the brake pedal pressed.
2. Press and hold button in the center console.
3. Release the brake pedal.
   The parking procedure starts.
4. Always pay attention to the traffic situation and the vehicle surroundings.
5. As soon as an obstacle appears, interrupt the parking procedure (e.g. by releasing the button in the center console).
   ▹ Please see chapter "Interrupting the parking procedure" on page 203.
6. Observe instructions in the PCM.
   A message appears when the vehicle reaches the target position.
   Operating mode **P** is engaged automatically and the parking brake is applied.
7. Take control of the vehicle.

Starting the pulling-out procedure

✓ Engine running.
✓ Brake pedal pressed.

1. Tap .
   – or –
   ASSIST ▸ **ParkAssist** ▸
2. Take your hands off the steering wheel and keep the brake pedal pressed.
3. In order to change the pulling-out direction, activate the corresponding turn signal (left/right).
   – or –
   Tap the corresponding button in the PCM (item A (Fig. 137)).
4. Press and hold button in the center console.
5. Release the brake pedal.
   The pulling-out procedure starts.
6. Always pay attention to the traffic situation and the vehicle surroundings.
7. As soon as an obstacle appears, interrupt the parking procedure (e.g. by releasing the button in the center console).
   ▹ Please see chapter "Interrupting the parking procedure" on page 203.
8. Observe instructions in the PCM.
   A message appears when the vehicle reaches the target position.
   The vehicle drives as far as possible out of the parking space until it can pull out without a collision.
9. Take control of the vehicle.

Interrupting the parking procedure

To interrupt parking briefly:

- Release button in the center console.
  – or –
- Bring the vehicle to a standstill by pressing the brake pedal.

The parking procedure is interrupted automatically when a door is opened.
The parking procedure can then be continued.

The following actions end the parking procedure:

- Intervening in the steering.
  – or –
- Changing operating mode.
  – or –
- Applying the parking brake.
  – or –
- Press the accelerator pedal.

The parking procedure must be restarted. To do this, switch the engine off and back on again when pulling out.

Maneuvering Assist

WARNING Lack of attention

The system must not induce you to take risks with your safety. The driver is always responsible for taking due care. The system is no substitute for the driver's attentiveness.

- Always pay attention to the traffic situation and the vehicle surroundings.
- If necessary, take control and brake the vehicle yourself.
- Observe the safety instructions and system limits of the supporting systems, sensors and cameras.
- For further information, see:
  - Please see chapter "General safety instructions" on page 198.
  - Please see chapter "Rear view camera" on page 199.
  - Please see chapter "Surround View" on page 200.
  - Please see chapter "Active parking support" on page 201.

System limitations

- The system is not available when towing a trailer.
- The system is not available when the tailgate is open.
- In order for the system to detect obstacles in the driving path, they must be higher than approx. 10 cm and stationary.
- The system is not available while active parking support is in use.

- For further information, see:
  - Please see chapter "System limitations" on page 198.
  - Please see chapter "Rear view camera" on page 199.
  - Please see chapter "Surround View" on page 200.

Scope of functions

✓ Maneuvering Assist is activated.
✓ Maneuvering Assist available (red bar visible under the symbol on the screen).
✓ Operating mode **R** is selected.
✓ The vehicle drives at max. 5 mph (10 km/h).

Maneuvering Assist uses sensors to monitor the area behind and to the sides of the vehicle. Static obstacles are signaled by an intermittent tone and visual signals in the PCM. In the event of an impending collision, the system automatically applies the brakes and brings the vehicle to a standstill.

- Observe instructions in the PCM.

Following automatic braking by Maneuvering Assist:

- Take control of the vehicle by lightly pressing the brake or accelerator pedal.
  The vehicle is **not** held stationary in this case. Maneuvering Assist is temporarily suspended, but remains active.

Activating and deactivating Maneuvering Assist

- **ASSIST** ▸ **Maneuvering Assist**
  Maneuvering Assist is activated or deactivated.

Temporarily deactivating Maneuvering Assist

- Tap button in the rear view camera's touch display.
  The Maneuvering Assist activated in the menu is deactivated for the current maneuvering situation.

If the reversing speed of 5 mph (10 km / h) is exceeded or the direction of travel is changed, Maneuvering Assist is reactivated.

Rear Cross Traffic Alert (RCTA)

WARNING Inattentive maneuvering or pulling out

The system must not induce you to take risks with your safety. The driver is still responsible for taking due care when pulling out and when assessing obstacles. The system is no substitute for the driver's

attentiveness.

- Make sure that no persons, animals, obstacles or vehicles are within maneuvering range of the vehicle.
- Observe the safety instructions and system limits of the supporting systems, sensors and cameras.

- For further information, see:
  - Please see chapter "General safety instructions" on page 198.
  - Please see chapter "Rear view camera" on page 199.
  - Please see chapter "Surround View" on page 200.
  - Please see chapter "Active parking support" on page 201.

⚠ WARNING Unidentified situations

Functional restrictions in the system may result in the system failing to respond or issuing a false alarm.

- Drive with extreme care.
- Always pay attention to the traffic situation and the vehicle surroundings.

System limitations

Vehicles cannot or may not be detected in time in the following situations:

– The vehicle is parked next to vehicles that protrude out very far toward the rear.

– Crossing vehicles approach extremely quickly.

– If the rear bumper is dirty.

- Observe the direction of travel and the relevant area around the vehicle closely at all times.
- For further information, see:
  - Please see chapter "System limitations" on page 198.
  - Please see chapter "Rear view camera" on page 199.
  - Please see chapter "Surround View" on page 200.

Operating principle

The Rear Cross Traffic Alert (RCTA) monitors the area behind the vehicle and warns of any road users (e.g. passenger vehicles, motorcycles, bicycles, pedestrians) crossing behind the vehicle when the driver is backing out.

Fig. 138: Rear Cross Traffic Alert display

✓ Tailgate closed
✓ Rear Cross Traffic Alert switched on.
✓ Porsche Stability Management (PSM) switched on.
✓ Operating mode **R** is selected.
✓ Vehicle speed is less than approx. 10 mph (15 km/h).

The Rear Cross Traffic Alert visual display is shown in the PCM. When reverse gear is engaged, arrows appear in the PCM to make the driver aware of approaching cross traffic. A warning symbol indicates a potentially dangerous situation. A warning tone is also issued. If the driver does not respond to the visual and acoustic warning, the system performs a brief warning jolt to alert the driver of the impending collision hazard.

Switching Rear Cross Traffic Alert on and off

Rear Cross Traffic Alert can be switched on and off in the PCM.

- **ASSIST** ▸ **Rear Cross Traffic Alert**

An animation appears, indicating that the function is active.

The setting remains stored even after the ignition is switched off.

The selected setting can be saved on the vehicle key via the relevant driver profile.

- Please see chapter "Personal Settings" on page 206.

Egress Warner (EW)

⚠ WARNING Exiting the vehicle inattentively

The increased comfort offered by the system should not induce you to risk your safety. The vehicle occupants are still responsible for taking due care when exiting the vehicle and when assessing obstacles. The system is no substitute for the attentiveness of the vehicle occupants.

- Before exiting, make sure that no vehicles are approaching from behind.

⚠ WARNING Unidentified situations

Functional restrictions in the system may result in the system failing to respond or issuing a false alarm.

- Always pay attention to the traffic situation and the vehicle surroundings.

System limitations

Vehicles cannot or may not be detected in time in the following situations:

- Vehicles are approaching extremely slowly or extremely quickly.
- The range of the sensors may be restricted by vehicles parked nearby or dirt on the rear bumper.
- The system shuts down approx. 3 minutes after the vehicle is switched off. The indicators **B** in the door panels light up. No other warnings are issued.

▶ Observe the direction of travel and the relevant area around the vehicle closely at all times.

▶ For further information, see:

▷ Please see chapter "System limitations" on page 198.

▷ Please see chapter "Surround View" on page 200.

Operating principle

The Egress Warner (EW) draws the attention of occupants in the stationary vehicle to road users (e.g. passenger vehicles, motorcycles, bicycles) approaching from behind or located in the blind spot.

When the door is opened or if the door is already open, the indicators in the door mirror and door panel light up on the relevant side of the vehicle to indicate that road users are approaching.

If a vehicle occupant attempts to open a door while an approaching road user is identified as critical, the door will be momentarily prevented from opening. Indicators **A** in the door mirror on the relevant side of the vehicle and **B** in the door panel of the relevant door will flash briefly.

If the door is already open when an approaching road user is identified as critical, indicators **A** in the door mirror on the relevant side of the vehicle and **B** in the door panel of the relevant door will light up until the danger passes.

Indicator elements

Warning indicators integrated in both door mirrors and door panels light up as soon as a dangerous situation is detected and opening the door appears critical.

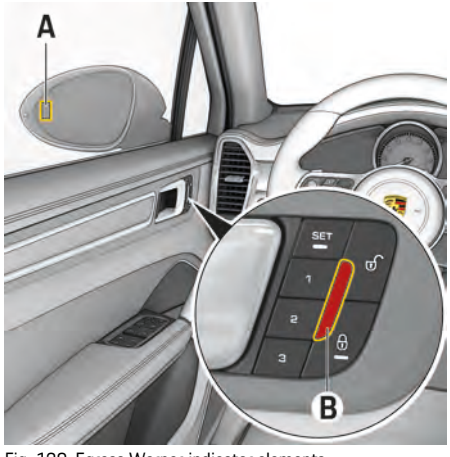


Fig. 139: Egress Warner indicator elements

A Indicator on the door mirror
B Indicator in the door panel.

Activating and deactivating the Egress Warner

Egress Warner can be activated and deactivated on the central display.

▶ **ASSIST** ▶ **Egress Warner**

An animation appears, indicating that the function is active. The indicator elements **B** in the door panels light up briefly.

The setting remains stored even after the vehicle is switched off.

The previously selected setting is automatically stored in the selected account and paired with the vehicle key used.

▷ Please see chapter "Personal Settings" on page 206.

Personal Settings

Storing and retrieving personal settings

Certain settings can be stored and retrieved in the vehicle.

When the ignition is switched off, the settings previously made are automatically saved to the driver profile in the PCM. The settings are automatically retrieved when the door is unlocked via the vehicle key, or when the driver profile is changed. If two or more people use the vehicle, it is advantageous to use one driver profile and vehicle key per person.

Additionally, up to three ergonomic settings can be manually stored and retrieved via the memory buttons in the driver's and passenger's doors (depending on equipment).

Comfort settings affect:
Ergonomic, air conditioning, light, vision, assistance-system, instrument cluster and infotainment settings.

Ergonomic settings affect:
seat, door mirror and steering wheel settings.

⚠ CAUTION Retrieving the automatic seat, door mirror, and steering wheel settings

Parts of the body may be pinched or crushed if the settings are activated in an uncontrolled manner.

- Do not leave children in the vehicle unattended.
- Automatic retrieval of the **ergonomic settings** can be **cancelled** if necessary by pressing a memory button or a seat adjustment button.

Storing and retrieving comfort settings

Storing comfort settings

- When the ignition is switched off, the settings previously made are **automatically** saved to the driver profile in the PCM.

Retrieving comfort settings

- Unlock the vehicle.
  The driver profile settings are retrieved.
  – or –

✓ Vehicle is stationary.

- Changing driver profile using the PCM.

If loading of the settings is interrupted:

- select **Activate driver** via the PCM.

Managing driver profile

Up to 6 driver profiles and 1 guest profile can be created and managed.

When you start the PCM for the first time, the **Set-up wizard** is displayed and guides you through important steps for configuring the PCM. We recommend that you run the **Set-up wizard** fully to correctly create the first driver profile.

It is only possible to switch between the created driver profiles via the instrument cluster immediately after the ignition has been switched on and, when the ignition is on, at any time via the PCM.

Driver detection occurs automatically via the vehicle key. A vehicle key is always automatically assigned to an active profile.

Managing driver profiles

- **SET ▸ Driver**

– Change driver
– Add driver
– Edit driver
– Delete driver (via the Edit driver menu item)
– Activate driver
– Activate personalization
– Deactivate automatic saving

Storing and retrieving ergonomic settings

Storing ergonomic settings on the memory buttons

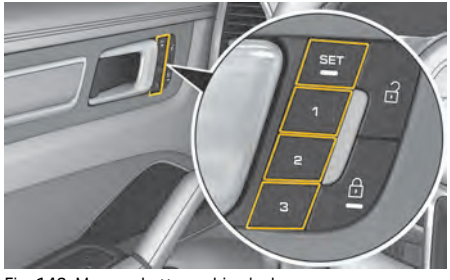


Fig. 140: Memory buttons, driver's door

1. Press the **SET** button.
   The light indicator on the button lights up.
2. Press the relevant memory button **1**, **2** or **3** within 10 seconds.

The settings are stored.

Storage is acknowledged acoustically (driver's door only) and the light indicator in the **SET** button goes out.

Retrieving ergonomic settings with memory buttons

- Press and hold the relevant memory button **1**, **2** or **3** until all settings are retrieved.
  – or –

✓ Ignition is switched off.

✓ Driver's or passenger's door open.

▸ Briefly press the relevant memory button **1**, **2** or **3**.
The settings will be automatically adjusted.

Porsche Active Safe (PAS)

Within the system limits, the Porsche Active Safe functions can initiate measures to protect the occupants and other road users in certain dangerous situations.

Porsche Active Safe (PAS) has the following functions[1]:

- Warning and braking functions
- Preventive occupant protection functions (depending on equipment)
- Distance warning (depending on equipment)

The camera behind the windshield detects the area ahead of the vehicle. Within the system limitations, an impending frontal collision with other vehicles, pedestrians or cyclists can be detected both in the urban and extra-urban speed range. The system warns the driver visually, acoustically and if necessary through a braking jolt. Where required, the system can support the driver's braking or initiate partial or full deceleration in order to reduce the collision speed or prevent the collision in some circumstances.

Other Porsche Active Safe functions can be installed, depending on vehicle equipment:

- In conjunction with the preventive occupant protection function, the front seat belts are additionally reversibly pretensioned and, depending on the equipment version, preconditioning measures initiated in the passenger compartment.
- By networking different vehicle systems such as PSM, the system initiates preventive protection measures for the occupants if emergency braking by the driver, for example, is detected.

Exceptions for Porsche Active Safe (PAS)

PAS is restricted or not available in the following situations:

- If the seat belts are not fastened.
- When reversing.
- If brake lights are defective.
- If there is a fault in Porsche Stability Management or the airbag control unit.
- In the event of restricted or switched-off PSM functionality (PSM off).
- Triggering times and functions are adapted or deactivated depending on the selected off-road mode.
- When Porsche Hill Control (PHC) is ready or active, PAS is not available.
- Up to 10 seconds after switching on the ignition.

  The light indicator comes on.

Switching PAS on and off

▶ **ASSIST** ▶ **Porsche Active Safe**

When Porsche Active Safe (PAS) is switched off or not available, the display appears in the instrument cluster.

A deactivated system is activated again when the ignition is switched back on.

NOTICE

- Switch off PAS when using the vehicle off public roads or when it is loaded onto a transport truck, train, ship, etc. The reason for this is to prevent undesired PAS interventions.
- Not all Porsche Active Safe protection measures will be triggered, depending on the detected danger.
- Always drive according to the regulations that apply in each country, particularly with regard to vehicle handling, distance from the vehicle in front, speed, etc. The driver is always responsible for complying with the relevant regulations that apply in each country.
- PAS must be deactivated while the vehicle is being towed.

Warning and braking functions

Within the system limits, PAS can warn against impending collisions and initiate the appropriate braking maneuvers. The system is active from a speed of approx. 3 mph (5 km/h).

It can react to pedestrians or cyclists from a speed of approx. 3 mph (5 km/h) up to 53 mph (85 km/h). It can react to vehicles from a speed of approx. 5 mph (10 km/h) up to 156 mph (250 km/h).

If detected in time, the system can assess a dangerous situation and respond accordingly.

Dangerous situations can arise, for example:

- If a vehicle in front brakes sharply.
- If your vehicle is approaching a significantly slower-moving or stationary vehicle in the driving direction.
- If a pedestrian or cyclist is standing or moving into the driving lane.

If detection is not possible, Porsche Active Safe does not react.

1. Not available in some country versions.

Collision warning

Fig. 141: Collision warning on the instrument cluster

If PAS detects a possible collision, it can warn the driver by issuing a warning tone and displaying a corresponding symbol in the instrument cluster display. It warns the driver about pedestrians or cyclists up to a speed of 53 mph (85 km/h) and about vehicles up to a speed of 156 mph (250 km/h).

The warning time varies according to the traffic situation and the driver's behavior and can be set.

Setting the warning time for the collision warning

▶ **ASSIST** ▶ ▶ **Assistance system settings** ▶ **Porsche Active Safe**

If the collision warning is switched off, it will be activated in its default setting when the ignition is switched on again.

Acute warning

If the driver does not respond to the collision warning, an acute warning in the form of a brief braking jolt can also alert the driver to the increasing collision hazard. Additionally, a warning tone is emitted and a corresponding symbol is displayed in the instrument cluster.

▷ Please see chapter "Warning and Information Messages" on page 293.

Even with this warning, the driver may still have to swerve or brake sharply in order to avoid a collision. The warning time varies according to the traffic situation and the driver's behavior. At the same time, the vehicle is prepared for possible emergency braking.

Automatic braking

If the driver does not respond to the acute warning, PAS can automatically brake the vehicle with progressively increasing braking force within the limits of the system.[1].

If Porsche Active Safe detects that the driver is not braking sufficiently in the event of an impending collision, it can increase the brake pressure depending on the situation. Additionally, a warning tone is emitted and a corresponding symbol is displayed in the instrument cluster.

By reducing the vehicle speed in the event of an impending collision, the system can help to mitigate the consequences of an accident.

⚠ WARNING PAS system limits and information

PAS cannot overcome the physically determined limits. It is a support system and cannot prevent a collision under all circumstances. The driver always bears responsibility for braking in time.

- ▶ Note that not all vehicles, pedestrians or cyclists can be detected by the sensors or camera in all cases - risk of accidents!
- ▶ The increased safety that is provided must not induce you to take risks with your safety - risk of accidents!
- ▶ Responsibility for adapting the vehicle speed and safety distance to vehicles, pedestrians or cyclists in front always lies with the driver and must always be adapted to the visibility, weather, road and traffic conditions.
- – In complex driving situations, PAS may issue undesired warnings and perform undesired braking interventions.
- – PAS does not react to animals, cross traffic, oncoming vehicles and objects such as poles, fences or rail vehicles.
- – PAS may be restricted or unavailable in bends.
- – Reflective objects such as crash barriers or tunnel entrances, heavy rain, snowfall, fog or ice formation may impair operation of the camera or sensors and consequently detection of a collision hazard.

1. Not available in some country versions.

CAUTION Impaired PAS detection performance

A damaged windshield can impair the functionality of PAS.

- ▶ Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

NOTICE

- ▶ Automatic braking intervention from PAS can be aborted by the driver braking significantly, accelerating, taking evasive action or deactivating PAS.
- ▶ Automatic braking can decelerate the vehicle to a standstill if necessary. Once the vehicle has reached a standstill, it is not held permanently by the brake system - press the brake and resume control of the vehicle.
- ▶ Be aware that PAS may apply the brakes unexpectedly. Therefore, always secure loads to prevent damage and possible injury.
- – When towing a trailer, the braking behavior of the vehicle-trailer combination can be different from usual during automatic braking due to the changed mass and the changed braking and stabilization behavior.
- – In the event of restricted or switched-off PSM functionality (PSM off), PAS is switched off.

Preventive occupant protection function

Seat belt system optimization

When driving off, the front seat belts are gently tightened in order to ensure an optimal position with regard to the occupants. Activation is performed when reaching a driving speed of approx. 20 mph (30 km/h) or when the seat belts are fastened again.

Preconditioning of the seat belt and passenger compartment

If a potentially hazardous accident situation is detected, PAS can initiate measures to prepare for a possible collision in order to support the effectiveness of the passive occupant protection system. For this purpose, depending on the situation, the front seat belts are reversibly pretensioned, windows are opened and (depending on equipment) the roof system is closed and the adaptive front seat side bolsters are inflated.

Within the system limits, the preventive occupant protection measures can be activated both during emergency braking initiated by the driver above a speed of approx. 20 mph (30 km/h) or through an automatic brake intervention initiated by the vehicle. As soon as the detected collision hazard has passed and a stable driving condition is achieved, the preconditioning measures are ended and existing seat belt tension is released again.

WARNING Limitations of the preventive occupant protection function

The preconditioning measures initiated by PAS can support the functions of the passive restraint system, but cannot overcome the physical limits.

- ▶ The following points must be observed:
- – In the case of repeated activation (e.g. in the context of driver safety training), the belt tension increases progressively so that it may no longer be possible to reliably release the belt tensioning. In this case, unfasten and refasten the seat belt or deactivate PAS.
- – If an accident occurs following a PAS intervention situation, the reversible seat-belt pretensioner may become damaged.
  Go to a qualified specialized repair shop. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.
- – In the event of a defect in the reversible belt tensioner, the preventive occupant protection measures are only available to a limited extent.
- – In the event of restricted or switched-off PSM functionality, (PSM off) the preventive PAS occupant protection functions are deactivated.

Distance warning

If Porsche Active Safe detects a safety hazard due to following too close, the system can warn the driver in a vehicle speed range from approx. 40 – 156 mph (65 – 250 km/h) by displaying the symbol on the instrument cluster.[1].

▷ Please see chapter "Warning and Information Messages" on page 293.

Setting the distance warning

- ▶ **ASSIST** ▶ ▶ **Assistance system settings** ▶ **Porsche Active Safe**

1. Not available in some country versions.

Porsche Active Suspension Management (PASM)

PASM is a system for the active adjustment of shock absorbers. The variable shock absorber system individually regulates the relevant shock absorber stiffness for each wheel depending on the driving situation and driving conditions. Driving safety, agility, and comfort are optimized.

Three different chassis modes can be selected at the push of a button:

– "Normal"
– "Sport"
– "Sport Plus"

In normal mode, the vehicle is in a comfortable setting. The "Sport" chassis setup offers distinctly sporty shock absorber control. "Sport Plus" mode offers uncompromising shock absorber control, which is optimized for sporty driving (e.g. on the race circuit). In addition to the manual mode selection, PASM also adjusts the shock absorber force requirement toward sport or comfort, depending on the driving situation.

Selecting chassis mode

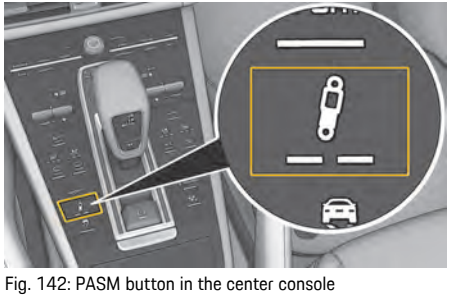


Fig. 142: PASM button in the center console

1. Switch on ignition.
2. Press button repeatedly.
   The button lights up as follows:

– **No** light indicator illuminates when "Normal" (default setting) is selected.
– **One** light indicator comes on when "Sport" is selected.
– **Two** light indicators come on when "Sport Plus" is selected.

In addition, the selected chassis mode is displayed briefly on the instrument cluster.

Information

The chassis mode can also be set in the PCM:

▸ **CAR** ▸ **DRIVE** ▸ **Chassis**

Information

The last selected chassis mode remains effective even after the ignition is switched off.

Responding to warning message

PASM faults are displayed on the instrument cluster.

Porsche Active Suspension Management (PASM) with air suspension and leveling system

PASM with switchable air suspension and leveling is a system for active adjustment of shock absorber force and spring rate as well as ride height compensation. The variable chassis control system selects the appropriate damping force level for each wheel depending on the driving situation and driving conditions and switches the spring rate of the air suspension. The leveling system automatically compensates for load changes and maintains a constant ride height. Driving safety, agility, and comfort are optimized.

Three different chassis modes can be selected at the push of a button:

- "Normal"
- "Sport"
- "Sport Plus"

In normal mode, the vehicle is in a comfortable setting. The "Sport" chassis setup offers distinctly sporty spring/shock absorber tuning. "Sport Plus" mode offers spring and shock absorber control, which is uncompromisingly optimized for sporty driving (e.g. on the race circuit). The vehicle is also lowered by approx. 0.7 in. (18 mm) compared to medium height, thereby switching to Low Level.

In addition to the manual mode selection, PASM also adjusts the spring rate setting and shock absorber force requirement toward sport or comfort, depending on the driving situation.

Information

- The height of the vehicle is automatically kept constant when the vehicle is loaded. The individual levels can be set only while the engine is running.
- Frequent chassis height changes can cause the compressor to overheat. In this case, the compressor must cool for several minutes before the leveling system is fully functional again. The system automatically adjusts to a selected level when the compressor cools down.

Information

If vehicles with air suspension are left stationary for several weeks, the ride height can be reduced. The vehicle automatically re-adjusts to the correct ride height when you start the engine. This can take several minutes, depending on the operating state. Ground clearance is reduced during this time.

Selecting chassis mode

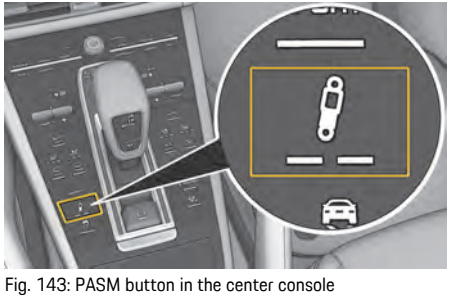


Fig. 143: PASM button in the center console

1. Switch on ignition.
2. Press button repeatedly.

The button lights up as follows:

- **No** light indicator comes on when "Normal" (default setting) is selected.
- **One** light indicator comes on when "Sport" is selected.
- **Two** light indicators come on when "Sport Plus" is selected.

In addition, the selected chassis mode is displayed briefly on the instrument cluster.

Information

The chassis mode can also be set in the PCM:

▸ **CAR** ▸ **DRIVE** ▸ **Chassis**

Information

The last selected chassis mode remains effective even after the ignition is switched off.

Information

When the vehicle is stopped, the ride height may be adjusted automatically in order to balance the vehicle load.

Setting chassis height

The chassis height can be set in the PCM. The last manually selected chassis mode and the height level are retained even after the ignition is switched off.

▸ **CAR** ▸ **DRIVE** ▸ **Chassis height**

Medium height

Medium height is adopted as standard in the "Normal" and "Sport" chassis mode. In "Sport Plus"

mode, Medium height can be selected manually in the PCM using the **DRIVE** menu.

Terrain level

Terrain level increases ground clearance by approx. 2.2 in. (55 mm) compared with Medium height and is used for driving the vehicle with maximum ground clearance. Terrain level can be selected manually at speeds below approx. 22 mph (35 km/h) and is deselected automatically at higher speeds.
Terrain level is adopted automatically in off-road mode "Rocks".

High level

High level increases ground clearance by approx. 1.0 in. (25 mm) compared with Medium height and is used for driving the vehicle on bad roads. High level can be selected manually at speeds below approx. 50 mph (80 km/h) and is deselected automatically at higher speeds.
High level is adopted automatically in off-road mode "Sand", "Mud" and "Gravel" and is deselected automatically at a speed of 75 mph (120 km/h).

Information

Frequent chassis height changes can cause the compressor to overheat. In this case, the compressor must cool for several minutes before the leveling system is fully functional again. The system automatically adjusts to a selected level when the compressor cools down.

Low level

Low level reduces ground clearance by approx. 0.7 in. (18 mm) compared with Medium height and is used for sporty driving.
Low level can always be selected manually in on-road mode.
Low level is adopted automatically in "Sport Plus" chassis mode.

Information

The vehicle is not lowered when the door is open. The selected level is set after closing the door.

Drop frame function

This function makes it easier to load the luggage compartment. It lowers the load sill of the vehicle by approx. 2.6 inches (66 mm).
The vehicle is automatically raised to the previously set level at speeds above approx. 3 mph (5 km/h).

NOTICE

Risk of damage to chassis parts, drive unit and the vehicle underbody.

The vehicle may bottom when driven down from curbs with the frame dropped, for example, if the ground clearance is insufficient.

- Always switch to Medium height before moving off.

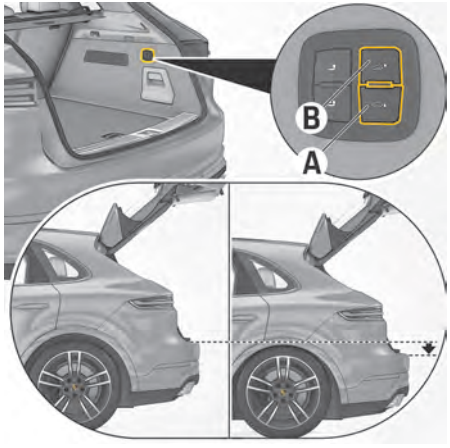


Fig. 144: Setting drop frame function via buttons in luggage compartment

The drop frame function can be set using the two buttons **A** and **B** on the side trim panel in the luggage compartment on the right in direction of travel. Depending on the selected mode, it can take 1 – 2 seconds for the rear of the vehicle to raise or drop after pressing the button. The rear of the vehicle can also be raised at different speeds, depending on the selected mode.

Lowering the rear of the vehicle

✓ Tailgate is open.

- Press and hold button **A**.
  The light indicator between the two buttons **A** and **B** comes on.
  The rear of the vehicle is lowered.

Raising the rear of the vehicle

✓ Tailgate is open.

- Press and hold button **B**.
  The light indicator between the two buttons **A** and **B** comes on.

The rear of the vehicle is raised to its initial level and the light indicator goes off.

Information

– No other leveling system processes are executed when the drop frame function is active.
– If the light indicator between the two buttons **A** and **B** is flashing continuously, the drop frame function cannot be activated, e.g. if there is no compressed air, if the battery voltage is too low or if there is a fault in the leveling system.

Leveling system when towing a trailer

Low level is not available when towing a trailer. Terrain level and High level can only be selected up to a speed of 22 mph (35 km/h) when towing a trailer.

NOTICE

Adjusting the level when towing a trailer can exceed the vehicle's rated tongue weight.

▶ Always check the tongue weight at Medium height.

Switching leveling system off

⚠ WARNING Operation of leveling system during a wheel change

The vehicle can slip off the jack. Parts of the body may be pinched or crushed.

Before lifting the vehicle using a lifting platform or jack:

▶ Set Medium height manually.
▶ Switch leveling system off.

The automatic leveling system must be switched off when driving onto a lifting platform or when raising the vehicle using the jack (car jack mode).

For information on raising the vehicle:

▷ Please see chapter "Jack and Lifting Platform" on page 149.

✓ Vehicle is stationary.

▶ **CAR** ▶ **CONTROL** ▶ **Vehicle settings** ▶ **Chassis** ▶ **Car jack mode**

The vehicle can now be raised.

Information

The leveling system switches on automatically at speeds above approx. 4 mph (7 km/h).

Responding to warning message

PASM faults are displayed on the instrument cluster.

Porsche Communication Management (PCM)

Brief overview - PCM

This brief overview does not replace the complete information provided in this section.

Safety messages and warnings, in particular, are not replaced by this brief overview.

Fig. 145: PCM rotary push button and volume control

Fig. 146: Areas of the touch display

What do I want to do?	What do I have to do?	Where?
Operate PCM	▶ Operate the PCM with the rotary push button **A**.	▷ p. 218
Switch on PCM	▶ Switch on the ignition or press volume control **B**.	–
Switch off PCM	▶ Switch off the ignition or press and hold volume control **B**.	–
Adjust the volume	▶ Turn volume control **B**. Mute: Press volume control **B** briefly.	–
Call up and use content from main and submenus	▶ Use menu area **C** and interaction area **E**.	▷ p. 217
Use search function and options, display connection and status symbol, navigate back	▶ Use **D** status area.	▷ p. 217
Call up home screen	▶ Select **D** in the status area.	▷ p. 220
Call up and use the Info widget	▶ Open and use the Info widget **F** in all menus.	▷ p. 220

What do I want to do?	What do I have to do?	Where?
Configure home screen/Info widget	▸ ▸ Options ▸ **Configure Home/Configure Info Widget**	▷ p. 220
Call up Set-up wizard	When you start the PCM for the first time, the **Set-up wizard** is displayed and guides you through important steps for configuring the PCM. ▸ **SET** ▸ **Set-up wizard**	–
Activate/deactivate Private mode	▸ **SET** ▸ **Porsche Connect** ▸ **Private mode** ▸ **Activate private mode/Deactivate private mode**	▷ p. 223
Change system and vehicle settings	▸ **CAR** ▸ **CONTROL**	▷ p. 285

Touch display in dashboard

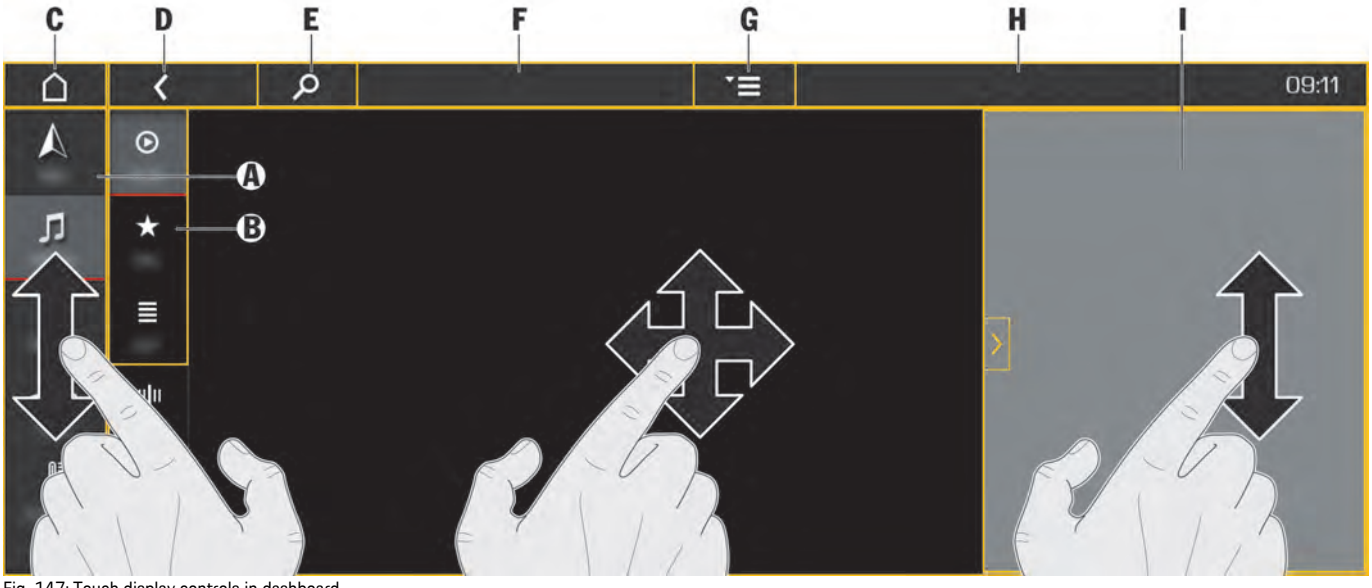


Fig. 147: Touch display controls in dashboard

A – Main menu

B – Submenu

Depending on the setting, the submenu is hidden and appears when your hand approaches the touch display.

▷ Please see chapter "Vehicle Settings" on page 285.

C – Home screen

Factory set and individually set functions are displayed.

Content from different categories can be individually grouped in tiles. A tile contains either a direct jump to the relevant menu or direct access to a function. A total of six different layouts can be configured.

D – Back

E – Context dependent search

F – Header with quick selection

e.g. display of the selected media source. Tap to open the quick selection.

G – Options and short options (most important settings) for each menu item

H – Connection and status symbols

e.g, display of different functions and temperature or time display. Tap to open the quick selection.

I – Info widget

When ◀ is opened, the factory set and individually set functions are displayed. Swipe vertically to change Info widget.

Content from different categories can be individually grouped in tiles. A tile contains either a direct jump to the relevant menu or direct access to a function. A total of three different layouts can be configured.

Important information on operation

The Porsche Communication Management (PCM) is the central control unit. To preserve the vehicle battery, the PCM switches off automatically a few minutes after the ignition is switched off.

For safety reasons, some functions are only available when the vehicle is stationary.

⚠ WARNING Configuring settings and operating while driving

Configuring settings and operating the multifunction steering wheel, infotainment system, etc. while driving can distract you from the traffic. You may lose control of the vehicle.

- Only operate these components while driving if the traffic situation allows.
- If in doubt, stop in a safe place and only carry out extensive operations and settings while the vehicle is at a standstill.

Operating the touch display

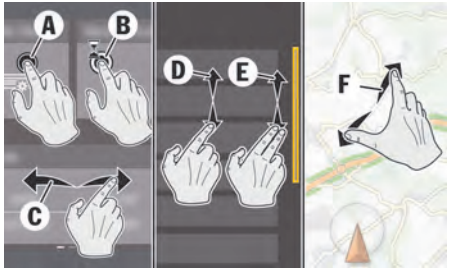


Fig. 148: Operating the touch display

A – Tap (select)

Briefly tap the touch display with your finger. Example: Select function or activate/deactivate checkbox.

B – Long press

Press the touch display with your finger for longer. Example: Save station as a favorite in the Media main menu.

C – Horizontal swipe

Swipe the touch display horizontally with your finger. Example: Scroll favorites horizontally.

D – Vertical swipe (scroll and switch)

Swipe the touch display vertically with your finger. Example: Search through lists manually or switch the Info widget.

E – Vertical swipe (scroll)

Swipe the touch display vertically using two fingers to tilt the map in the Navigation main menu.

F – Zoom

Move two fingers further apart or closer together. Tap the touch display twice to zoom in on a section.

Operating the rotary push button

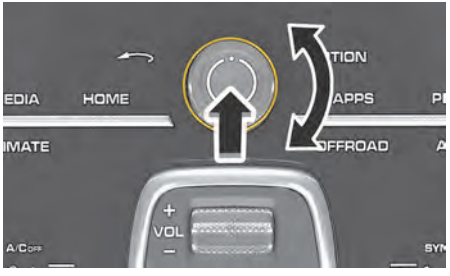


Fig. 149: Operating the rotary push button

1. Turn the rotary push button until the desired function is highlighted.
2. Press the rotary push button to activate the highlighted function.

Opening menus

Open the main menu

- Press the button in the center console (e.g. **NAV**) or in the touch display (e.g. **NAV**).

Calling up submenu

- Select menu item (e.g. **MAP**) in the touch display.

Opening settings for each menu item

✓ Desired menu is selected.

- Select options.

Settings and further functions of the relevant menu are displayed.

Setting display of time or temperature

▶ Select Time 9:11 or Temperature in the headline to adjust the display.

To adjust the PCM and the display brightness:

▷ Please see chapter "Vehicle Settings" on page 285.

Entering text and characters

As soon as text or characters need to be entered, an input field appears, e.g. for entering a destination or search term.

You can set the keyboard language in the PCM.

