Owner's Manual

PORSCHE

911 Carrera 2/4

911 turbo



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5/91

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Dear Owner,

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

Remember however that, as with any vehicle, you should take time to familiarize yourself with your Porsche and its performance characteristics. Always drive within your own unique capabilities as a driver and your level of experience with your Porsche. Ensure that anyone

else driving your Porsche does the same. To prevent or minimize injury, always use your safety belts. Never consume alcohol or drugs before or while driving.

This Owner's Manual contains a host of useful information. **Please read** this manual before you drive your new Porsche. Acquaint yourself to operate your Porsche more safely. The better you know your Porsche, the more pleasure you will experience driving your new car.

A separate Maintenance Booklet explains how you can keep your Porsche in top driving condition by having it serviced regularly. A separate Warranty Booklet contains detailed information about the warranties covering your Porsche.

For U.S. only:

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Porsche Cars North America (Porsche Cars N.A.). 9

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

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

Your car has thousands of parts and components which have been designed and manufactured in accordance with Porsche's high standards of engineering quality and safety. 3 --------) ----3 ---

Any alteration of the car may negate or interfere with those safety features built into the car. Your Porsche is intended to be used in a safe manner in light of the local laws and driving conditions faces by you, and in accordance with the instructions provided in this Manual. Do not misuse your Porsche by ignoring those laws and driving conditions, or by ignoring the instructions in this manual. Any alteration or misuse of the car can lead to accidents and severe or fatal personal injuries.

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

Your car may have all or some of the components described in this manual. Should you have difficulty understanding any of the explanations of features or equipment installed in your car, your authorized Porsche dealer will be glad to assist you. Also check with your dealer on other available options or equipment. Text, illustrations and specifications in this manual are based on the information available at the time of printing.

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

IMPORTANT

For your own protection and longer service life of your car, please heed all operating instructions and special warnings. Ignoring them could result in serious mechanical failure or even physical injury.

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

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

Note to owners

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

Note aux proprietaires

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

Volkswagen Canada Inc. Porsche Customer Assistance Assistance a la Clientele Porsche 1940 Eglinton Ave. East Scarborough Ontario M1L 2M2

Fuel quality:

Unleaded fuel is required, however Porsche strongly recomends the use of unleaded fuel with a minimum octane rating of 95 Research Octane Number (90 Anti-Knock Index $(\frac{R+M}{2})$).

Tire pressures:

(with tires cold, in psi (bar) overpressure)

Summer tires		Carrera 2/4, Turbo look	Turbo
Front	16" wheels 17" wheels	36 (2.5) 36 (2.5)	36 (2.5)
Rear	16" wheels 17" wheels	44 (3.0) 36 (2.5)	36 (2.5)
Snow, tires			
Front	16" wheels 17" wheels	36 (2.5) 36 (2.5)	36 (2.5)
Rear	16" wheels 17" wheels	44 (3.0) 36 (2.5)	44 (3.0)

Collapsible spare tire: front and rear: 36 overpressure (2.5)

These tire pressures are valid only for Porsche approved tires. For replacement tires it is imperative that you consult the Technical Data section of thes manual and follow the recommendations contained therein.



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Dear Porsche-Owner

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

the safe driver...

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

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

Before going on a trip...

First things first

- Turn the engine off before you attempt any checks or repairs of the vehicle.
- Be sure tires are inflated correctly. Check for damage and tire wear.
- See that wheel bolts are properly tightened and not loose or missing.
- Check engine oil level, add if necessary. Make it a habit to have engine oil checked with every fuel filling.
- · Be sure you have a well charged battery.
- Check brake fluid level. If too low, have brake system checked.
- Replenish windshield washer fluid.
- · Check if front hood is latched safely.
- · Replace worn or cracked wiper blades.
- See that all windows are clear and unobstructed.
- Keep air intake slots and area between engine hood and windshield free of snow and ice, so that the heater and the windshield wipers work properly.
- · Check whether all light lenses are clean.

- Be sure all lights are working and headlights are aimed correctly.
- Check under vehicle for leaks.
- · Be sure all luggage is stowed securely.

Emergency equipment

It is good practice to carry emergency equipment in your vehicle. Some of the things you should have are: window scraper, snow brush, container or bag of sand or salt, emergency light, small shovel, first-aid kit, etc.

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In the driver's seat ...