Fig. 150: Touch display keyboard

A Current cursor position
B Change between letters, numbers and special characters
C Show and hide the keyboard
D Freehand entry (enter letters or characters using the touch display)
E Adapt keyboard (country-dependent availability)
F Insert space
G Confirm entry
H Delete entry
I Results list
J Voice input
K Integrated search
L Online search (availability dependent on country)

There are various options for entering text and characters:

Entry via the keyboard

1. Select input field.
   The touch display keyboard appears.
2. Enter desired text or characters.
3. Press the desired letters for longer to enter accents umlauts etc.
   A window then opens containing accents, umlauts etc. for these letters.

Making entries using the rotary push button

1. Turn the rotary push button (Fig. 149) until the desired letter or character is highlighted.
2. Press rotary push button to apply the highlighted letter or character.
3. Use the button ↩ to jump from character input to results list.
4. Use the button ↩ to jump from the results list to character input field.

Entry via freehand writing.

The freehand writing feature has handwriting recognition and enables you to write text and characters directly with your finger.

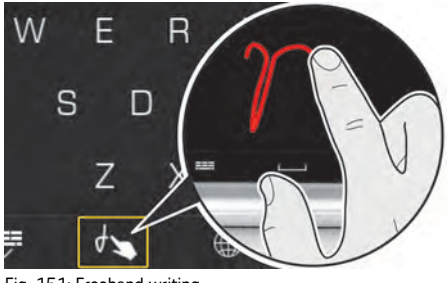


Fig. 151: Freehand writing

1. Select to open the freehand text field.
2. Write the desired characters with your finger.
3. To enter a space, swipe your finger from left to right.
4. To delete an entry, swipe your finger from right to left.

Entry via voice control

Text and numbers can also be entered using voice control (e.g. for dialing a phone number or entering a navigation destination).

▷ Please see chapter "Voice control" on page 287.

Home screen and Info widget

Fig. 152: Configuring Home screen

Configuring Home screen

1. ▸ Options ▸ **Configure Home**
2. Select, hold and move the desired category into any tile in the left-hand layout via drag & drop.
3. Swipe in the tile to select the desired contents.
4. If you wish to remove a tile from the left-hand layout, move the relevant tile upwards using drag & drop or replace it with another tile.

The Home screen layout can be changed under **Switch layout**.

Information

A tile can also be moved to any other tile (drag & drop).

Deleting a tile in Home screen

▸ ▸ Options ▸ **Activate delete mode**

Configuring Info widget

1. ▸ Options ▸ **Configure Info Widget**
2. Select, hold and drag the desired category into any tile in the left-hand layout via drag & drop.
3. Swipe in the tile to select the desired contents.
4. If you wish to remove a tile from the left-hand layout, move the relevant tile upwards using drag & drop or replace it with another tile.

The Info widget layout can be changed under **Switch layout**.

Information

A tile can also be moved to any other tile (drag & drop).

Deleting a tile in Info widget

▸ ▸ Options ▸ **Configure Info Widget** ▸ Options ▸ **Activate delete mode**

Calling up Manual in PCM

✓ Vehicle is stationary.

▸ **CAR** ▸ **CONTROL** ▸ **Manual**

Notes on ports and externally connected devices

– If a storage device contains a large number of files, folders or playlists, it may take longer to load media tracks for the first time.
– During playback, audio files are automatically displayed with additional saved information (e.g., artist, track, album cover). If this information is not available on the medium in question, an available Internet database is used. Nonetheless, in certain cases it may not be possible to display the individual additional information.
– Do not use USB extension cables or adapters. These impair functionality.
– USB hubs are not supported.
– Porsche will not assume any liability for damaged or lost files or media.
– At unusually high or low outside temperatures, playback of a CD/DVD may be temporarily impossible. To protect the CD/DVD and the drive, a thermal protection circuit is installed.
– The PCM may not always be able to play back CDs/DVDs that have copy protection or do not conform to the standard.

Technical data on supported media and file formats:

▷ Please see chapter "Porsche Communication Management (PCM)" on page 351.

Interfaces

Using interfaces in the glove compartment and armrest

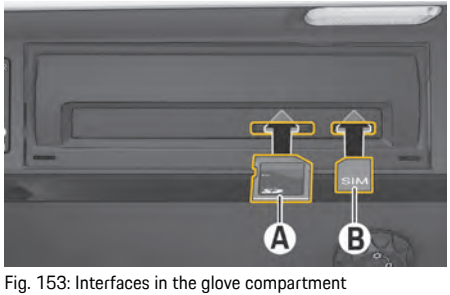


Fig. 153: Interfaces in the glove compartment

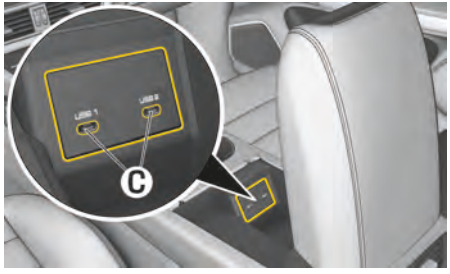


Fig. 154: Interfaces in the armrest

A SD card/SD card reader
B SIM card/SIM card reader
C USB ports (Type C)

Inserting an SD card

NOTICE

Risk of damage to the PCM due to incorrect use of SD cards.

If you are using SD multi-component cards, there is a risk of the SD card falling out of the adapter due to vibration, so that the individual components of the card may remain stuck in the SD card reader.

- Only use single-component SD cards.

1. Insert SD card **A** into the SD card reader with the printed side facing upward until it engages.
2. Press the SOURCE button and select the desired media source.

Removing an SD card

- Press on the inserted SD card **A** and remove it.

Inserting and removing a SIM card

▷ Please refer to the Chapter "Porsche Connect" in the on-board Owner's Manual.

Connecting an external device via USB

1. Open the armrest.
2. Connect an external device (e.g. iPod, USB storage medium) to the USB port (Type C) **C**.
3. Press the SOURCE button and select the desired media source.
4. Adjust the volume on the external device and on the PCM as required.

Additional USB ports (Type C) are available on the rear control panel.

Using the DVD changer in the luggage compartment

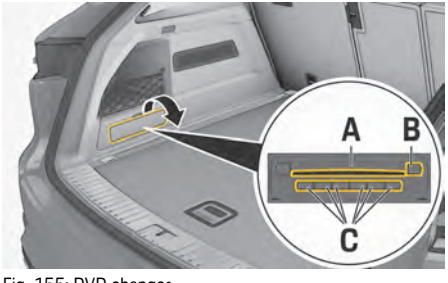


Fig. 155: DVD changer

A CD/DVD slot
B CD/DVD load button
C CD/DVD position button

⚠ CAUTION Risk of injury

Danger from invisible laser radiation if the housing is opened or is damaged. The DVD changer is a Class 1 laser product.

- Do not open the housing. Any maintenance work required must be performed exclusively by qualified customer service specialists.

Inserting and loading a CD/DVD

NOTICE

Risk of damage to the DVD changer owing to incorrect use of CDs/DVDs

- Only use standard circular CDs/DVDs with a diameter of 12 cm.
- Only hold CDs/DVDs by the edges. Do not touch the unprinted side.
- Keep the CDs/DVDs clean and clean them if necessary.
- Never stick anything to the CD/DVD.
- Do not bend CDs/DVDs.
- Do not force CDs/DVDs into or out of the drive.

1. Press the CD/DVD load button **B**.
   As soon as a CD/DVD can be loaded, the light indicator in the CD/DVD slot **A** flashes green. If the CD/DVD changer is not ready, the light indicator in the CD/DVD slot **A** lights up red.
2. Insert the CD/DVD with the labeled side facing up into CD/DVD slot **A** until it is automatically pulled in.
   The CD/DVD is automatically loaded in the first available position. The light indicator of the relevant position button **C** flashes.
   – or –
   To load the CD/DVD in a particular position, press the relevant position button **C** and push the CD/DVD into the CD/DVD slot **A**.

Removing a CD/DVD

1. Press button ⏏.
2. Press the button of the CD/DVD to be ejected.
3. Remove CD/DVD.
4. To eject all CDs/DVDs, press button ⏏ and keep it pressed for approx. 3 seconds.

Porsche Connect

Various use options are available depending on model, country and equipment. The features described here are therefore not available in all models, countries and equipment versions.

Depending on the country, the data connection can be established using the integrated SIM card, an external SIM card or an external WiFi hotspot. The currently active data connection is displayed in the status line of the PCM and in the Device Manager.

▷ Please see chapter "Porsche Communication Management (PCM)" on page 215.

▷ Please see chapter "Device Manager" on page 106.

Establishing data connection via embedded SIM card (availability dependent on country)

✓ There is **no** SIM card in the SIM card reader.

✓ PCM phone is switched on. (**SET** ▸ **Porsche Connect** ▸ **Switch on PCM phone**)

The data connection is established immediately when the ignition is switched on.

Information

If a data connection cannot be established, check the following:

– PCM phone is switched on.

– The vehicle is in an area with sufficient network reception (not a coverage blackspot).

▸ Restart the PCM if necessary.

Displaying data packages

▸ **APPS** ▸ **Data packages**

Information about the booked data package is displayed in some markets.

Establishing data connection via external SIM card

An inserted external SIM card deactivates the function of the embedded SIM card (availability dependent on country). Additional costs may be incurred for the data connection (e.g. due to data roaming).

NOTICE

If you are using a SIM card adapter, the SIM card may fall out of the adapter due to vibrations and components of the card may get stuck in the drive.

▸ Do not use a SIM card adapter.

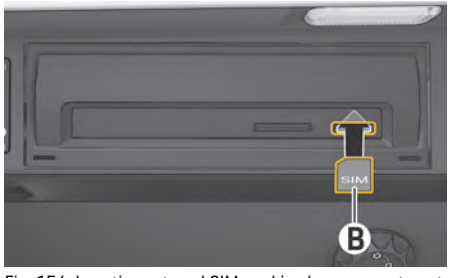


Fig. 156: Inserting external SIM card in glove compartment

✓ PCM phone is switched on. (**SET** ▸ **Porsche Connect** ▸ **Turn on phone features**)

1. Insert external SIM card **B** (mini SIM, dimensions: 0.98 x 0.59 in. (25 x 15 mm)). The missing corner must be pointing front left with the chip facing down.
2. SIM card **with** PIN:
   a. Enter the PIN for the external SIM card and confirm with **OK**.
   b. Select **Store PIN**.
3. Confirm the prompt for establishing the data connection.
   The data connection is established.
4. To remove the external SIM card, press on the inserted card and remove.

Information

If a data connection cannot be established, check the following:

– PCM phone is switched on.

– External SIM card has sufficient data volume and is inserted correctly.

– External SIM card is not damaged and is working properly.

– APN settings (Internet access) are correct. The APN settings can be checked by contacting the network provider.

– In foreign countries: Data roaming is allowed on the external SIM card and enabled in the PCM.

– The vehicle is in an area with sufficient network reception (not a coverage blackspot).

▸ Restart the PCM if necessary.

Selecting access point for external SIM card

If several access points are available, the message **Several access points (APN) are available. Please choose one** appears. A list of available access points (APNs) is displayed.

1. Select the desired access point (APN).
2. If there is no access point configured, you should contact the service provider to obtain the APN settings. To configure the APN

settings, select or in the header (depending on the connection status) ▸ Options ▸ **Data connections** ▸ **Configure APN**.

Establishing data connection via external WiFi hotspot

✓ There is **no** SIM card in the SIM card reader.

✓ Vehicles with embedded SIM card (availability dependent on country): PCM phone is switched off. (**SET** ▸ **Porsche Connect** ▸ **Turn off phone features**)

1. Select or in the header (depending on the connection status) ▸ Options ▸ **WiFi** ▸ **Search for WiFi hotspot**
2. Select a WiFi hotspot (e.g. public hotspot or the cellphone's personal hotspot) and enter WiFi access data in the PCM. Be aware of upper and lower case when entering the data.
   A connection is established to the external WiFi hotspot.

Activating the PCM WiFi hotspot (wireless Internet access)

Up to 8 WiFi devices can be connected to the PCM hotspot.

✓ Data connection is successfully established via the embedded SIM card or external SIM card.

✓ Data connection via embedded SIM card (availability dependent on country): corresponding data package is booked.

1. Select or in the header (depending on the connection status) ▸ Options ▸ **PCM hotspot**.
   The WiFi access data of the PCM (device name and WiFi password) are displayed.
2. Enter the WiFi access data of the PCM in the WiFi settings of the device.
   A connection is established to the PCM's wireless Internet access.

Using Porsche Connect

A data connection is required in order to use Porsche Connect services.

See chapter Porsche Connect.

▷ From page 223

Information

Further information about Porsche Connect (Help videos, Porsche Connect operating instructions and Questions & Answers) can be found at www.porsche.com/connect..

Activate Porsche Connect services

Activation is required before using Porsche Connect services for the first time.

▸ Activate Porsche Connect Services at www.porsche.com/connect.

Using services in the navigation system and voice control system

– Online search when entering navigation destinations and loading Portal List POIs or other point of interest categories from My Porsche.
– Additional map display.
– Real-time traffic provides information on accidents, road works, traffic flow information and other incidents from the Internet.
– Dictate online language search as well as messages.

Using services in the APPS menu

▸ Select **APPS**.
Available services are displayed.

Logging Porsche Connect user (Porsche ID) into the PCM

The Porsche ID is linked to the PCM using a pairing code. This is required for using some Connect services in order to retrieve personal settings from My Porsche.

1. **APPS** ▸ Options ▸ **Porsche ID settings** ▸ **Manage Porsche ID**
2. Enter the pairing code that is displayed under My Porsche after successful activation of the services.

Managing Porsche Connect user (Porsche ID) in the PCM

✓ A Porsche Connect user has been created and registered.

▸ **APPS** ▸ Options ▸ **Porsche ID settings** ▸ Select the desired action:

– **Link new Porsche ID**
– **Remove**
– **Settings**
– **Logout Porsche ID**: The user currently logged in is logged out.

Displaying service overview

▸ **APPS** ▸ Options ▸ **Service overview**
Information about the services purchased and the contract duration is displayed.

Using Porsche apps

▷ Please see chapter "Apps" on page 225.

Information

– The Porsche Connect services (including the Car Connect services, but not the Safety and Security services) offer a free inclusive period, which varies in length for each services package and country, but is always at least 3 months. Further information about the free inclusive periods as well as subsequent costs and information about the availability of individual services for your country is available online at **www.porsche.com/connect** or from your authorized Porsche dealer.
– Depending on the country, the Porsche Connect services can be used via the embedded SIM card or a data-enabled external SIM card. A separate, fee-based contract with a cellphone service provider is required for the external SIM card.
– Additional costs may be incurred for receiving data from the Internet, depending on the cellphone rate plan, particularly when the system is used in foreign countries. We recommend a data flat rate.
– Service availability and scope, as well as service providers, may vary from country to country, model year, device and tariff.

Changing Porsche Connect settings

▶ **SET** ▶ **Porsche Connect** ▶ Select the desired setting:

– **Porsche ID settings**
– **Remote access authorization**: Prerequisite for using service control programs (My Porsche and apps).
– **Turn on phone features**/**Turn off phone features**: Switch PCM phone on or off.
– Activate or deactivate **Private mode**.

▷ Please see chapter "Apps" on page 225.

Apps

Various apps are available for your vehicle, depending on the country (download from Apple App Store or GOOGLE® Play Store).

WARNING Configuring settings and operating while driving

Configuring settings and operating apps while driving can distract you from the traffic. You may lose control of the vehicle.

▶ Only use apps and configure settings while the vehicle is stationary.

Porsche Connect App[1]

The app provides a means of communication between vehicle and cellphone.
Vehicle-specific information can be retrieved via the cellphone and selected vehicle settings can be made via the app. Personal POIs (Points of Interest), destinations from the address book or calendar entries can be transferred to the PCM from the cellphone. The vehicle position can be retrieved via the app. In the personal area of the app, information is stored and settings can be changed.

Connecting the app to the PCM via WiFi and opening it in the PCM

✓ The app is installed on your cellphone (download from Apple App Store or Google® Play Store).
✓ The app is started.
✓ The cellphone WiFi function is activated.
✓ The PCM WiFi function is activated.

Fig. 157: Opening the Device Manager

1. Display the WiFi access data of the PCM and establish a WiFi connection between your cellphone and the PCM.
   a. In the headline or (depending on the connection status) ▶ Options ▶ **Vehicle hotspot**
   Hotspot name and PCM **password** are displayed.
   b. Enter the WiFi access data of the PCM in the WiFi settings of the cellphone.
2. Select **Apps**.
   Available app contents are displayed.

1. Name and functions subject to changes

Disabling communication between vehicle and app (privacy mode)

When private mode is activated, communication between the vehicle and app as well as My Porsche is suppressed. No vehicle-specific information is transmitted. This means that no vehicle settings can be configured via the app or My Porsche.

▶ **SET** ▶ **Porsche Connect** ▶ **Private mode** ▶ **Activate private mode/Deactivate private mode**

If there is no active contract for the vehicle, the **Porsche Connect** menu item will be grayed out. Even if private mode is activated, location information for the vehicle can be transmitted in the event of an emergency call or theft.

▶ Please inform all individuals using the vehicle that the **Private mode** function can be activated.

Information

Since it is possible to access vehicle-specific data and other functions through the app, it is recommended that this data be protected from unauthorized third-party access. Using the app could incur additional costs with your cellphone service provider, as the data is transmitted via cellphone networks.

Porsche Offroad Precision App[1]

The app, which is available in some countries, can be used to connect to the vehicle via a wireless local network (WiFi). This enables driving data to be displayed, recorded and analyzed directly on a cellphone. You do not necessarily need a SIM card/data connection to use the app.

For information on establishing a WiFi connection in the PCM:

▷ Please see chapter "Porsche Connect" on page 223.

Detailed information on installation and app functions can be found in the app itself and at www.porsche.com or from your authorized Porsche dealer.

DANGER Loss of control over the vehicle

Driving inappropriately for the conditions and risky maneuvers may lead to loss of control over the vehicle.

▶ Adapt your driving style and maneuvers to your personal ability, the road and weather conditions, as well as the traffic situation.

▶ Only use the app on closed circuits away from public roads.

Information

Since vehicle-specific data can be accessed using the app, it is recommended to protect this data from unauthorized access by third parties.

Porsche "Good to know" app[1]

The app provides you with detailed information for your vehicle (from model year 2013). Get to know your Porsche better. Following installation, choose your Porsche model and download the relevant content package.

The app comprises the following features:

– Manual with all vehicle details
– Video instructions for your vehicle functions
– Information about Porsche Connect
– Interactive graphics
– Practical tips on the vehicle
– Exterior and interior images of your vehicle
– Keyword search function (index search)
– Porsche dealer search

1. Name and functions subject to change

Porsche Hill Control (PHC)

Porsche Hill Control (PHC) is an assistance system that helps the driver when driving slowly downhill (e. g. on steep slopes or on wintry mountain roads) both when driving forward and reversing. The system limits the speed through targeted braking at all four wheels. ABS remains active to prevent the wheels from locking.

⚠ WARNING Reduced braking effect

As with all brakes, the braking effect is impaired on slippery surfaces (e.g. on icy roads or loose surfaces), which can lead to accidents.

- Always adapt your driving style to the driving situation.

Using Porsche Hill Control (PHC)

Selecting PHC and establishing readiness

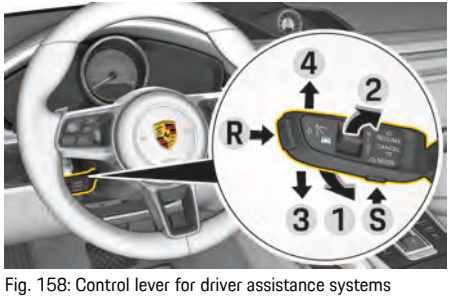


Fig. 158: Control lever for driver assistance systems

R Switch driver assistance systems on/off
S Switch between driver assistance systems
1 Set readiness/increase speed
2 Reduce speed
3 Interrupt PHC operation (CANCEL)
4 Resume PHC operation (RESUME)/restore readiness

✓ Control lever for driver assistance systems is switched on (button **R**).

1. Press button **S**.
   The options menu for the driver assistance systems appears on the instrument cluster.
2. Select **PHC** using the **left** rotary knob on the steering wheel and press to confirm.
   Porsche Hill Control (PHC) is selected.

PHC selected
The gray symbol on the instrument cluster indicates that PHC is selected.

- Press the control lever forward (Fig. 158) **1**.
  Porsche Hill Control (PHC) is ready.

PHC readiness
The white symbol on the instrument cluster indicates readiness. The requirements for activating PHC are met. There is no speed stored.

Activating PHC operation

✓ Porsche Hill Control (PHC) is ready.
✓ The vehicle is traveling at more than approx. 0 mph (0 km/h) and less than approx. 20 mph (30 km/h).
✓ The gradient must be at least approx. 7%.

PHC control active
The red symbol on the instrument cluster indicates that control is active. A speed is stored.

Information

The active system switches back to operational readiness when the gradient is less than approx. 7%.

Changing the speed

✓ PHC is active.

- Press the brake or accelerator pedal.
  – or –
- Press the control lever forward (Fig. 158) **1** (increase speed) or pull it back (Fig. 158) **2** (reduce speed).

Switching off PHC

- Press button **R** on the control lever.

Porsche Stability Management (PSM)

PSM is an active control system for stabilizing the vehicle in extreme driving situations. It is automatically enabled when the engine starts. PSM makes use of the automatic brake differential (ABD) and the anti-slip regulation (ASR) as well as the functions of the anti-lock braking system (ABS) and the engine drag torque control (EDC).

⚠ WARNING Loss of control over the vehicle

The PSM cannot reduce the risk of accidents due to inappropriate speed.

The increased safety that is provided should not induce you to take greater risks with your safety. The limits set by the laws of driving physics cannot be overridden by PSM.

- Despite the advantages of PSM, drivers remain responsible for adapting their driving style and maneuvers to the road and weather conditions, as well as the traffic situation.

The events below inform the driver of PSM control operations:

- PSM warning light on the instrument cluster flashes.
- Hydraulic noises are audible.
- Vehicle decelerations and modification of steering wheel forces through targeted brake intervention.
- Reduced engine power.
- Pulsing brake pedal and changes in brake pedal position when braking. To achieve full vehicle deceleration, the foot pressure must be increased after the brake pedal starts to pulse.

Automatic brake differential (ABD)

If one wheel on a driven axle starts to spin, it is braked so that the other wheel on the same axle can be driven.

Anti-slip regulation (ASR)

Anti-slip regulation prevents wheels from spinning through targeted adjustment of engine power, thereby ensuring good road-holding ability and stable vehicle handling.

Engine drag torque control (EDC)

In conditions of excessive slip, the engine drag torque control system prevents all driven wheels from locking up when the vehicle is overrunning. This is also the case when shifting to a lower gear on a slippery road.

Steering torque pulse

Steering torque pulse provides the driver steering assistance when braking on roads with varying friction values. Additional steering forces also assist the driver during countersteering.

Activating sport PSM

✓ Vehicles with Sport Chrono package.

In sport PSM mode, the system operates in a particularly sporty mode.

⚠ WARNING Restricted PSM support

In PSM Sport mode, the support provided by PSM is restricted in critical driving situations outside the ABS control range.

- Always leave PSM Sport switched off during "normal" driving operation.
- Never activate PSM Sport when driving with a spare wheel.

- Press button briefly.
  The light indicator on the button and the PSM OFF warning light in the instrument cluster come on.
  A message stating that PSM Sport is activated appears on the instrument cluster.

Switching off PSM

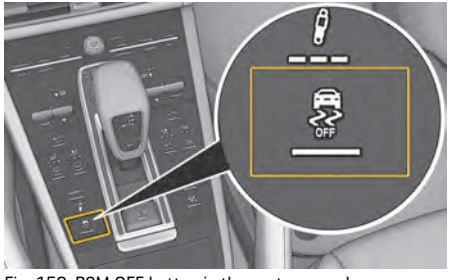


Fig. 159: PSM OFF button in the center console

⚠ WARNING No PSM support

When PSM is switched off, the support provided by PSM is absent in critical driving situations outside the ABS control range.

- Always leave PSM switched on during "normal" driving operation.
- Never switch PSM off when driving with a spare wheel.

- Press button for at least two seconds.

PSM is switched off after a brief delay.
The light indicator on the button and the PSM OFF warning light in the instrument cluster come on.
A message stating that PSM is deactivated appears on the instrument cluster.

Information

When braking in the ABS control range, the vehicle is stabilized even when PSM is switched off. One-sided spinning of the wheels is prevented even when PSM is switched off.

However, in exceptional situations it can be advantageous to temporarily switch off PSM:
- On loose ground and deep snow.
- When "rocking the vehicle free".

Information

When PSM Sport mode is active, it is only possible to switch to PSM OFF mode if the PSM was activated beforehand.

Switching PSM back on

- Press button.
  PSM is immediately active.
  The light indicator on the button and the PSM OFF warning light on the instrument cluster go out.
  A message stating that PSM is activated appears on the instrument cluster.

Responding to warning symbols

For information on the PSM warning light:

▷ Please see chapter "Warning and Information Messages" on page 293.

ABS brake system

WARNING Loss of control over the vehicle

The ABS cannot reduce the risk of accidents due to inappropriate speed.

The increased safety that is provided should not induce you to take greater risks with your safety. The laws of physics for driving cannot be overridden even with ABS.

- Despite the advantages of ABS, drivers remain responsible for adapting their driving style and maneuvers to the road and weather conditions and to the traffic situation.

ABS ensures:
- Full steering control: Vehicle remains steerable
- Good driving stability: No skidding due to locked wheels
- Optimal braking distance: Shortening of braking distance in most cases
- Prevention of wheel locking: No flat spots on the tires

Function

The decisive advantage of ABS lies in the driving stability and maneuverability of the vehicle in hazardous situations.

ABS prevents the wheels from locking during full braking on virtually all road surfaces until just before the vehicles come to a standstill.

ABS begins to take control as soon as one wheel shows a tendency to lock.

The controlled braking process is comparable to cadence braking in very rapid succession. The driver is warned to adapt the driving speed to the road conditions by a pulsing brake pedal and a "juddering noise".

Full braking is necessary:

- Fully depress the brake pedal during the entire braking operation, despite the pulsing pedal. Do not reduce the braking pressure.

Responding to warning symbols

For information on the ABS warning light:

▷ Please see chapter "Warning and Information Messages" on page 293.

Multi-collision braking

During an accident, multi-collision braking can help the driver reduce the risk of skidding and further collisions during the accident through automatically initiated braking.

Prerequisites

Multi-collision braking works exclusively:
- During front, side, and rear-end collisions.
- When the airbag control unit detects an appropriate activation threshold during an accident.
- During an accident at a driving speed above approx. 6 mph (10 km/h).

Information

The vehicle is decelerated automatically by the PSM system, provided the hydraulic brake system, PSM, and electrical system remain undamaged and operational during the accident.

Exceptions

The following activities prevent automatic braking in the event of an accident:

– When the driver significantly depresses the accelerator pedal.
– When the braking pressure exerted by the driver on the brake pedal is stronger than the brake pressure applied by the system.

Porsche Vehicle Tracking System

PVTS is a GSM/GPS-based tracking system that allows a Security Operating Center (SOC) to locate the vehicle if it is stolen. It can then be found by the authorities.

Information

On vehicles with the smartphone app or Car Connect (depending on country), certain settings can be implemented directly using the app.

Detailed information on installation, the functions and management of the contract can be found at: www.porsche.com/connect.

Scope of supply and initial activation

PVTS is tested by the authorized Porsche dealer and activated together with the vehicle owner.

Following activation, the vehicle owner will receive important documents such as the phone number of the local Security Operating Center (SOC) and the service provider.

Detailed activation information can be obtained at www.porsche.com/connect or from an authorized Porsche dealer.

Functions

Vehicle tracking is only carried out if the vehicle is stolen. In this case, a notification is sent to the specified cellphone number. The location of the vehicle is not specified in the notification for safety reasons.

- Contact the Security Operating Center (SOC) if your vehicle is stolen. In addition, report the theft to the relevant police authority.

The following alarms can be set:

- **Unauthorized movement of the vehicle**: The vehicle is moved with the ignition switched off. On vehicles with Driver Card: the vehicle is moved without a Driver Card.
- **Sabotage**: PVTS was used without authorization.
- **Intrusion alarm**: The alarm system was triggered and has been active for more than 15 seconds.

Information

- There is no guarantee that a theft will be detected under all circumstances.
- The PVTS alarm can be triggered even if the vehicle battery is flat.

▷ Please see chapter "Battery" on page 72.

Information

Note for Belgium / Luxembourg:

If the Driver Card remains in the shut-off vehicle for more than 30 minutes, it will become invalid. In order to reactivate the card, the disarming mode must be accessed via the app, customer portal, or Service Operating Center (SOC).

Information

- The Security Operating Center (SOC) can prevent the engine from starting if the vehicle has been stolen.
- On vehicles with Porsche Connect or Car Connect smartphone app (depending on country), access to the vehicle using the app or via My Porsche is blocked in the event of theft.

Operating PVTS without Driver Card

When PVTS is operated normally, no intervention on your part is required.

Transport

If a vehicle is transported with the ignition switched off (e.g., on a ferry), activate transport mode.

If the vehicle is not transported in transport mode, the system may trigger a false alarm, which is also subject to charge (further information can be found at www.porsche.com/connect).

Activating and deactivating transport mode

- Contact the Security Operating Center (SOC) before transporting the vehicle and when you have finished transporting the vehicle.

– or –

- Via the Porsche Connect smartphone app or at www.porsche.com/connect before transporting the vehicle and when you have finished transporting the vehicle.

Service

PVTS Plus must be set to service mode in the following situations:

- During customer service (e.g., for regular servicing).
- When the vehicle battery is disconnected.

If the vehicle is not serviced in service mode, the system may trigger a false alarm that you will be billed for (for further information, please visit www.porsche.com/connect).

Activating and deactivating service mode

- Contact the Security Operating Center (SOC) before having the vehicle serviced and after the vehicle has been serviced.
- When your vehicle is being serviced, please inform the relevant employee at the authorized Porsche dealer that your vehicle is equipped with PVTS.

Rear spoiler

✓ Cayenne Coupé

⚠ WARNING Changed aerodynamics

A warning message on the instrument cluster regarding the rear spoiler malfunction indicates that driving stability will be impaired at higher speeds through the increased rear-axle lift.

- Adapt your driving style and speed to the altered vehicle handling.
- Have the fault repaired by an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

The rear spoiler improves driving stability at high speeds and reduces fuel consumption at low speeds.

Automatic mode

Automatic extension and retraction of the rear spoiler depends on various conditions.

The rear spoiler **automatically** extends at approx. 56 mph (90 km/h).

The rear spoiler **automatically** retracts at approx. 37 mph (60 km/h).

If the rear spoiler control fails, a warning message appears on the instrument cluster.

Service position

⚠ CAUTION Retracting and extending the rear spoiler

When the rear spoiler is manually extended or retracted while the vehicle is stationary, body parts can become trapped between the moving spoiler and stationary vehicle parts.

- Make sure that no persons are within the range of movement of the rear spoiler.

NOTICE

Risk of damage to the rear spoiler.

- Do not push the vehicle by the rear spoiler.
- Retract the rear spoiler before using an automatic car wash.

The rear spoiler can be extended and retracted manually via the PCM for manual cleaning purposes.

Extending the rear spoiler

✓ Vehicle is stationary.

✓ Ignition on.

1. Select **CAR** ▸ **DRIVE** ▸ **Spoiler**.
2. Press switch **Spoiler**.
   The spoiler is extended. The spoiler position is indicated in the vehicle model.

- After washing, retract the rear spoiler.

Retracting the rear spoiler

1. Select **CAR** ▸ **DRIVE** ▸ **Spoiler**.
2. Press and hold the **Spoiler** button until the rear spoiler has reached its end position.
   The rear spoiler is in automatic mode.

Refueling

General information

DANGER Refueling Fires Phones

The RF energy from a cellphone can cause sparking on bare metal, much like aluminum foil in a microwave oven. The spark could ignite gasoline fumes present while refueling.

- Do not use a cellphone while pumping gas.

DANGER Refueling Fires Static Electricity

Static discharge from your body can ignite gasoline fumes present when you get back out of the vehicle and touch the fuel nozzle.

- Do not re-enter the vehicle while pumping gas.

WARNING Risk of fire during refueling

Fuel is highly flammable, can deflagrate or explode.

- Fire, naked flames and smoking are prohibited when handling fuel.

WARNING Fuel vapors and skin contact with fuel

Fuel and fuel vapors are harmful to health.

- Do not inhale fuel vapors.
- Avoid contact with skin and clothing.

Information

In some cases, fuels have a high sulfur content. As a result, under certain driving conditions, combustion in the engine can lead to output of unpleasant odors (known as the "odor of rotten eggs"). Porsche is not responsible for this circumstance and it does not indicate a vehicle fault.

When the ignition is on, the fuel level is displayed on the instrument cluster.

If a model-dependent remaining quantity is not reached, a warning message will appear on the instrument cluster.

- Refuel at the next opportunity.
- ▷ Please see chapter "Technical Data" on page 334.

Selecting suitable fuel

NOTICE

Unsuitable fuels may damage the engine as well as the fuel and exhaust system.

- Only use fuel according to the specification below.
- Do not **use any fuels containing methanol.**

NOTICE

Unleaded fuels may not be available outside the continental U.S. and Canada.

- Do not take your car to areas or countries where unleaded fuel may not be available.

Information

Information regarding fuel quality can normally be found on the fuel pump. Service station employees can also provide information.

The engine is designed for unleaded fuels without metallic additives.

Engine	Recommended fuel	Alternative fuel
3.0 liter V6 turbo engine	min. 95 RON/ 85 MON (90 CLC/AKI)	
All other engines	min. 98 RON/ 88 MON (93 CLC/AKI)	min. 95 RON/ 85 MON (90 CLC/AKI)

The engine is suited to operation with fuel containing up to 15% ethanol. The use of fuels containing ethanol may lead to an increase in fuel consumption.

Information

If the recommended fuel is not available, in an emergency, the vehicle can also be fueled using **unleaded fuel without metallic additives, with octane levels of 91 RON/82.5 MON (86 CLC/AKI)**. However, this may reduce performance and increase fuel consumption.

- **Refuel with unleaded fuel without metallic additives, with octane levels** of **at least 91 RON/ 82.5 MON (86 CLC/AKI)**.
- Do **not** floor the accelerator pedal when using unleaded fuel with octane levels of 91 RON/82.5 MON (86 CLC/AKI).

Filling with fuel

NOTICE

E-Hybrid vehicles:

If the engine has cut out owing to a lack of fuel, a minimum quantity of fuel must be refilled before the vehicle detects the new fuel level. Otherwise, it would not be possible to restart the engine.

- Refill up to 4 gals (15 liters) of fuel.

NOTICE

Contact with fuels may bleach decorative films.

- Immediately wipe fuel off decorative films.

Fig. 160: Button A: Starting fuel tank ventilation and releasing filler flap (E-Hybrid vehicles)

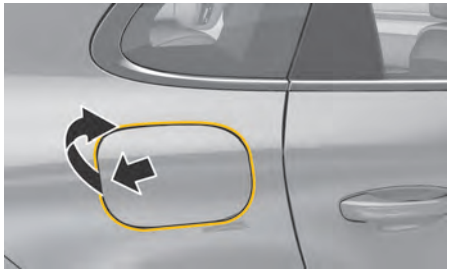


Fig. 161: Opening the filler flap

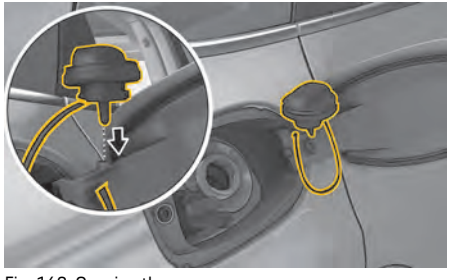


Fig. 162: Opening the gas cap

✓ Engine switched off.

✓ Ignition switched off.

✓ Vehicle unlocked.

- **E-Hybrid vehicles:** Press button **A** in the driver's door to start fuel tank ventilation.
  The fuel tank ventilation status is displayed on the instrument cluster. When fuel tank ventilation is complete, an acoustic signal sounds and the filler flap is released. If fuel tank ventilation is not completed successfully, button **A** can be pressed a second time in order to start fuel tank ventilation again.

1. **E-Hybrid vehicles:** Open released filler flap fully.
   Vehicles without E-Hybrid drive: Open the filler flap by pressing on the rear part of the filler flap.
   The fuel type to be used for the vehicle is printed on a sticker on the inside of the filler flap.
2. Slowly unscrew and remove the gas cap.
3. Place the gas cap in the holder.
4. Insert the pump nozzle fully into the filler neck with the handle pointing downward.
5. Operate the pump nozzle and refuel the vehicle. After the automatic pump nozzle switches off, do not continue to add fuel. The fuel could splash back or overflow when heated.
6. Immediately after refueling, replace the gas cap and turn it until it is heard and felt to engage.
7. Close the filler flap and press on the rear part of the flap until it is heard to engage.

Information

If you lose the gas cap, you must replace it only with an original part.

Emergency release of filler flap

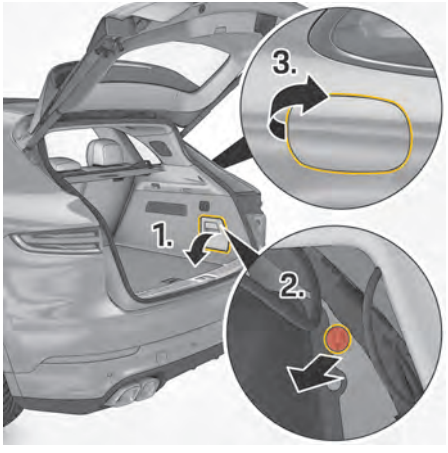


Fig. 163: Performing emergency release of filler flap

In the case of a fault with the electrical release, the filler flap can be opened manually:

1. Carefully remove the right luggage compartment trim panel.
2. Pull the red emergency release button.
   The filler flap is unlocked.
   E-Hybrid vehicles: When unscrewing the gas cap following emergency release, fuel vapors can leak out.

Fuel Evaporation Control

Fuel tank venting

The evaporation chamber and the carbon canister prevent fuel vapors from escaping to the atmosphere at extreme high outside temperatures, when driving abruptly around curves and when the vehicle 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.

Roof Spoiler

✓ Vehicles with extendible roof spoiler

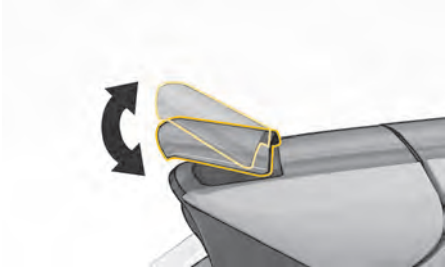


Fig. 164: Roof spoiler

The roof spoiler improves driving stability at high speeds and reduces fuel consumption at low speeds.

Automatic mode

Automatic extension and retraction of the roof spoiler depends on various conditions, e.g. driving speed or if the Panoramic roof is open.

If the automatic control system fails, a warning message regarding the roof spoiler malfunction appears on the instrument cluster.

▷ Please see chapter "Warning and Information Messages" on page 293.

⚠ WARNING Changed aerodynamics

A warning message on the instrument cluster regarding the roof spoiler malfunction indicates that driving stability will be impaired at higher speeds through the increased rear-axle lift.

- Adapt your driving style and speed to the altered vehicle handling.
- Have the fault repaired by an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Manual mode

When the ignition is switched on, the roof spoiler can be extended and retracted manually using the touch display in the dashboard.

Manual extension

- Select **CAR** ▸ **DRIVE** ▸ **Spoiler**.
  The current spoiler position is indicated in the vehicle model.

Information

The selected spoiler position can be stored in INDIVIDUAL mode.

Manual retraction

1. Select **CAR** ▸ **DRIVE**.
2. Current speed < 9 mph (15 km/h): Press and hold **Spoiler** button until the roof spoiler has reached its final position.
   – or –
   Current speed > 9 mph (15 km/h): Press **Spoiler** button briefly.
   The roof spoiler is in automatic mode.

⚠ CAUTION Retracting and extending the roof spoiler

When the roof spoiler is extended or retracted manually while the vehicle is stationary, body parts can become trapped between the moving spoiler and stationary vehicle parts.

- Make sure that no persons are within the range of movement of the roof spoiler.

NOTICE

Risk of damage to the roof spoiler.

- Do not push the vehicle by the roof spoiler.
- Retract the roof spoiler before using an automatic car wash.

Roof system

WARNING Opening and closing the roof system

When opening or closing the roof system, particularly in one-touch mode, parts of the body may become trapped between moving and stationary vehicle parts.

- Make sure that no parts of the body become trapped between moving and stationary vehicle parts.
- Always switch off the ignition when leaving the vehicle.
- Take the vehicle key with you when leaving the vehicle. Uninformed persons (e.g. children) could injure themselves when operating the roof system.
- In case of danger, press the roof system switch in the opposite direction.

NOTICE

Risk of injury when operating the roof system if roof elements are not fitted correctly.

- Check that the roof elements are properly fitted before starting to drive.
- Make sure that there is sufficient clearance between the roof system and the fitted roof elements.

NOTICE Risk of damage to the door storage compartment due to rain.

- Close door storage compartment immediately in the event of rain.

Information

– The roof system has a force limiter. If the roof is obstructed during the closing operation, it will open again immediately.
– The roof system does not function at extremely high vehicle speeds or at extremely low temperatures.

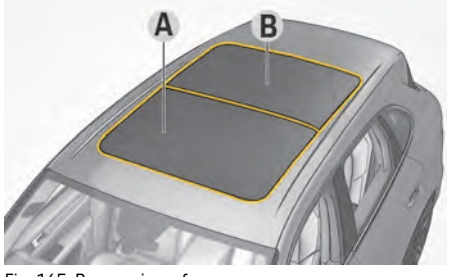


Fig. 165: Panoramic roof

A Sunroof element
B Fixed glass element

Roof element **A** can be moved in the vehicle's longitudinal direction. It can also be raised.
Roof element **B** is a fixed glass element.

Opening and closing the roof system

WARNING Emergency closing of the roof system

During emergency closing of the roof system, the closing force is automatically increased in stages if necessary.

- Make sure that no one can be injured, pinched or crushed.

Information

When the roof system is opened in the tilt position, the sunblind opens automatically by approx. 4 inches (10 cm) and cannot be fully closed manually.

✓ Ignition is switched on.
– or –
✓ The ignition has been switched off, but for no longer than 10 minutes.
✓ The driver's or passenger's door has not yet been opened.

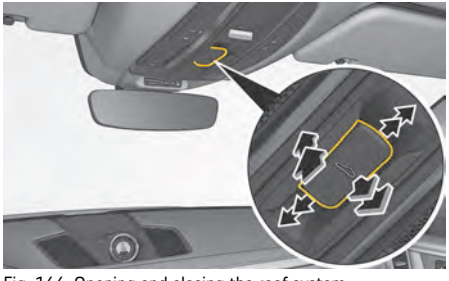


Fig. 166: Opening and closing the roof system

The switch has a **two-stage function**. When the switch is actuated, both stages can be clearly felt due to resistance when pushed or pulled.
Wind noises are possible, depending on the driving speed.

Stage one – manual operation

- Actuate the switch to the first setting in the relevant direction until the desired position is reached.

The process stops when the button is released.

Stage two – automatic operation

- Press or pull the switch all the way to the second setting in the relevant direction.
  The roof system opens as far as the best end position from the point of view of noise or closes automatically.
- Actuate the switch again to stop the roof system at the desired position.

Opening roof system completely

In one-touch mode, the roof system opens as far as the best end position from the point of view of noise (comfort position). To open the roof system completely:

- Actuate the switch again in the opening direction.
  The roof system opens to the final position.
- Wind noises are possible, depending on the driving speed.

Closing after repeated intervention from the force limiter

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

1. Remove the obstruction.
2. Repeatedly press or press and hold the switch in the closing direction until the roof system stops in the closed position.

Opening and closing sunblind

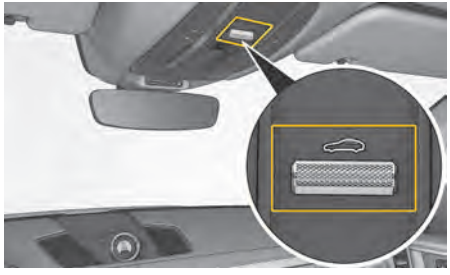


Fig. 167: Opening and closing sunblind

The switch has a **two-stage function**. When the switch is actuated, both stages can be clearly felt due to a resistance when pushed or pulled.

Stage one – manual operation

- Press or pull the switch in the first setting until the required position is reached.
  The process stops when the switch is released.

Stage two – automatic operation

- Briefly pull or press the switch fully to the second setting.
  The sunblind opens or closes automatically to the final position.
- Actuate the switch again to stop the sunblind at the desired position.

Closing roof system and sunblind

– If the sunblind is closed (one-touch operation) while closing the roof system, the sunblind closes to its final position after the roof system has reached its final position.
– If the roof system is closed (one-touch operation) while closing the sunblind, the closing movement of the sunblind will be interrupted.
  The sunblind closes to its final position after the roof system has reached its final position.

Storing final positions of roof system and sunblind

⚠ WARNING Anti-pinch protection deactivated

The roof system and sunblind close with their full closing force. Parts of the body that become trapped between the moving and stationary vehicle parts may be crushed.

- Make sure that no parts of the body become trapped between moving and stationary vehicle parts when closing.

Storing final position of roof system

✓ Vehicle is stationary.
✓ Ignition is switched on.
✓ Roof system closed

- Pull the switch (Fig. 166) on the overhead console downward and hold.
  Saving of the final position starts after approx. 10 seconds.
  The closing and storing process takes a maximum of 45 seconds.

Storing final position of sunblind

✓ Vehicle is stationary.
✓ Ignition is switched on.
✓ Sunblind is closed.

- Press and hold switch (Fig. 167).
  Saving of the final position starts after approx. 10 seconds.
  The closing and storing process takes a maximum of 45 seconds.

Cleaning the sunblind

⚠ WARNING Anti-pinch protection deactivated

The roof system and sunblind close with their full closing force. Parts of the body that become trapped between the moving and stationary vehicle parts may be crushed.

- Make sure that no parts of the body become trapped between moving and stationary vehicle parts when closing.

✓ Vehicle is stationary.
✓ Ignition is switched on.

1. Open the roof system completely.
2. Close the sunblind as far as possible.
3. Press the button for the sunblind (Fig. 167).
   The sunblind starts to close after 10 seconds.
4. Press the button until the sunblind is fully closed.
5. Remove any dirt.

Exiting the cleaning function

- Drive off.
  – or –
  Operate the roof system.
  – or –
  Operate the sunblind.

Closing the roof system in the event of failure of the roof mechanism

To have the roof system repaired:

- Go to a qualified specialized repair shop. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Roof transport system

Transporting objects on the roof

⚠ WARNING Unsecured or incorrectly secured roof transport system or individual load-carrying devices

An unsecured or incorrectly secured roof transport system can become detached from the vehicle while driving and cause serious accidents.

- Individual attachment modules such as ski/snowboard holders or roof boxes must be positioned as centrally as possible relative to the leg supports.
- Check the roof transport system and load-carrying devices before each trip and at regular intervals during longer trips to ensure that they are mounted correctly and securely.
- Re-tighten all fastening screws.

⚠ WARNING Changed vehicle handling

Vehicle handling changes when the roof transport system is mounted and loaded.

- Adapt your driving style.
- Do not drive at a speed of more than 81 mph (130 km/h) when the roof transport system is loaded.
- Do not drive at a speed of more than 110 mph (180 km/h) when the roof transport system is mounted but not loaded.

⚠ WARNING Unsecured or incorrectly secured loads

An unsecured or incorrectly secured load can become detached from the roof transport system while driving and cause serious accidents.

- Secure the load so that it cannot move during the journey.
- Load the roof transport system so that the load does not protrude over the sides of the roof transport system. Never exceed the width of the vehicle.
- Do not use elastic tensioners.
- Position the center of gravity of the load as low as possible with respect to the roof transport system and distribute the load evenly over the load area.

NOTICE

Washing the vehicle in a car wash or failure to observe the overall vehicle height or the maximum permitted gross weight can damage the vehicle or roof transport system.

- Remove the complete roof transport system before washing the vehicle in a car wash.
- Check the overall vehicle height with the roof transport system fitted before driving into areas with limited headroom (e.g. parking garages).
- Do not exceed the maximum permitted roof load, gross weight or maximum axle loads.

Information

- When you are not using the roof transport system, remove it completely from the vehicle in order to save fuel and reduce noise.

Various objects can be transported safely and securely using the roof transport system and additional attachments, e.g. ski/snowboard rack, roof box or bicycle rack.

- Only use roof transport systems that have been tested and approved by Porsche. It is not possible to fit commercially available roof rack systems.

For more information on the roof transport system:

- Contact an authorized Porsche dealer.

Fitting the roof transport system

✓ All Cayenne models except Cayenne Coupé

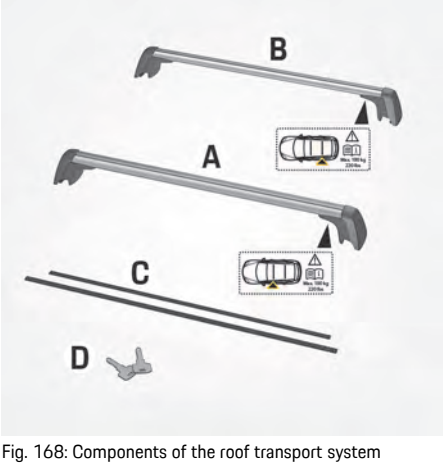


Fig. 168: Components of the roof transport system

A Front carrier (long)
B Rear carrier (short)
C Cover trims
D Key

✓ Roof rail cleaned in the area of the carrier bar supports and carrier bar support surfaces.

1. Unlock the covers counter-clockwise using the key.

Fig. 169: Unlocking the cover

2. Pull the covers upward in two steps until they engage.
   Make sure that the cover is not subjected to any load.

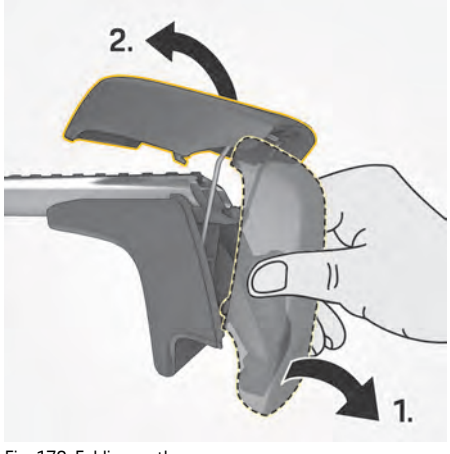


Fig. 170: Folding up the cover

3. Pull out the fastening screws and turn counter-clockwise to the stop.

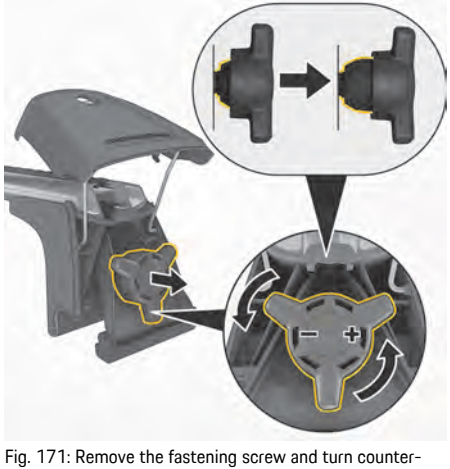


Fig. 171: Remove the fastening screw and turn counter-clockwise.

4. Identify the front and rear carrier bars based on the sticker and carefully place them onto the roof rails.
   Ensure that the sticker is located on the left in the direction of travel.
5. Only fit the locking pin for the carrier bars **A** at the marked areas of the bore **B**.

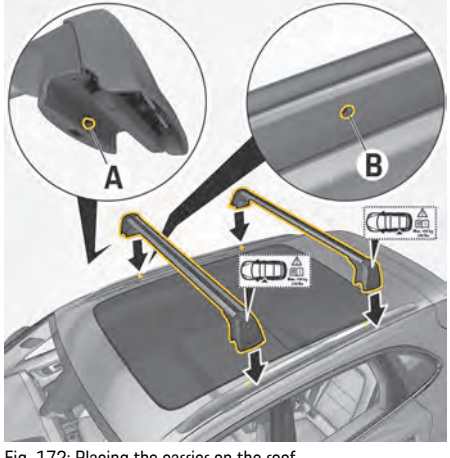


Fig. 172: Placing the carrier on the roof

6. Check that the carrier bars are correctly seated on the roof rail.
7. Tighten the fastening screws **slightly** clockwise, in a diagonally opposite sequence, but do **not yet** tighten completely.
   Make sure that the locking pins and carrier bars are still secure and cannot slip.
8. Tighten the fastening screws clockwise, in a diagonally opposite sequence, until they audibly click and then press them in.
9. Close the covers and lock them clockwise using the key.

Information

- Re-tighten the fastenings after a short journey and check them again at regular intervals.
- The screw connections must be checked more frequently on bad roads. Loosening or loss of mounting components can result in serious accidents.

Fitting the roof transport system

✓ Cayenne Coupé

Fitting for the first time

- The roof transport system should only be fitted for the first time by an authorized Porsche dealer. Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Fig. 173: Components of the roof transport system

A Front carrier (long)
2 locking pins per side (FL/FR)
B Rear carrier (short)
2 locking pins per side (RL/RR)
C Cover trims
D Torque wrench
E Key
F Removal tool for roof catch

✓ Vehicle roof and doors cleaned in the carrier support area and carrier contact surface.

Fig. 174: Removing the roof catches

1. Pull out all roof catches using the removal tool.

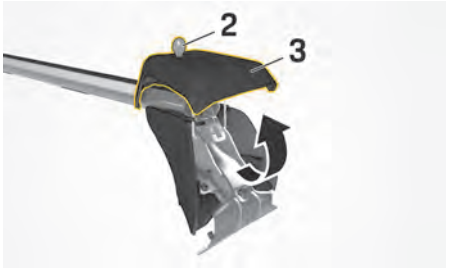


Fig. 175: Unlocking and folding up the cover flaps

2. Unlock the cover flaps with the key.
3. Fold up the cover flaps until they audibly engage.

Fig. 176: Engaging the fastening bracket in the carrier support

4. Unscrew the fastening screw counter-clockwise using the torque wrench, but not completely.

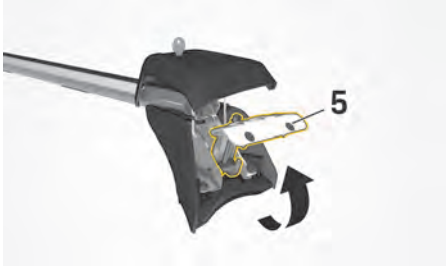


Fig. 177: Swivel the fastening bracket upward and engage it in the carrier support

5. Swivel the fastening bracket upward and engage it in the carrier support.
6. Open the vehicle door.

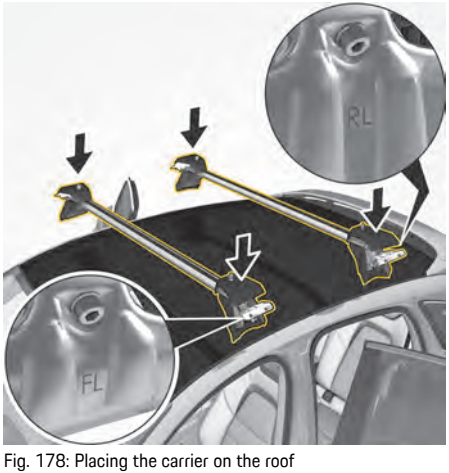


Fig. 178: Placing the carrier on the roof

7. Place the carrier on the roof carefully so that the position mark is on the correct side of the vehicle.
FL Front Left / **FR** Front Right / **RL** Rear Left / **RR** Rear Right.

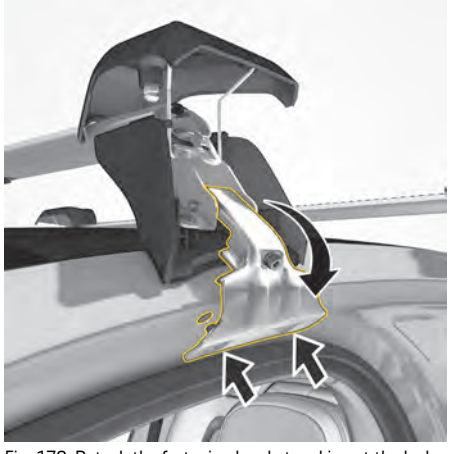


Fig. 179: Detach the fastening bracket and insert the locking pin

8. Disengage the angle bracket and insert the locking pin in the relevant bore on the inside of the roof frame.
9. Push the fastening bracket upwards. If the fastening bracket cannot be pushed upwards without exerting force, realign the carrier.
10. Tighten the fastening screws in the support feet on both carriers **slightly**, but do **not yet** tighten them fully. Make sure that the locking pins are still secure and the carriers cannot slip.
11. Tighten the fastening screws alternately to a torque of approx. 2.6–3.3 lb-ft (3.5–4.5 Nm) clockwise using the torque wrench.
12. Close the covers and turn the key clockwise. Then, insert cover trims if necessary.

Information

- Re-tighten the fastenings after a short journey and check them again at regular intervals.
- The screw connections must be checked more frequently on bad roads. Loosening or loss of mounting components can result in serious accidents.

Fitting accessories

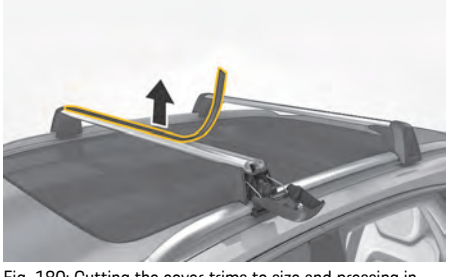


Fig. 180: Cutting the cover trims to size and pressing in

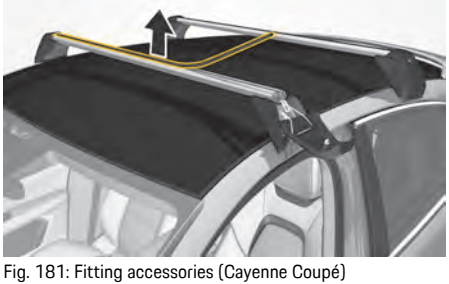


Fig. 181: Fitting accessories (Cayenne Coupé)

✓ Covers are opened.

1. Remove the cover trim from the T-groove.
2. Insert the mounting components into the T-groove provided.
3. Close the covers and lock them clockwise using the key.
4. Always read the relevant installation instructions for fitting and securing accessories.

Seat Belts

DANGER Unfastened or incorrectly used seat belts

A seat belt that is not fastened will not provide any protection in the event of an accident. A seat belt that is not fastened correctly can increase the risk of injury in the event of an accident.

- All occupants must always fasten their seat belts before the start of a journey.
- Also provide your passengers with all the information in this section.
- Never allow two people to use the **same** seat belt at the same time.
- Remove any loose articles of clothing, as they can interfere with the correct position of the seat belt and restrict your freedom of movement.
- Do not place the seat belts across hard or breakable objects (e.g. glasses, ball-point pens, cell phones etc.).
  Objects of this kind pose an additional risk of injury.
- Make sure that the seat belt is not twisted or loose.
- Use appropriate child restraint systems for all children.
- Seat belts must be positioned on the body as to restrain the upper body and lap from sliding forward. Improperly positioned seat belts can cause serious personal injury in case of an accident.
- The shoulder belt should always rest on your upper body. The shoulder belt should never be worn behind your back or under your arm.
- For maximum effectiveness, the lap belt should be worn low across the hips.
- Do not position the lap belt at your stomach because this could cause injuries in an accident.
- Pregnant women should position the seat belt as low as possible across the pelvis. Make sure it is not pressing against the abdomen.
- Seat belts must not rub against sharp objects or damage may occur to the belt.

DANGER Using damaged seat belts

Damaged, heavily stressed or worn seat belts do not offer sufficient protection in the event of an accident.

The seat belt pretensioner system can be triggered only once. Triggered seat belt pretensioner systems must be replaced.

- Check all seat belts regularly for signs of damage in the fabric, and check that the buckle and attachment points function correctly.
- Keep belt buckles free of any obstruction that may prevent secure locking.
- Seat belts that are damaged or have been heavily stressed in an accident must be replaced.
  If a seat belt pretensioner is triggered it must also be replaced.
  In addition, the anchor points of the belts must be checked.
  Work may be carried out on the seat belt pretensioner system only by qualified specialist employees from an authorized Porsche dealer.
  Please see your authorized Porsche dealer immediately after detecting a fault or damage. If the seat belts show damage to webbing, bindings, buckles or retractors, they should be replaced to ensure safe operation.
- Do not modify or disassemble the seat belts in your vehicle.
- The seat belts must be kept clean or the retractors may not work properly
- Never bleach or dye seat belts.
- Do not allow seat belts to retract until they are completely dry after cleaning or this may cause damage to the belt.

Seat-belt pretensioners

Triggering of the seat-belt pretensioners depends on the severity of the accident.

The seat-belt pretensioners can be triggered during:

– Front or rear collisions
– Side impacts
– Vehicle rollover

Information

Smoke may be released when the seat-belt pretensioners are triggered. This does not necessarily mean that the vehicle is on fire.

Observe the seat belt warning light and warning message

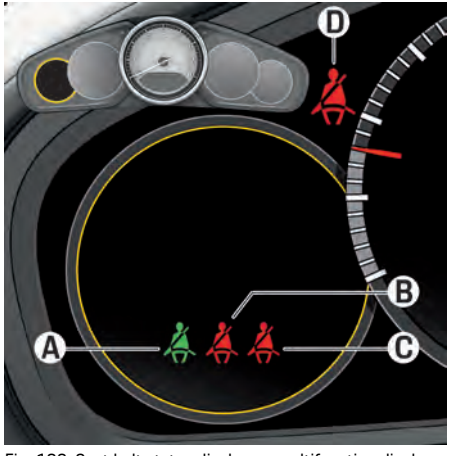


Fig. 182: Seat belt status display on multifunction display

A Seat belt status display for the left rear seat
B Seat belt status display for center rear seat
C Seat belt status display for the right rear seat
D Warning symbol: Driver's or passenger seat belt not fastened

Front seats

When the ignition is switched on, a warning signal sounds and the red warning symbol **D** on the instrument cluster flashes for 6 seconds if the driver's or passenger seat belt has not been fastened. The red warning symbol on the instrument cluster stays on after 6 seconds until the driver's seatbelt and, if occupied, the passenger's seatbelt have been fastened.

A warning message is also displayed in the instrument cluster.

When the speed of the vehicle reaches approximately 15 mph (24 km/h), a warning signal also sounds and the red warning symbol **D** in the instrument cluster flashes if the driver's seat belt or passenger seat belt, if occupied, is not fastened.

Rear seats

After switching on the ignition, a seat belt status display for the rear seats appears on the instrument cluster.

The seat belt display disappears approx. 60 seconds after driving off (Fig. 182).

The green symbol indicates that the person sitting on this seat has fastened their seat belt.

The red warning symbol indicates that the person sitting on this seat has not fastened their seat belt, or no-one is sitting on this seat. When the speed of the vehicle reaches approximately 15 mph (24 km/h), a warning signal also sounds and the red warning symbol in the instrument cluster flashes for approx. 60 seconds if the seat belt on a seat is not fastened.

Adjusting seat belt

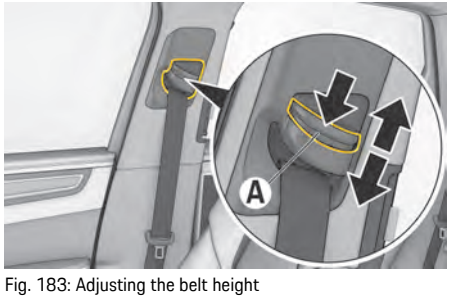


Fig. 183: Adjusting the belt height

The height of the belt outlets for the front seats can be adjusted.

- Adjust the height of the belt outlet so that the belt runs across the middle of your shoulder, not against your neck.
  - **a.** Upward – push belt outlet upward.
  - **b.** Downward – press locking button **A** and move belt outlet.

Fastening seat belt

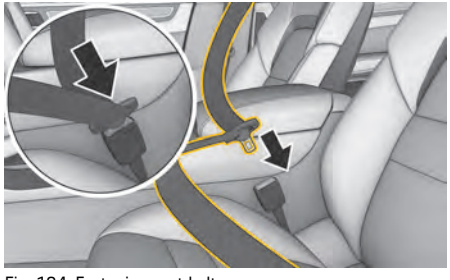


Fig. 184: Fastening seat belt

1. Assume an appropriate sitting position.
   ▷ Please see chapter "Seats" on page 249.
2. Adjust the backrest so that the shoulder belt passes over the center of your shoulder and is positioned on your upper body.
3. Grasp the seat belt by the belt latch and pull it slowly and evenly over your chest and hip.
4. Insert the belt latch into the appropriate seatbelt buckle on the inner side of the seat until it locks with an audible click.
5. Make sure that the seat belt is not trapped or twisted and that it is not rubbing against sharp edges.
6. Check that the horizontal section of the belt always fits snugly across your pelvis. Therefore,

after fastening the seat belt, always pull the diagonal part of the belt upwards.
For pregnant women: Position the lap belt so that it is as far down on the lap as possible and not pressing against the abdomen.

7. Pull on the diagonal section of the belt now and again during the journey to ensure that the horizontal section remains tight.

Information

The seat belt can block in the following situations:
- Vehicle is at an angle.
- Seat belt is pulled out abruptly.
- When accelerating or decelerating, when negotiating bends or on inclines.

Unfastening the seat belt

1. Hold the belt latch.
2. Press the red button on the seat-belt buckle.
3. Guide the belt latch to the belt outlet.

Seats

Choosing the correct seat position

A correct sitting position is important for safe and fatigue-free driving. To adjust the position of the driver's seat, proceed as follows:

1. Adjust the seat height to ensure that you have enough headroom and a good overview of the vehicle.
2. Move the seat in the fore-and-aft direction so that you can reach and press the pedals without stretching your legs out completely. Your foot should cover the entire surface of the pedal.
3. Grip the top half of the steering wheel. Set the backrest angle and the steering wheel position so that your arms are almost outstretched. Your shoulders must still be touching the backrest.
4. Move the seat in the fore-and-aft direction if necessary.

⚠ WARNING Adjusting the seat while driving

The seat can move further than intended if adjusted while driving. You may lose control of the vehicle.

- Do not adjust the seat while driving.

The electric seat adjustment function is restricted when driving.

⚠ WARNING Failure to adjust backrests

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

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

⚠ CAUTION Seat adjustment

If persons or animals are in the movement range of the seat during seat adjustment, there is a risk of parts of the body being pinched or crushed.

- Make sure that no one is put at risk when adjusting the seat.

NOTICE

Risk of damage to the headrest, roof and sun visor.

- Adjust the seat so that there is a sufficient distance between the headrest, roof and sun visor.

Head restraints

⚠ DANGER Removal of or Failure to Adjust Headrest

Driving with removed headrests, improperly positioned headrests or improperly installed headrests can cause serious personal injury or death in an accident.

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

The vehicle is equipped with a total of 5 headrests in the backrests of the the front and rear seats.

The height and fore-and-aft position of the headrests on the front seats can be adjusted (depending on type of seat). The height of the headrests on the rear seats can be adjusted.

Adjusting front seat

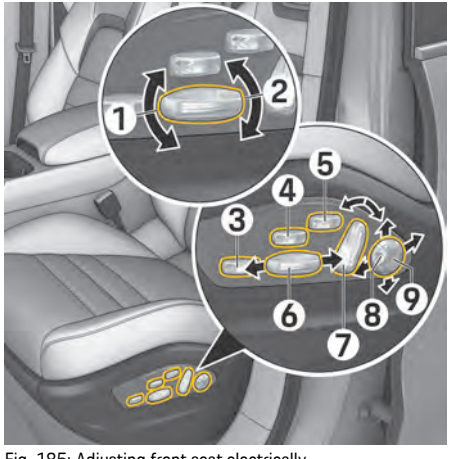


Fig. 185: Adjusting front seat electrically

1 Adjusting seat angle
2 Adjusting seat height
3 Adjusting seat cushion
4 Adjusting seat side bolsters
5 Adjusting backrest side bolsters
6 Adjusting fore-and-aft position
7 Adjusting backrest angle
8 Adjusting lumbar support
9 Switching massage function on and off

- Press the respective control in the direction of the arrow until the desired setting or final position is reached.

Storing seat settings

For information on storing and retrieving the seat settings:

▷ Please see chapter "Personal Settings" on page 206.

Rear seat fore-and-aft adjustment

Fig. 186: Fore-and-aft adjustment of rear seat

▶ Pull up lever **A** and push the seat forward or back.

Rear seat backrest angle adjustment

Fig. 187: Rear seat backrest angle adjustment

1. Sit on the rear seat.
2. Pull up lever **B** and adjust the released seat backrest by pressing it into a less steep seating position or by easing it into a more upright seating position. The seat backrest engages in the current position when you release the lever. There are several seat backrest angle positions available.

Folding rear seat backrests forward and returning to upright position

The rear seat backrests can be folded forward individually to make the luggage compartment larger.

NOTICE

Risk of damage from objects on the rear seats.

▶ Do not place objects on the seats when folding the backrests forward.

Information

The backrests on the left and center rear seats are connected. When you fold the left backrest forward, the center backrest will also fold over.
The backrest on the center rear seat can also be folded forward separately.

Folding the rear seat backrests forward

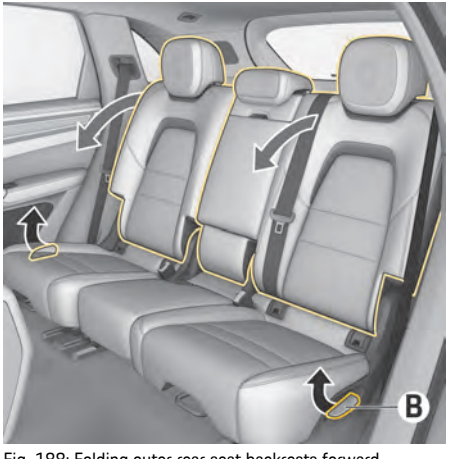


Fig. 188: Folding outer rear seat backrests forward

✓ The rear seats are moved back in the fore-and-aft direction.

1. Push the headrests down.

▷ Please see chapter "Adjusting headrests on rear seats" on page 252.

2. Pull up release lever **B** and fold the seat backrest forward. The seat backrests must engage audibly in the lowered position. Adjust the fore-and-aft position of the seats to do this if necessary.

Returning outer seat backrests to upright position

⚠ WARNING Backrest not latched in position

Risk of injury due to backrests that are not properly engaged.

- When folding back the backrest, check that it is engaged.

1. Pull up release lever **B** and fold the seat backrest back.
2. Make sure that the seat belts are not trapped.
3. Fold up the seat backrest until it locks with an audible click.

Folding the backrest on the center rear seat forward

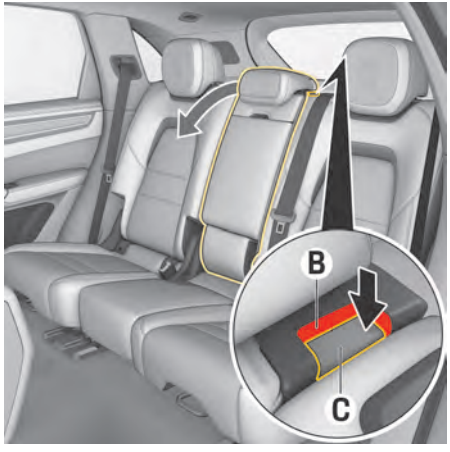


Fig. 189: Folding center rear seat backrest forward

- Press release button **C** in direction of arrow and fold the backrest forward.

Returning center rear seat backrest to upright position

⚠ WARNING Seat backrest not engaged correctly

If the rear seat backrests are not engaged correctly, they can fold forward unintentionally while driving.

If the red marking **B** is still visible, the seat backrest is not engaged correctly.

- Make sure that the red marking **B** is no longer visible after the seat backrest has engaged.
- Release the seat backrest again and engage it again if necessary.
- Fold up the seat backrest until it locks with an audible click.
  Make sure that the seat belts are not trapped.

Adjusting headrests on front seats

The height and fore-and-aft position of the headrests on the front seats can be adjusted.

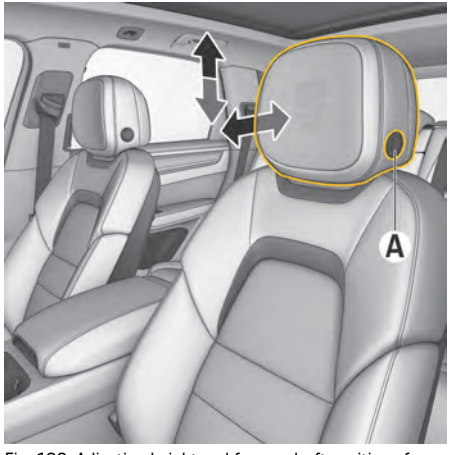


Fig. 190: Adjusting height and fore-and-aft position of headrests on front seats

- Adjust the height of the relevant headrest so that the upper edge of the headrest is at least at eye level or higher.
- Always make sure that the relevant headrest is engaged correctly.

Raising

- Push headrest upward until the desired setting is reached.

Lowering

- Press button **A** and at the same time push the headrest downward until the desired setting is reached.

Forward

- Pull headrest forward until the desired position is reached.

Backward

- Press button **A** and push the headrest back at the same time until the desired position is reached.

Adjusting headrests on rear seats

The height of the headrests on the rear seats can be adjusted.

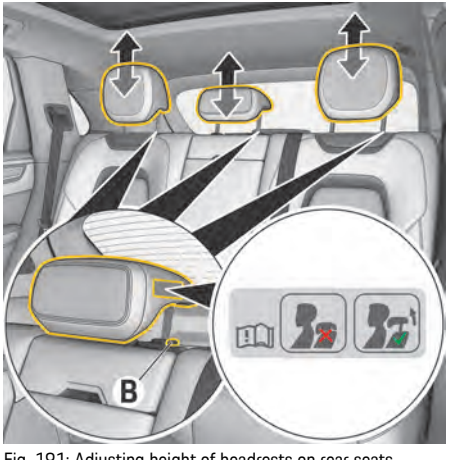


Fig. 191: Adjusting height of headrests on rear seats

- Adjust the height of the relevant headrest so that the upper edge of the headrest is at least at eye level or higher.
- Always make sure that the relevant headrest is engaged correctly as described on the safety label.

Raising

- Push headrest upward until the desired setting is reached.

Lowering

- Press button **B** and at the same time push the headrest downward until the desired setting is reached.

To improve your view to the rear, the headrest on the center rear seat can be moved to a storage position that is lower than the lowest detent position.

⚠ WARNING Headrest on occupied center rear seat in storage position

Driving with headrests not adjusted correctly increases the risk of serious injury.

- If the center rear seat is occupied, move the headrest out of its storage position and adjust it to one of the higher detent positions.

Removing and installing headrests on rear seats

The headrests on the rear seats may have to be removed in order to install a child restraint system correctly.

⚠ WARNING Headrests on rear seats removed or not adjusted correctly

Driving with headrests removed or not adjusted correctly increases the risk of serious injury.

- If the rear seats are occupied, install the relevant headrests.
- Adjust the height of the relevant headrest so that the upper edge of the headrest is at least at eye level or higher.
- Always make sure that the relevant headrest is engaged correctly.

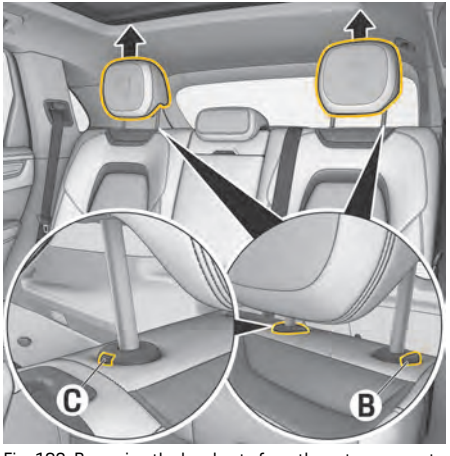


Fig. 192: Removing the headrests from the outer rear seats

Removing headrests from outer rear seats

1. Push headrest up as far as it will go.
2. Insert a suitable implement (e.g. emergency key) **C** into the opening.
3. Press button **B** while pushing the headrest up until button **B** remains engaged.
4. Fold the rear seat backrest roughly half-way forward.
5. Remove the headrest and stow it safely in the vehicle.
6. Adjust and engage the rear seat backrest if necessary.

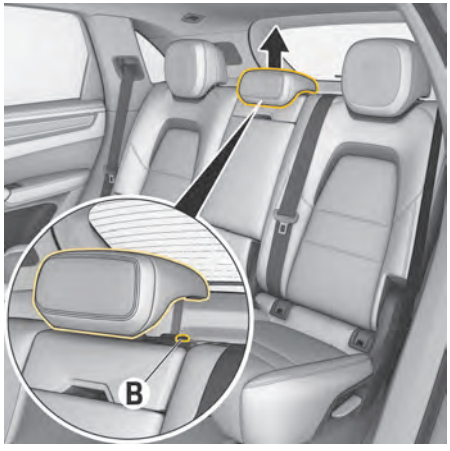


Fig. 193: Removing the center rear seat headrest

Removing center rear seat headrest

1. Press button **B** and, at the same time, completely remove the headrest.
2. Stowing headrest safely in the vehicle.

⚠ WARNING Interchanging headrests

The individual headrests are designed specifically for use on the respective seats. If the headrests are not fitted on the correct seats during re-installation, this will increase the risk of serious injury.

- Make sure that the headrests are not interchanged during re-installation.

Installing headrests

1. Fold the rear seat backrest roughly half-way forward.
2. Insert headrest into the guides and push it down until it locks with an audible click.
3. Press button **B** and push the headrest down fully. It should no longer be possible to pull the headrest out of the seat backrest.
4. Adjust and engage the rear seat backrest.