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- · Check operation of horn.
- · Position seat for easy reach of controls.
- · Adjust inside and outside rear view mirrors.
- · Attach your safety belts.
- Check operation of foot and parking brakes.
- Check all warning and indicator lights with ignition on and engine stationary.
- NEVER leave car idling unattended.
- Lock doors from inside, especially with children in the car.
- To prevent inadvertent opening of doors from inside or outside, drive with locked doors.

On the road...

- Never drive after you have consumed alcohol or drugs.
- Always have your safety belt attached.
- Always drive defensively. Expect the unexpected.
- Use signals to indicate turns and lane changes..
- Turn on headlights at dusk.
- 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.
- · Observe speed limits and obey road signs.
- 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. See WARNINGS on "Engine Exhaust".
- When parked, always set the parking brake. Move gearshift lever to reverse or first gear. On hills also turn the wheels toward the curb.

- When emergency repairs become necessary, move the vehicle well off the road. Turn on emergency flasher and use other warning devices to alert other motorists. Do not park or operate the vehicle in areas where the hot exhaust system may come in contact with dry grass, brush, fuel spill or other flammable material.
- Make it a habit to have the engine oil checked with every fuel filling.

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Break-in Hints for the first 1.000 miles/1.600 kilometers

There are no specific break-in rules for your Porsche. However, by taking a few precautions you can help extend the service life and performance of your engine.

During the first 1,000 miles/1,600 km, all working components of the engine adjust to each other to a certain degree. Therefore: Avoid full throttle starts and abrupt stops. Change speeds frequently. Vary the throttle load.

Do not exceed max. engine speed of 4,500 rpm (revolutions per minute).

Do not run a cold engine at high rpm or in Neutral.

Do not let the engine labor, especially when driving uphill. Shift to the next lower gear in time (use the most favorable rpm range).

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

Never lug the engine in high gear at low speeds. This rule applies all the time, not just during the break-in period.

Breaking-in brake pads

Brake pads do not have maximum braking efficiency when the car is new. Therefore, more pedal force is necessary during the first 100 to 150 miles/150 to 250 km. This also applies to replacement brake pads.

Breaking-in new tires

New tires do not have maximum traction. They tend to be slippery. Break in new tires by driving at moderate speeds during the first 60 to 120 miles/100 to 200 km, and longer braking distances must be anticipated.

Engine Oil Consumption

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

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

Check engine oil level, add if necessary. Make it a habit to have engine oil checked with every fuel filling.

Engine Exhaust

WARNING

- Engine exhaust is dangerous if inhaled.
- Never start or let the engine run in a closed garage. Never sit in your car for prolonged periods with the engine on and the car not moving.

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- Although exhaust fumes from the engine have many components which you can smell, they also contain carbon monoxide, which is a colorless and odorless gas. Carbon monoxide can be fatal if inhaled.
- If you smell gas fumes in the vehicle, drive with the windows open to prevent poisonous exhaust gas from being drawn into the vehicle. Have the cause immediately located and corrected.
- Never carry additional fuel containers in your vehicle. Such containers, full or partially empty, may leak, cause an explosion, or result in fire in case of a collision.

- 1. Remote control for outside mirror
- 2. Power-window controls
- 3. Light switch
- 4. Ignition/starter switch with steering lock
- 5. Turn signal, headlight dimmer, flasher lever
- 6. Horn
- 7. Windshield wiper/washer lever
- 8. Emergency-flasher switch
- 9. Electric seat adjustment



NEVER invite car theft!

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

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

WARNING

Always remove the ignition key, especially if children are left unattended in the vehicle. Unsupervised use of any vehicle key may cause serious personal injury. NEVER leave your vehicle unattended with the key in the ignition lock. Take the key and lock the doors

Keys

The vehicle is supplied with three keys fitting all locks. Two keys are fitted with a battery operated light which is integrated in the plastic handle and lights up upon pressing the contact button. The third key has a flat plastic handle and should be kept as an "emergency key", for instance in your purse. By pulling off the flat handle, this key can be fitted with the plastic handle with integrated battery operated light available from your Porsche dealer.

Replacement keys can only be made if the key number is given. The key number, together with the vehicle identification number, is listed on a tag attached to the keys. Detach this tag and keep in a safe place. Remove the glue-on label showing the key number from the head of the keys.

For vehicles equipped with lockable wheel nuts, three identical keys are supplied. When taking the vehicle to your Porsche dealer or to a workshop for wheel or tire service, remember to leave one key with the service attendant.

In case of loss, duplicate wheel lock keys cannot be furnished by your Porsche dealer. Do not leave these keys in the vehicle. Keep them in a safe place.