Using seat heating/seat ventilation

Switching seat heating/seat ventilation on and off

Fig. 194: Switching front seat heating/seat ventilation on and off

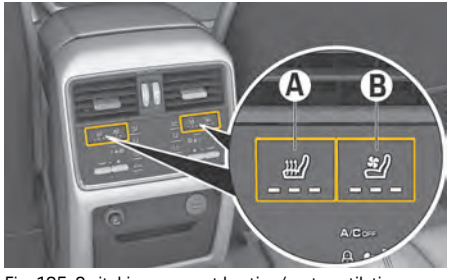


Fig. 195: Switching rear seat heating/seat ventilation on and off

Switching heated seat/seat ventilation on

✓ Engine is running.

- Press button **A** (seat heating) or **B** (seat ventilation) – repeatedly if necessary.

The number of illuminated light indicators show the selected setting.

Switching seat heating/seat ventilation off

- Press button **A** (seat heating) or **B** (seat ventilation) – repeatedly if necessary – until all the light indicators go out.

Information

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

Seat ventilation is not available when the interior temperature is low.

If the battery voltage is too low, the seat heating/seat ventilation functions are initially restricted and then turned off.

Adjusting seat heating/seat ventilation

For seat heating and seat ventilation, the balance between the seat cushion and backrest can be set.

1. **CAR ▸ CONTROL ▸ Vehicle ▸ Seat settings ▸ Driver seat heating/Passenger seat heating/Driver seat ventilation/Pass. seat ventilation**
2. Setting the balance.

Using the Easy Entry function

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

⚠ CAUTION Automatic adjustment of the driver's seat

If persons are behind the seat when the driver's seat is automatically adjusted, they may become trapped.

- Switch off the Comfort access function if somebody is sitting behind the driver's seat.

NOTICE

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

The seat could move back and become damaged.

- Switch off the Easy Entry function if the rear seat is folded forward.

When exiting the vehicle

Touch display in dashboard:

Activating the function

- **CAR ▸ CONTROL ▸ Vehicle ▸ Locking ▸ Easy Entry**

✓ The function is activated.

- Switch off the ignition **and** open the driver's door.
  The steering wheel moves upward.
  The driver's seat moves backward.

When entering the vehicle

Touch display in dashboard:

Activating the function

- **CAR ▸ CONTROL ▸ Vehicle ▸ Locking ▸ Easy Entry**

✓ The function is activated.

✓ The driver's seat and steering wheel are in their Easy Entry positions.

- Close the driver's door and switch on the ignition.
  The driver's seat and steering wheel move to the stored position.

Information

When the key is changed, the seat and steering wheel move to the stored key-specific entry position.

Information

Altering the seat setting manually interrupts the Easy Entry function.

- Set the seat position manually.

Adjusting passenger seat from the driver's seat

Touch display in dashboard:

1. **CAR ▸ CONTROL ▸ Vehicle ▸ Seat settings ▸ Passenger seat position ▸ Adjust front passenger seat**
2. Setting the passenger seat position using the controls on the driver's seat (Fig. 185).

To end the adjustment:

- Select **Finish seat adjustment**.

Disabling controls in the rear – child protection

Fig. 196: Disabling controls in the rear

The power window buttons on the rear doors and the control panel on the rear center console can be disabled by pressing the safety button in the control panel on the driver's door.

Switching child protection on/off

- Press the safety button.
  The light indicator on the button lights up.
  The seat settings made at the rear control panel are retained.
  The function of the rear control panel is deactivated.

Smoker's Package

Using the ashtray

⚠ WARNING Fire hazard due to flammable objects

Paper in the ashtray can catch fire.

- Do not put any flammable objects into the ashtray.

Using the front ashtray

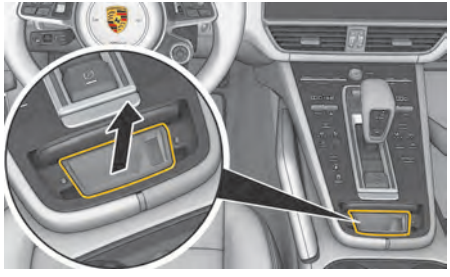


Fig. 197: Using the front ashtray

Opening the ashtray

- Press the ashtray lid briefly.
  The lid opens automatically.

Emptying the ashtray

1. Press the ashtray lid briefly.
2. Hold the ashtray insert by the lid and remove it.
3. After emptying, replace the ashtray insert and press it downward until it audibly engages.

Using the rear ashtray

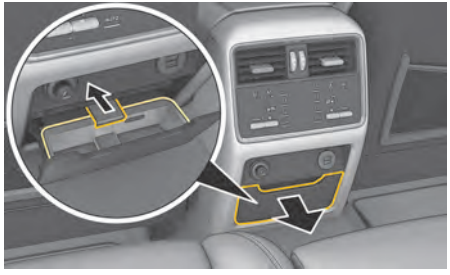


Fig. 198: Using the rear ashtray

Opening the ashtray

- Pull on the ashtray lid at the recess and open it.

Emptying the ashtray

1. Pull on the ashtray lid at the recess and open it.
2. Press the release in the direction of travel.
3. Grasp the ashtray insert and remove it.
4. After emptying, replace the ashtray insert.

Using the cigarette lighter

⚠ WARNING Hot cigarette lighter

The glowing surface of the cigarette lighter is very hot when in use.

- Do not leave children in the vehicle unattended.
- Never touch the heating element or the side surfaces of the cigarette lighter.
- Hold the hot cigarette lighter only by the operating button.

Depending on the vehicle equipment, there is a cigarette lighter in the rear center console.

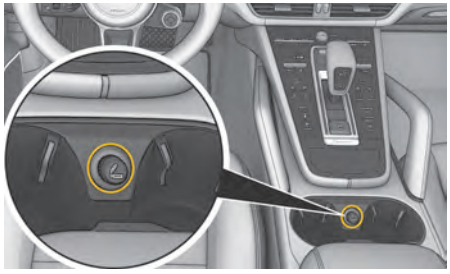


Fig. 199: Using the cigarette lighter

The cigarette lighter is ready for use regardless of the ignition lock position.

1. Press in the operating button.
   When the element is red hot, the lighter will jump back to its initial position.
2. Remove the cigarette lighter.

For information about the use of charging adapters in cigarette lighters:

▷ Please see chapter "Electrical Sockets" on page 108.

Speed Limiter

The speed limiter helps you to stay below an individual stored speed.

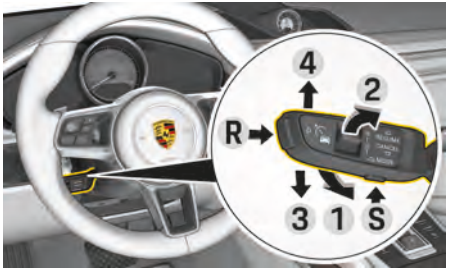


Fig. 200: Control lever

R Switch driver assistance systems on/off
S Switch between driver assistance systems
1 Set/increase maximum speed
2 Reduce maximum speed
3 Cancel speed limitation (CANCEL)
4 Resume speed limitation (RESUME)

Switching on speed limiter readiness

✓ Speed limiter on (button **R**).

1. Press button **S** on the control lever.
   The options menu for the driver assistance systems appears on the instrument cluster.
2. Select **LIM** using the **left** rotary knob on the steering wheel and press to confirm.
   The speed limiter is ready.

▷ Please see chapter "Operating the instrument cluster" on page 141.

Setting, storing and increasing maximum speed

Variant 1

1. Accelerate the vehicle to the desired speed using the accelerator pedal.
2. Press the control lever on the steering wheel forward (Fig. 158) **1**.
   The current driving speed is now stored as the maximum speed, which will be maintained automatically.

Variant 2

▸ Press the control lever on the steering wheel forward (Fig. 158) **1**.
Brief press = 1 mph (1 km/h) increments, press and hold = 5 mph (10 km/h) increments.
The new maximum speed is displayed on the instrument cluster.

Information

The maximum speed can also be set using the control lever on the steering wheel when the vehicle is in "operational readiness" mode.

▸ Press the control lever on the steering wheel forward once (Fig. 158) **1**.
The preset maximum speed of 20 mph (30 km/h) is displayed on the instrument cluster.

Reducing the stored maximum speed

▸ Pull the control lever on the steering wheel toward the steering wheel (Fig. 158) **2**.
Brief touch = 1 mph (1 km/h) increments, pull and hold = 5 mph (10 km/h) increments.
The new maximum speed is displayed on the instrument cluster.

Interrupting speed limiter – CANCEL

▸ Press the control lever on the steering wheel down (Fig. 158) **3**.
– or –
▸ Press button **S** on the control lever.

The maximum speed that was stored before the interruption remains stored in the memory and can be reactivated by pressing the control lever.

▷ Please see chapter "Resuming the stored maximum speed – RESUME" on page 256.

Deactivating the speed limiter temporarily by initiating a kickdown

If the set maximum speed is exceeded by initiating a kickdown (e.g. during overtaking), a warning signal sounds and the speed limiter symbol with stored maximum speed flashes red on the instrument cluster. The speed limiter is deactivated temporarily. If the vehicle speed drops to below the stored maximum speed, the speed limiter is activated again.

Driving downhill

The speed limiter initiates braking when driving downhill. The transmission initiates downshifting to help slow down the vehicle.

Resuming the stored maximum speed – RESUME

▸ Press the control lever on the steering wheel up (Fig. 158) **4**.
The speed limiter is set to the stored maximum speed.

Information

The stored maximum speed should only be recalled if traffic and road conditions are conducive to driving at that speed.

Deactivating the speed limiter

- Press button **R** on the control lever.
  The memory is cleared and the readiness symbol disappears.

Automatically

The speed limiter is switched off automatically in the following situations:

– In the event of a system fault that impairs the function of the speed limiter.
– When the airbags are triggered.

Information

If the speed limiter is deactivated automatically due to a system fault, it is only deactivated completely when the accelerator pedal is released or when the system is switched off by pressing the **R** button.

Sport Chrono Stopwatch

The Sport Chrono stopwatch can be used to record and evaluate various times.

The lap time can be displayed on the stopwatch on the dashboard, on the touch display and on the instrument cluster.

The following information can be recorded and evaluated:

- Lap number
- Completed lap distance
- Lap time
- Optional: Various other information (e.g. vehicle position, speed or outside temperature)

The following information can be displayed while recording is in progress:

- Number of the current lap
- Fastest lap time and the current lap time compared to it
- How much of the lap has been completed in relation to a reference lap
- Color coding to indicate whether the current lap is slower, just as fast or faster than the previous fastest lap
- Remaining fuel range and the number of laps that can be completed with the fuel left in the tank
- Remaining time available for recording
- Optional: The track progress of the current lap and of the reference lap

Stopwatch on the dashboard

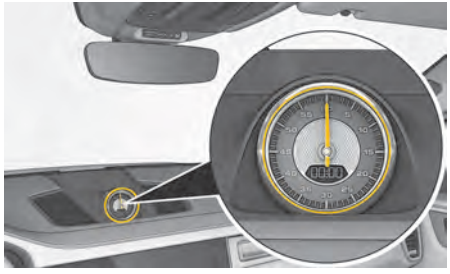


Fig. 201: Sport Chrono stopwatch

The analog pointer shows the seconds. The digital display accurately indicates down to 1/100 second.

The digital display and the displays in the touch display and dashboard can show up to 99 hours, 59 minutes and 59.99 seconds.

Setting the time display and illumination of the stopwatch on the dashboard

▷ Please see chapter "Vehicle Settings" on page 285.

Stopwatch in the PCM

Fig. 202: Stopwatch in PCM

A Recording information, e.g. the remaining fuel range and number of laps that can be completed with the fuel left in the tank.

B Distance traveled or circle display with lap counter: Distance traveled compared to reference lap. Color coding to indicate whether the current lap is faster (green), just as fast (yellow) or slower (red) than the reference lap.

Starting timing

▸ **CAR** ▸ **CHRONO** ▸ **Start**
Recording of the data begins. If a reference lap has not been stored, the first lap in the recording is used as a reference lap.
Please see chapter "Loading reference lap" on page 259.

Stopping timing

✓ Timing has been started.

▸ **CAR** ▸ **CHRONO** ▸ **Stop**

Continuing timing

✓ Timing has been stopped.

▸ **CAR** ▸ **CHRONO** ▸ **Continue**

Ending lap/starting new lap

A maximum of 99 laps can be stored for each recording.

✓ Timing has been started.

- **CAR** ▸ **CHRONO** ▸ **New lap**
  The lap counter is incremented by one. The time of the fastest lap driven is stored as the fastest lap time if its duration is within the permitted difference in distance.
  Please see chapter "Setting Sport Chrono" on page 259.

Taking intermediate time

✓ Timing has been started.

- **CAR** ▸ **CHRONO** ▸ **Interim time**
  The interim time is displayed briefly and not saved. Timing continues to run in the background.

Resetting stopwatch time

✓ Timing has been stopped.

- **CAR** ▸ **CHRONO** ▸ **Reset**
  All stopwatch time displays are reset to zero and the running recording is ended.

Loading reference lap

- **CAR** ▸ **CHRONO** ▸ **Load lap**

Storing reference lap

- **CAR** ▸ **CHRONO** ▸ Options ▸ **Sport Chrono view** ▸ **Evaluation** ▸ Select desired recording ▸ **Save as reference lap**

Resetting reference lap

- **CAR** ▸ **CHRONO** ▸ **Reset reference lap**

Displaying and editing recordings and recording statistics

A maximum of 99 laps can be recorded in each recording. If a reference lap has not been stored yet, the first lap in the recording is used as a reference lap. The system can record up to 10 hours of data.

- **CAR** ▸ **CHRONO** ▸ Options ▸ **Sport Chrono view** ▸ **Evaluation**

Renaming, deleting, importing and exporting recordings and reference laps

✓ Options ▸ **Sport Chrono evaluation** selected.

✓ SD card inserted or USB data carrier connected. Data on the data carrier must be stored in the SportChrono folder.

- **CAR** ▸ **CHRONO** ▸ Options

Setting Sport Chrono

Activating Record additional data option and displaying track progress

In addition to lap length and times, additional driving-related data (e.g. speed) can be recorded at intervals of 1 second. The track progress can also be shown on the map.

- **CAR** ▸ **CHRONO** ▸ Options ▸ **Sport Chrono settings** ▸ **Record additional data**

Setting difference in distance allowed

Indicates by how much the length of a lap may deviate from the length of the reference lap. Laps with larger length deviations are not included in the evaluation.

- **CAR** ▸ **CHRONO** ▸ Options ▸ **Sport Chrono settings** ▸ **Difference in distance allowed**

Setting maximum time difference for evaluation

Indicates the maximum time difference within which recorded laps are flagged 'as fast as' (yellow).

- **CAR** ▸ **CHRONO** ▸ Options ▸ **Sport Chrono settings** ▸ **Max time difference for evaluation**

Displaying the vehicle position for the fastest lap (ghost car)

- **CAR** ▸ **CHRONO** ▸ Options ▸ **Sport Chrono settings** ▸ **Display reference lap**

Stopwatch in the instrument cluster

The stopwatch is displayed on the "Car & Info" display.

Fig. 203: Stopwatch in the instrument cluster

A Last lap time
B Fastest lap time
C Lap counter
D Current lap time / temporary interim time
E Lap time, reference lap or fastest lap time
F Options and control commands (Start, Stop, etc.)
G Circle diagram: Distance traveled compared to reference lap. Color coding to indicate whether the current lap is faster (green), just as fast (yellow) or slower (red) than the reference lap.

Starting timing

▸ **Sport Chrono ▸ Start**
Recording of the data begins. If a reference lap has not been stored yet, the first lap in the recording is used as a reference lap.

Stopping timing

✓ Timing has been started.

▸ **Sport Chrono ▸ Stop**

Continuing timing

✓ Timing has been stopped.

▸ **Sport Chrono ▸ Continue**

Ending lap/starting new lap

When the stopwatch is running, the current stopwatch time is stored as the lap time.

A maximum of 99 laps can be stored for each recording.

✓ Timing has been started.

▸ **Sport Chrono ▸ Lap**
The lap counter **C** is incremented by one lap. The time of the fastest completed lap is stored as the fastest lap time **B**.

Taking intermediate time

✓ Timing has been started.

▸ **Sport Chrono ▸ Interim time**
The interim time **D** is displayed briefly and not saved. Timing continues to run in the background.

A number in the circle diagram **G** shows each set interim time.

Resetting stopwatch time

✓ Timing has been stopped.

▸ **Sport Chrono ▸ Reset**
All stopwatch time displays are reset to zero.

Analog Clock on the Dashboard

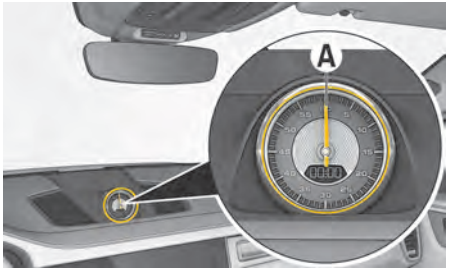


Fig. 204: Analog clock on the dashboard

The time and the brightness of the lighting of the analog clock **A** can be set via the touch display in the dashboard:

▷ Please see chapter "Vehicle Settings" on page 285.

Starting and Stopping the Engine

Ignition lock

The vehicle key is replaced with a operating device in the ignition lock. The vehicle key only needs to be carried on your person.

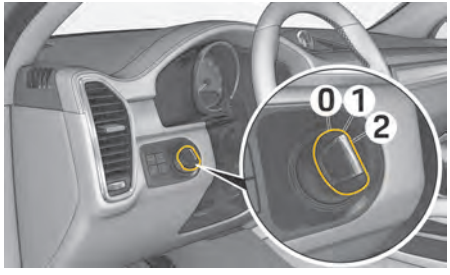


Fig. 205: Ignition lock/operating device

0 Initial position
1 Ignition on
2 Start the engine/establish readiness for operation (E-Hybrid vehicles)

0 – Ignition off (initial position)

In ignition lock setting **0** the engine and ignition are off.

1 – Ignition on

Most of the electrical equipment can be switched on. The warning lights in the instrument cluster come on as a lamp check.

Information

If no consumers are switched on for 10 minutes after the ignition has been switched on, the ignition has to be switched on again. The operating device must first be turned to ignition lock position**0** (initial position).

2 – Start the engine

The operating device is automatically reset from position **2** to position **1** when the engine is started or readiness for operation is established on E-Hybrid vehicles.

Starting the engine

For information on starting E-Hybrid vehicles:

▷ Please see chapter "Hybrid Vehicle" on page 135.

1. Press the footbrake.
2. Press the **P** button on the selector lever or select operating mode **N**.
3. Do not press the accelerator pedal.
4. Turn operating device briefly to ignition lock position **2**.
   The starting process is carried out and completed automatically as soon as ignition key position **2** (start engine) is reached.

▶ If necessary, wait for about 10 seconds and then repeat the starting process. First turn the operating device back to ignition lock position **0** (initial position).
Do not warm up the engine when stationary. Drive off immediately. Avoid high engine speeds and full throttle until the engine has reached operating temperature.

If the vehicle cannot be started:

▷ Please see chapter "Starting the vehicle with discharged vehicle key battery or radio interference" on page 283.

Switching off the engine

WARNING Risk of the vehicle rolling away

An improperly parked vehicle can roll away in an uncontrolled manner, endangering people and objects.

▶ Before leaving the vehicle, always apply the electric parking brake and press the **P** button on the selector lever.

WARNING No power steering or brake force boosting

Power steering and brake force boosting are only operative when the engine is running. Consequently, much greater force suddenly needs to be applied during steering or braking when the engine is stopped.

▶ Only switch off the ignition when the vehicle is at a standstill.

1. Stop the vehicle.
2. Turn the operating device back to ignition lock position **0**.

▶ When leaving the vehicle, press the **P** button on the selector lever and activate the electric parking brake.

Information

The operating device cannot be removed.

Steering Wheel

Adjusting the steering wheel

⚠ WARNING Steering wheel adjustment while driving

The steering wheel can move further than intended if adjusted while driving. You may lose control of the vehicle.

- Do not adjust the steering wheel while driving.

Adjusting the steering wheel manually

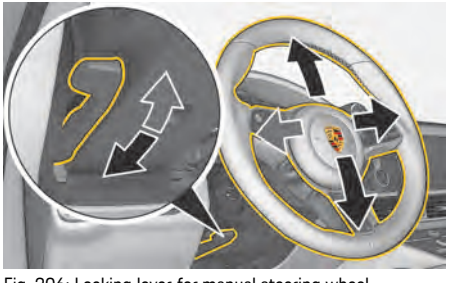


Fig. 206: Locking lever for manual steering wheel adjustment

1. Swivel the locking lever downward.
2. Move the steering wheel vertically and horizontally in order to adjust the steering wheel position to the tilt of the backrest and seat position.
3. Turn back the locking lever to the original position until you feel it engage.

Adjusting the steering wheel electrically

⚠ CAUTION Uncontrolled retrieval of the memory settings

If persons or animals are within the range of movement of the steering wheel, there is a risk of parts of the body being pinched or crushed when you adjust the steering wheel.

- Do not leave children unattended in the vehicle.

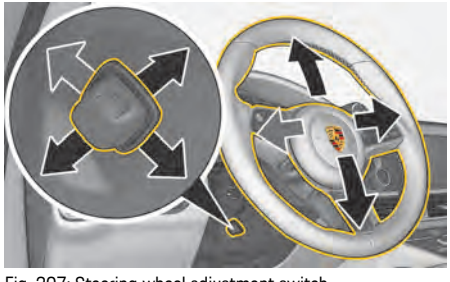


Fig. 207: Steering wheel adjustment switch

- Move the switch under the steering column in the relevant direction until the desired position is reached.

Storing steering wheel settings

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

▷ Please see chapter "Personal Settings" on page 206.

Operating instrument cluster with the multifunction steering wheel

For further information on operating the instrument cluster:

▷ Please see chapter "Operating the instrument cluster" on page 141.

Switching the heated steering wheel on and off

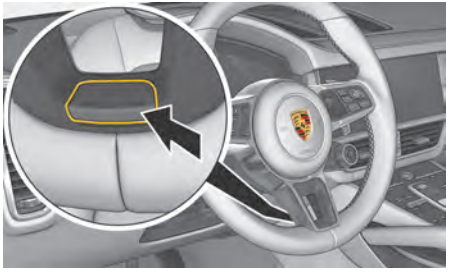


Fig. 208: Heated steering wheel button

✓ Engine is running.

- Press the button on the central steering wheel spoke (Fig. 208), until a message appears briefly on the instrument cluster.

Storage

Stowing objects

WARNING Unsecured or incorrectly positioned objects

An unsecured or incorrectly positioned load can slide or be thrown about and injure the vehicle occupants as a result of hard braking, direction changes or an accident.

- Ensure all objects are secured inside the vehicle before driving.
- Do not transport heavy objects in open storage compartments.
- Always keep storage compartments closed while driving.

NOTICE

Risk of damage to the storage net.

- Do not place any heavy or bulky objects in the storage net.

Depending on its equipment, the vehicle has the following storage options:

- Glove compartment
- Map pockets on the back of the front seat backrests
- Clothes hooks on the rear grab handles
- Storage compartment under the cargo area floor
- Storage compartment in the armrests
- Storage compartment and bottle holder in the front and rear door panel
- Storage compartment in the front center console
- Storage compartment under the front seats

Opening and closing the glove compartment

Opening the glove compartment

- Pull the handle.
  The glove compartment opens automatically.

Closing the glove compartment

- Close the cover by pressing on it.

The glove compartment can be locked and unlocked using the emergency key.

▷ Please see chapter "Vehicle Key" on page 282.

Opening the storage compartment in the armrest

Fig. 209: Storage compartment in the armrest

Opening the storage compartment

- Pull the handle and pull up the armrest.

Sun Visors

Adjusting sun visor

Fig. 210: Adjusting sun visor

- Swivel the sun visor downward to prevent glare from the front.

Fig. 211: Preventing side glare

Glare from the side:

1. Disengage the sun visor from the inner bracket.
2. Swivel the sun visor around so that it is in front of the side window.
3. The second sun visor can also be swiveled down.

Information

The second sun visor must be swiveled up before swiveling the first side sun visor back. Otherwise, you will no longer be able to swivel the first sun visor up.

Opening vanity mirror

CAUTION Open vanity mirror sliding cover

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

- Keep the sliding cover closed while driving.

Fig. 212: Opening vanity mirror

- Open the sliding cover of the vanity mirror on the inside of the sun visor. The vanity mirror lighting is switched on.

Tailgate

Opening and closing the tailgate

DANGER Inhalation of toxic exhaust gases

Toxic exhaust gases may enter the passenger compartment when the tailgate is open or not closed properly and the engine is running.

- Always keep the tailgate fully closed when the engine is running.
- Never drive with the tailgate open.

WARNING Uncontrolled opening or closing of the powerlift tailgate

Risk of injury as a result of uncontrolled opening or closing of the powerlift tailgate.

- Open or close the tailgate only when the vehicle is stationary.
- Open or close the tailgate only when there are no persons or animals within its movement range.
- Always pay close attention to the opening and closing operation so that the movement can be stopped at any time in the event of danger.

NOTICE

Risk of damage as a result of uncontrolled opening or closing of the powerlift tailgate.

The tailgate may hit against the garage ceiling or against a protruding load while opening or closing.

- Make sure there is sufficient clearance behind and above the vehicle (e.g. roof transport systems, garage ceiling).
- Do not allow a load to protrude over the edge of the luggage compartment.

Information

A warning tone sounds and the tailgate is opened and closed.

Opening tailgate from outside using button

Fig. 213: Tailgate unlocking button

✓ Vehicle unlocked (vehicles without Porsche Comfort Access).

– or –

✓ Vehicle key is carried (vehicles with Porsche Comfort Access).

- Press the button.

The vehicle is unlocked, depending on the setting.

A warning tone sounds and the tailgate opens as far as the set opening height.

Opening tailgate with the vehicle key

✓ Ignition is switched off.

- Press and hold button on the vehicle key for at least 1 second.

The vehicle is unlocked, depending on the setting.

A warning tone sounds and the tailgate opens as far as the set opening height.

Opening tailgate using foot gesture

CAUTION Unintentional tailgate movement

If the sensors in the rear end detect persons, movements or objects and a valid vehicle key is located at the rear of the vehicle, the tailgate may open or close automatically, causing injury to persons or damage to the vehicle.

To prevent an unintentional tailgate movement:

- Deactivate the function in the PCM.

– or –

- deactivate Porsche Comfort Access.

Fig. 214: Foot gesture control

✓ Vehicles with Comfort Access.
✓ Function activated.
✓ Vehicle key is carried.
1. Stand in a central position behind the vehicle.
2. Move your foot toward the vehicle and back in one sequence.
   A warning tone sounds and the tailgate opens as far as the set opening height.

The function can be activated or deactivated in the central display.

▸ **CAR** ▸ **CONTROL** ▸ **Vehicle settings** ▸ **Locking**

Information

The foot gesture function may not be available in the following situations:
– In poor weather conditions (rain, snow or ice).
– The bumper is dirty.
– The vehicle key radio signal is interfered with through radio waves.

Opening tailgate using button in driver's door

Fig. 215: Tailgate button in driver's door

✓ P button activated.
▸ Press button **A** in the driver's door.
  A warning tone sounds and the tailgate opens as far as the set opening height.

Adjusting the opening height of the tailgate

You can adjust the opening height of the tailgate individually.

On vehicles with leveling system, always adjust the tailgate when the vehicle is at its highest level.

▹ Please see chapter "Porsche Active Suspension Management (PASM) with air suspension and leveling system" on page 212.

1. Stand behind the vehicle and open the tailgate.
2. Press button on the vehicle key or on the tailgate trim panel to stop the automatic opening operation.
3. Move the tailgate by hand to the desired opening height.
4. Press and hold button **A** (Fig. 216) in the tailgate trim panel for approx. 3 seconds.
   An acoustic signal confirms the programmed opening height.

Automatic stop in the event of unintentional tailgate movement

If the tailgate lowers unaided immediately after opening, e.g. due to the weight of snow, an electrical mechanism brakes the tailgate and a series of brief warning signals sounds until the tailgate stops moving.

▸ Bring the tailgate to rest for approx. 1 second.
  The automatic stop is disabled.

Close the tailgate

Closing tailgate using button in driver's door

✓ Ignition is switched on.
▸ Press and hold button **B** in the driver's door until the tailgate is fully closed.
  A warning tone sounds and the tailgate closes.

Closing tailgate using foot gesture

✓ Porsche Comfort Access.
✓ Ignition is switched off.
✓ Vehicle key is carried.
✓ The approx. distance to the vehicle is max. 29.5 in. (75 cm).
1. Stand in a central position behind the vehicle.
2. Move your foot toward the vehicle and back in one sequence.
   A warning tone sounds and the tailgate closes.
   The vehicle remains unlocked or locked.

Closing tailgate using button in tailgate trim panel

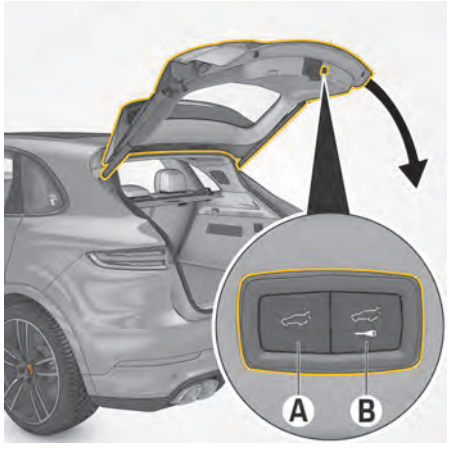


Fig. 216: Button in tailgate trim panel

A Close the tailgate
B Close the tailgate and lock the vehicle (Porsche Comfort Access)

- Press button **A** on the tailgate trim panel.
  A warning tone sounds and the tailgate closes.

Closing and locking tailgate using button in tailgate trim panel

✓ Porsche Comfort Access.
✓ Vehicle key is carried.
- Press button **B** in the tailgate trim panel.
  A warning tone sounds, the tailgate closes and the vehicle is locked.

Information

If the key is inside the vehicle when you lock it, the vehicle is unlocked again. The vehicle beeps twice and flashes 4 times. Only if a door or the tailgate is not opened within approx. 45 seconds is the vehicle locked and can only be unlocked using a second key.

- Make sure that the vehicle key is not left inside the vehicle when locking it.

Detection of obstacles during closing

The closing operation is interrupted automatically if closing of the tailgate is blocked by an obstruction.
A warning tone sounds and the tailgate stops moving.

1. Remove the obstruction.
2. Close the tailgate automatically or slowly by hand.

Interrupting the opening or closing operation in the event of danger

Press one of the following buttons to immediately interrupt the opening or closing operation:

- button on the vehicle key.
  – or –
  button in the driver's door.
  – or –
  Button **A** or **B** in the tailgate trim panel.
  – or –
  Release button on the tailgate.
  – or –
  Gesture using your foot.
- Press the appropriate button to resume one-touch operation.

Tailgate emergency unlocking

Malfunction of the tailgate drive

The automatic function is not active if the vehicle battery voltage is too low. If a button is pressed in order to open the tailgate, the tailgate lock is unlocked and three brief warning signals sound. The tailgate can now be opened by hand.

- Charge the vehicle battery.
  – or –

If the automatic opening or closing procedure is interrupted owing to a fault:

- open or close the tailgate slowly by hand.

Overload protection

If overloading of the tailgate drive is detected, a brief warning signal sounds. The tailgate cannot be operated automatically for approx. 30 seconds.

Emergency unlocking of the tailgate

If the tailgate cannot be released using the vehicle key (e.g. if the vehicle key battery is discharged):

1. Unlock the driver's door with the emergency key and open it.
2. Switch on the ignition within 15 seconds (country-dependent) to prevent the alarm system from triggering.
3. Press button in the driver's door.
   The tailgate is unlocked.
4. Press button in the driver's door.
   – or –
   Press the button on the vehicle key.
   – or –
   Press the release button on the tailgate.
   – or –
   Grip the lower edge of the tailgate and open it with your hand.

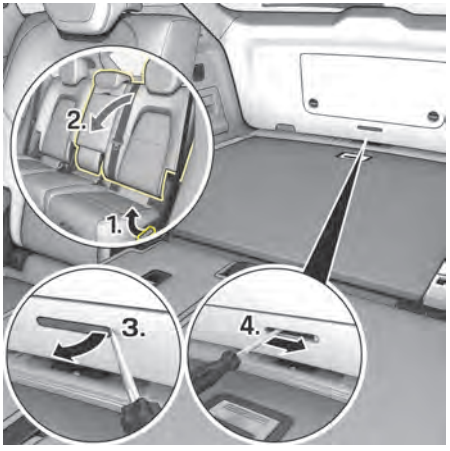


Fig. 217: Emergency unlocking of the tailgate

If the tailgate still cannot be opened (e.g. if the vehicle battery is discharged), emergency release must be performed:

1. Fold rear seat backrests forward.
2. Get into the luggage compartment over the folded rear seats.
3. **All Cayenne models except Cayenne Coupé:**
   On the inside of the tailgate, remove the cover for the emergency release using a suitable tool (e.g. screwdriver).
   – or –
   Cayenne Coupé:
   On the inside of the tailgate, pierce the perforation in the cover for the emergency release using a suitable tool (e.g. screwdriver).
4. Actuate the lock for unlocking the tailgate in direction of arrow using the screwdriver.
   An unlocking noise will be heard.
5. The tailgate can now be opened by hand.

Test Stand Measurement

Carrying out test stand measurements

WARNING Inhalation of toxic exhaust gases

Risk of serious or fatal injury due to inhalation of toxic exhaust gases.

Exhaust gas contains colorless and odorless carbon monoxide, which is toxic even in low concentrations.

- Perform work with the engine running only outdoors or with suitable extraction systems for the exhaust gases.

WARNING Inadequate securing of vehicle

An unsecured or incorrectly secured vehicle can move unintentionally or tip or fall off lifting equipment such as a jack or lifting platform. This can cause serious injuries and damage.

- Raise the vehicle using a jack on a solid and flat surface only.
- Raise the vehicle only at the prescribed jacking points on the vehicle underbody.
- Always place the vehicle on solid supports when working under the vehicle. The vehicle jack is not suitable for this purpose.
- Never start the engine when the vehicle is raised. Engine vibrations can cause the vehicle to fall.

Power measurement

Porsche does not authorize power measurements on roller-type test stands.

Carrying out brake tests

- Brake tests must only be performed on roller-type test stands.

The following limits must not be exceeded:

– Test speed 4.7 mph (7.5 km/h)
– Test duration 20 seconds

Carrying out electric parking brake tests

- Electric parking brake tests on the brake test stand **must only be performed with the ignition switched on and the selector lever in neutral (transmission parking lock activated)**.

The vehicle switches automatically to the brake test stand mode in which the electric parking brake can be tested. A message appears on the instrument cluster.

Towing

Information

- Always observe the legal requirements relating to the towing and tow starting of vehicles.
- Vehicles should only be towed with great care. Before driving, both drivers should familiarize themselves with the special conditions that apply to tow-starting and towing.
- In the event of a power failure or faults in the electrical system, it may be necessary to connect an external power supply in order to release the electric parking brake or the steering column lock.

Tow starting and push starting the vehicle

NOTICE

Danger of significant vehicle and transmission damage through tow-starting or push-starting.

- **Never** tow-start or push-start the vehicle.
- Have the vehicle transported with both axles on a recovery vehicle, transport truck or trailer, or tow it on all 4 wheels.
- Tie the vehicle down only at its wheels. Never attach tension straps to the towing hook.

If the battery is faulty or completely discharged, the only way to start the engine is to replace the battery or through emergency starting with jumper cables.

▷ Please see chapter "Battery" on page 72.
▷ Please see chapter "Emergency Starting" on page 111.

Towing the vehicle

⚠ WARNING Increased steering and braking forces due to no power assistance

There is no steering and braking assistance on the towed vehicle when the engine is stopped. This means that greater force is required for braking and steering.

- Vehicles should only be towed with great care.

- The towed vehicle must not be heavier than the towing vehicle.
- Vehicles with defective brakes must **not** be towed.
- Switch on the ignition so that the brake lights and turn signals are working and the steering column is not locked.

Towing the vehicle

- Select operating mode **N**.
- If operating mode **N** cannot be selected or the transmission parking lock **P** is activated:
  ▷ Please see chapter "Performing emergency release of transmission parking lock" on page 270.
- Deactivate PAS.
  ▷ Please see chapter "Porsche Active Safe (PAS)" on page 208.
- Do not exceed the maximum speed of 30 mph (50 km/h). A vehicle should not be towed for more than 30 miles (50 km).

If the vehicle has to be towed for more than 30 miles (50 km) or at a speed above 30 mph (50 km/h) or if it is located on an upward or downward incline:

- Do not attempt to tow the vehicle.
- Call a roadside assistance or breakdown recovery service.
- Have the vehicle transported with both axles on a recovery vehicle, transport truck or trailer.

▷ Please see chapter "Transporting the vehicle on car trains, ferries and vehicle transporters" on page 272.

Performing emergency release of transmission parking lock

If activated, emergency release of the transmission parking lock must be performed before towing. The emergency release is located under the floor mat on the driver's side.

⚠ WARNING No securing against rolling away

When performing emergency release of the transmission parking lock, the vehicle is not secured against rolling away and can endanger persons or cause material damage.

- Before emergency release, apply the electric parking brake and prevent the vehicle from rolling away (e.g. place a wheel chock underneath).

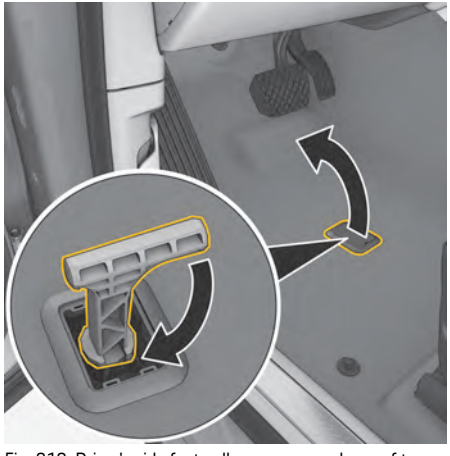


Fig. 218: Driver's side footwell: emergency release of transmission parking lock

Emergency release of transmission parking lock

1. In order to secure the vehicle against unintentional rolling away, apply the electric parking brake or press the brake pedal.
   ▷ Please see chapter "Brakes" on page 76.
2. Carefully lever off the cover in the footwell with a suitable object (e.g. screwdriver) and remove it.
3. Insert the socket wrench from the tool box into the release lock.
   ▷ Please see chapter "Luggage Compartment" on page 164.
4. Press the socket wrench and turn clockwise through 90° until it engages.
5. Leave the socket wrench inserted.

Following emergency release of the transmission parking lock, operating mode **N** is displayed on the instrument cluster.

Re-engaging the transmission parking lock

NOTICE

Risk of damage when re-engaging the transmission parking lock.

- Do not turn the socket wrench back.

1. Pull out the socket wrench vertically.
2. Re-insert the cover.

Using tow rope or tow bar

- Use a towing bar if possible. Only use a towing rope if a towing bar is not available. Use an elastic synthetic fiber rope or a rope made from an elastic material, which is explicitly intended as a towing rope by the manufacturer.
- Data and installation instructions can be found in the accessory manufacturer's manual. Follow the manufacturer's safety and operating instructions.
- Always observe the permissible towing force of the towing rope or towing bar. The towing rope or towing bar must be approved for the vehicle weight. Never exceed the manufacturer's specifications.
- The towed vehicle must not be heavier than the towing vehicle.
- When towing, first screw the towing hook into the vehicle before attaching the towing rope or towing bar to the towing hook.
  ▷ Please see chapter "Using the towing hook" on page 271.
- Do not attach a towing rope or towing eye to the trailer hitch.

Using a towing rope

- Always keep the towing rope taut when towing. Avoid jerky and sudden loading.

Using a towing bar

- Do **not** attach the towing bar diagonally between the vehicles.

Pulling out a vehicle that has become stuck

- Always pull out the vehicle with the greatest care.
- Never pull out a vehicle abruptly or at an angle.
- If possible, pull the vehicle backward, following the track previously made.
- Do not pull out the vehicle with a trailer attached.

Using the towing hook

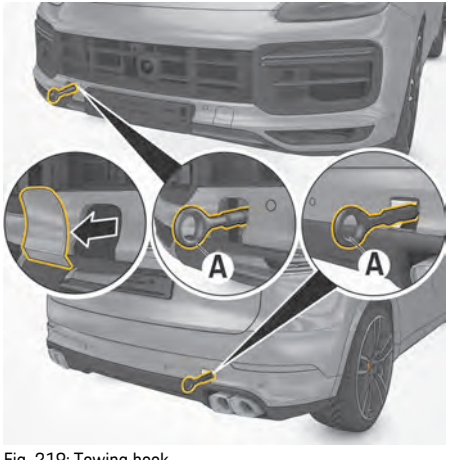


Fig. 219: Towing hook

Attaching the towing hook

The towing hook is stored in the tool box.

▷ Please see chapter "Luggage Compartment" on page 164.

1. Press the plastic cover on the upper edge of the bumper until it releases.
2. Pull the plastic cover out of the bumper and let it hang by its thread.
3. Screw in the towing hook **A** as far as possible counterclockwise (left-hand thread) and tighten by hand.

Removing the towing hook

1. Unscrew the towing hook **A** (turn it to the right, left hand thread).
2. Insert the plastic cover at the upper edge of the opening.
3. Fold the plastic cover into the bumper and press on the lower edge until it engages.
4. Store the towing hook in the tool box.

Using flat bed

Pulling vehicle onto flat bed

Fig. 220: 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

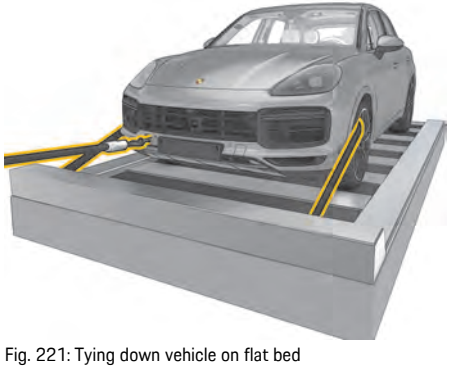


Fig. 221: Tying down vehicle on flat bed

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.
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.

Transporting the vehicle on car trains, ferries and vehicle transporters

- Tie the vehicle down only at its wheels. **Never** attach tension straps to the towing hook.
- Deactivate the passenger compartment monitoring system and inclination sensor.
  - Please see chapter "Alarm System" on page 67.
- Activate Porsche Vehicle Tracking System transport mode if necessary.
  - Please see chapter "Porsche Vehicle Tracking System" on page 231.

Traffic Sign Detection

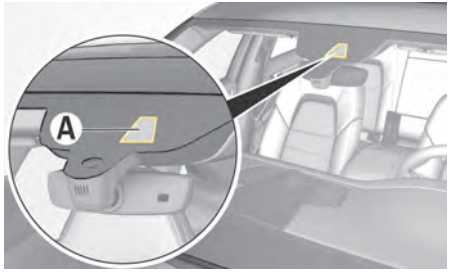


Fig. 222: Windshield camera

Traffic sign detection uses the camera **A** to detect speed limits as well as the start and end points of no-overtaking zones and bend ahead signs. Traffic signs are evaluated together with the navigation system's map data and shown on the instrument cluster.

If a speed limit is restricted to a wet road, fog or a certain time, the detected additional sign is compared with the information provided by the vehicle (e.g. rain sensor, navigation data and time). Speed limits for vehicles towing a trailer are also displayed if a trailer is detected on the vehicle and the function is activated in the PCM.

▷ Please see chapter "Trailer-relevant settings" on page 274.

The bend ahead warning is issued approx. 500 ft. (150 m) before a bend that is significant for the driver and continues until the relevant bend has been passed.

Traffic sign detection is country-dependent and is not available for all countries.

When driving in a country in which traffic sign detection is not available, the driver is alerted to this fact by a message on the instrument cluster.

⚠ WARNING Lack of attention

Responsibility while driving, e.g. choosing an appropriate speed, remains with the driver even when using traffic sign recognition. The system does not replace the driver's attentiveness.

Traffic sign recognition does not adjust the speed of the vehicle to specified speed limits.

- ▶ Drive with extreme care.
- ▶ Always check the traffic situation and the area around the vehicle.
- ▶ Adjust driving speed to road conditions.

⚠ WARNING Failure of camera to detect traffic signs

The camera's view can be reduced by different influencing factors (e.g. rain, snow, ice, heavy water spray and backlight). In some circumstances, the camera may not detect traffic signs or may detect them incorrectly, which will result in a speed limit or bend ahead warning not being displayed or being displayed incorrectly. Posted traffic signs always take priority over the traffic sign recognition information displayed in the instrument cluster.

- ▶ Always pay attention to the road signs.
- ▶ Drive with extreme care.
- ▶ Always keep your eyes on the road ahead.

Information

Traffic sign recognition is restricted in the following situations, for example:

- – Camera heavily soiled, iced-up or covered (e.g. stickers)
- – In unfavorable weather conditions (e.g. heavy rain)
- – Traffic signs covered or damaged

Information

To avoid impairing the detection performance of the camera:

- – Do not cover the camera area on the rearview mirror **A** with objects (e.g. stickers).
- – The camera must always be kept free of dirt, ice and snow.

▷ Please see chapter "Car Care" on page 79.

Information

If the camera does not detect a traffic sign, the speed limit stored in the navigation system will be automatically displayed.

Displaying speed limits and bend ahead warning

Fig. 223: Traffic sign display in instrument cluster

A Main traffic sign
B Bend ahead warning

Up to three main traffic signs **A** including additional signs can be displayed on the Speed & Assist display in the instrument cluster. The traffic sign with the highest priority is on the left.

After the ignition is switched on, the last valid speed limit appears on the instrument cluster. If no speed limit is detected or if traffic sign detection is not available in the current area, a message appears on the instrument cluster.

▷ Please see chapter "Warning and Information Messages" on page 293.

Information

– In traffic-calmed areas or play streets, the display shows "3 mph (5 km/h)".
– On unsigned highway and highway on and off-ramps, the respective speed limit for surface roads (out of town) is displayed.

Speed limit warning

A speed limit warning with a warning threshold of 3 - 12 mph (5 - 20 km/h) can be activated in the PCM. When this threshold is exceeded, the relevant traffic sign starts to "glow" in order to alert the driver.

Activating speed limit warning

▸ **ASSIST** ▸ Options ▸ **Speed limits**

Trailer-relevant settings

▸ **ASSIST** ▸ Options ▸ **Speed limits** ▸ **Trailer operation**

Showing trailer-relevant signs

✓ Automatic trailer detection is activated.

NOTICE

▸ Deactivate automatic trailer detection if a bicycle carrier, for example, is plugged into the trailer socket.

▷ Please see chapter "Trailer Hitch" on page 275.

Setting maximum speed for trailer

The maximum permitted speed can be set for the trailer, depending on the type of trailer. If no value is set or if the set value is higher than the legal speed limit and does not conform to any national special regulations (e.g. SL110 in Germany, where only SL80 or the special regulation relating to SL100 are legally plausible), the function will display the maximum speed for towing a trailer that applies in the relevant country.

NOTICE

▸ The value set for the maximum speed for towing a trailer - depending on the type of trailer - remains stored when the ignition is switched off and on again and may have to be changed if a different trailer is used.

Setting maximum speed for trailer

– In traffic-calmed areas or play streets, the display shows "3 mph (5 km/h)".

– On unsigned highway and highway on and off-ramps, the respective speed limit for surface roads (out of town) is displayed.

Speed limit warning

A speed limit warning with a warning threshold of 3 - 12 mph (5 - 20 km/h) can be activated in the PCM. When this threshold is exceeded, the

Trailer Hitch

- Never attempt to modify or repair the trailer hitch yourself.
  - Please follow the operating instructions for the trailer.

Important definitions

- **The towed weight** (gross weight of the trailer) is the sum of the trailer's empty weight and the weight of the load.
- **The tongue weight** is the weight exerted by the trailer drawbar on the trailer hitch of the vehicle.
- **The rear-axle load** is the vehicle weight on the rear axle plus the weight of the transported load and the tongue weight of the trailer.
- **The gross weight of the vehicle-trailer combination** is the sum of the weight of the towing vehicle and the weight of the trailer.

▷ Please see chapter "Technical Data" on page 334.

Retrofitting the trailer hitch

Only have a trailer hitch retrofitted at an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Using the electrical connection

Fig. 224: Using a trailer hitch

Your vehicle has a 7-pin plug for the electrical connection to the trailer.

- If you wish to tow a trailer with a 13-pin plug, use an appropriate adapter.

Preparing for trailer operation

- Always observe permitted specifications for towed weight, tongue weight and rear-axle load.
- When connected, the trailer must always be horizontal behind the towing vehicle. Use a trailer with an adjustable drawbar if necessary.

Distributing the load

- 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.
- Never exceed the trailer hitch's rated tongue weight when loading the trailer.

Ensuring correct tire pressure

- Select the vehicle tire pressure for full load on the towing vehicle.
  - Please see chapter "Wheels and Tires" on page 316.
- Adjust the tire pressure of the trailer wheels according to the manufacturer's instructions.

Checking the field of view of the door mirror

- If the width of the trailer obstructs your view of the traffic behind the trailer, additional door mirrors must be fitted.

Checking the headlights and other lights

- Check that the plug of the trailer is plugged into the towing vehicle.
- Check that all the lights work.

Driving with a trailer

WARNING Changed vehicle handling due to hitched trailer

A hitched trailer has a significant effect on vehicle handling.

- Observe country-specific laws for driving with a trailer.
- Carefully and gradually familiarize yourself with the handling and braking behavior of the vehicle/trailer combination.
- Take into account the altered vehicle handling and dimensions in situations such as braking, parking, cornering, overtaking, etc.
- Avoid abrupt and sudden driving and braking maneuvers.
- Do not drive with the towing vehicle empty and the trailer loaded. If this unfavorable situation is unavoidable, drive particularly slowly.
- Adapt your driving style and speed to the changed conditions.

WARNING Excessive speed

Driving too fast can cause the driver to lose control of the vehicle/trailer combination.

- The driving stability of the vehicle/trailer combination diminishes with increasing speed. Drive particularly slowly on downhill stretches and in unfavorable road and weather conditions (e.g. high winds).
- Drive in an appropriately low gear on downhill stretches in order to make use of the engine braking effect.
- Do not drive with the towing vehicle empty and the trailer loaded. If this unfavorable situation is unavoidable, drive particularly slowly.
- Slow down immediately if the trailer starts to sway. Do not countersteer; brake if necessary. Never attempt to straighten out the vehicle-trailer combination by accelerating.

WARNING Absence of distance warning when reversing

Rear ParkAssist is deactivated automatically if a connected trailer is detected.

- Drive with extreme care.

WARNING Absence of warning when changing lanes

Lane Change Assist is deactivated automatically if a connected trailer is detected.

- Drive with extreme care.

WARNING Moving vehicle

Parts of the body can come between the trailer and the towing vehicle and may be pinched or crushed.

- People, animals or objects must never be in the space between the trailer and towing vehicle when the vehicle is moving.

Information

Towing a trailer places greater stress on the vehicle. Have the vehicle checked regularly by an authorized Porsche dealer.

Hitching and unhitching a trailer

Hitching a trailer

1. Switch off the alarm system before hitching the trailer. The alarm system could trigger unintentionally.
   ▷ Please see chapter "Alarm System" on page 67.
2. Hitch the trailer.
3. Switch the alarm system on again after hitching the trailer.

Unhitching a trailer

1. Switch off the alarm system before unhitching the trailer. The alarm system could trigger unintentionally.
2. If the trailer has an overrun brake, do not unhitch the trailer when the brake is still applied.
3. Unhitch the trailer.
4. Switch the alarm system on again after unhitching the trailer.

Transmission

Driving with Porsche Tiptronic S

Tiptronic S is an 8-speed automatic transmission with an automatic and a manual shifting mode.

In **automatic shifting mode** (operating mode **D**), gear changing is automatic. You can change temporarily from automatic to manual shifting mode using the shift paddles on the steering wheel.

In **manual shifting mode** (operating mode **M**), you can change gear using the selector lever or the shift paddles on the steering wheel.

You can switch between the **D** and **M** modes as required while driving.

- Make sure that the gearshift paddles on the steering wheel are not accidentally operated in automatic and manual shifting mode, triggering unintended gearshifts.

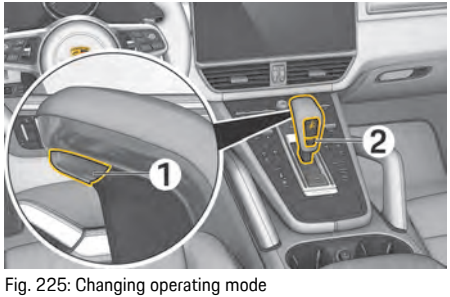


Fig. 225: Changing operating mode

1 Release button
2 Transmission parking lock (P button)

Changing operating mode

When the ignition is off, operating mode **P** is active and the selector lever is freely movable in the shift gate.

The operating mode can only be changed if the release button (**1**) on the selector lever has been pressed. In addition to the release button, the brake pedal must be pressed when switching from the **P** or **N** operating mode. It is only possible to switch to the **M** operating mode from the **D** operating mode. In order to switch to the **P** operating mode, either the P button (**2**) on the selector lever has to be pressed or the ignition switched off.

Following each actuation, the selector lever returns to its original center position and the selected operating mode is indicated on the instrument cluster.

▷ Please see chapter "Reading the indicator for the mode and engaged gear" on page 278.

Release button

The release button (**1**) on the selector lever prevents the gear from being changed unintentionally. It must always be pressed before changing mode.

P button

The P button (**2**) on the selector lever activates the transmission parking lock. When the ignition is switched off, the transmission parking lock is automatically engaged in the **D**, **M** or **R** operating modes.

Information

The transmission parking lock is also engaged in **D**, **M** or **R** operating modes when you leave the vehicle (driver-side seat belt unfastened, driver's door opened, brake pedal released).

The vehicle can still be moved with the driver's door open and the driver's seat belt unfastened by releasing the electric parking brake manually and if necessary switching to the desired operating mode **D**, **M** or **R**. In this case, the parking brake remains released and the desired operating mode **D**, **M** or **R** remains selected and the transmission parking lock is not automatically activated.

▷ Please see chapter "Starting and Stopping the Engine" on page 261.

Starting the engine

The engine can only be started if the brake pedal is pressed and mode **P** or **N** is activated.

For information on starting E-Hybrid vehicles:

▷ Please see chapter "Hybrid Vehicle" on page 135.

Driving off

- Only select the desired operating mode for driving off (**D**, **M** or **R**) when the engine is idling and keep the brake pedal pressed while doing so.
- Because the vehicle moves (creeps) when a gear is engaged, you should only release the brake when you want to drive off.

Driving off on gradients

▷ Please see chapter "HOLD Function: Standstill Management" on page 132.

Stopping the vehicle

- For a brief stop (e.g. at traffic lights), leave the selector lever in operating mode **D** and hold the vehicle with the brake pedal.
- Do not use the accelerator pedal to hold the vehicle on gradients. but use the brake pedal or electric parking brake instead.
- Before leaving the vehicle, always apply the electric parking brake and activate operating mode **P**.

Parking the vehicle

- Go easy on the accelerator!
- When parking or maneuvering in a small space, control the speed by careful use of the footbrake.

Reading the indicator for the mode and engaged gear

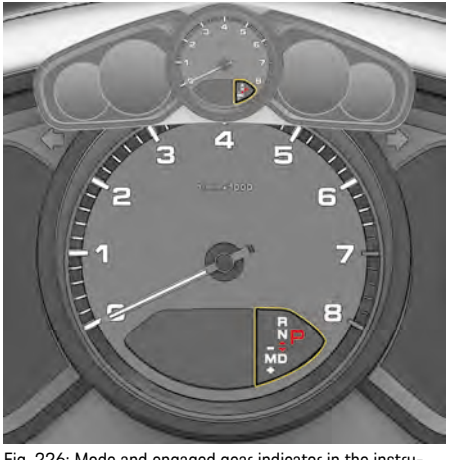


Fig. 226: Mode and engaged gear indicator in the instrument cluster

When the engine is running, the operating modes and the engaged gear are displayed.

If the selector lever is accidentally moved to a different mode from **P** or **N** without the brake being applied (due to a malfunction or incorrect operation), this mode flashes and no power transmission occurs.

- To drive off, apply the brake and move the selector lever from **P** or **N** to the desired mode again.

Operating mode R or D flashes in the instrument cluster

No power transmission takes place.

Effects:

– The selector lever was engaged without the footbrake being pressed.

– The selector lever was moved to **R** or **D** above the permissible speed limit or against the direction of travel.

Action required:

- Press the footbrake and engage the desired operating mode again from **N**.

Operating modes

P – Parking lock

- You should only activate the parking lock with the P button when the vehicle is stationary. If operating mode **P** flashes, the parking lock is not engaged. The vehicle can roll away. Press the P button again or switch off the ignition.

R – Reverse gear

- Select only if the vehicle is stationary and the brake is applied.

N – Neutral

Operating mode **N** must be selected in car washes, for example.

- Only select the desired operating mode for driving off (**D**, **M** or **R**) when the engine is idling and keep the brake pedal pressed while doing so.

D – Automatic shifting mode

- Engage operating mode **D** for "normal" driving. The gears are automatically selected according to the accelerator pedal position and vehicle speed.

Information

Shifting gears on the steering wheel allows you to switch temporarily from automatic shifting mode **D** to manual shifting mode **M**.

Example:

– Downshifting before bends or when entering built-up areas

– Downshifting when driving downhill (engine braking effect)

– Downshifting for short bursts of speed

The manual selection mode remains engaged:

– During overrun

– When the vehicle is stationary, e.g. at a junction

Manual shifting mode is terminated again:

– Automatically after around 6 seconds (not in overrun)

M – Manual shifting mode

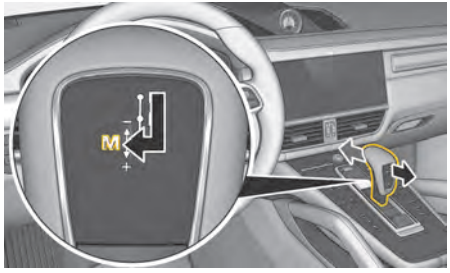


Fig. 227: Manual selection mode at the selector lever

The gearshift paddles on the steering wheel or the selector lever allow the driver to select the eight forward gears comfortably and safely.

▸ Press the selector lever from position **D** to **M**.

The currently engaged gear is retained when you change from **D** to **M**.

If you change from **M** to **D**, the gear-changing map suitable for your current driving style is selected and the appropriate gear is engaged.

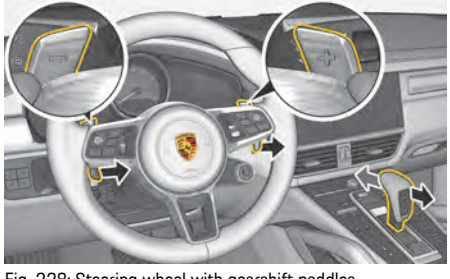


Fig. 228: Steering wheel with gearshift paddles

Upshifting with selector lever or right "+" gearshift paddle

▸ Pull back the selector lever or right gearshift paddle.

Downshifting with selector lever or left "–" gearshift paddle

✓ ACC or cruise control mode is not active.

▸ Press the selector lever forward or pull back the left gearshift paddle.

Upshift indicator for fuel consumption-optimized driving

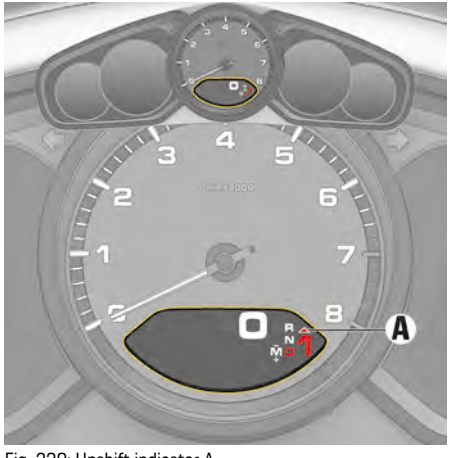


Fig. 229: Upshift indicator A

The fuel economy-oriented upshift indicator **A** helps you to develop a fuel-saving driving style. Depending on the gear selected, engine speed and accelerator pedal position, the upshift indicator lights up, prompting you to shift to a higher gear.

▸ Shift to the next-higher gear when the upshift indicator lights up.

Actuating the kick-down function

The kickdown function is active in operating modes **D** and **M**.

▸ For optimum acceleration, e.g. when overtaking, depress the accelerator pedal quickly as far as it will go (kickdown).

Depending on the driving speed and the engine speed, the transmission will downshift. Upshifting takes place at the highest possible engine speeds.

Driving in coasting mode

✓ Cayenne, Cayenne Coupé, Cayenne S, Cayenne S Coupé, Cayenne GTS, Cayenne GTS Coupé, Cayenne Turbo, Cayenne Turbo Coupé.

In coasting mode, the engaged gear is automatically disengaged and the engine braking effect avoided. The vehicle rolls in neutral.

Manual coasting mode can be initiated by the driver.

Automatic coasting mode can be requested by the driver and is also initiated automatically by the system.

Requesting automatic costing mode

✓ Cayenne, Cayenne Coupé, Cayenne S, Cayenne S Coupé, Cayenne Turbo, Cayenne Turbo Coupé.

✓ Auto Start/Stop function switched on.

✓ NORMAL driving mode selected.

✓ Operating mode **D** selected.

✓ Porsche Stability Management (PSM) active.

✓ Cruise control mode not active.

✓ Adaptive Cruise Control (ACC) not active.

✓ Porsche InnoDrive (PID) not active.

✓ Vehicle has reached operating temperature.

✓ No major inclines or slopes.

✓ Driving outside built-up areas.

✓ Data from other assistance systems allow coasting mode (country-dependent; e.g. distance to the vehicle in front, upcoming road routing according to map data).

- Slowly remove your foot from the accelerator pedal.
  The system evaluates the driving data and automatically initiates coasting mode in appropriate driving situations.

Initiating coasting mode manually

✓ Cayenne, Cayenne Coupé, Cayenne S, Cayenne S Coupé, Cayenne GTS, Cayenne GTS Coupé, Cayenne Turbo, Cayenne Turbo Coupé
✓ NORMAL driving mode selected.
✓ Operating mode **D** selected.
✓ Porsche Stability Management (PSM) active.
✓ Cruise control mode not active.
✓ Adaptive Cruise Control (ACC) not active.
✓ Porsche InnoDrive (PID) not active.
✓ No major inclines or slopes.
✓ Auto Start Stop function switched on (only Cayenne, Cayenne Coupé, Cayenne S, Cayenne S Coupé, Cayenne Turbo, Cayenne Turbo Coupé).

1. Remove your foot from the accelerator pedal completely.
2. Use the gearshift paddle or the selector lever to manually shift up beyond the highest possible gear.
   Coasting mode is initiated.

Exiting coasting mode

- Press the accelerator pedal.
  – or –
- Shift gear using the shift paddle or selector lever.
  The engine is engaged again and coasting mode is exited.

Driving off with Performance Start

The Performance Start function achieves maximum acceleration from a standing start.

⚠ WARNING Loss of control over the vehicle or endangering other road users

In some situations (poor road conditions, driver inattention, etc.) control over the vehicle may be lost or other road users may be endangered as a result.

- Only use Performance Start on public roads if the road and traffic conditions permit.
- Do not endanger other road users when using Performance Start.

Information

Stresses on components increase significantly when driving off at maximum acceleration compared to normal driving off.

✓ Engine is at operating temperature.
✓ SPORT PLUS mode activated.

1. Press the brake firmly with your left foot.
2. Quickly depress the accelerator pedal fully and hold it down.
   The engine speed levels off automatically. A message appears on the instrument cluster indicating that the Performance Start function is active.
3. Release the brake within a few seconds.

Driving off with e-Launch

✓ E-Hybrid vehicles

The e-Launch function is used to achieve maximum, purely electric acceleration from a standstill.

✓ The high-voltage battery should be as fully charged as possible.

1. Activate E-POWER mode.
2. Press the brake with your left foot.
3. Press the accelerator pedal until a message regarding an active e-Launch function appears in the instrument cluster and stop at that point.
4. Release the brake within a few seconds.

Information

In the E-POWER driving program, the accelerator pedal has a hybrid-specific end point. When this end point is exceeded, the combustion engine is started.

Trip Information Display

A large range of trip information, e.g. the trip time, the distance traveled, the average speed or the average fuel consumption, can be displayed on the touch display and on the instrument cluster.

For information on operation of the touch screen and instrument cluster:

- ▷ Please see chapter "Operating the instrument cluster" on page 141.
- ▷ Please see chapter "Operating the touch display" on page 218.

Driving data on the instrument cluster

Displaying driving data in the Car & Info display

1. Select **Trip** menu.
2. Select a display from the list.

Resetting the trip data

1. **Trip** ▸ **Reset**
2. Select a display from the list.

Trip information display on touch display in dashboard

Displaying the trip data

1. **CAR** ▸ **Trip**
2. Scroll to the desired display.

Customizing trip

1. **CAR** ▸ **Trip** ▸ Options ▸ **Customize trip**
2. Numerous items of vehicle data can be assigned to four fields via drag & drop. One item of diving data cannot be assigned to several fields.

Resetting the trip data

- ▸ **CAR** ▸ **Trip** ▸ ▸ **Reset trip data**

Vehicle Key

Using the vehicle key

Information

- Only use the vehicle key when the vehicle is in your sight.

The Porsche Crest on the vehicle key lights up when the buttons are pressed. The Crest may also light up when driving without any of the buttons being pressed on the vehicle key.

Data of relevance for servicing and maintenance is stored on the vehicle key while driving. The Porsche Crest on the vehicle key may therefore light up without actuation. For further information on storing and reading out the data on the vehicle key:

- Contact an authorized Porsche dealer.

The remote control may not work for the following reasons:

– Radio waves can interfere with transmission (even radio contact between the vehicle key and vehicle in the case of Porsche Comfort Access). Never store the vehicle key together with electronic devices that are switched on (e.g. cellphone, notebook, charging cable). Change where you store the vehicle key if necessary.
– The remote control is malfunctioning due to a fault.
– The vehicle key battery is discharged.

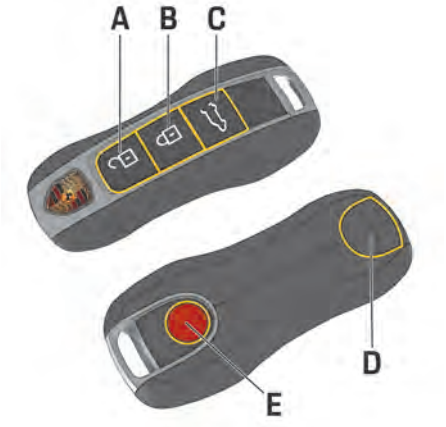


Fig. 230: Vehicle key

A Unlock vehicle
B Lock vehicle
C Opening the tailgate and unlocking the vehicle
D Emergency key
E Panic button

There is an emergency key integrated in every vehicle key. The vehicle keys can be used to operate all of the vehicle locks.

- Take care of your vehicle keys: do not part with them except under exceptional circumstances.
- Never leave the vehicle key in the vehicle.

Using the panic button

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

To trigger an alarm

- Press the red button once.

The horn sounds and the emergency flasher flashes.

To stop the alarm

- Press the red button again.

The horn becomes silent and the emergency flasher goes out.

Using the emergency key

Removing emergency key

Fig. 231: Removing emergency key

- Push the emergency key upward out of the vehicle key.

Inserting emergency key

- Push the emergency key into the vehicle key until it engages audibly.

Replacing the vehicle key battery

⚠ WARNING Risk of internal burns or death from swallowing the lithium coin cell (button battery)

The vehicle key contains a lithium coin cell (battery).

Swallowing the battery can cause internal burns within two hours and this can result in death.

- Keep removed or new batteries out of children's reach.
- Keep vehicle keys out of children's reach. Children could open the vehicle key and remove the battery.
- If the battery is swallowed or inserted into a body orifice, seek medical attention from a doctor immediately.

Information

- Observe the disposal instructions for batteries.

If the battery in the vehicle key needs to be replaced, a message appears on the instrument display. The Porsche Crest on the vehicle key no longer lights up when buttons are pressed on the vehicle key.

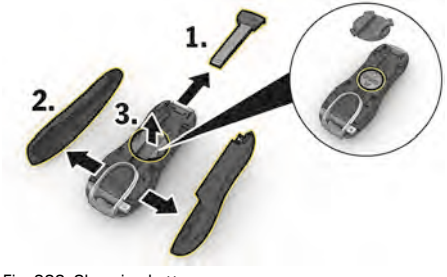


Fig. 232: Changing battery

Changing the battery (CR 2032, 3V)

1. Remove the emergency key.
2. Unclip the vehicle key housing to the right and left.
3. Unscrew the battery cover counter-clockwise and remove it.
4. Change the battery (check polarity).
5. Re-fit the battery cover and screw it back on firmly clockwise.
   Ensure that the emergency key can be pushed in again.
6. Push the vehicle key housing upwards from below and clip into place.
7. Insert the emergency key.

Starting the vehicle with discharged vehicle key battery or radio interference

Fig. 233: Vehicle key in drink holder

Malfunctions of wireless communication between the vehicle and the vehicle key, or a discharged vehicle key battery can disable detection of the vehicle key.

Then when starting the vehicle, observe the following:

1. Place the vehicle key in the left-hand front drink holder. Hold the vehicle key against the wall of the drink holder with the back toward the rear.
2. Turn the operating device to ignition lock position **2** and then back to position **0**.
3. Turn the operating device to ignition lock position **2** again.
   ▷ Please see chapter "Starting and Stopping the Engine" on page 261.

Ordering a replacement key and keeping in a safe place

Vehicle keys can only be ordered from an authorized Porsche dealer. This can take a long time.

- Always have a replacement key available.
- Keep the replacement key in a safe place, but under no circumstances in or on the vehicle.

To teach new vehicle keys for the vehicle:

- Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.
- Teach all vehicle keys belonging to the vehicle again.

Information

A total of eight vehicle keys can be taught.

Information

- If a vehicle key is lost or stolen, have an authorized Porsche dealer disable this vehicle key in the vehicle and change the mechanical locks if necessary.
- You should notify your insurance company of the loss or theft of vehicle keys or of the production of additional or replacement keys.

Vehicle Settings

Different vehicle settings can be made depending on model, country and equipment. The vehicle settings listed here may not be available in all models, countries and equipment. For safety reasons, some functions are only available when the vehicle is stationary.

The vehicle settings are saved even when the ignition is switched off.

▷ Please see chapter "Personal Settings" on page 206.

What do I want to do?	What should I select?	Where?
Set locking and unlocking options	▸ **CAR** ▸ **CONTROL** ▸ **Vehicle settings** ▸ **Locking**	–
Adjust lighting, windshield wiper and door mirrors	▸ **CAR** ▸ **CONTROL** ▸ **Vehicle settings** ▸ **Light and visibility**	–
Adjust seat heating, seat ventilation and seat position	▸ **CAR** ▸ **CONTROL** ▸ **Vehicle settings** ▸ **Seat settings**	–
Set Tire Pressure Monitoring (TPM)	▸ **CAR** ▸ **CONTROL** ▸ **Vehicle settings** ▸ **Tire pressure monitoring**	▷ p. 316
Set the ◊ button on the multifunction steering wheel	▸ **CAR** ▸ **CONTROL** ▸ **Vehicle settings** ▸ **Steering wheel button**	–
Set car jack mode	▸ **CAR** ▸ **CONTROL** ▸ **Vehicle settings** ▸ **Chassis**	–
Program the garage door opener (HomeLink®)	▸ **CAR** ▸ **CONTROL** ▸ **Vehicle settings** ▸ **Garage door opener**	▷ p. 129
Display service history (electronic service record)	▸ **CAR** ▸ **CONTROL** ▸ **Vehicle settings** ▸ **Service history** The servicing performed and the service scope are displayed.	–
Adapt the PCM display	▸ **CAR** ▸ **CONTROL** ▸ **Search** ▸ **Display PCM**	–
Adapt the instrument cluster display	▸ **CAR** ▸ **CONTROL** ▸ **Search** ▸ **Display instrument cluster**	–
Adapt customized view in the instrument cluster	▸ **CAR** ▸ **CONTROL** ▸ **Search** ▸ **Display instrument cluster** ▸ **Contents** ▸ **Customized view**	–

What do I want to do?	What should I select?	Where?
	You can select from many items of vehicle information for display in four fields via drag & drop. One item of vehicle information cannot be assigned to several fields.	
Set date and time	▸ **CAR** ▸ **CONTROL** ▸ **System** ▸ **Date and time**	–
Set units	▸ **CAR** ▸ **CONTROL** ▸ **System** ▸ **Units**	–
Set the voice control system	▸ **CAR** ▸ **CONTROL** ▸ **System** ▸ **Voice control**	–
Set the language	▸ **CAR** ▸ **CONTROL** ▸ **System** ▸ **Language**	–
Adjust the volume of warning signals and ParkAssist	▸ **CAR** ▸ **CONTROL** ▸ **System** ▸ **Warning signals**	–
Reset to factory settings	▸ **CAR** ▸ **CONTROL** ▸ **System** ▸ **Factory settings** Resetting to the factory settings deletes **all** settings made.	–

Voice control

WARNING Impaired speech recognition

Your voice can change in stressful situations. This could prevent the desired telephone connection from being established or from being established fast enough.

- ▸ Do not use voice control in an emergency.
- ▸ Enter the emergency number via the touch display.

Numerous Navigation, Media, Phone and Apps functions as well as the air-conditioning settings can be activated via voice commands. The vehicle functions cannot be operated via voice commands. The voice control function adapts to the speaker and learns from the very first dialog.

On-board and Online voice recognition functions[1] are linked seamlessly in the voice control system. The voice control function does not support all system languages.

For information on operating the Porsche Communication Management (PCM):

▹ Please see chapter "Porsche Communication Management (PCM)" on page 215.

Opening voice control

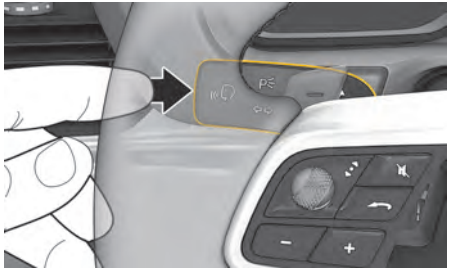


Fig. 234: Press the voice control button on the control lever.

Starting voice control

✓ The ignition is switched on.
✓ There are no active phone calls.
✓ ParkAssist is not active.

1. Briefly press on the control lever.
   A rising acoustic signal is heard and the symbol for voice control appears on the PCM.
2. Say the voice command.

Ending voice control

✓ Voice control is active.

- ▸ Press the button on the control lever.
  A fading acoustic signal sounds.

Information

The dialog can be paused by tapping on the microphone symbol and started again by tapping again.

Further voice control button functions

The button on the control lever can activate different functions, depending on the application:

- – Skips a running announcement when pressed briefly.
- – Interrupts the current dialog when pressed briefly.
- – Activated by pressing and holding Siri voice recognition.

▹ Please see chapter "Operating Apple CarPlay with Siri voice recognition" on page 68.

Information

- – Navigation and traffic notices are not issued during a dialog.
- – With voice control active, list entries can be selected using voice control, the rotary push button or the touch display.
- – If the spoken voice command is not understood or if it cannot be interpreted, voice control responds with the question **Excuse me?** and the voice command can be repeated after that.

Using Porsche Connect services in the voice control system

✓ Data connection is established successfully.

▹ Please see chapter "Porsche Connect" on page 223.

- – Load the online search function for entering navigation destinations as well as portal POIs and other POI categories from Porsche Connect.
- – Dictate online language search as well as text messages/e-mails.

1. Prerequisite: Data connection is established.

Notes on communication using voice control

Note the following points when using voice control:

- Speak clearly and at a normal volume.
- Stress voice commands evenly, without long pauses in your speech.
- Do not speak when the voice control function is making an announcement.
- Reduce disruptive noises by closing the doors, windows and sliding roof.
- Only the driver should issue voice commands, as the hands-free microphone is pointed toward the driver's side.

Adjusting voice control

1. **CAR** ▸ **CONTROL** ▸ **System** ▸ **Voice control**
2. Select the desired setting:

- **Short dialog**: The voice response involves short announcements.
- **Help texts**: Commands that can be spoken are displayed.

Speaking voice commands

There are three types of voice commands:

- **Global voice commands** can always be used. If, for example, the main menu **NAV** is active and the voice command **Radio station XY** is spoken, the station mentioned is called up.
- **General voice commands** may be spoken at any point in the dialog:
  - **New input**
  - **Correction**: If, for example, a phone number was input in several blocks (e.g. 0711 911), the block last input is deleted.
  - **Pause**: Pauses voice control, e.g. when dictating a message. The voice control can be paused for a maximum of 5 minutes. When this time elapses, the dialog is automatically terminated.
  - **Help**: Input help with possible voice commands is displayed.
  - **Cancel**
- **Dialog-related voice commands** are needed as soon as a dialog is conducted with the PCM, e.g. **Line 1**, **Next page**/**Previous page**, **Yes**/**No**

Navigating lists via voice control

Scrolling through a list

▸ To scroll forward/backward in a list in the PCM, say **Next page**/**previous page**.
– or –
Navigate a list via touch display or rotary push button.

Saying a list item

List entries and line numbers marked in blue in the touch display in the dashboard can be spoken.

▸ Say the voice command **Line 1**.
– or –
Say a list entry marked in blue.

Global voice commands for radio

What do I want to do?	What do I have to say?	Note
Change the reception range	(Set/switch on) **Tuner** e.g. **FM/AM/SiriusXM/online radio**	
Select station	**Select station**	Only stations that can currently be received can be spoken.
Set a station that can currently be received	(**Tune to**) **Station** e.g. Station XY	Only stations that can currently be received can be spoken.
Enter frequency	(**Select**) **Frequency** e.g. 91.1 FM	Directly selecting a frequency may cause the reception range to change.