See "Lockable wheel nuts" for details.

NOTE

It is a good idea to also keep a record of your key numbers in your wallet together with your license.





A) Key with battery operated light
 B) Flat key
 C)Key for lockable wheel nuts

WARNING

NEVER remove the key from the steering lock while you are driving or as the car is rolling to a stop. The steering column will lock when you remove the key, and you will not be able to steer the car. This may result in a serious accident. Keys A and B can be used to operate:

- 1. Door locks with central locking, -Alarm system
 - -Interior light
- 2. Steering lock and ignition/ starter switch
- 3. Luggage compartment lock (Cabriolet, Targa)
- Glove compartment lock, rear stowage compartment (Coupe, Targa)



Key light

Two keys have a built-in flashlight in the key head. The beam from a small bulb in the key head illuminates the lower part of the key stem. The flashlight is on as long as the contact button is depressed. The flashlight is powered by a 1.5 Volt button battery. When the beam begins to fade, replace the battery, because **an old battery may leak and damage your clothes.**

- 1. Use your finger nail or a small screw driver to carefully lift the key handle cover.
- 2. Insert a new commercial battery (1.5 V) in the contact button.
- 3. Assemble key top as shown in the figure.





Central Locking System, Doors

With the central locking system, both doors can be electrically locked or unlocked by turning the key in one door lock. When the doors are locked, the locking knobs (A) must be completely depressed.

The two doors can be locked individually from inside by depressing the locking knob (A) or turning the rotary knob (B). If one door is unlocked using the rotary knob, the second door is also unlocked automatically.

To keep you from being locked out of your Porsche, the central locking system only operates when the driver's door is closed (even if the passenger's door is still open).

If the central locking system should fail, both doors can still be opened and closed.

The alarm system can be switched on by performing the closing movement three times in quick succession.





Central Locking System Button

Both doors can be electrically locked or unlocked when the ignition is switched on by depressing the central locking system button in the centre console. The button lights to indicate that the doors are locked.

The central locking system button can be used to lock the doors even with the ignition key removed. The ignition must be switched on or rotary knob (B) turned for unlocking.

Doors

The doors are opened from the outside by pulling the door handle release catch and from the inside by pulling the recessed lever (C).

Theft protection

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

- Close windows and sunroof (or convertible top)
- · Remove ignition key
- · Allow steering lock to engage
- · Lock the glove compartment
- On Cabriolet and Targa, lock the luggage compartment release
- Close rear stowage compartments in the Coupe and Targa
- Lock doors

Alarm system

The alarm system is armed when one of the doors is locked with the key. Light-emitting diodes (LEDs) in the locking buttons start flashing immediately to indicate that the alarm is armed.

If the LEDs do not flash when the car is locked or change to a double-flashing signal after 10 seconds, not all of the alarm contacts have been closed.

The following components are monitored by the alarm:

- Doors (central door locking system)
- Engine- and luggage-compartment lids
- Glove compartment (rear stowage compartment in Cabriolet)
- Radio
- · Ignition (car immobilizing circuit)

If an alarm contact is broken, the alarm horn will sound for approx. 4 minutes.

At the same time, the interior lights and the hazard warning lights flash for approx. 4 minutes. When the alarm is triggered, the LEDs are switched to a double-flashing signal.

When a door lock is unlocked, the alarm system is disarmed and the LEDs go out.

Emergency arming

If the central locking system is not working, the alarm system can be armed by three door locking actions in rapid succession. The LEDs indicate this with a double-flashing signal.



A Backrest release B Electric height adjustment C Fore-and-aft adjustment D Emergency fore-and-aft adjustment E Backrest adjustment

Driver's Seat

A proper seating position is essential to safe, non-tiring driving.

Adjusting the seating position

The two locking levers at the front of the seat cushion allow the seat to be adjusted to any position: the left-hand lever controls fore-andaft adjustment, and the backrest angle can be set by raising the right-hand lever. The height of the seat is adjusted electrically at front and rear by jacks actuated by pressing the rocker switches.



1-2 Height adjustment, front (B) 3-4 Height adjustment, rear (B)

1. For **fore-and-aft adjustment** (C), raise the left-hand locking lever on the front of the seat and slide the seat until your leg is fully stretched with the foot at an angle when the clutch is fully depressed. Release the lever and make sure that the seat latches correctly.

WARNING

Do not disengage the driver's-seat latch while the car is in motion: the seat could suddenly change position, causing you to lose control of the car.

2. Set desired height (B) at front and rear.

 Grasp the top of the steering wheel. Then use the right-hand locking lever (E) to adjust the **backrest angle** until your shoulders touch the backrest with your arms almost at full stretch.

The backrest will move forward under spring pressure when the lever is raised, unless held back by a weight.

Passenger seat

For **fore-and-aft adjustment** (C), raise the right-hand locking lever at the front of the seat, set the seat to the desired position, release the lever and check that the seat latches correctly.

Adjust seat to the desired height (B) at front and rear.

To adjust the **backrest angle** (E), raise the left-hand locking lever at the front of the seat, move the backrest to the desired position, and release the lever.

The backrest will move forward under spring pressure when the lever is raised, unless held back by a weight.

Backrest Locking

The **backrest** is locked to prevent it from tipping forward under heavy braking. To unlock the backrest, push knob (A) on the side of the backrest upward. When the backrest is pushed upright, the knob locks automatically.

WARNING

For driver and passenger protection, backrest locks must be engaged at all times while the vehicle is in motion.





Electric fore-and-aft adjustment 5-6

Press the switch for fore-and-aft adjustment until your leg is fully stretched with the foot at an angle when the clutch is fully depressed.

Electric backrest adjustment 7-8

Press the switch for backrest adjustment until you find the correct backrest position.

Seat Heating (S)

The seat heating is switched on at switch (S) and heats the seat cushion and the backrest.

Press upper half of switch - heating on Press lower half of switch - heating off

Heating temperature is controlled with the aid of the knurled knob in the switch; the temperature is held constant until the seat heating is switched off.

Turn knurled knob up to increase temperature Turn knurled knob down to reduce temperature

Lumbar Support (L)

- Horizontal adjustment
- Height adjustment

The backrest support can be regulated vertically and horizontally to any position to guarantee a relaxed seated posture and provide individual lumbar support.

Emergency fore-and-aft adjustment (D)

If the electric seat adjustment should fail, use the crank handle from the tool kit to turn the adjuster motor (D) and move the seat forwards or backwards to the desired position.



Rear Seat

The two **rear seat backrests** can be unlocked by pressing the knob, and folded forward to increase stowage space.

To lock the backrests, push back until the knob latches.



Safety belts

WARNING

Failure to follow safety belt instructions may result in serious personal injury.

Instructions

- For your and your passengers' protection, use safety belts at all times while the vehicle is in motion. Use appropriate child resistant systems for all small children.
- Safety belts must be properly positioned on the body. Improperly positioned safety belts can cause serious personal injury in case of an accident.
- For maximum effectiveness, the lap belt should be worn low across the plevic crest.
- · Belts should not be worn twisted.
- Do not wear belts over rigid or breakable objects in or on your clothing, such as eye glasses, pens, keys, etc. as these may cause injury.
- Several layers of heavy clothing may interfere with proper positioning of belts.
- Belts must not rub against sharp objects.
- Keep belt buckles free of any obstruction that may prevent secure locking.

- Make sure that belt of the unoccupied passenger seat is fully wound up on its retractor so that the belt tongue is in its stowed position.
- Belts that have been subjected to excessiv stretch forces in an accident must be replaced.
- If belts show damage to webbing, blindings, buckles or retractors, they should be replaced.
- If beltsdo not wwork properly, see your authorized Porsche dealer.
- Do not motify or disassemble the safty belts in your vehicle.
- The belts must be kept clean as otherwise the retractors may not work properly (see also "Car instructions").
- · Never bleach or dye safty belts.
- Do not allow safty belts to retrac untill they are completely dry.



A Safety Belt Warning System

An audio-visual warning system is inter-connected with the driver's safety belt.

Every time the ignition is turned on, the gong will sound for about 6 seconds to remind driver and passenger to buckle up. The seat belt warning light will go off as soon as the driver has buckled up.





Inertia reel retractor

The combination lap/shoulder belt with inertia reel locking mechanism adjusts automatically to your size and movements as long as the pull on the belt is slow.

Rapid deceleration during hard braking or a collision locks the belt. The belt will also lock when you drive up or down a steep hill or in a sharp curve. Otherwise the shoulder belt will not inhibit your upper body movement.

- To fasten, grasp latch and pull belt in continuous slow motion across your chest and lap.
- Insert lap tongue into buckle on inboard side of seat. Push down until it securely locks with an audible click. Pull belt to check.