Global voice commands for media

What do I want to do?	What do I have to say?	Note
Use natural voice commands	Examples: **Play something from the SD card.** **I want to hear rock music.**	As an alternative to actual commands, the PCM can recognize natural voice commands (not available in all languages).
Change the media source	**Play** e.g. **SD card**/**USB**/**Bluetooth**	
Select artist/album/track/genre	**Play (artist)** e.g. **Allan Taylor** **Play (album)** e.g. **Songs for the road** **Play (track)** e.g. **Let the music flow** **Play (genre)** e.g. **Rock**	Only artists/albums/tracks/genres that are available in the active media source can be spoken.
Play music similar to current track	**Play similar music**	

Global voice commands for Phone

✓ Phone is connected to the PCM.

▷ Please see chapter "Mobile Phone" on page 177.

What do I want to do?	What do I have to say?	Note
Use natural voice commands	Examples: **I would like to call John Doe.** **Call John Doe on his cell phone.** **Show me my call list.** **Redial the last number.**	As an alternative to actual commands, the PCM can recognize natural voice commands (not available in all languages).
Open the redial feature	**Redial**	
Enter phone number	**Dial number**/**Number** e.g. **0711 911 12345**	In the next step, the system asks for the telephone number./The number you entered is called.
Call voicemail	**Call voicemail**	
Call contact	**Call contact**/**Show contacts**	In the next step, the system asks for the name of the contact.

What do I want to do?	What do I have to say?	Note
Call stored contact	**Call** e.g. **Doe** (**private/work/general**)	If the contact is not clear, the command leads to the dialog. The first name, last name or both can be spoken. A specific phone number can also be selected.
Open call list	**Call history/missed calls/received calls/dialed numbers**	These voice commands lead to a global call list, from which an entry can be selected or called.
Read out e-mails/text messages	**Read out e-mail/text message**	✓ The connected cellphone supports the function.
Dictate messages	**Dictate (new) e-mail/(new) text message**	✓ The connected cellphone supports the function. The service is not available in all languages and markets. Service cannot be used with Apple devices.

Global voice commands for Navigation

What do I want to do?	What do I have to say?	Note
Use natural voice commands	Examples: **Take me to** e.g. **San Francisco 250 Main Street** **Take me to the next restaurant.** **Where is the next gas station?** **I need gas.** **Show me the map.** **Are there traffic delays on the route?**	As an alternative to actual commands, the PCM can recognize natural voice commands (not available in all languages).
Enter new destination	**Take me to** e.g. **San Francisco 250 Main Street/Enter address/Enter new destination**	To start navigation, say the whole address (house number, street, city, state) in a sentence or step by step.
Select previous destination	**Last destinations/stored destinations**	
Select home/work as destination	**Take me home/Take me to work**	Starts navigation to the stored address.

What do I want to do?	What do I have to say?	Note
Search for destination or point of interest	**Search for (POI)** e.g. **Porsche Service**	Brand names or point of interest categories may be spoken (e.g. search for point of interest, airport).[1]
Search for a destination online	**Online search/Internet search**	The service is not available in all languages and markets. ▷ Please see chapter "Porsche Connect" on page 223.
Select country	**Enter country/change country**	
Select state	**Enter state/Change state**	
Select town/city	**Enter city**	
Find restaurant/rest area/restroom/ ATM/service station	**Next restaurant/rest area/restroom/ATM/gas station**	Shows the respective search criterion nearby.
Start/stop route guidance	**Start/stop route guidance**	
Determine amount of fuel remaining	**Range/remaining range**	
Call up traffic information	**Traffic Info**	✓ Route guidance is active.
Request arrival time	**When will I arrive?**	✓ Route guidance is active.
Calculate alternative route/Avoid traffic jams	**Calculate alternative routes/Dynamic diversions**	After alternative routes are calculated, you can make a choice, e.g. via **Route 2** or via the color of the alternative route in the map view, e.g. **green**.

1. If the **Connected Speech** data package is booked, the search is performed online in parallel if a data connection is available. That can affect the search results and may cause a slight delay in the dialog.

Global voice commands for air conditioning

What do I want to do?	What do I have to say?	Note
Use natural voice commands	Examples: **I'm cold.** **It's too hot.**	As an alternative to actual commands, the PCM can recognize natural voice commands (not available in all languages).
Set temperature	**Set air conditioning to** e.g. **19 degrees**	
Increase/reduce temperature	**Increase temperature by** e.g. **2 degrees**	
Seat heating	**Turn on seat heating** **Set seat heating to level** e.g. **1**	

Global voice commands for apps

What do I want to do?	What do I have to say?	Note
Use natural voice commands	Examples: **What's the latest in news headlines?** **Read out the news headlines.** **I like to see the weather report.**	As an alternative to actual commands, the PCM can recognize natural voice commands (not available in all languages).
News	**Show me the news** **Show me the news from Fox News**	
Weather	**Show me the weather** **How's the weather in** e.g. **New York** **Will it rain tomorrow?**	

Warning and Information Messages

If a warning message appears, refer to the corresponding sections in this manual.

When certain warning lights appear, an additional acoustic signal sounds.

Warning messages are only possible if all measurement conditions are satisfied – therefore check all fluid levels regularly.

The following tables are an extract from the main warning and information messages.

Safety

Display	Message		Meaning and action required
		**Airbag system error** **Visit workshop**	Airbag system is faulty. ▶ Adapt your driving style to the situation. ▶ Have the fault rectified at an authorized Porsche dealer.*
		**Airbag system error** **Driving permitted** **Service necessary**	Airbag system is faulty. ▶ Adapt your driving style to the situation. ▶ Have the fault rectified at an authorized Porsche dealer.*
		**Child lock fault**	Fault in child lock for rear doors. ▶ Switch child lock off and on again. If the fault persists: ▶ Have the fault rectified at an authorized Porsche dealer.*
		**Steering assistance failure** **Increased steering force Driving permitted**	Power steering has failed, is restricted or is faulty. Possible to drive on. ▶ Adapt your driving style to the situation. ▶ Have the fault rectified at an authorized Porsche dealer.*
 (Canada) BRAKE lights up	 (Canada)	**Brake fluid level low** **Park vehicle safely**	The brake fluid level is too low.

Display	Message	Meaning and action required
(USA)	 (USA)	▸ Stop when it is safe to do so. ▸ Do not continue driving. ▸ Have the fault rectified at an authorized Porsche dealer.*
 (Canada) BRAKE (USA)	 (Canada)  (USA) **Brake booster failure**	Power steering has failed or is faulty. ▸ Stop when it is safe to do so. ▸ Do not continue driving. ▸ Have the fault rectified at an authorized Porsche dealer.*
 (Canada) BRAKE (USA) lights up	 (Canada)  (USA) **Brake force distribution error** **Park vehicle safely**	The brake force distribution is faulty. ▸ Stop when it is safe to do so. ▸ Do not continue driving. ▸ Have the fault rectified at an authorized Porsche dealer.*
 (Canada) ABS (USA) lights up	 (Canada)  (USA) **ABS/PSM failure** **Adapted driving permitted**	ABS or Porsche Stability Management (PSM) is not available. Possible to drive on. ▸ Adapt your driving style to the situation. ▸ Have the fault rectified at an authorized Porsche dealer.*
 (Canada) BRAKE WEAR (USA)	 (Canada)  (USA) **Brake pads worn** **Change break pads Driving permitted**	Brake pads are worn. ▸ Have the brake pads replaced immediately. ▸ Have the fault rectified at an authorized Porsche dealer.*
	 (Canada)  **Parking brake in service mode**	Parking brake is in service mode. ▸ Have the fault rectified at an authorized Porsche dealer.*

Display	Message		Meaning and action required
	(USA)		
	 (Canada)  (USA)	**P not available** **Vehicle can roll away** **Apply electric parking brake**	Transmission parking lock **P** is not available. ▶ Select **P** operating mode. ▷ Please see chapter "Transmission" on page 277.
		**Rain or light sensor faulty** **Service necessary**	Rain/light sensor is defective. ▶ Switch on the windshield wipers and lights manually. ▶ Have the fault rectified at an authorized Porsche dealer.*
	flashes 	Example: **L. static cornering light defective** **Check static cornering light**	The indicated cornering light is faulty. ▶ Check relevant light. ▶ Adapt your driving style to the situation. ▶ Have the fault rectified at an authorized Porsche dealer.*
	lights up 	**Driving light control error** **Status temporary Driving permitted**	Driving light control is faulty. ▶ Adapt your driving style to the situation. ▶ Have the fault rectified at an authorized Porsche dealer.*
		Example: **Rear left indicator faulty** **Check indicator**	Indicated light is defective. ▶ Check relevant light. ▶ Have the fault rectified at an authorized Porsche dealer.*
		**High beam assist not available** **Driving permitted** **Activate high beam manually**	Full beam assistant is temporarily unavailable. ▶ Operate the high beam manually. If the fault persists: ▶ Have the fault rectified at an authorized Porsche dealer.*

Display		Message		Meaning and action required
			High beam assist not available **No camera view Clean windshield if necessary**	High beam assist temporarily unavailable due to camera fault. ▶ Clean the windshield if necessary. If the fault persists: ▶ Have the fault rectified at an authorized Porsche dealer.*
			Headlight beam adjust error **Driving permitted Service necessary**	Headlight leveling is faulty. ▶ Adapt your speed to the changed conditions. ▶ Have the fault rectified at an authorized Porsche dealer.*
			Wiper defective **Service necessary**	Windshield wiper is defective. ▶ Adapt your driving style to the situation. ▶ Have the fault rectified at an authorized Porsche dealer.*
	lights up		**Check tires**	Significant loss of pressure on one or more tires. ▶ Stop when it is safe to do so. ▶ Check the relevant tire for damage. ▶ Fill in sealant if necessary. ▶ Set the correct tire pressure at the next opportunity. ▷ Please see chapter "Wheels and Tires" on page 316. ▷ Please see chapter "Flat Tire" on page 121.
	lights up		**Fill air**	Loss of pressure at one or more tires. ▶ Set the correct tire pressure at the next opportunity. ▷ Please see chapter "Flat Tire" on page 121.
	flashes or lights up		**TPMS error** **Service necessary**	Fault in the Tire Pressure Monitoring System (TPMS). Tire pressure is not being monitored. ▶ Have the fault rectified at an authorized Porsche dealer.*
	flashes or lights up		**System briefly not available** **Status temporary Driving permitted**	Temporary fault in the Tire Pressure Monitoring System (TPMS). Tire pressure is not being monitored. If the fault persists: ▶ Have the fault rectified at an authorized Porsche dealer.*

Display		Message		Meaning and action required
	flashes or lights up		**TPMS inactive** **System learning above xx mph**	The Tire Pressure Monitoring System (TPMS) requires a certain time to learn the wheels. No current tire pressures are displayed during this time. ▶ Perform tire pressure monitoring again later.
	flashes or lights up		**Tire change detected** **Update selection**	The tire settings must be updated after a wheel change. ▶ Update tire settings. ▷ Please see chapter "Vehicle Settings" on page 285.
	lights up		**Tire pressure too low** or **Comfort pressure** **Reduce speed**	Speed for set tire pressure has been exceeded. ▶ Reduce speed. ▶ Top off the tire pressure at the next opportunity.
			**Pedestrian warning not available** **Service necessary**	The pedestrian warning is temporarily unavailable. If the fault persists: ▶ Have the fault rectified at an authorized Porsche dealer.*
			**Pedestrian protection activated** **Close hood** **Service necessary**	Pedestrian protection has been triggered. ▶ Close the hood. ▷ Please see chapter "Hood" on page 134. ▶ Have the fault rectified at an authorized Porsche dealer.*
			**Pedestrian protection system error** **Driving permitted** **Service necessary**	Pedestrian protection is faulty. ▶ Have the fault rectified at an authorized Porsche dealer.*

* Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Engine

Display	Message	Meaning and action required
	 **Oil level critical** **Add up to xx l**	Oil level below minimum. ▶ Immediately stop when it is safe to do so and switch off the engine. ▶ Check whether there is an obvious oil leak in or under the vehicle. Do not continue driving if there is an obvious oil leak. ▶ Call up oil measurement in instrument cluster: ▷ Please see chapter "Instrument Cluster" on page 139. ▶ Add oil if necessary. ▷ Please see chapter "Engine Oil" on page 117. ▶ Have the fault rectified at an authorized Porsche dealer.*
	 **Oil level too high** **Driving permitted** **Service necessary**	Oil level above maximum. ▶ Have the fault rectified at an authorized Porsche dealer.*
	 **Oil level measurement error** **Driving permitted** **Visit workshop**	Oil level measurement is faulty. ▶ Have the fault rectified at an authorized Porsche dealer.*
	 **Oil level low** **Add up to xx l**	Minimum oil level reached. ▶ Top up oil. ▷ Please see chapter "Engine Oil" on page 117.
	 **Oil pressure low** **Park vehicle safely**	Oil pressure is too low. ▶ Immediately stop when it is safe to do so and switch off the engine. ▶ Do not continue driving. ▶ Check whether there is an obvious oil leak in or under the vehicle. ▶ Call up oil measurement in instrument cluster: ▷ Please see chapter "Instrument Cluster" on page 139. ▶ Add oil if necessary.

Display	Message		Meaning and action required
			▷ Please see chapter "Engine Oil" on page 117. ▶ Do not continue driving if the warning message is displayed even when the oil level is correct. ▶ Have the fault rectified at an authorized Porsche dealer.*
		**Oil pressure measurement error** **Driving permitted** **Visit workshop**	Oil pressure measurement is faulty. Possible to drive on. ▶ Have the fault rectified at an authorized Porsche dealer.*
		**Oil temperature too high** **Reduce load**	Oil temperature is too high. ▶ Immediately stop when it is safe to do so, switch off the engine and let it cool down. ▶ Do not continue driving. ▶ Call up oil measurement in instrument cluster: ▷ Please see chapter "Instrument Cluster" on page 139. ▶ Add oil if necessary. ▷ Please see chapter "Engine Oil" on page 117.
		**Oil temperature display error** **Driving permitted** **Visit workshop**	Oil temperature gage is faulty. Possible to drive on. ▶ Have the fault rectified at an authorized Porsche dealer.*
Coolant temperature gage at maximum mark		**Coolant level too low** **Park vehicle safely**	Engine coolant level is too low. ▶ Immediately stop when it is safe to do so, switch off the engine and let it cool down. ▶ Check engine coolant level: ▷ Please see chapter "Coolant" on page 102. ▶ Add engine coolant if necessary. If the fault persists: ▶ Have the fault rectified at an authorized Porsche dealer.*
		**Coolant temperature gauge error**	Coolant temperature gage is faulty. ▶ Have the fault rectified at an authorized Porsche dealer.*

Display	Message	Meaning and action required
	Driving permitted **Visit workshop**	
Coolant or oil temperature gage at maximum mark	 **Engine temperature too high** **Park vehicle and allow engine to cool**	Coolant or engine oil temperature is too high. ▶ Immediately stop when it is safe to do so, switch off the engine and let it cool down. ▶ Check radiators and air guides in and on the vehicle for obstructions. ▶ Check coolant and engine oil level: ▷ Please see chapter "Engine Oil" on page 117. ▶ Add coolant if necessary. ▷ Please see chapter "Coolant" on page 102. If the fault persists: ▶ Have the fault rectified at an authorized Porsche dealer.*
	 **Coolant pump faulty**	Coolant pump is faulty. Possible to drive on. ▶ Have the fault rectified at an authorized Porsche dealer.*
 flashes or lights up	 **Reduced engine power** **Driving permitted** **Visit workshop**	Engine power is reduced. Possible to drive on. ▶ Have the fault rectified at an authorized Porsche dealer.*
 flashes or lights up	 **Engine control fault** **Park vehicle safely**	Engine control system is faulty. ▶ Stop when it is safe to do so and switch off the engine. ▶ Do not continue driving. ▶ Have the fault rectified at an authorized Porsche dealer.*
	 **Engine control fault** **Driving permitted** **Visit workshop**	Engine control system is faulty. Possible to drive on. ▶ Have the fault rectified at an authorized Porsche dealer.*

* Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Vehicle

Display	Message	Meaning and action required
	 **Vehicle electrical system error** **Park vehicle safely**	Vehicle electrical system is faulty. ▶ Immediately stop when it is safe to do so. ▶ Do not continue driving. ▶ Have the fault rectified at an authorized Porsche dealer.*
	 **Engine run req. for electricity** **Vehicle electrical system error** **Park vehicle safely**	Vehicle electrical system is faulty. ▶ Stop when it is safe to do so. ▶ Do not continue driving. ▶ Have the fault rectified at an authorized Porsche dealer.*
	 **Vehicle electrical system error** or **Battery low** **Service necessary**	Vehicle electrical system fault or battery is low. Possible to drive on. ▶ Have the fault rectified at an authorized Porsche dealer.*
	 **Start/stop failure**	The Start Stop function is not available at present. If the fault persists: ▶ Have the fault rectified at an authorized Porsche dealer.*
	 **Transmission failure** **Park vehicle safely**	Transmission has failed. The vehicle can be driven only until it comes to a stop. Not possible to drive on. ▶ Immediately stop when it is safe to do so. ▶ Have the vehicle towed to an authorized Porsche dealer. ▷ Please see chapter "Towing" on page 270.
	 **Transmission overheated** **Park vehicle safely** **Allow transmission to cool**	Transmission temperature is too high. ▶ Immediately stop when safe to do so and let the transmission cool down. ▶ Have the fault rectified at an authorized Porsche dealer.*

Display	Message	Meaning and action required
	**Transmission temperature too high** **Reduce load**	Transmission temperature is too high. Possible to drive on. A "warning jerk" can be felt when driving off. Engine power may be restricted. ▶ Stop when it is safe to do so. ▶ Reduce engine load. ▶ Do not hold the vehicle using the accelerator, use the brake instead. ▶ Allow the engine to run in mode **P** or **N** until the warning disappears.
	**Transmission error** **Possibly no reverse gear**	Transmission is faulty. Reverse gear may not be available. Possible to drive on with restricted gearshift comfort. ▶ Have the fault rectified at an authorized Porche dealer.*
	**Service notification transmission**	Additional transmission servicing is necessary. Possible to drive on. ▶ Have the fault rectified at an authorized Porsche dealer.*
	**VTS - theft recognized** **Alarm triggered**	Theft attempt was recognized. ▶ Contact the Security Operating Center (SOC).
	**Emergency call function error** **Service necessary**	Emergency call function is faulty. ▶ Have the fault rectified at an authorized Porsche dealer.*
	**Inspection in xx days**	Service reminder ▶ Have the next service performed at the latest after the indicated number of miles or days. However the intervals in the Maintenance booklet are binding.
	**Reduced engine power** **Please refuel soon**	Fuel tank is empty. ▶ Refuel at the next opportunity. ▷ Please see chapter "Refueling" on page 234.

Display	Message	Meaning and action required
 lights up	 **Gas cap open** **Close gas cap**	Gas cap is not fully closed. ▶ Position gas cap correctly and screw on until it engages with an audible click. ▷ Please see chapter "Refueling" on page 234.
	 **ACC not available** or **Trunk lid open**	▶ Close the indicated door or the tailgate.
	 **Key not found or key error** **Hold key back toward marked area** or  or **Change key position**	Vehicle key battery is discharged. ▶ Place the key at the front left in the storage compartment in the center console to start the vehicle. ▶ Replace the battery. ▷ Please see chapter "Vehicle Key" on page 282. **or** Key faulty, not found or not recognized. Key position faulty. ▶ Switch off possible interference sources. ▶ Carry the vehicle key with you. **– or –** Change key position in vehicle.
	 **Spoiler failure** **Reduce speed**	Driving stability is impaired. ▶ Adapt your driving style to the situation. ▶ Have the fault rectified at an authorized Porsche dealer.*
	 **Spoiler error** or **Spoiler control fault** or  **Adapted driving permitted**	Driving stability is impaired. ▶ Adapt your driving style to the situation. If the fault persists after the engine has been re-started: ▶ Have the fault rectified at an authorized Porsche dealer.*

* Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Driving systems

Display	Message	Meaning and action required
	 **Chassis system fault** **Adapted driving permitted** **See owner's manual.**	The chassis system is faulty. The vehicle handling may change. Possible to drive on. ▶ Adapt your driving style to the situation. ▶ Have the fault rectified at an authorized Porsche dealer.*
	 **Chassis system fault** **Visit workshop** **Adapted driving permitted**	The chassis system is faulty. The vehicle handling may change. Possible to drive on. ▶ Adapt your driving style to the situation. ▶ Have the fault rectified at an authorized Porsche dealer.*
	 **Chassis system failed** **Park vehicle safely**	The chassis system has failed. ▶ Stop when it is safe to do so. ▶ Do not continue driving. ▶ Have the fault rectified at an authorized Porsche dealer.*
	 **Vehicle level extremely low** **Do not drive off, wait until ready for operation**	Vehicle level is low. ▶ Adapt your driving style to the situation. ▶ Have the fault rectified at an authorized Porsche dealer.*
	 **Vehicle level extremely high** **Adapted driving permitted**	Vehicle level is high. ▶ Adapt your driving style to the situation. ▶ Have the fault rectified at an authorized Porsche dealer.*
 lights up	 **PSM failure** **Visit workshop** **Adapted driving permitted**	Porsche Stability Management (PSM) is not available. Possible to drive on. ▶ Adapt your driving style to the situation. ▶ Have the fault rectified at an authorized Porsche dealer.*

Display	Message	Meaning and action required
 lights up	 **ABS/PSM failure** **Adapted driving permitted**	Porsche Stability Management (PSM) is not available. Possible to drive on. ▶ Adapt your driving style to the situation. ▶ Have the fault rectified at an authorized Porsche dealer.*
 lights up	 **PSM activated automatically**	Porsche Stability Management (PSM) was switched on automatically.
	 **PSM Sport** **Vehicle stability system restricted**	Vehicle stability system is only available to a restricted extent when Porsche Stability Management (PSM) is active. Possible to drive on. ▶ Adapt your driving style to the situation.
	 **Drive distribution system error** **Adapted driving permitted**	Porsche Traction Management (PTM) fault. ▶ Reduce load. If the fault persists: ▶ Have the fault rectified at an authorized Porsche dealer.*
	 **Drive distribution system failure** or **Drive distribution system overloaded** **Rear-wheel drive only** **Adapted driving permitted**	Porsche Traction Management (PTM) is temporarily unavailable. ▶ Reduce load. If the fault persists: ▶ Have the fault rectified at an authorized Porsche dealer.*
	 **Drive distribution system temp. limit** **Reduce load**	Porsche Traction Management (PTM) is overloaded. ▶ Reduce load. If the fault persists: ▶ Have the fault rectified at an authorized Porsche dealer.*
	 **Rear differential lock overloaded** **Adapted driving**	Porsche Traction Management (PTM) is overloaded. ▶ Reduce load. If the fault persists:

Display	Message	Meaning and action required
	permitted	▶ Have the fault rectified at an authorized Porsche dealer.*
	**Rear differential lock failure** or **Rear differential lock failure** **Adapted driving permitted**	Porsche Torque Vectoring Plus (PTV Plus) has failed or is faulty. Possible to drive on. ▶ Adapt your driving style to the situation. ▶ Have the fault rectified at an authorized Porsche dealer.*
	**Rear axle steering failure** or **Rear axle steering fault** **Adapted driving permitted**	Rear axle steering has failed or is faulty. Possible to drive on. ▶ Have the fault rectified at an authorized Porsche dealer.*
	**e-Launch activated**	Launch Control is activated. Maximum acceleration is achieved when driving off from standstill. ▷ Please see chapter "Transmission" on page 277.
	**Camera system fault** **Service necessary**	Cameras are faulty. ▶ Have the fault rectified at an authorized Porsche dealer.*
	**Camera system not available** **Status temporary** **Driving permitted**	Assistance systems or cameras are faulty. ▶ Have the fault rectified at an authorized Porsche dealer.*
	**Camera system restricted** **No camera view** **Clean windshield**	Assistance systems or cameras are temporarily unavailable due to weather conditions or dirt on the windshield. ▶ Clean the windshield if necessary.

Display	Message		Meaning and action required
		if necessary	If the fault persists: ▶ Have the fault rectified at an authorized Porsche dealer.*
		**System error** **Driving permitted** **Service necessary**	One or more electrical systems may not be available. ▶ Adapt your driving style to the situation. ▶ Have the fault rectified at an authorized Porsche dealer.*
		**ParkAssist sound failure** or **Instrument cluster sound failure** **Driving permitted** **Service necessary**	Acoustic warning and distance measurements (e.g. with ParkAssist) are not available. ▶ Adapt your driving style to the situation. ▶ Have the fault rectified at an authorized Porsche dealer.*
		**Front ParkAssist failed** or **Rear ParkAssist failed** **Driving permitted** **Service necessary**	ParkAssist is not available. ▶ Adapt your driving style to the situation. ▶ Note the fault when parking. ▶ Have the fault rectified at an authorized Porsche dealer.*
		**PAS fault** **Service necessary**	Porsche Active Safe (PAS) fault. Possible to drive on. ▶ Adapt your driving style to the situation. ▶ Have the fault rectified at an authorized Porsche dealer.*
		**WBA restricted** **See owner's manual**	Porsche Active Safe (PAS) is restricted or faulty. Possible to drive on. ▶ Adapt your driving style to the situation. If the fault persists: ▶ Have the fault rectified at an authorized Porsche dealer.*

Display	Message	Meaning and action required
	 **WBA restricted** **Sensor dirty, please clean sensor**	Porsche Active Safe (PAS) may be impaired due to weather conditions or dirt on the sensor in the vehicle. ▶ Adapt your driving style to the situation. ▶ Clean the windshield if necessary. If the fault persists: ▶ Have the fault rectified at an authorized Porsche dealer.*
	 **ACC not available** **Driver takeover necessary**	Adaptive Cruise Control (ACC) is not available. ▶ Take over control of the vehicle.
	 **ACC not available** **ABS/PSM intervention**	Adaptive Cruise Control (ACC) is not available during ABS or PSM intervention. ▶ Adapt your driving style to the situation.
	 **ACC not available**	Adaptive Cruise Control (ACC) system error. Possible to drive on. ▶ Adapt your driving style to the situation. If the fault persists: ▶ Have the fault rectified at an authorized Porsche dealer.*
	 **ACC not available** **Engage transmission range D or M**	Adaptive Cruise Control (ACC) is only possible in the **D** or **M** operating modes. ▶ Select **D** or **M** operating mode (transmission range).
	 **ACC not available** **Sensor dirty, please clean sensor**	Adaptive Cruise Control (ACC) temporarily unavailable due to poor weather conditions or dirt on the sensor. ▶ Clean the sensor. If the fault persists: ▶ Have the fault rectified at an authorized Porsche dealer.*
	 **Active lane guidance fault**	Active lane keeping is faulty. ▶ Have the fault rectified at an authorized Porsche dealer.*

Display	Message	Meaning and action required
	Service necessary	
	 **Active lane guidance fault** **Sensor dirty, please clean sensor**	Active lane keeping temporarily unavailable due to poor weather conditions or dirt on the front camera or ACC sensor. ▶ Clean front camera and ACC sensor. If the fault persists: ▶ Have the fault rectified at an authorized Porsche dealer.*
	 **Emergency stop assist fault** **Driving permitted Service necessary**	Emergency stop assist function is faulty. ▶ Have the fault rectified at an authorized Porsche dealer.*
	 **Emergency stop assist not available** **Status temporary Driving permitted**	Emergency stop assist is temporarily unavailable. If the fault persists: ▶ Have the fault rectified at an authorized Porsche dealer.*
	Speed limit display currently limited **No camera view Clean windshield if necessary**	Speed limit display is temporarily unavailable due to weather conditions or dirt on the windshield. ▶ Clean the windshield if necessary. If the fault persists: ▶ Have the fault rectified at an authorized Porsche dealer.*
	Speed limit display not available **Status temporary Driving permitted** or **You are outside of the service area** or **No navigation data available**	No navigation data being received for the time being. Possible to drive on. If the fault persists: ▶ Have the fault rectified at an authorized Porsche dealer.*

Display	Message	Meaning and action required
	LCA not available **Status temporary** **Driving permitted**	Lane Change Assist (LCA) is temporarily unavailable due to weather conditions. ▶ Activate Lane Change Assist (LCA) by pressing the button. ▷ Please see chapter "Lane Change Assist (LCA)" on page 151.
	LCA not available **No Lane Change Assist during trailer operation**	Lane Change Assist (LCA) cannot be activated when towing a trailer.
	LCA not available **Sensor dirty, please clean rear bumper**	Lane Change Assist (LCA) sensors are covered, e.g. by bicycle racks, stickers, dirt or a build-up of ice. ▶ Have the sensor fault corrected. ▶ Activate Lane Change Assist (LCA) by pressing the button. ▷ Please see chapter "Lane Change Assist (LCA)" on page 151.
	Driver takeover	Lane Keep Assist or Active Lane Keeping detects excessively weak or no steering wheel movements by the driver and prompts the driver to take over in several stages. To activate Lane Keep Assist or Active Lane Keeping: ▶ Take over steering immediately. Vehicles with activated emergency stop function are decelerated to a standstill if no steering wheel movement is detected. To cancel the emergency stop procedure: ▶ Take over steering immediately, brake or accelerate.
	Lane Keep Assist not available **Driving permitted** **Service necessary**	Lane Keep Assist is not available. ▶ Adapt your driving style to the situation. ▶ Have the fault rectified at an authorized Porsche dealer.*
	Lane Keep Assist restricted **No camera view**	Lane Keep Assist is temporarily unavailable due to weather conditions or dirt on the windshield. ▶ Clean the windshield if necessary.

Display	Message	Meaning and action required
	Clean windshield if necessary	If the fault persists: ▶ Have the fault rectified at an authorized Porsche dealer.*
	Lane Keep Assist restricted **Status temporary Driving permitted**	Lane Keep Assist is temporarily unavailable. If the fault persists: ▶ Have the fault rectified at an authorized Porsche dealer.*
	Night View Assist not available	Night View Assist is not available. ▶ Have the fault rectified at an authorized Porsche dealer.*
	Night View Assist **Pedestrian detection not available**	Pedestrian detection is not available. Pedestrians or large wild animals will not be detected. Possible to drive on. ▶ Adapt your driving style to the situation.
	Porsche InnoDrive not available **Driving permitted Service necessary**	Porsche InnoDrive is not available. Possible to drive on. ▶ Have the fault rectified at an authorized Porsche dealer.*
	Porsche InnoDrive not available **Driver takeover**	Porsche InnoDrive is not available. ▶ Take over steering.
	Porsche InnoDrive not available **Status temporary Driving permitted** or **No map data available**	Porsche InnoDrive is temporarily unavailable. Possible to drive on. If the fault persists: ▶ Have the fault rectified at an authorized Porsche dealer.*
	Intersection light not available	Intersection light is temporarily unavailable. Possible to drive on.

Display	Message	Meaning and action required
	Status temporary Driving permitted	If the fault persists: ▶ Have the fault rectified at an authorized Porsche dealer.*
	**Trailer hitch faulty Park vehicle, lock trailer hitch**	Trailer hitch is not in towing position. ▶ Immediately stop when it is safe to do so. ▶ Unhitch and hitch the trailer again: ▷ Please see chapter "Trailer Hitch" on page 275. If the fault persists: ▶ Have the fault rectified at an authorized Porsche dealer.*

* Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

E-Hybrid vehicles

Display	Message	Meaning and action required
	**Hybrid functions not available Electrical system overheated Do not drive**	Hybrid functions are not available. ▶ Immediately stop when it is safe to do so and switch off the engine. ▶ Do not continue driving. ▶ Have the fault rectified at an authorized Porsche dealer.*
	**Hybrid system failure Park vehicle safely Let vehicle cool down**	Hybrid system is not available. ▶ Stop when it is safe to do so and switch off the engine. ▶ Do not continue driving. ▶ Have the fault rectified at an authorized Porsche dealer.*
	**Hybrid system fault Driving permitted Visit workshop**	Hybrid system fault. Possible to drive on. ▶ Have the fault rectified at an authorized Porsche dealer.*
	**Hybrid coolant level too low Park vehicle safely**	Coolant level below minimum.

Display	Message	Meaning and action required
	Let vehicle cool down	▶ Stop when it is safe to do so and switch off the engine. ▶ Do not continue driving. ▶ Have the fault rectified at an authorized Porsche dealer.*
	Vehicle electrical system error **Restart not possible** **Service necessary**	Vehicle electrical system is faulty. ▶ Have the fault rectified at an authorized Porsche dealer.*
	Long-term engine running required **See owner's manual**	Fuel has accumulated in the engine oil. Prolonged running of the combustion engine is required. ▶ Activate E-CHARGE mode. ▷ Please see chapter "E-CHARGE mode" on page 137. ▶ Drive at medium engine speed until the message extinguishes. Avoid high revs and full throttle. Observe the relevant speed limits! If the fault persists: ▶ Have the fault rectified at an authorized Porsche dealer.*
	E-Sound error **Driving permitted** **Visit workshop**	E-Sound fault. ▶ Have the fault rectified at an authorized Porsche dealer.*
	e-Launch not possible	e-Launch is not available. Vehicle temperature too high ▶ Switch engine off and let it cool. **or** The high-voltage battery is not sufficiently charged. ▶ Charge the high-voltage battery.
	Battery discharge protection active **Charge state:** **xx %**	High-voltage battery discharge protection is active. ▶ Charge the high-voltage battery. When leaving the vehicle standing for long periods: ▷ Please see chapter "Car Care" on page 79.

Display	Message	Meaning and action required
	**Fuel system error** **Driving permitted** **Visit workshop**	Electrical unlocking of the tank system is faulty. ▶ Filler flap emergency release. ▷ Please see chapter "Refueling" on page 234. ▶ Have the fault rectified at an authorized Porsche dealer.*

* Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Washer fluid

▷ Please see chapter "Engine compartment filler openings" on page 30.

Note the following points:

▶ Depending on the time of year, add appropriate additives (window cleaner concentrate, freeze protection) to the water. Note the correct mixing ratio as well as all warnings on the containers of the additives used.

– **Summer**: Fill with water and window cleaner concentrate
– **Winter**: Fill with water, freeze protection and window cleaner concentrate

Only use window cleaner concentrates that meet the following requirements:

– Dilutability 1:100
– Phosphate-free
– Suitable for plastic headlights

For information on window cleaner concentrates approved by Porsche: Contact an authorized Porsche dealer.

If the washer fluid level is too low, a warning symbol appears on the instrument cluster.

Topping up the washer fluid

NOTICE

Risk of damage to the headlights.

▶ Do not lean on the headlight when topping up the washer fluid

1. Open the cap of the washer fluid reservoir.
2. Top up the washer fluid.
3. Carefully close the cap.

▷ Please see chapter "Technical Data" on page 334.

Wheels and Tires

In addition to correct tire inflation pressure and correct wheel alignment, the service life of the tires also depends on your driving style. Abrupt acceleration, high cornering speeds and heavy braking increase tire wear. Moreover, tread wear is increased at high outside temperatures and on rough road surfaces.

Complying with load and speed requirements

- Drive at an appropriate speed.
- Do not overload the vehicle and pay attention to the roof load.

▷ Please see chapter "Technical Data" on page 334.

Checking tire pressure

⚠ DANGER Low tire pressure

Driving the vehicle with low tire pressure increases the risk of tire failure and resulting loss of control. Furthermore, low tire pressure increases the rate of wear of the affected tires and causes damage.

- Always use an accurate tire pressure gauge when checking inflation pressures.
- Do not exceed the maximum tire pressure listed on the tire side wall.
- 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.
- Check the tire pressure at least monthly when the tires are cold.
- Valve caps protect the valve from dust and dirt and thus from leakage. Always screw caps down tightly. Replace missing caps immediately.
- Use only plastic valve caps.
- For safety reasons, do not use tire inflating bottles.

NOTICE

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.
- Never let air out of hot tires. When tires are warm, the tire pressure is increased. This could cause the tire pressure to fall below the prescribed value.

▷ Please see chapter "Technical Data" on page 334.

When tires are warm, the tire pressure is increased.

- Never let air out of hot tires. This could cause the tire pressure to fall below the prescribed value.

Insufficient tire pressure can cause tires to overheat and thus be damaged – even invisibly. Hidden tire damage is not eliminated by subsequently correcting the tire pressure.

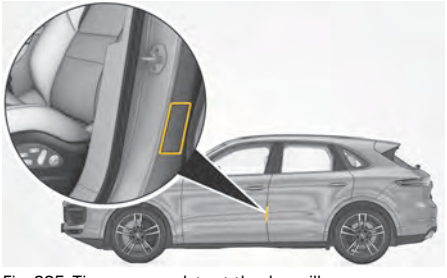


Fig. 235: Tire pressure plate at the door sill area

The tire pressure must match the prescribed value. The tire pressure is specified on the plate at the door sill area on the driver's side and in the "Technical Data". The values apply to cold tires (68 °F / 20 °C).

- Check the tire pressure at least monthly when the tires are cold.

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.
3. Read the tire pressure on the gauge stem and compare it to the permissible tire pressure. This information can be found on the tire pressure plate or in the chapter "Technical Data".
   ▷ Please see chapter "Technical Data" on page 334.
4. Remove the pressure gauge.

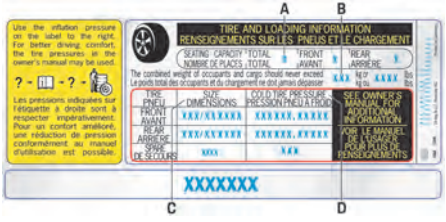


Fig. 236: Example of a tire pressure plate

A Seating capacity
Maximum number of vehicle occupants, including the driver.

B Vehicle load limit
Is the maximum total weight limit specified of the load (passengers and cargo) for the vehicle. This is the maximum weight of passengers and cargo that can be loaded into the vehicle.

C Vehicle load limit
Size of tires mounted at the factory.

D Recommended cold tire inflation pressure
These values are for cold tires (68 °F (20 °C)).

Tire Pressure Monitoring System (TPMS)

Each tire, including the spare (if provided), should be checked monthly when cold and inflated to the in-

flation pressure recommended by the vehicle manufacturer on the vehicle placard or tire inflation pressure label. (If your vehicle has tires of a different size than the size indicated on the vehicle placard or tire inflation pressure label, you should determine the proper tire inflation pressure for those tires.) As an added safety feature, your vehicle has been equipped with a Tire Pressure Monitoring System (TPMS) that causes a tire pressure warning light to come on when one or more of your tires is significantly under-inflated. Accordingly, when the tire pressure warning light comes on, you should stop, check your tires as soon as possible, and inflate them to the proper pressure. Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure. Under-inflation also reduces fuel efficiency and tire tread life, and may affect the vehicle's handling and stopping ability.

Please note that the TPMS is not a substitute for proper tire maintenance, and it is the driver's responsibility to maintain correct tire pressure, even if under-inflation has not reached the level to activate the TPMS tire pressure warning light. The display as well as the settings for the Tire Pressure Monitoring System take place on the multifunction display. However, the tires still have to be inflated manually.

▷ Please see chapter "Technical Data" on page 334.

The TPMS offers the following functions:

– Permanent monitoring of tire pressure and tire temperature.
– Displays the actual tire pressure (actual pressure) during the trip.
– Tire pressure warnings in two stages (yellow and red warning).
– Vehicle stationary: Display of pressure difference in relation to the set pressure

The tire pressure warning light and a corresponding message on the instrument cluster warn against loss of pressure in two stages (yellow and red tire pressure warning, depending on the extent of the pressure loss).

The tire pressure warning light only goes out when the tire pressure has been corrected to the set pressure.

The yellow tire pressure warning is displayed for around 10 seconds after the car comes to a standstill and the ignition has been switched off or when the ignition is switched on again. The yellow tire pressure warning can be acknowledged when the ignition is switched on. The red tire pressure warning also appears while traveling and can be acknowledged.

- If the tire pressure warning light comes on and a tire pressure warning is displayed even with a correct tire pressure: Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Information

The tire pressure monitoring system issues warnings relating to loss of pressure due to natural diffusion and gradual loss of pressure caused by foreign bodies. The Tire Pressure Monitoring System cannot warn you about tire damage that occurs suddenly (e. g. a flat tire due to unexpected external effects).

WARNING Defective tires

Driving with defective tires can result in serious accidents.

- When a red tire pressure warning appears on the instrument cluster: Stop immediately in a suitable place and check the tires for damage. If necessary, remedy the damage with tire sealant or mount the spare wheel.
- **Do not** continue to drive with defective tires. Have defective tires replaced immediately. Consult an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.
- **Do not** drive with tires that repeatedly lose pressure in a short space of time. If in doubt, have the tire checked by an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

WARNING High speed at comfort pressure.

Excessive speed when comfort pressure is set damages the tires and wheels.

- Reduce speed to below the maximum speed displayed in the instrument cluster.
- For higher speeds, fill the tires to the standard inflation pressure.

Malfunctions in the tire pressure monitoring system

Your vehicle has also been equipped with a TPMS malfunction indicator to indicate when the system is not operating properly. The TPMS malfunction indicator is combined with the tire pressure warning light. When the system detects a malfunction, the light indicator flashes for approximately one minute and then remains continuously illuminated. This sequence will continue upon subsequent vehicle

start-ups as long as the malfunction exists. When the malfunction indicator is illuminated, the system may not be able to detect or signal low tire pressure as intended. TPMS malfunctions may occur for a varie-ty of reasons, including the installation of replace-ment or alternate tires or wheels on the vehicle that prevent the TPMS from functioning properly. Always check the TPMS malfunction light indicator after re-placing one or more tires or wheels on your vehicle to ensure that the replacement or alternate tires and wheels allow the TPMS to continue to function properly.
Monitoring is interrupted in the following cases:

- If the Tire Pressure Monitoring System is faulty
- If wheel sensors for the Tire Pressure Monitoring System are missing
- In the learning phase after the tire settings have been updated
- After a wheel change without updating the tire settings
- If the tire temperatures are too high

▷ Please see chapter "Warning and Information Messages" on page 293.

Retrieving the tire pressure

The individual tire pressures are only displayed above a speed of approx 16 mph (25 km/h) or if the tire is filled to at least 1.5 psi (0.1 bar). When the ignition is switched on after the vehicle has been stationary for more than approx. 10 minutes, lines (-.-) are shown in place of the tire pressures.

▸ **Tire pressure ▸ Current**

The actual pressures are displayed for information purposes only. The tire pressures change according to the temperature.

▸ Never change the tire pressures on the basis of this display.

Displaying pressure difference

Fig. 237: Example pressure difference

✓ Vehicle is stationary.

▸ **Tire pressure ▸ Deviation**

The pressure difference from the set pressure on the relevant wheel is displayed. Example:
If the reading for the right rear tire is shown as **–0.1 bar**, this tire needs to be inflated by 1.4 psi (0.1 bar). The tire temperature has already been taken into account in the pressures shown.

▸ You should only use the pressure difference from the display or the corresponding tire pressure warning to correct the tire pressure.

Tire settings

Settings for the tire type and tire size, load and comfort/standard pressure can be made via the touch display in the dashboard:

▷ Please see chapter "Setting Tire Pressure Monitoring (TPM)" on page 318.

Setting Tire Pressure Monitoring (TPM)

⚠ WARNING Incorrect settings

Tire pressure that is too low or too high destroys the tire and wheel, extends the braking distance and significantly increases the risk of an accident.

Although the Tire Pressure Monitoring System is available, it is the driver's responsibility to ensure that the tires are inflated to the correct tire pressure and that the vehicle settings are correct. Incomplete or incorrect settings can affect the output of warnings and notices.

- Adjust tire pressure to suit your tires and the load.
- Ensure that the settings in the TPMS menu correspond to the tires fitted on the vehicle and the current load of the vehicle (especially after a wheel change or changes in vehicle loading).
- Select tire type and size in the Tire Pressure Monitoring menu again, even if a newly mounted wheel set corresponds to the settings of the predecessor.

Displaying pressure difference

✓ Vehicle is stationary.

▸ **CAR ▸ CONTROL ▸ Vehicle settings ▸ Tire pressure monitoring ▸ Tire pressure**

The required pressure, the pressure difference from the required pressure at the relevant wheel as well as the setting for load, tire type and size are displayed.
Example: If the reading for the right rear tire is shown as **–0.1 bar**, this tire needs to be inflated by 1.4 psi (0.1 bar). The tire temperature has already been taken into account in the pressures shown.

- You should only use the pressure difference from the display or the corresponding tire pressure warning to correct the tire pressure.

In the case of tires that have not yet been taught-in, the new target pressures are displayed instead of the actual pressure differences.

Setting the tire type and tire size

Information

The options available depend on the model and tire type. It is therefore possible that not all the options shown here are available.

- Before fitting tires and wheels with dimensions that are not available for selection in the Tire Pressure Monitoring System menu, the missing information should be added. Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.
- Only use tires and wheels approved by Porsche.

▸ **CAR ▸ CONTROL ▸ Vehicle settings ▸ Tire pressure monitoring ▸ Tire selection**

Selecting full load or partial load

▸ **CAR ▸ CONTROL ▸ Vehicle settings ▸ Tire pressure monitoring ▸ Full load**

☑ **Full load**
Full load is activated.

☐ **Full load**
Partial load is activated.

- Adjust the tire pressures to the selected load type.

Information

If the option **Full load** is not displayed, the specified tire pressures are valid for all types of vehicle load.

Selecting comfort pressure or standard pressure

The tire pressures can be reduced to enhance comfort.

With comfort pressure, the Tire Pressure Monitoring System automatically uses lower required pressures for tire pressure monitoring.

▸ **CAR ▸ CONTROL ▸ Vehicle settings ▸ Tire pressure monitoring ▸ Comfort pressure**

☑ **Comfort pressure**
Comfort pressure is activated.

☐ **Comfort pressure**
Standard pressure is activated.

- Adjust tire pressures to comfort pressure or standard pressure.

Teaching in the Tire Pressure Monitoring System

After the tires have been changed, a wheel sensor has been replaced or the tire settings have been updated, the process for teaching the tires in the Tire Pressure Monitoring System begins. The tire pressure control system recognizes the wheels and their installation position. The position and pressure data is available as soon as the tire pressure monitoring system has assigned the recognized wheels to the correct wheel position.

During this process, the required pressures for cold tires (68 °F (20 °C)) are displayed in the PCM and a message appears on the instrument cluster.

The tire pressure warning light in the instrument cluster remains lit until all the wheels have been taught in.

Uniform Tire Quality Grading and Glossary of Tire Terminology

Fig. 238: Treadwear, Traction and Temperature of the Tire

Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width. All passenger vehicle tires must conform to Federal Safety Requirements in addition to these grades. Quality grades can be found where applicable.

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.

▷ Please see chapter "Checking tire tread" on page 324.

Traction AA, A, B, C

The traction grades, from highest to lowest, are AA, A, B, and C and they represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

Information

The traction grade assigned to this is based on braking (straight-ahead) traction tests and does not include cornering (turned) traction, acceleration, hydroplaning or peak traction characteristics.

Temperature A, B, C

The temperature grades are A (the highest), B and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel.

Sustained high temperatures can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure.

The grade C corresponds to a level of performance which all passenger vehicle tires must meet under the Federal Motor Vehicle Safety Standard No. 109.

Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.

WARNING Tire Abuse

The temperature grade for this tire is established for a tire that is properly inflated and not overloaded. Excessive speed, underinflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure.

- Do not exceed the permitted maximum speed for the tires fitted to the vehicle.
- Ensure that the tires are set to the correct inflation pressure.
- Observe the maximum load for the vehicle.

Glossary of tire terminology

Radial ply tire

A pneumatic tire in which the ply cords which extend to the beads are laid at substantially 90° to the centerline of the tread.

Ply

A layer of rubber-coated parallel cords.

Cord

The strands forming the plies in the tire.

Rim

A metal support for a tire or a tire and tube assembly upon which the tire beads are seated.

Bead

The part of the tire made of steel wires, wrapped or reinforced by ply cords, that is shaped to fit the rim.

Sidewall

The portion of a tire between the tread and the bead.

Tread

The portion of the tire that comes in contact with the road.

Tire pressure plate

A label in the door sill area at the driver's door providing information about seating capacity, vehicle load limit, original tire size and recommended inflation pressure.

Tire Identification Number (TIN)

An identification number on radial tires providing information about the manufacturer, tire size, tire type and date of manufacture.

Inflation pressure

A measure of the amount of air in the tire. The tire pressure is measured in kilopascals (kPa), pounds per square inch (psi) or bar.

Cold inflation pressure

The tire pressure of a cold tire with ambient temperature maximum 68 °F / 20 °C and the vehicle out of direct sunlight exposure.

Maximum permissible inflation pressure

The maximum cold inflation pressure to which a tire may be inflated.

Recommended inflation pressure

The cold inflation pressure found on the tire pressure plate.

kPa (Kilopascal)

A metric unit for tire pressure.

PSI (Pounds per square inch)

A standard unit for tire pressure.

▷ Please see chapter "Loading information" on page 334.

Overloading

DANGER Overloading

Overloading can lead to dangerous vehicle reactions and long braking distances.

- Do not overload your vehicle. Be careful about the roof load.
- If you plan to load the vehicle, first correct the tire pressure. Tire pressure for loaded vehicle can be found on the tire pressure plate and in the chapter technical data.
- Never exceed the specified axle load.

NOTICE

Risk of damage to the vehicle and to the tires. Damage due to overloading is not covered by the vehicle warranty.

Tire damage may also be caused by overloading, and this damage is not covered by your tire warranty.

- Do not overload your vehicle. Be careful about the roof load.
- If you plan to load the vehicle, first correct the tire pressure. Tire pressure for loaded vehicle can be found on the tire pressure plate and in the chapter "Technical Data".
- Never exceed the specified axle load.

Inflating tires

CAUTION Hot pressure hose

The compressor pressure hose can become hot during filling and cause burns.

- Wear gloves.

The compressor with pressure gage is located in the luggage compartment under the cargo area.

▷ Follow the separate operating instructions for the compressor.

1. Screw the compressor pressure hose onto the tire valve.
2. Connect the compressor plug to a 12-volt socket in the vehicle.
   – or –
   Connect clips of the compressor to the emergency starting terminals. Observe the sequence below:

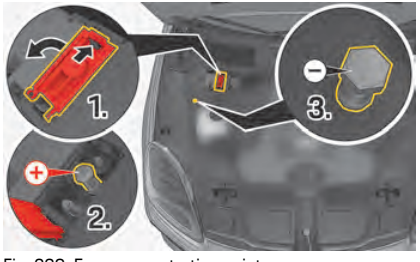


Fig. 239: Emergency starting points

   a. Open the cap on the positive terminal for emergency starting **+**.
   b. Connect positive lead (red) to the positive terminal for emergency starting **+**.
   c. Connect negative lead (black) to the negative terminal for emergency starting **–**.
3. Switch on compressor.
   The tire is inflated.
4. Check inflation pressure using the pressure gage and reduce tire pressure or continue filling as required. Check the inflation pressure again.
5. Switch off the compressor.
6. Unscrew the compressor pressure hose.

Reading off inscription on tires

Fig. 240: Inscription on radial tires (example)

A Tire size
B TIN (Tire Identification Number)
C Tire ply composition and material
D Maximum permissible inflation pressure
E Maximum load rating
F Radial
G Term of tubeless or tube tire

A – Tire size

Example: P 265/40R18 (101Y)

- P – The tire is designed for a passenger vehicle. This information is not included on all tires.
- 265 – Indication of tire width in mm
- 40 – Indication of tire height to tire width ratio in percent
- R – Belt type code letter for radial
- 18 – Indication of rim diameter in inches
- 101 – Load capacity coefficient

– Y – Speed code letter
– XL (Extra Load) – Tire with increased load rating

B – TIN (Tire Identification Number)

Example: DOT xx xx xxxx xxxx

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 indicates the manufacturer's identification mark.
– Second two-digit code indicates the tire size.
– Third four-digit code indicates the tire type code.
– Fourth four-digit code indicates the date of manufacture. If, for example, the last four numbers read 0204, the tire was produced in the 2nd week of 2004.

C – Tire ply composition and material

The number of layers in the tread and side walls and their material composition.

D – Maximum permissible inflation pressure

The maximum permissible cold inflation pressure to which a tire can be inflated.

▶ Do not exceed the permissible inflation pressure.

E – Maximum load rating

The maximum load in kilograms and pounds that can be carried by the tire. If you replace tires always use a tire that has the same maximum load rating as the factory installed tire.

F – Radial

The identification indicates whether the tire has a radial structure.

G – Term of tubeless or tube tire

Identification for tubeless tires.

Speed code letter

The speed code letter indicates the maximum permitted speed for the tire. This rating is indicated on the tire side wall.

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)
(Y)	up to 186 mph (300 km/h) as for Y tires. Speeds of more than 185 mph (300 km/h) are also possible at a maximum tire load capacity of 85% (confirmation from tire manufacturer required for speeds of more than 185 mph (300 km/h)).

Reading off inscription on wheels

The information is inscribed on the back of the spokes near the tire valve.

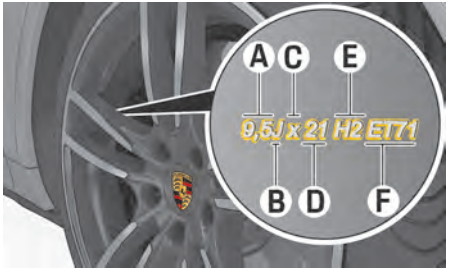


Fig. 241: Inscription on wheel (sample)

A Rim width in inches
B Rim-flange contour code letter
C Symbol for drop-center rim
D Rim diameter in inches
E Double hump
F Rim offset in mm

Identifying tire damage

⚠ WARNING Hidden tire damage and damage to the rim flange

Hidden tire damage can cause the tire to burst. You may lose control of the vehicle.

▶ Check tires, including the sidewalls, regularly for embedded foreign bodies, nicks, cuts, cracks and bulges.
▶ Cross curb edges slowly and at right angles if possible. Avoid driving over steep or sharp curbs or objects with sharp edges (such as stones) heavily or at an acute angle.
▶ If in doubt, have the tire, especially the inner side, checked by an expert. Go to a qualified specialized repair shop. Porsche recommends an authorized Porsche dealer, as they have trained

technicians and the necessary parts and tools.

- Tire repairs are not permissible under any circumstances. Sealing a tire with tire sealant is only an emergency solution so that you can drive to the nearest workshop.

For safety reasons, tires must be replaced in the event of the following types of damage:

– If the possibility of a fracture in the ply cannot be ruled out.
– If the tire was thermally or mechanically overloaded as a result of pressure loss or other prior damage.

Replacing tires and wheels

- Switch off the ignition when changing a wheel.

⚠ WARNING Lack of grip

Initially, new tires do not provide their full grip.

- You should therefore drive at moderate speeds during the first 125 mls (200 km) to extend the service life of the tires and achieve full performance capability.

- Only tires from the same manufacturer and with the same specification code (e.g. "NO", "N1", etc.) may be mounted on the vehicle.
- Before mounting new tires, inquire about their current approval status: Contact an authorized Porsche dealer.
- Use only tire makes tested and approved by Porsche.
- The difference in tread depths on one axle must not exceed 30%.
- Only use second-hand tires if their prior usage is known.
- Always replace both tires on one axle to avoid any unnecessary effect on driving behavior due to varying tread depths.
- Only authorized Porsche dealers may install tires. Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.
- Adjust your driving style to the altered handling behavior.
- Only use tires with tire pressure sensors for the Tire Pressure Monitoring System (TPMS).
- Make sure the wheels are compatible with the TPMS on your vehicle. For information on suitable wheels and on the TPMS on your vehicle: Contact an authorized Porsche dealer.
- Check the battery level of the tire pressure sensors when changing tires. Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.
- ▷ Please refer to the vehicle registration documents or the "Technical data" section of this manual.

Information

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 is especially the case if only the rear tires are replaced. However, this effect is reduced continuously as the new tires are broken in.

Check and replace valves and valve caps

- Use only genuine Porsche valves for the Tire Pressure Monitoring System (TPMS).
- Have the valves checked and replaced if necessary whenever the tires are changed. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

In the absence of valve caps the valve is unprotected from dust and dirt, resulting in leaks.

- Always screw on valve caps tightly to protect valve inserts from dirt. Dirty valve inserts can cause creeping air loss.
- Replace missing valve caps immediately.
- Use only plastic valve caps.

Using snow tires

⚠ WARNING Exceeding the maximum permitted speed

Exceeding the maximum permitted speed can cause tires to burst.

- Observe the maximum permitted speed for the tire.
- Snow tires with a maximum permitted speed rating that is lower than the specified maximum vehicle speed may only be fitted if they bear the

M+S designation or the snowflake symbol, depending on the country, on the tire sidewall. Observe country-specific regulations.

- Affix the sticker with the maximum permitted speed in the driver's field of vision. Observe country-specific regulations.
- Set the maximum permitted speed as the speed limit.

- Install snow tires in a timely manner before the cold season begins.
- Use only tire makes tested and approved by Porsche.
- Before mounting new tires, inquire about their current approval status: Contact an authorized Porsche dealer.

Information

At low temperatures, juddering noises caused by the tires can occur during maneuvering or accelerating out of curves on both dry and wet road surfaces.

The driving performance and comfort of summer tires are impaired at low temperatures below 45 °F/ 7 °C. Porsche therefore recommends that you fit snow tires on the vehicle at temperatures below 45 ° F/7 °C.

Extremely low temperatures below 5 °F (-15 °C) can cause permanent damage to summer tires.

Snow tires are no longer suitable if their tread depth is less than 0.16 in. (4 mm).

Using snow chains

Install snow chains only on the rear wheels and only with the tire/rim combinations designated for use with snow chains listed in the Technical Data.

- Only use snow chains approved by Porsche so that sufficient clearance between the wheel well and chain is assured.
- Remove ice and snow deposits in the wheel well before installing the chains.
- Observe the different national regulations regarding maximum speeds.

Checking tire tread

- 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.
- Check tire tread regularly, particularly before and after long journeys.
- 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 inch (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.
- For safety reasons, replace the tires before the wear indicators appear. Snow tires are no longer suitable when their tread depth falls below 5/32 in. (4 mm).
- In the United States, state laws may govern the minimum tread depth permissible. Follow all such laws.

Measuring tire tread depth

- Insert a commercially available tread depth gauge or caliper in the tire tread and measure the tire tread depth.

Storing wheels

- Always store wheels in a cool, dry and dark place. Store tires without rims vertically.
- Do not store summer tires or park vehicles with summer tires mounted at ambient temperatures under 5 °F (-15 °C).
- Avoid contact with gas, oil or grease.
- Tires must **not** be more than 6 years old. Chemical additives, which make the tire rubber elastic, lose their effectiveness over the course of time and the rubber becomes brittle. The age of the tire can be seen from the "DOT" code number shown on the tire sidewall. If, for example, the last four digits read 3016, then the tire was produced in the 30th week of 2016.

Balancing wheels

As a precaution, have wheels balanced in spring (summer tires) and before winter (M+S tires) by an authorized Porsche dealer.

- Visit an authorized Porsche dealer. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Changing a wheel

⚠ WARNING Working under the vehicle

The vehicle can slip off the jack.

- Make sure that there is no one inside the vehicle when jacking it up and changing the wheel.
- Raise the vehicle only at the prescribed jacking points on the vehicle underbody.
- Never jack up the vehicle on a surface that slopes up, down or to the side.
- Only use the jack to raise the vehicle for changing a wheel.
- Always place the vehicle on solid supports when working under the vehicle.

Information

The tools needed for changing wheels (jack, wheel bolt wrench, mounting aids, etc.) are not included in the standard scope of supply for the vehicle.

- For information on the tool required: Contact an authorized Porsche dealer.

Information

The tire and wheel sizes on both axles are different. When removing the wheels, mark the direction of rotation and position on each wheel and carry out the installation according to these markings.

- Only use wheels/tires with approved dimensions for the relevant axle.
- ▷ Please refer to the vehicle registration documents or the "Technical data" section of this manual.

Caring for wheel attachment faces

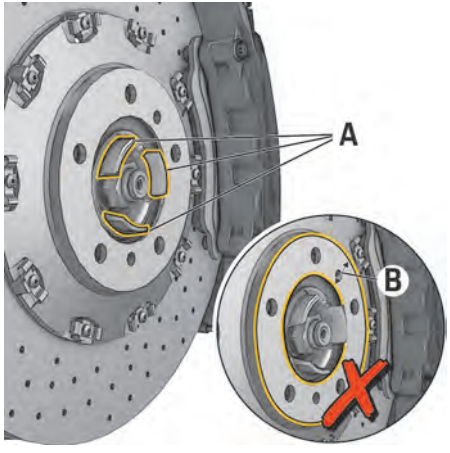


Fig. 242: Wheel attachment faces

NOTICE

Risk of damage to the wheel and wheel attachment face.

- The wheel attachment face **B** on the brake disk, wheel hub and on the wheel itself must **not** be greased.
- Only the areas **A** may be greased. Grease these areas very thinly with Optimoly® TA: Contact an authorized Porsche dealer. Do not use any other grease or paste.

Care of wheel bolts

- Clean the wheel bolts before installation.
- Wheel bolts must not be greased.
- Replace damaged wheel bolts. Only use genuine Porsche wheel bolts assigned especially to this model or wheel bolts of similar quality that have been manufactured according to Porsche specifications and production requirements.
- **Tighten wheel bolts with a tightening torque of 118 ftlb. (160 Nm).**
- Do not use any power tools such as impact wrenches.

Using security wheel bolts

Fig. 243: Adapter for security wheel bolts

The adapter for the security wheel bolts is in the tool box.

- To loosen and tighten the wheel bolt with anti-theft protection, the adapter must be used between the wheel bolt and the wheel bolt wrench.
- When positioning the adapter, ensure that it engages fully in the teeth of the wheel bolt.

Changing a wheel

Preparing the vehicle

1. Activate the transmission parking lock using the P button on the selector lever.
2. Activate the electric parking brake.
3. Switch ignition off.
4. Secure the vehicle to prevent it from rolling away, e.g. by placing wheel blocks at the wheels on the opposite side.
5. Slightly loosen the wheel bolts or wheel nuts on the wheel to be changed.

⚠ WARNING Control operation of the leveling system

A vehicle on which the leveling system is activated can move unexpectedly or tip or fall off lifting equipment, e.g. a jack or lifting platform. This can cause serious injuries and damage.

- ▶ Manually set normal level and switch off the leveling system before raising the vehicle.

▷ Please see chapter "Vehicle Settings" on page 285.

6. Raise the vehicle only at the specified jacking points.
   ▷ Please see chapter "Jack and Lifting Platform" on page 149.
7. Raise the vehicle until the wheel lifts off the ground.

Changing

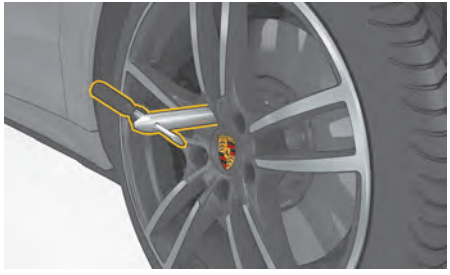


Fig. 244: Screw in one assembly aid on vehicles without PCCB

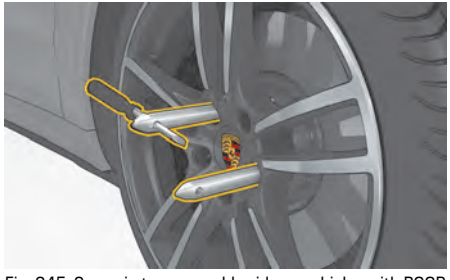


Fig. 245: Screw in two assembly aids on vehicles with PCCB

1. For vehicles without PCCB: Remove one wheel bolt and screw in an assembly aid.
   – or –
2. For vehicles with PCCB: Remove two wheel bolts and screw in two assembly aids.

NOTICE

The brake disks can become damaged if wheels are not changed properly, especially on vehicles with PCCB.

- ▶ When changing a wheel, screw in the assembly aids.

2. Remove the remaining wheel bolts.
   ▷ Please see chapter "Care of wheel bolts" on page 325.
3. Remove the wheel.
   ▷ Please see chapter "Caring for wheel attachment faces" on page 325.
4. Fit a new wheel.
5. Insert wheel bolts and tighten in diagonally opposite sequence.
6. Remove assembly aids and screw in remaining wheel bolts. Initially tighten bolts only slightly in a diagonally opposite sequence so that the wheel is centered.
7. Inflate the tires if necessary.
8. Lower the vehicle fully and remove the jack.
9. Tighten the wheel bolts in diagonally opposite sequence. Do not use any force-actuated tools such as impact screwdrivers.
10. **Immediately after changing a wheel, use a torque wrench to check the specified tightening torque (118 lb-ft (160 Nm)) of the wheel bolts.**
11. The current settings for the Tire Pressure Monitoring System (TPMS) are displayed.
    ▷ Please see chapter "Setting Tire Pressure Monitoring (TPM)" on page 318.

Windows

Opening and closing windows

WARNING Opening and closing windows

When opening or closing the windows, particularly in automatic mode, body parts can become trapped between the moving window and stationary vehicle parts.

- When opening and closing the windows, make sure that no parts of the body can become trapped between the moving windows and stationary vehicle parts.
- Always switch off the ignition when leaving the vehicle. People who are unfamiliar with the vehicle could be injured when operating the power windows.
- In case of danger: release the power window button immediately.
- Do not leave children unattended in the vehicle.

WARNING Closing a window manually

If one-touch mode was deactivated after a window was blocked, the window will close with its full force when closed manually.

- Make sure that nobody is trapped or crushed during closing of the windows.

Information

If a window is blocked by an obstruction when closing, the window stops and opens again a few centimeters.
If the window is blocked a second time within around 10 seconds, one-touch mode for this window is locked. The window can be closed manually. One-touch mode is enabled again once the window has been completely shut once in manual mode.

Opening and closing windows

✓ Ignition is switched on.
– or –
✓ The ignition has been switched off, but for no longer than 10 minutes.
✓ The driver's or passenger's door has not yet been opened.

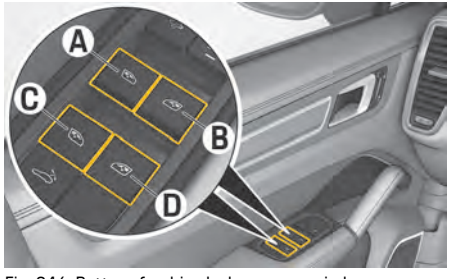


Fig. 246: Buttons for driver's door power window

A Power window button, front, driver side
B Power window button, front, passenger side
C Power window button, rear, driver side
D Power window button, rear, passenger side

The switches feature a **two-stage function**. When the buttons are actuated, both stages can be clearly felt due to a resistance when pushed or pulled.

Stage one – manual operation

- Press or pull the relevant rocker switch to the first stage until the required position is reached.
  The process stops when the switch is released.

Stage two – automatic operation

- Briefly push or pull the relevant rocker switch fully to the second stage.
  The window opens or closes automatically to the final position.
- Actuating the button again stops the window in the required position.

Storing final position of windows

The final positions of the windows are lost after the battery is disconnected and reconnected. Windows automatic mode is not operative.

Perform the following steps for all windows:

1. Close the window completely once by pulling the rocker switch to the second setting.
2. When the window is completely closed, briefly pull the rocker switch to the second setting again.
3. Completely open the window once by pressing the switch.

Disabling controls in the rear – child protection

Fig. 247: Disabling controls in the rear

The power window buttons on the rear doors and the control panel on the rear center console can be disabled by pressing the safety button in the control panel on the driver's door.

Switching child protection on/off

- Press the safety button.
  The light indicator on the button lights up.
  The seat settings made at the rear control panel are retained.
  The function of the rear control panel is deactivated.

Using the roll-up sunblind on the rear side window

Information

The roll-up sunblinds on the rear side windows can be raised or lowered only when the rear side windows are closed.

The roll-up sunblinds move automatically to the correct final position.

If child protection is activated, the roll-up sunblinds on the rear side windows can only be operated using the power window buttons in the driver's door.

Fig. 248: Power window/sunblind switch on driver's door

Lowering roll-up sunblind on rear side window

- Briefly pull the switch for the relevant window to the first stage.
  The roll-up sunblind is lowered fully.

Raising roll-up sunblind on rear side window

- Briefly press the switch for the relevant window to the first stage.
  The roll-up sunblind is raised fully.

Information

When opening a rear side window when the roll-up sunblind is lowered, the sunblind is raised automatically before the rear side window opens.

Windshield Wipers

Brief Overview - Windshield Wipers

This brief overview does not replace the comprehensive descriptions provided in the "Windshield Wipers" chapter. Safety messages and warnings, in particular, are not replaced by this brief overview.

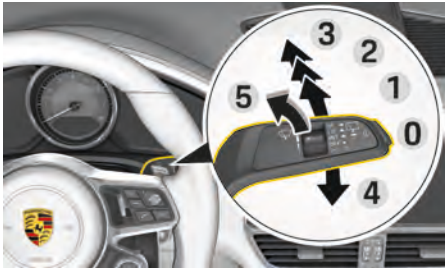


Fig. 249: Windshield wiper lever

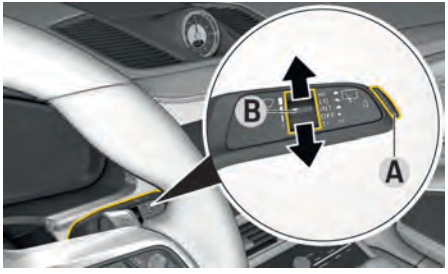


Fig. 250: Button A for rear wiper and switch B for rain sensor sensitivity

What do I want to do?	What do I have to do?	Where?
Wipe automatically at front (rain sensor operation)	▶ Press the lever to detent position **1**.	▷ p. 330
Set rain sensor sensitivity	▶ Press switch **B** upward (wipe more often) or downward (wipe less often).	▷ p. 330
Wipe at front	▶ Slow: Press the lever to detent position **2**. ▶ Fast: Press the lever to detent position **3**. ▶ Once: Press the lever to position **4** (holding lever in position **4** accelerates wiping action).	▷ p. 330
Spray and wipe at front	▶ Pull the lever towards the steering wheel at position **5** and hold.	▷ p. 330
Wipe at rear (intermittent wiping)	▶ Press button **A**.	▷ p. 331
Wipe at rear (wipe once)	▶ Press button **A** briefly twice in succession.	▷ p. 331
Windshield wiper service position Attaching windshield snow covers or sun shades or replacing wiper blades	▶ Switch off the ignition and press the wiper lever downward once **4**. The windshield wipers move upward through approx. 90°.	▷ p. 331

⚠ WARNING Undesired wiping

In rain sensor mode, the windshield wipers wipe automatically when water is detected on the windshield.

- Always switch off the windshield wipers before cleaning the windshield.

NOTICE

Risk of damage to the hood, windshield and wiper system.

- Only wipe the windshield when sufficiently wet, otherwise it could become scratched
- Carefully detach frozen wiper blades from the windshield before driving.
- Do not operate a frozen windshield washer system.
- Always switch off windshield wipers in car washes to prevent them from wiping unintentionally (rain sensor mode).
- Always hold the wiper arm securely when replacing windshield wipers.
- Pay attention to the varying length of wiper blades when replacing them.
- Always switch off windshield wipers before opening the hood (wiper lever in position **0**). Risk of collision! If the wiper arms are not at their final position, switch the wiper system on and off briefly so that the wipers move to their end position.

Operating windshield wipers

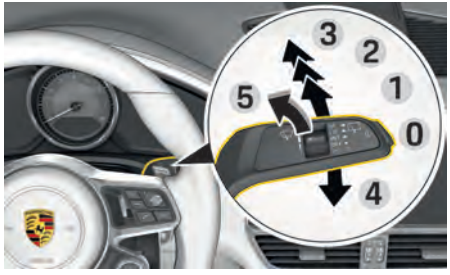


Fig. 251: Windshield wiper lever

0 – Windshield wipers off

When the windshield wipers and the ignition are switched off, the wipers move up slightly from their rest position so that the wiping edges are aligned correctly.

1 – Windshield wiper rain sensor operation

- Move wiper lever upward to the first detent.

2 – Windshield wipers slow

- Move wiper lever upward to the second detent.

3 – Windshield wipers fast

- Move wiper lever upward to the third detent.

4 – Windshield wiper one-touch operation

- Move wiper lever downward.
  The windshield wipers carry out one wiping cycle.
- Press and hold the wiper lever downward.
  The windshield wipers wipe fast.

5 – Windshield wiper and washer system

- Pull wiper lever toward the steering wheel.
  The washer system wipes and sprays while the lever is pulled toward the steering wheel. When the wiper lever is released, a few drying wipes are performed.

Information

The quantity of water sprayed depends on the speed driven and on how long the wiper stalk is actuated.

Information

- If windshield is very dirty, repeat the cleaning process.
- Persistent dirt (e.g. insect remains) should be removed regularly.

Windshield wiper blades in perfect condition are vital for ensuring a clear view.

Information

During every 10th washing process, the Night View Assist camera is cleaned at the same time.

Setting rain sensor operation

When the rain sensor is activated, the amount of rain on the windshield is measured. The wiper speed is automatically adjusted accordingly.

At a driving speed below approx. 2.5 mph (4 km/h), rain sensor operation is activated automatically when the windshield wipers are switched on (wiper lever in position **2**). If a speed of approx. 7 mph (12 km/h) is exceeded, the system switches to the preselected wiper speed.

Information

– If the wiper lever is already in position **1** when the ignition is switched on, the rain sensor is activated at speeds above approx. 2.5 mph (4 km/h).
– If the wiper lever is already in position **2** or **3** when the ignition is switched on, the windshield wiper remains switched off until the wiper lever is moved.

Adjusting rain sensor sensitivity manually

High sensitivity

▸ Press switch **Bupward**.
The setting is confirmed by one wipe of the windshield.

Low sensitivity

▸ Press switch **Bdownward**.

Operating the rear wiper

Fig. 252: Button A for rear wiper

Switching on rear wiper intermittent mode

▸ Press button **A**.

Switching off rear wiper intermittent mode

▸ Press button **A**.

Information

The rear wiper interval is adjusted depending on the driving speed.

Activating reversing function

In the PCM, you can configure the rear wiper to automatically perform a series of wipes when it rains or when the windshield wipers are used while reverse gear is engaged.

▸ **CAR** ▸ **CONTROL** ▸ **Vehicle settings** ▸ **Light and visibility**

Cleaning the rear window

Fig. 253: Cleaning the rear window

▸ Press the wiper lever forward (Fig. 253).
The system sprays and wipes as long as the wiper lever is pressed forward.
When the lever is released, a few drying wipes are performed.

Information

When the rear window is cleaned, the rear view camera is cleaned at the same time.

Wiper blades

NOTICE

If the wiper arms accidentally fall back onto the windshield, they can damage the windshield.

▸ Always hold the wiper arms securely when replacing the wiper blades.

NOTICE

The wiper blades can freeze at low temperatures.

▸ Thaw and release frozen wiper blades before driving.

NOTICE

The graphite coating on the wiper blades can be damaged if they are not cleaned properly.

▸ Ensure that the cleaning jet does not strike the wiper blades.
▸ Do not clean wiper blades with a cloth or sponge.
▸ Clean wiper blades with clear water only.

Replacing windshield wipers

The wiper blades should be replaced twice per year (before and after the cold season) or if wiper performance deteriorates or the wipers are damaged.

⚠ CAUTION Incorrectly mounted windshield wipers

Windshield wipers that are not attached properly when replaced can come loose while driving.

- ▸ Lock wiper blades correctly into the wiper arm.
- ▸ Check that the wiper blades are securely set in place.

Information

If necessary visit an authorized Porsche dealer to have this work carried out. Porsche recommends an authorized Porsche dealer, as they have trained technicians and the necessary parts and tools.

Replacing windshield wiper blades

Extending windshield wipers

✓ Ignition switched off.

1. Press the wiper lever downward once (position **4**).
   The windshield wipers move upward through approx. 90°.
2. Change the wiper blades in accordance with the separate installation instructions provided by the manufacturer. Pay attention to the different lengths of the wiper blades.

Retracting windshield wipers

✓ Ignition is switched on.

- ▸ Press the wiper lever downward for approx. 1 second (position **4**).
  The windshield wipers return to their initial position.

Replacing rear wiper blades

NOTICE

Risk of damage to the vehicle or wiper arm.

The wiper arm on the rear window has no joint and cannot be folded up fully from the window.

- ▸ Lift the wiper arm max. 15° off the window.

Removing wiper blade

1. Lift the wiper arm slightly.
2. Grasp the wiper blade and press it upward slightly at the mounting **A** with your index finger.
3. Lever the wiper blade from the mounting **A**.

Fig. 254: Replacing rear wiper blades

Installing wiper blade

- ▸ Press the new wiper blade into the mounting **A** and press it firmly into place.

Technical Data

On the following pages you will find technical data for your vehicle.

Technical Data

Vehicle identification data

Vehicle identification number

Fig. 255: Vehicle identification number

The vehicle identification number is located at the bottom left behind the windshield as well as in the passenger footwell under a cover in the carpet.

- When ordering spare parts, always quote the vehicle identification number.

Safety compliance sticker

Fig. 256: Safety compliance sticker

The safety compliance sticker is your assurance that your new Porsche complies with all applicable Federal Motor Vehicle Safety Standards which were in effect at the time the vehicle was manufactured.

The sticker also shows the month and year of production and the vehicle identification number of your car (perforations) as well as the **G**ross **V**ehicle **W**eight **R**ating and the **G**ross **A**xle **W**eight Rating.

Tire pressure plate

Fig. 257: Tire pressure plate

The tire pressure plate is fixed to the door sill area of the driver's door.

Vehicle data carrier

You will find the vehicle data carrier in the Maintenance booklet. It contains all important data about your vehicle. This data carrier cannot be reordered if it is lost or damaged.