- Pull shoulder section to make sure belt fits snugly across the hips.
- Belts should fit snugly across the pelvis and chest. Make sure any slack is wound on the retractor.
- To unfasten belt, push in release button on buckle. Belt tongue will spring out of buckle.
- To release a locked belt, lean back to take the body pressure of the belt.
- To store lap/shoulder belt, allow belt to wind up on its retractor as you guide latch to ist stowed position on doorpost.

Child Restraint Systems

WARNING

Failure to follow these child restraint instructions may reslult in serious personal injury.

- 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.
- The use of infant or child restraints is required by law in all 50 states and the Canadian provinces. The child restraint system should be one that complies with U.S. Federal Motor Vehicle Safety Standard 213 and should be secured by a lap belt or the lap belt portion of a lap-shoulder belt. A statement by the seat manufacturer of compliance with this standard can be found on the instruction label on the restraint and in de instruction manual providet with the restraint.
- When using an infant or child restraint system be sure to follow all manufacturer's instructions on installation and use.
- Infants and small children should never be held on the lap, nor should they share a seat belt with another occupant while the vehicle is in motion.

- Children too big for child restraint systems should use regular seat belts. A shoulder belt can be used providing it does not cross the face or the neck of the child.
- For maximum safety and protection, we recommend that small children travel in the rear seats.
- To reduce risk of injury from an inflating airbag in an accident, Porsche strongly recommends the following positioning:

Forward facing child restraint system: Use in the rear seat or in the passenger seat only in the rearmost adjusting position.

Rearward facing child restraint system: Only use in the passenger seat in the rearmost adjusting position.



Coupé, Targa

Child restraint anchorages (Canada Models"Coupe, Targa")

If your child restraint seat or seats require the use of a spether strap you will want to use the anchor points provided on the panel behind the rear seats.

The anchorages are covered with caps.

The left child restraint anchorage is shown in the illustration.

The hardware needed to attach the tether strap comes with your Porsche.

WARNING

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

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Belt care

- Belts that have been subjected to exessive stretch forces in an accident must be replaced.
- If belts show damage to webbing, bindings, buckles or retractors, they should be replaced.
- If belts do not work properly, see your authorized Porsche dealer.
- Do not modify or disassemble the safety belts in your vehicle.
- the belts must be kept clean as otherwise the retractors may not work properly (see also "Car care instructions").
- · Never bleach or dye safety belts.
- Do not allow safety belts to retract until they are completely dry.







Air Bag System

The "Air Bag" in combination with the safety belt makes up a passive safety system which offers the driver and front seat passenger the greatest known protection from injuries in case of accident.

The air bag system is composed of the following 3 major groups:

- Air bag moduls with gas generators and ignition unit
- Control electronics
- Collision sensors

In case of frontal collision greater than a certain severity, the collision sensors send a signal via the control electronics to the ignition mechanism. In the ignition process, a solid propellant in the gas generator is combusted in a fraction of a second. This combustion generates the gas quantity and pressure necessary to fill the air bag.

The air bag is located behind the steering wheel center pad on the driver's side, and on the passenger side behind the padding above the glove compartment. Due to the rapid deflation of the air bag after use, there is little danger of obstructed vision. Likewise, the noise of the inflation of the air bag generally goes unnoticed because of the collision noise. The air bag protects the face and upper body, and at the same time dampens the forward motion of the driver and passenger.

Range of Effectiveness

Even if your vehicle is equipped with an air bag, the safety belt must be worn **at all times**, because the air bag system is only actuated by frontal collisions with an impact of sufficient severity. See figure for range of effectiveness.

Below the actuation threshold of the air bag system, and during types of collisions which do not cause the actuation of the system, the seat belts provide the primary protection to the occupants when correctly worn. Therefore, all persons within the vehicle must **always wear safety belts** (in many states, state law requires the use of safety belts). See also the chapter "Safety Belts".

Maintenance /Monitor Lights

The air bag system monitors the operational readiness of the igniter, sensors, warning lamp, and control electronics itself.

Any malfunctions which may arise are announced by the monitor lights in the clock. Upon activation of the vehicle ignition circuit, the "Air Bag" notation in the instrument cluster lights up for approximately 5 seconds and then goes out again, indicating system readiness.

In the following cases you should immediately consult an authorized Porsche dealer in order to assure the air bag system is functioning properly:

- Illumination of the "Air Bag" light during travel or repeated illumination longer than 5 seconds after the ignition circuit is turned on.
- Illumination fails to light up during ignition circuit activation.

In order to ensure long-term functioning, the air bag system must be inspected by an authorized Porsche dealer after 4, 8 and 10 years from the date of manufacture shown on the safety compliance sticker, and then every 2 years.

WARNING

- No changes must be made to the wiring or components of the air bag system. Do not add any additional coverings or stickers to the steering wheel or in the area of the passenger side air bag. Doing so may adversely affect the functioning of the air bag system.
- Do not undertake any wiring for electrical accessory equipment in the vicinity of the air bag wiring harness. Doing so may disable the air bag system.
- The actuation of the air bag requires the immediate inspection of the system and replacement of some parts of the system. See your authorized Porsche dealer.
- Defects should be repaired immediately. See your authorized Porsche dealer.
- When disposing of a used air bag unit, our safety instructions must be followed. These instructions can be obtained at any authorized Porsche dealer.

Important:

If you sell your Porsche, notify the purchaser that the vehicle is equipped with an air bag, and refer him or her to the chapter, "Air Bag System", in the owner's manual (safety and disposal rules). Further information on the air bag system can be found on stickers in the glove compartment, at the windshield, as well as on all air bag components.

For special recommendations on the use of child restraints, please refer to the chapter on "Child Restraint Systems".







Power windows

> Both door windows can be controlled by "updown" switches located in the door panels. The door window on the passenger's side can also be operated from the driver's side. The power window switches are operational when the ignition key is turned to switch position 1 or 2. When the ignition is turned off or the ignition key removed. The power windows can be operated until one door is opened.

WARNING

Do not put anything on or near the windows that may interfere with the driver's vision. Remove the ignition key to shut off power to the window switches when the vehicle is not attended by a responsible person.

 Remember, power is still supplied to the window switches until one door is opened.

Power windows - emergency operation

The windows can be raised or lowered by hand if the electric drive is defective.

 Unscrew loudspeaker trim panel (A) by hand. If installed, remove loudspeaker by unscrewing the 3 retaining screws (arrowed).

- Pierce plastic membrane. Take crank and hexagon reducing socket from toolkit and push hexagon socket into crank as far as it will go.
- 3. Close window by turning crank.
- Remove crank, insert loudspeaker and tighten the 3 retaining screws. Ensure that the loudspeaker cables are properly connected. Screw loudspeaker trim panel into place.

Have the condition remedied by your authorized Porsche dealer.





Rear View Mirrors

Do not put decals or other signs on the windows that may interfere with the driver's vision.

Adjust the outside and inside mirrors before driving. It is important for safe driving that you have good vision to the rear.

Inside day-night mirror

You can adjust the day-night mirror from clear daylight visibility to non-glare visibility at night by moving the lever at the bottom of the mirror forward or rearward.





Rocker switch for electric door mirror

Heated outside mirror with remote control

When you turn on the rear window defogger, the outside rear view mirrors of the Coupé and Targa are also heated. The outside mirrors are adjustable from inside the vehicle by a four direction switch located on the left door and a rocker switch located above the ignition switch. The rocker switch selects either the left or right mirror for adjustment. Push the rocker switch left to select the left mirror, and right to select the right mirror. Then the four direction switch will adjust the selected mirror in any of the four directions. The mirror housing is hinged and can be folded flat against the car in either direction to prevent damage in the tight parking spots.

The heated outside mirror for the right side is adjustable with the same four-way switch. Before adjusting the right-hand mirror, first depress the right side of the rocker switch located above the ignition lock.



For convertible vehicles, the exterior mirrors are heated by a push-pull switch in the center of the dashboard. The indicator light in the switch will be lit as long as the heating is on.



Retractable rear spoiler

Your Porsche has an electrically operated rear spoiler that extends and retracts depending on vehicle speed.

The spoiler extends to its final position at a speed of about 80 km/h, and returns to its original position below 15 km/h.

If the spoiler does not extend at speeds above 80 km/h, a warning light will appear in the instrument cluster.

This means that engine cooling is no longer sufficient; monitor the oil temperature and reduce speed.

If the rear spoiler does not extend at high speeds, driving stability will be impaired by the resulting rear axle lift-off.

Adjust your driving to the change in driving characteristics or extend the rear spoiler manually.

Have the malfunction corrected at the nearest authorized Porsche dealer.

The rear spoiler can be extended and retracted manually with the ignition switched on between 0 km/h and 80 km/h using the left switch in the center console. It is not possible to operate the rear spoiler at speeds above 80 km/h. The rear spoiler can only be manually operated again when the speed drops below approx. 15 km/h.