Loading information

Definitions

The **rear-axle load** is the vehicle weight on the rear axle plus the weight of the transported load.

The **Curb weight** – actual weight of your vehicle – is the vehicle weight including standard and optional equipment, fluids, and emergency tools. This weight does not include passengers and cargo.

The **Gross Vehicle Weight** is the sum of the curb weight and the weight of passengers and cargo combined.

The **Gross Vehicle Weight Rating** is the maximum total weight of vehicle, passengers, luggage and optional equipment.

The **Gross Axle Weight Rating** is the maximum load limit for the front or the rear axle. This information is located on the safety compliance sticker located in the driver's side door aperture area.

For determining the compatibility of the tire and vehicle load capabilities:

▷ Please see chapter "Wheels and Tires" on page 316.

The load capacity coefficient (e.g. "106") is a minimum requirement. For more information:

▷ Please see chapter "Wheels and Tires" on page 316.

The **Gross Combined Weight Rating** is the maximum total weight rating of vehicle, passengers and cargo.

The **Vehicle Capacity Weight** – Load Limit – is the maximum total weight limit specified of the load (passengers and cargo) for the vehicle. This is the maximum weight of passengers and cargo that can be loaded into the vehicle. This information can be found on the tire pressure plate.

The **maximum loaded vehicle weight** is the sum of curb weight, accessory weight, vehicle capacity weight and production options weight.

The **load rating** is the maximum load that a tire is rated to carry for a given inflation pressure.

The **maximum load rating** is the load rating for a tire at the maximum permissible inflation pressure.

The **cargo capacity** is the permissible weight of cargo, the subtracted weight of passengers from the load limit.

- Never exceed the permissible limits.

⚠ DANGER Riding in a Cargo Area

Injuries are much more likely in an accident if occupants ride in the cargo area.

- Occupants must ride only in the seats provided for this purpose.
- Make sure that all occupants fasten their seat belts.

⚠ DANGER Overloading Vehicle

Overloading will lead to dangerous vehicle reactions and long braking distances.

- Never exceed the specified axle loads.

NOTICE

Risk of damage to the vehicle if the vehicle is overloaded.

Overloading can shorten the service life of the tires and car. Damage due to overloading is not covered by the vehicle warranty.

- Never exceed the specified axle loads.

Vehicle Load Capacity

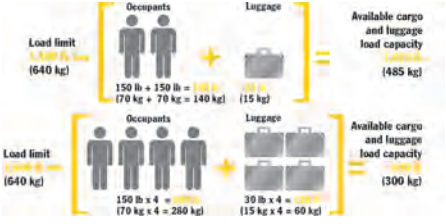


Fig. 258: Example for determining the combined weight of occupants and cargo

- The combined weight of occupants and cargo should never exceed the weight shown on the tire pressure plate in the vehicle.
- Never exceed the number of passengers shown on the tire pressure plate in the vehicle.

Determining the combined weight of occupants and cargo:

- Add the weight of all occupants and then add the total luggage weight (figure)

Steps for determining correct load limit:

1. Locate the statement "The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs." on your vehicle's placard.
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 kg or XXX lbs.
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 lbs. 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".

Engine data

	Cayenne	Cayenne S	Cayenne GTS	Cayenne Turbo
Number of cylinders	6	6	8	8
Displacement	2,995 cm^3	2,894 cm^3	3,996 cm^3	3,996 cm^3
Max. engine power[1]	250 kW (335 hp)	324 kW (434 hp)	338 kW (452 hp)	404 kW (541 hp)
at rpm	5,300 – 6,400 1/min	5,700 – 6,600 1/min	6,000 – 6,500 1/min	5,750 – 6,000 1/min
Max. torque	450 Nm	550 Nm	620	770 Nm
at rpm	1,340 – 5,300 1/min	1,800 – 5,500 1/min	1,800 – 4,500 1/min	1,960 – 4,500 1/min
Engine oil consumption	up to 0.8 l/1,000 km	up to 0.8 l/1,000 km	up to 0.8 l/1,000 km	up to 0.8 l/1,000 km
Maximum permitted engine speed	6,500 1/min	6,800 1/min	6,800 1/min	6,800 1/min

Cayenne E-Hybrid	Combustion engine	Electric machine	Combined
Number of cylinders	6	–	–
Displacement	2,995 cm^3	–	–
Max. engine power[1]	250 kW (335 hp)	100 kW (134 hp)	340 kW (455 hp)
at rpm	5,300 – 6,400 1/min	2,500 – 3,000 1/min	5,250 – 6,400 1/min
Max. torque	450 Nm	400 Nm	700 Nm
at rpm	1,340 – 5,300 1/min	100 – 2,300 1/min	1,000 – 3,750 1/min

1. hp = imperial horsepower

Cayenne E-Hybrid	Combustion engine	Electric machine	Combined
Engine oil consumption	up to 0.8 l/1,000 km	–	–
Maximum permitted engine speed	6,500 1/min	–	–

Cayenne Turbo S E-Hybrid	Combustion engine	Electric machine	Combined
Number of cylinders	8	–	–
Displacement	3,996 cm^3	–	–
Max. engine power[1]	404 kW (541 hp)	100 kW (134 hp)	500 kW (670 hp)
at rpm	5,750 – 6,000 1/min	2,500 – 3,000 1/min	5,750 – 6,000 1/min
Max. torque	770 Nm	400 Nm	900 Nm
at rpm	2,100 – 4,500 1/min	100 – 2,300 1/min	1,500 – 5,000 1/min
Engine oil consumption	bis zu 0.8 l/1,000 km	–	–
Maximum permitted engine speed	6,800 1/min	–	–

Dimensions

Cayenne models:

Length (depending on equipment)	4,918 mm – 4,929 mm
Width (depending on equipment)	1,983 mm
Width with door mirrors	2,194 mm
Height at empty weight to DIN	1,676 mm – 1,728 mm

1. hp = imperial horsepower

Height with tailgate open	2,123 mm – 2,188 mm
Maximum wading depth (steel suspension) at DIN kerb weight	500 mm (480 mm)[1]
Maximum wading depth (air suspension, Normal Level)	475 mm (465 mm)[1]
Maximum wading depth (air suspension, Special Terrain Level)	530 mm (520 mm)[1]

Cayenne E-Hybrid models:

Maximum wading depth (steel suspension) at DIN kerb weight	250 mm
Maximum wading depth (air suspension, Normal Level)	225 mm
Maximum wading depth (air suspension, Special Terrain Level)	280 mm

Cayenne Coupé models:

Length (depending on equipment)	4,931 mm – 4,939 mm
Width (depending on equipment)	1,983 mm – 1,995 mm
Width with door mirrors	2,194 mm
Height at empty weight to DIN	1,643 mm – 1,676 mm
Height with tailgate open	2,223 mm – 2,243 mm
Maximum wading depth (steel suspension) at DIN kerb weight	500 mm (480 mm)[2]
Maximum wading depth (air suspension, Normal Level)	475 mm (465 mm)[2]
Maximum wading depth (air suspension, Special Terrain Level)	530 mm (520 mm)[2]

1. Cayenne GTS only.
2. Cayenne Coupé GTS only.

Cayenne Coupé E-Hybrid models:

Maximum wading depth (steel suspension) at DIN kerb weight	250 mm
Maximum wading depth (air suspension, Normal Level)	225 mm
Maximum wading depth (air suspension, Special Terrain Level)	280 mm

Filling quantities

- Use only fluids and fuels approved by Porsche. For further information: Contact an authorized Porsche dealer.

	Cayenne	Cayenne S	Cayenne GTS	Cayenne Turbo
Fuel tank	Approx. 23.8 gals (90 liters) with a reserve of approx. 3.4 gals (13 liters)			
Windscreen/headlight washer fluid	Approx. 0.9 gals (3.5 liters) (vehicles with Night View Assist: approx. 1.6 gals (6.2 liters))			
Refrigerant R1234yf	2-zone air conditioning: 680 g 4-zone air conditioning: 850 g			
Air-conditioning system compressor oil ND12	2-zone air conditioning: 110 ±10 cm^3 4-zone air conditioning: 110 ±10 cm^3, plus additional 30 cm^3			

	Cayenne E-Hybrid
Fuel tank	Approx. 19.8 gals (75 liters) with a reserve of approx. 2.9 gals (11 liters)
Windscreen/headlight washer fluid	Approx. 0.9 gals (3.5 liters) (vehicles with Night View Assist: approx. 1.6 gals (6.2 liters))
Refrigerant R1234yf	2-zone air conditioning: 680 g 4-zone air conditioning: 850 g
Air-conditioning system compressor oil ND12	2-zone air conditioning: 110 ±10 cm^3 4-zone air conditioning: 110 ±10 cm^3, plus additional 30 cm^3

	Cayenne Turbo S E-Hybrid
Fuel tank	Approx. 19.8 gals (75 liters) with a reserve of approx. 2.9 gals (11 liters)
Windscreen/headlight washer fluid	Approx. 0.9 gals (3.5 liters) (vehicles with Night View Assist: approx. 1.6 gals (6.2 liters))
Refrigerant R1234yf	2-zone air conditioning: 680 g 4-zone air conditioning: 850 g
Air-conditioning system compressor oil ND12	2-zone air conditioning: 110 ±10 cm^3 4-zone air conditioning: 110 ±10 cm^3, plus additional 30 cm^3

Weights

- Do not exceed the maximum gross vehicle weight rating and maximum permitted axle loads. If additional accessories are installed, the maximum possible payload will be reduced.
- Only use roof transport systems that are from the Porsche Tequipment product line or that have been tested and approved by Porsche.
- Do not drive at a speed of more than 81 mph (130 km/h) when the roof transport system is loaded.

	Cayenne	Cayenne S	Cayenne GTS	Cayenne Turbo
Vehicle load capacity	The combined weight of occupants and cargo should never exceed the weight shown on the tire pressure plate in the vehicle.			
Maximum axle load, front	3,163 lbs. (1,435 kg)	3,174 lbs. (1,440 kg)	3,252 lbs. (1,475 kg)	3,339 lbs. (1,515 kg)
Maximum axle load, rear	3,208 lbs. (1,455 kg)	3,208 lbs. (1,455 kg)	3,164 lbs. (1,435 kg)	3,262 lbs. (1,480 kg)
Maximum gross weight	6,239 lbs. (2,830 kg)	6,261 lbs. (2,840 kg)	6,305 lbs. (2,860 kg)	6,470 lbs. (2,935 kg)
Maximum roof load	220 lbs. (100 kg)	220 lbs. (100 kg)	220 lbs. (100 kg)	220 lbs. (100 kg)
Towing a trailer up to 60 mph (100 km/h) – USA/Canada				
Maximum axle load, rear	3,681 lbs. (1,670 kg)	3,664 lbs. (1,662 kg)	3,638 lbs. (1,650 kg)	3,736 lbs. (1,695 kg)

	Cayenne	Cayenne S	Cayenne GTS	Cayenne Turbo
Maximum towed weight, braked[1]	7,716 lbs. (3,500 kg)	7,716 lbs. (3,500 kg)	7,716 lbs. (3,500 kg)	7,716 lbs. (3,500 kg)
Maximum towed weight, unbraked[1]	1,653 lbs. (750 kg)	1,653 lbs. (750 kg)	1,653 lbs. (750 kg)	1,653 lbs. (750 kg)
Gross vehicle weight rating of the vehicle combination (incl. trailer)	13,955 lbs (6,330 kg)	13,977 lbs. (6,340 kg)	14,021 lbs. (6,360 kg)	14,186 lbs. (6,435 kg)
Maximum trailer hitch load	772 lbs. (350 kg)	772 lbs. (350 kg)	772 lbs. (350 kg)	772 lbs. (350 kg)

For certain E-Hybrid vehicles, the maximum towed weights as well as the gross vehicle weight rating of the vehicle combination depend on the tire/wheel size of the individual vehicle.

- Determine the weights regarding trailer operation according to the following tables.

	Cayenne E-Hybrid	Cayenne Turbo S E-Hybrid
Vehicle load capacity	The combined weight of occupants and cargo should never exceed the weight shown on the tire pressure plate in the vehicle.	
Maximum axle load, front	3,251 lbs. (1,475 kg)	3,395 lbs. (1,540 kg)
Maximum axle load, rear	3,571 lbs. (1,620 kg)	3,494 lbs. (1,585 kg)
Maximum gross weight	6,679 lbs. (3,030 kg)	6,779 lbs. (3,075 kg)
Maximum roof load	220 lbs. (100 kg)	220 lbs. (100 kg)

1. On gradients up to 12%

	Cayenne E-Hybrid vehicles with 19-inch/20-inch/21-inch tires	Cayenne Turbo S E-Hybrid vehicles with 19-inch/20-inch/21-inch tires
Towing a trailer up to 60 mph (100 km/h)– USA/Canada		
Maximum axle load, rear	4,045 lbs. (1,835 kg)	3,968 lbs. (1,800 kg)
Maximum towed weight, braked[1]	7,716 lbs. (3,500 kg)	6,613 lbs. (3,000 kg)
Maximum towed weight, unbraked[1]	1,653 lbs. (750 kg)	1,653 lbs. (750 kg)
Gross vehicle weight rating of the vehicle combination (incl. trailer)	14,396 lbs. (6,530 kg)	13,393 lbs. (6,075 kg)
Maximum trailer hitch load	771 lbs. (350 kg)	661 lbs. (300 kg)

	Cayenne E-Hybrid vehicles with 22-inch tires	Cayenne S E-Hybrid vehicles with 22-inch tires
Towing a trailer up to 60 mph (100 km/h)– USA/Canada		
Maximum axle load, rear	4,045 lbs. (1,835 kg)	3,968 lbs. (1,800 kg)
Maximum towed weight, braked[1]	6,614 lbs. (3,000 kg)	6,613 lbs. (3,000 kg)
Maximum towed weight, unbraked[1]	1,653 lbs. (750 kg)	1,653 lbs. (750 kg)
Gross vehicle weight rating of the vehicle combination (incl. trailer)	13,294 lbs. (6,030 kg)	13,393 lbs. (6,075 kg)
Maximum trailer hitch load	771 lbs. (350 kg)	661 lbs. (300 kg)

1. On gradients up to 12%

	Cayenne Coupé	Cayenne Coupé S	Cayenne Coupé GTS	Cayenne Coupé Turbo
Vehicle load capacity	The combined weight of occupants and cargo should never exceed the weight shown on the tire pressure plate in the vehicle.			
Maximum axle load, front	3,109 lbs. (1,410 kg)	3,141 lbs. (1,425 kg)	3,241 lbs. (1,470 kg)	3,318 lbs. (1,505 kg)
Maximum axle load, rear	3,208 lbs. (1,455 kg)	3,207 lbs. (1,455 kg)	3,219 lbs. (1460 kg)	3,263 lbs. (1,480 kg)
Maximum gross weight	6,162 lbs. (2,795 kg)	6,228 lbs. (2,825 kg)	6,283 lbs. (2,850 kg)	6,426 lbs. (2,915 kg)
Maximum roof load	165 lbs. (75 kg)	165 lbs. (75 kg)	165 lbs. (75 kg)	165 lbs. (75 kg)

	Cayenne Coupé	Cayenne Coupé S	Cayenne Coupé GTS	Cayenne Coupé Turbo
Towing a trailer up to 60 mph (100 km/h)– USA/Canada				
Maximum axle load, rear	3,626 lbs. (1,645 kg)	3,648 lbs. (1,655 kg)	3,703 lbs. (1,680 kg)	3,681 lbs. (1,670 kg)
Maximum towed weight, braked [1]	7,716 lbs. (3,500 kg)	7,716 lbs. (3,500 kg)	7,716 lbs. (3,500 kg)	7,716 lbs. (3,500 kg)
Maximum towed weight, unbraked [1]	1,653 lbs. (750 kg)	1,653 lbs. (750 kg)	1,653 lbs. (750 kg)	1,653 lbs. (750 kg)
Gross vehicle weight rating of the vehicle combination (incl. trailer)	13,878 lbs. (6,295 kg)	13,944 lbs. (6,325 kg)	13,999 lbs. (6,350 kg)	14,142 lbs. (6,415 kg)
Maximum trailer hitch load	772 lbs. (350 kg)	772 lbs. (350 kg)	772 lbs. (350 kg)	772 lbs. (350 kg)

	Cayenne Coupé E-Hybrid	Cayenne Coupé Turbo S E-Hybrid
Vehicle load capacity	The combined weight of occupants and cargo should never exceed the weight shown on the tire pressure plate in the vehicle.	
Maximum axle load, front	3,252 lbs. (1,475 kg)	3,395 lbs. (1,540 kg)

1. On gradients up to 12%

	Cayenne Coupé E-Hybrid	Cayenne Coupé Turbo S E-Hybrid
Maximum axle load, rear	3,571 lbs. (1,620 kg)	3,494 lbs. (1,585 kg)
Maximum gross weight	6,735 lbs. (3,055 kg)	6,823 lbs. (3,095 kg)
Maximum roof load	165 lbs. (75 kg)	165 lbs. (75 kg)

	Cayenne Coupé E-Hybrid	Cayenne Coupé Turbo S E-Hybrid
Towing a trailer up to 60 mph (100 km/h)– USA/Canada		
Maximum axle load, rear	3,990 lbs. (1,810 kg)	3,880 lbs. (1,760 kg)
Maximum towed weight, braked [1]	7,716 lbs. (3,500 kg)	6,614 lbs. (3,000 kg)
Maximum towed weight, unbraked [1]	1,653 lbs. (750 kg)	1,653 lbs. (750 kg)
Gross vehicle weight rating of the vehicle combination (incl. trailer)	14,451 lbs. (6,555 kg)	13,393 lbs. (6,075 kg)
Maximum trailer hitch load	771 lbs. (350 kg)	661 lbs. (300 kg)

Wheels and tires

Wheel and tire sizes

Tires approved by Porsche are the best possible tires for your vehicle. The load capacity index (e.g. "105") and classification letter (e.g. "Y") for maximum permitted speed are minimum requirements. When fitting new tires or changing tires:

▷ Please see chapter "Wheels and Tires" on page 316.

- Snow chains must only be fitted to the appropriately marked wheel and tire sizes. Observe the applicable national regulations regarding maximum speeds when snow chains are fitted. Only use snow chains approved by Porsche.
- For further information, please contact your Porsche partner.

1. On gradients up to 12%

Tire type	Tire size	Wheel size	Fitting snow chains
Collapsible spare wheel	195/65-20 108P	6.5B x 20, RO 28	No
Cayenne models with 6-cylinder engines			
Summer tires	FA: 255/55 ZR 19 XL (111Y) RA: 275/50 ZR 19 XL (112Y)	FA: 8.5J x 19, RO 47 RA: 9.5J x 19, RO 54	No
	FA: 275/45 ZR 20 XL (110Y) RA: 305/40 ZR 20 XL (112Y)	FA: 9.0J x 20, RO 50 RA: 10.5J x 20, RO 64	No
	FA: 285/40 ZR 21 XL (109Y) RA: 315/35 ZR 21 XL (111Y)	FA: 9.5J x 21, RO 46 RA: 11.0J x 21, RO 58	No
	FA: 285/35 ZR 22 XL (106Y) RA: 315/30 ZR 22 XL (107Y)	FA: 10.0J x 22, RO 48 RA: 11.5J x 22, RO 61	No
All-season tires	FA: 255/55 R 19 111V XL M+S RA: 275/50 R 19 112V XL M+S	FA: 8.5J x 19, RO 47 RA: 9.5J x 19, RO 54	No
	FA: 275/45 R 20 110V XL M+S RA: 305/40 R 20 112V XL M+S	FA: 9.0J x 20, RO 50 RA: 10.5J x 20, RO 64	No
	FA: 285/40 R 21 109V XL M+S RA: 315/35 R 21 111V XL M+S	FA: 9.5J x 21, RO 46 RA: 11.0J x 21, RO 58	No
Winter tires	FA: 255/55 R 19 111V XL M+S RA: 275/50 R 19 112V XL M+S	FA: 8.5J x 19, RO 47 RA: 9.5J x 19, RO 54	On rear axle only
	FA: 275/45 R 20 110V XL M+S RA: 305/40 R 20 112V XL M+S	FA: 9.0J x 20, RO 50 RA: 10.5J x 20, RO 64	On rear axle only
	FA: 275/40 R 21 107V XL M+S RA: 305/35 R 21 109V XL M+S	FA: 9.5J x 21, RO 46 RA: 11.0J x 21, RO 58	On rear axle only
Cayenne models with 8-cylinder engine			

Tire type	Tire size	Wheel size	Fitting snow chains
Summer tires	FA: 285/40 ZR 21 XL (109Y) RA: 315/35 ZR 21 XL (111Y)	FA: 9.5J x 21, RO 46 RA: 11.0J x 21, RO 58	No
	FA: 285/35 ZR 22 XL (106Y) RA: 315/30 ZR 22 XL (107Y)	FA: 10.0J x 22, RO 48 RA: 11.5J x 22, RO 61	No
All-season tires	FA: 285/40 R 21 109V XL M+S RA: 315/35 R 21 111V XL M+S	FA: 9.5J x 21, RO 46 RA: 11.0J x 21, RO 58	No
Winter tires	FA: 275/45 R 20 110V XL M+S RA: 305/40 R 20 112V XL M+S	FA: 9.0J x 20, RO 50 RA: 10.5J x 20, RO 64	On rear axle only
	FA: 275/40 R 21 107V XL M+S RA: 305/35 R 21 109V XL M+S	FA: 9.5J x 21, RO 46 RA: 11.0J x 21, RO 58	On rear axle only

FA = front axle, RA = rear axle, RO = rim offset

Tire type	Tire size	Wheel size	Fitting snow chains
Cayenne Coupé models with 6-cylinder engines			
Summer tires	FA: 275/45 ZR 20 XL (110Y) RA: 305/40 ZR 20 XL (112Y)	FA: 9.0J x 20, RO 50 RA: 10.5J x 20, RO 55	No
	FA: 285/40 ZR 21 XL (109Y) RA: 315/35 ZR 21 XL (111Y)	FA: 9.5J x 21, RO 46 RA: 11.0J x 21, RO 49	No
	FA: 285/35 ZR 22 XL (106Y) [1] RA: 315/30 ZR 22 XL (107Y) [1]	FA: 10.0J x 22, RO 48 [1] RA: 11.5J x 22, RO 52 [1]	No
All-season tires	FA: 275/45 R 20 110V XL M+S RA: 305/40 R 20 112V XL M+S	FA: 9.0J x 20, RO 50 RA: 10.5J x 20, RO 55	No

1. Cayenne Coupé, Cayenne Coupé E-Hybrid only.

Tire type	Tire size	Wheel size	Fitting snow chains
	FA: 285/40 R 21 109V XL M+S RA: 315/35 R 21 111V XL M+S	FA: 9.5J x 21, RO 46 RA: 11.0J x 21, RO 49	No
Winter tires	FA: 275/45 R 20 110V XL M+S RA: 305/40 R 20 112V XL M+S	FA: 9.0J x 20, RO 50 RA: 10.5J x 20, RO 55	On rear axle only
	FA: 275/40 R 21 107V XL M+S RA: 305/35 R 21 109V XL M+S	FA: 9.5J x 21, RO 46 RA: 11.0J x 21, RO 49	On rear axle only
Cayenne Coupé models with 8-cylinder engines			
Summer tires	FA: 285/40 ZR 21 XL (109Y) RA: 315/35 ZR 21 XL (111Y)	FA: 9.5J x 21, RO 46 RA: 11.0J x 21, RO 49	No
	FA: 285/35 ZR 22 XL (106Y) RA: 315/30 ZR 22 XL (107Y)	FA: 10.0J x 22, RO 48 RA: 11.5J x 22, RO 52	No
All-season tires	FA: 275/45 R 20 110V XL M+S [2] RA: 305/40 R 20 112V XL M+S [2]	FA: 9.0J x 20, RO 50 [2] RA: 10.5J x 20, RO 55 [2]	No
	FA: 285/40 R 21 109V XL M+S RA: 315/35 R 21 111V XL M+S	FA: 9.5J x 21, RO 46 RA: 11.0J x 21, RO 49	No
Winter tires	FA: 275/45 R 20 110V XL M+S RA: 305/40 R 20 112V XL M+S	FA: 9.0J x 20, RO 50 RA: 10.5J x 20, RO 55	On rear axle only
	FA: 275/40 R 21 107V XL M+S RA: 305/35 R 21 109V XL M+S	FA: 9.5J x 21, RO 46 RA: 11.0J x 21, RO 49	On rear axle only

FA = front axle, RA = rear axle, RO = rim offset

Standard tire pressure - Cayenne models

These tire pressures apply only to the tire makes and types approved by Porsche for cold tires at 68 °F (20 °C).

2. E-Hybrid models only.

- Set the load condition of the vehicle in Tire Pressure Monitoring System (TPMS). Adapt the tire pressure to suit the vehicle load.
  - Please see chapter "Setting Tire Pressure Monitoring (TPM)" on page 318.

Vehicles with 6-cylinder engines **FA = front axle, RA = rear axle**	**Part load**		**Full load**	
	FA	**RA**	**FA**	**RA**
Summer tires	2.4 bar / 240 kPa / 35 psi	2.6 bar / 260 kPa / 38 psi	2.6 bar / 260 kPa / 38 psi	2.8 bar / 280 kPa / 41 psi
Winter/all-season tires	2.4 bar / 240 kPa / 35 psi	2.6 bar / 260 kPa / 38 psi	2.6 bar / 260 kPa / 38 psi	2.8 bar / 280 kPa / 41 psi

E-Hybrid vehicles with 6-cylinder engine **FA = front axle, RA = rear axle**	**Part load**		**Full load**	
	FA	**RA**	**FA**	**RA**
19-/20-/21-inch summer tires	2.6 bar / 260 kPa / 38 psi	2.7 bar / 270 kPa / 39 psi	2.8 bar / 280 kPa / 41 psi	3.0 bar / 300 kPa / 44 psi
22-inch summer tires	2.6 bar / 260 kPa / 38 psi	2.7 bar / 270 kPa / 39 psi	2.8 bar / 280 kPa / 41 psi	3.1 bar / 310 kPa / 45 psi
Winter/all-season tires	2.6 bar / 260 kPa / 38 psi	2.7 bar / 270 kPa / 39 psi	2.8 bar / 280 kPa / 41 psi	3.0 bar / 300 kPa / 44 psi

Vehicles with 8-cylinder engine **FA = front axle, RA = rear axle**	**Part load**		**Full load**	
	FA	**RA**	**FA**	**RA**
21-inch summer tires	2.6 bar / 260 kPa / 38 psi	2.6 bar / 260 kPa / 38 psi	2.7 bar / 270 kPa / 39 psi	2.9 bar / 290 kPa / 42 psi

Vehicles with 8-cylinder engine FA = front axle, RA = rear axle	Part load		Full load	
22-inch summer tires	2.7 bar / 270 kPa / 39 psi	2.8 bar / 280 kPa / 41 psi	2.9 bar / 290 kPa / 42 psi	3.3 bar / 330 kPa / 48 psi
Winter/all-season tires	2.6 bar / 260 kPa / 38 psi	2.6 bar / 260 kPa / 38 psi	2.7 bar / 270 kPa / 39 psi	2.9 bar / 290 kPa / 42 psi

E-Hybrid vehicles with 8-cylinder engine FA = front axle, RA = rear axle	Part load		Full load	
	FA	**RA**	**FA**	**RA**
21-inch summer tires	2.8 bar / 280 kPa / 41 psi	2.8 bar / 280 kPa / 41 psi	3.0 bar / 300 kPa / 44 psi	3.2 bar / 320 kPa / 47 psi
22-inch summer tires	3.0 bar / 300 kPa / 44 psi	3.1 bar / 310 kPa / 45 psi	3.1 bar / 310 kPa / 45 psi	3.4 bar / 340 kPa / 50 psi
Winter/all-season tires	2.8 bar / 280 kPa / 41 psi	3.0 bar / 300 kPa / 44 psi	3.0 bar / 300 kPa / 44 psi	3.3 bar / 330 kPa / 48 psi

	FA	RA
20-inch collapsible spare wheel	3.5 bar / 350 kPa / 51 psi	3.5 bar / 350 kPa / 51 psi

Comfort tire pressure for summer, winter and all-season tires up to 100 mph (160 km/h) - Cayenne models

✓ Vehicles with "Comfort pressure" setting in the Tire Pressure Monitoring System (TPMS) and speed threshold "100 mph (160 km/h)".

These tire pressures apply only to the tire makes and types approved by Porsche for cold tires at 68 °F (20 °C).

- Set the load condition of the vehicle in Tire Pressure Monitoring System (TPMS). Adapt the tire pressure to suit the vehicle load.
  - Please see chapter "Setting Tire Pressure Monitoring (TPM)" on page 318.

⚠ WARNING Tire pressure too low

The "Comfort tire pressure" selection option is country-dependent and is not available in all country versions.
Driving at high speed and low tire pressure damages the tires.

- Comfort tire pressure in the tires must only be set on vehicles with the "Comfort tire pressure" selection option in the Tire Pressure Monitoring System (TPMS).

Vehicles with 6-cylinder engines **FA = front axle, RA = rear axle**	**FA**	**RA**
19/20/21-inch tires	2.2 bar / 220 kPa / 32 psi	2.4 bar / 240 kPa / 35 psi
E-Hybrid vehicles with 6-cylinder engine **FA = front axle, RA = rear axle**	**FA**	**RA**
19/20/21-inch tires	2.4 bar / 240 kPa / 35 psi	2.5 bar / 250 kPa / 36 psi
Vehicles with 8-cylinder engine **FA = front axle, RA = rear axle**	**FA**	**RA**
21-inch tires	2.4 bar / 240 kPa / 35 psi	2.4 bar / 240 kPa / 35 psi
22-inch tires	2.6 bar / 260 kPa / 38 psi	2.7 bar / 270 kPa / 39 psi
E-Hybrid vehicles with 8-cylinder engine **FA = front axle, RA = rear axle**	**FA**	**RA**
21-inch tires	2.6 bar / 260 kPa / 38 psi	2.7 bar / 270 kPa / 39 psi
22-inch tires	2.7 bar / 270 kPa / 39 psi	2.9 bar / 290 kPa / 42 psi

Porsche Communication Management (PCM)

Technical data: Audio and video files	
Supported media	**SD cards** up to 128 GB **DVD Drive** Audio CDs up to 80 min., CD-ROMs up to 700 MB, DVD±R/RW, Standard Video DVD, Video DVD compatible DVD Audio **Portable players** MTP Player, USB 2.0 devices of "USB Device Subclass 1 and 6" such as, for example, USB sticks, USB MP3 players without special driver software, external USB Flash memory and hard drives **DVD changers** Audio CDs up to 80 min., standard video DVDs, video DVD-compatible DVD Audio
File system	**SD**/**SDHC**/**SDXC**/**MMC** memory cards **USB mass storage** exFAT, FAT or FAT32, NTFS file systems with a maximum of 4 partitions **DVD Drive** ISO9660, Joliet, UDF
Format	MPEG 1/2 Layer 3; Windows Media Audio 9 and 10; MPEG 2/4; FLAC, MPEG 1/2; ISO-MPEG4; DivX 3, 4 and 5; Xvid; ISO-MPEG4 H.264 (MPEG4 AVC); Windows Media Video 9
File extension	.mp3 (does not apply to DVD changer); .wma; .asf; .m4a; .m4b; .aac; .flac; .mpg; .mpeg; .avi; .mp4; .m4v; .mov; .wmv
Playback lists	.M3U; .PLS; .WPL; .M3U8; .ASX
Characteristics	max. 320 kbit/s and 48 kHz sampling frequency; max. 2,000 kbit/s and 720x576 px. at max. 25 fps
Number of files	**DVD Drive** max. 1,000 files per DVD **USB mass storage** and **memory cards** max. 10,000 files per medium, max. 1,000 files per directory/playback list
Metadata	Album covers up to 800 x 800 pixels; GIF, JPG and PNG formats or via Gracenote® database
Video DVD region codes	Code 1: USA, Canada and US colonies Code 2: Europe, Greenland, South Africa, Egypt and the Middle East, Japan Code 3: Southeast Asia, South Korea, Hong Kong, Indonesia, Philippines, Taiwan Code 4: Australia, New Zealand, Mexico, Central America, South America Code 5: Russia and other former countries of the Soviet Union, Eastern Europe, India, Africa Code 6: People's Republic of China Code 8: International territory (cruise ships, aircraft)

Technical data: Connectivity	
Mobile networks	GSM/GPRS/EDGE: Quad Band, 850/900 MHz/1,800/1,900 MHz UMTS/HSPA+: Triple band, 850 MHz (band V)/AWS (band VI)/1,900 MHz (band II) LTE: Quad band, 700 MHz (band 17)/850 MHz (band 5) /AWS (band 4)/1,900 MHz (band 2)
WiFi	IEEE 802.11a/b/g/n (2.4 GHz)
Bluetooth®	Bluetooth® 2.1, IEEE 802.15.1, Class 2, range approx. 10 m
SIM card	Mini-SIM, dimensions: 25 x 15 mm
Technical data: Radio	
Frequency ranges/ standards	FM: 87.5 – 108 MHz AM: 530 – 1,700 kHz
Tuning grid with automatic station search	FM: 200 kHz AM: 10 kHz
General information	At the time of manufacture, this laser product was manufactured in accordance with the German/international DIN EN 60825-1 Standard: 2008-05 and DHHS Rules 21 CFR Subchapter J, classified as a Class 1 laser product. The laser beam in this Class 1 laser product is so weak that it poses no risk under normal operating conditions. This product is designed so that the laser beam is completely enclosed within the device.
Laser beam output power	DVD: 0.68 mW CD: 0.85 mW
Laser beam wavelength	DVD: 665 nm CD: 795 nm

License notices		
Bluetooth®	The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by AISIN AW CO., LTD. is under licence. Other trademarks and trade names are those of their respective owners.	
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Inspection marks and declarations of conformity

Radio Frequency Devices and Radio Communication Equipment

Radio Frequency Devices and Radio Communication Equipment comply with Part 15 of the FCC Rules and with RSS-210 of Industry Canada.

Operation is subject to the following two conditions:

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

Changes or modifications made to the equipment not expressly approved by Porsche may void the FCC authorization to operate the equipment.

The equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. The equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with this manual, may cause harmful interference to radio communications. Operation of the equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

These Class A digital devices comply with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

ID Central Locking System

USA: FCC-ID IYZ-PK3

Canada: IC 2701A-PK3

ID Bluetooth® Transceiver

USA: FCC-ID 2ACC7TRANSCVRP01

Canada: IC 11980A-TRANSCVRP01

This device complies with part 15 of the FCC Rules and Industry Canada licence-exempt RSS standard (s). Operation is subject to the following two conditions:

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

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. l'appareil ne doit pas produire de brouillage, et
2. l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Information

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

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

Model: R3TR

IC: 3659A-R3TR

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est

1. l'appareil ne doit pas produire de brouillage, et
2. l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

USA Model: R3TR

FCC: LTQR3TR

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

This device complies with Part 15 of the FCC Rules and with RSS of the Industry Canada. Operation is subject to the following two conditions:

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

United States (FCC) 47 CFR Part 15 and Canada (ISED) RSS-Gen (English)

This device complies with FCC rules part 15 and Innovation, Science, and Economic Development Canada RSS-210. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference that maybe received including interference that may cause undesired operation.

WARNING: The transmitter has been tested and complies with FCC and ISED rules. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device. This equipment complies with FCC and ISED radiation exposure limits set forth for an uncontrolled environment. End Users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must be at least 20 cm from the user and must not be co-located or operating in conjunction with any other antenna or transmitter.

Canada (ISED) RSS-Gen (French)

Cet appareil est conforme aux règlements dalà FCC, section 15, et au CNR-210 d'innovation, Sciences et Développement économique Canada. Le fonctionnement est assujetti aux deux conditions suivantes : (1) cet appareil ne doit pas causer d'interférences nuisibles et (2) cet appareil doit accepter toute interférence reçue, y compris celle qui pourrait entraîner un dysfonctionnement. MISE EN GARDE : L'émetteur a subi des tests et est conforme aux règlements de la FCC et d'ISDE. Les changements ou modifications non approuvés explicitement par la partie responsable de la conformité pourraient rendre caduque l'autorisation de l'utilisateur de se servir du dispositif. Cet appareil est conforme aux limites d'exposition aux radiations de la FCC et d'ISDE établies pour un environnement non contrôlé. Les utilisateurs finaux doivent respecter les instructions d'utilisation spécifiques pour satisfaire aux exigences de conformité aux expositions de RF. L'émetteur doit se trouver à 20 cm au minimum de l'utilisateur et ne doit pas être situé au même endroit que tout autre émetteur ou antenne ni fonctionner avec un autre émetteur ou antenne.

Bluetooth® approval (extract)

Albania – Andorra – Angola – Aruba – Australia – Austria – Bahamas – Bahrain – Barbados – Belarus – Belgium – Belize – Bolivia – Bonaire – Bosnia and Herzegovina – Brazil – Brunei – Bulgaria – Burkina Faso – Canada – Chile – China – Colombia – Costa Rica – Croatia – Curacao – Cyprus – Czech Republic – Denmark – Dominican Republic – Ecuador – Egypt – El Salvador – Estonia – Ethiopia – Finland – France – French Guyana – French Polynesia – Gabon – Germany – Ghana – Gibraltar – Guadeloupe – Guatemala – Greece – Greenland – Hong Kong – Hungary – Iceland – India – Indonesia – Ireland – Iraq – Israel – Italy – Ivory Coast – Jamaica – Japan – Jordan – Kenya – Kosovo – Kuwait – Latvia – Lebanon – Lesotho – Liberia – Libya – Liechtenstein – Lithuania – Luxembourg – Macau – Macedonia – Madagascar – Malaysia – Malta – Martinique – Mauritius – Mexico – Monaco – Mongolia – Morocco – Mozambique – Netherlands – New Caledonia – New Zealand – Nigeria – Norway – Oman – Pakistan – Panama – Peru – Poland – Portugal – Puerto Rico – Qatar – Réunion – Romania – Russia – San Marino – Saudi Arabia – Senegal – Serbia – Singapore – Slovakia – South Africa – Spain – St. Lucia – Sweden – Switzerland – Tahiti – Taiwan – Thailand – United Arab Emirates – United Kingdom – Uruguay – USA – Venezuela – Vietnam – Yemen – Zimbabwe

Recycling

Airbag and seat-belt pretensioner units

Non-ignited gas generators, or whole vehicles or assemblies with airbag and seat-belt pretensioner units, must not be disposed of as "normal" scrap or waste or put into any other form of end storage.
For further information on correct disposal:

- Contact your Porsche partner.

Old batteries

Old batteries must not be disposed of as "normal" scrap or waste or put into any other form of end storage.

- Observe the local disposal instructions. Hand in old “household batteries” at a battery collection point.
- The lithium battery (12 V) and the high-voltage battery are dangerous goods. Do neither handle these batteries nor dispose them yourself.

For further information on correct disposal:

- Contact your Porsche partner.

Index

D

E

F

G

H

I

J

K

P

R

S

T

U

V

W