WARNING

When retracting or extending the rear spoiler with the vehicle at a standstill, ensure that no one is injured and that no objects are caught in the spoiler.

911 Carrera 4

Porsche Dynamic Four-wheel Drive (PDFD)

Power is distributed between the rear axle and front axle through a torsionally elastic drive shaft mounted in the transaxle tube. In "normal" operation, power distribution is always as follows:

31 % to the front axle and 69 % to the rear axle.

This maintains the familiar "rear-biased" characteristics of the Porsche, and produces excellent steering control in curves.

The rotation speeds of the wheels are continuously measured by the ABS sensors, and compared to one another in the control unit. If a difference in speed (of more than ca. 0.8 km/h) occurs, the hydraulically controlled differentials will engage.

The yellow indicator light on the traction switch shows that the differentials are operating.

Situations such as differences in tire diameter or pressure are detected and compensated for by a built-in module, without producing slippage. When slippage occurs, the normal 31% to 69% power distribution changes as the hydraulically controlled longitudinal and transverse differentials engage, favouring the axle that can transfer more power at that particular moment.

This automatic torque adjustment feature of the PDFD system ensures that traction is always good, and continually optimises driving characteristics.



Traction Program

The right "Traction Program" switch completely locks the longitudinal and transverse differential, when the vehicle is stopped and at speeds of up to approximately 30 km/h. Full interlocking is automatically released above 40 km/h.

The traction program is a useful way of freeing the vehicle if it has become stuck in snow or sand.

The traction program must not be activated if the wheels are slipping.

This function is designed to get the vehicle moving, and is not suitable for normal road driving. The increased differential lock causes strain and noise, especially in tight curves or while manoeuvring. It also results in severe understeer.

If the ABS takes effect while the traction program is on, full differential locking is automatically disabled.



Traction program on -

Switch to the right; indicator light on switch blinks.

Traction program off -Switch to the left; indicator light off.

Note:

If the PDFD system fails, the red warning light in the instrument cluster will light up. The driving characteristics of the vehicle will be different; please adjust your driving accordingly.



Dashboard Assembly, Instruments

- 1 Pull knob for fuel tank flap
- 2 Indicator, headlight dip/full beam, flasher stalk
- 3 Small instrument cluster
- 4 Rear window wiper
- 5 Instrument lighting knob
- 6 Sunroof switch/Convertible top
- 7 Large instrument cluster
- 8 Outside mirror selector switch
- 9 Tachometer
- 10 Speedometer

- 11 Intermittent wiper switch
- 12 Clock
- 13 Wiper/washer stalk
- 14 Heated rear window switch
- 15 Fog light switch
- 16 Fresh air vent
- 17 Defroster vent
- 18 Pull knob for front hood lock
- 19 Light switch
- 20 Ignition/starter switch with steering lock
- 21 Horn

- 22 Tempostat (cruise control)23 Heating/Ventilation/Air conditioning panel
- 24 Hazard warning light switch
- 25 Traction switch (longitudinal and transverse interlocks)/Rear spoiler
- 26 Cancel switch button
- 27 Central locking system
- 28 Radio
- 29 Glove compartment lock
- 30 Cigarette lighter



Ignition/Starter Switch with Steering Lock

The steering is equipped with an anti-theft ignition lock.

For your safety, fasten safety belts.

Before starting the engine, move the gearshift lever into neutral or the Tiptronic selector lever to P or N, and apply the handbrake.

There are 4 key positions:

- 0 Ignition off/steering locked. Insert key. If
 it is difficult to turn the key, gently move the steering wheel until the key turns freely.
- 1 Steering unlocked. All electric circuits wired through the ignition will operate, except turn signals.
- 2 Ignition on, steering unlocked. All electric circuits can be switched on. When the engine is not running, the central warning light and individual warning lights come on as a bulb check. The brake warning light will continue glowing until the parking brake is fully released.
- 3 The starter is operated by turning the ignition key to the right (do not touch the accelerator pedal). As soon as the engine starts, release the key: it will automatically return to the "ignition on" position. The central warning lamp and individual warning lamps must not be lit while the engine is running.

The spoiler warning light stays on until the car reaches a speed of about 4 mph/7 km/h (movement detection).

While the starter is cranking the engine, power in the main electrical circuits is interrupted.

Starter switch

The starter should not be operated for more than 10 to 15 seconds at a time. If the engine does not start the first time or stalls at any time, the ignition will have to be switched off and then on again. The non-repeat lock in the switch prevents the starter from being operated when the engine is running and guards against starter damage. -

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To remove the key and to lock the steering wheel, turn the key back to positon "0" and pull it out. Turn the steering wheel until it locks.

Note:

On vehicles with Tiptronic it is only possible to remove the ignition key if the selector lever is in position "P"

WARNING

Never remove the key from ignition lock or turn key off while vehicle is moving. The steering wheel will lock, causing loss of control.

Gong

If you leave the key in the ignition/steering lock, a gong will sound when the driver's door is opened. This is a reminder to remove the key.

See also Starting Procedures and Break-in Period.

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Starting Procedures

WARNING

- · Fasten safety belts before driving.
- Unnecessary serious or fatal injuries may result if you are involved in a collision without having fastened safety belts
- Never start or let the engine run in an enclosed, unventilated area. Exhaust fumes from the engine contain carbon monoxide, which is a colorless and odorless gas. Carbon monoxide can be fatal if inhaled.
- Never leave engine idling unattended. An unattended vehicle with a running engine is potentially hazardous.
- FIRE DANGER
 - Do not park or operate the vehicle in areas where the hot exhaust system may come in contact with dry grass, brush, fuel spill or other flammable material.
- If your car catches on fire for any reason, call the fire department. Do not endanger your life by attempting to put out the fire yourself.
- Never leave engine idling. When starting engine, be ready to drive immediately. Maintain moderate speed until engine is warm.

Tiptronic

- Start with selector lever in Park. Manual Transmission

- Start with gearshift lever in Neutral.

Temperature sensors on the engine automatically provide the correct fuel/air mixture required for starting.

Therefore, it is not necessary to depress the accelerator pedal while starting a **cold** or a **warm** engine.

When starting at very low outside temperatures, fully depress the clutch pedal, so that the starter only has to crank the engine.

As soon as the engine starts, release the ignition key.

If the engine fails to start after 10 or 15 seconds of cranking, wait about 10 seconds before engaging starter again.

At temperatures below minus, it is recommended to help the engine in reaching its idling speed by not stopping the starting operation after the first few ignitions.

Do not let the engine idle to warm it up. After starting, drive vehicle at moderate speeds and avoid engine speeds above 4500 rpm during the first 5 minutes.

Stopping engine

Turn key back to position 0.

Do not stop engine immediately after hard or extended driving. Keep engine running at increased idle for about two minutes to prevent excessive heat build-up before turning off engine.

WARNING

 Before working on any part in the engine compartment, turn the engine off and let it cool down sufficiently. Hot engine compartment components can burn skin on contact.

Rear fan temperature monitoring: If the ignition has been switched on for at least 30 seconds, rear fan temperature will be monitored for at least 15 minutes after the ignition is switched off. If rear fan temperature exceeds 203 $F^{\circ}/95^{\circ}$ C during this period, the rear fan will switch on at its maximum setting. When the temperature drops below 199.5° F/93° C, it will switch off. Temperature will then be monitored for another 15 minutes. If the temperature limit is not exceeded during this additional period, the control unit will switch off.

If you have an automatic garage door

The transistorized ignition system in your Porsche may interfere with your electronically operated garage door. To check this: drive your Porsche close to the garage door and run the engine at different speeds.

If the garage door opens or closes without you operating the garage door unit in your car, contact the dealer who installed the automatic garage door to have the frequency and/or coding of the garage door signal modified.

Gearshifting

The Porsche transmission with servo-lock synchronization permits rapid and precise shifting of gears. But be sure when changing gears that the clutch pedal is fully depressed to the floor, and that the gearshift lever is completely engaged. The engine speeds for the individual gears are listed on the next page.

Reverse

Only shift into reverse when the car has come to a complete stop.

Before shifting into **reverse**, the clutch pedal must be depressed for several seconds; only then move the gearshift lever to the left, overcoming the spring resistance, and then to the front.

Both back-up lights come on when the transmission is put into reverse (with ignition on).

The specified maximum rpm figures should not be exceeded when shifting down, as otherwise the engine speed would be too high. For smooth shifting, observe the following shift ponts (applies to standard gear ratios only):



911 Carrera 4

Maximum downshifting points

 5th to
 4th
 131
 mph/210
 km/h
 or
 5.400
 rpm

 4th to
 3rd
 96
 mph/155
 km/h
 or
 5.000
 rpm

 3rd to
 2nd
 65
 mph/105
 km/h
 or
 4.600
 rpm

 2nd to
 1st
 40
 mph/65
 km/h
 or
 4.100
 rpm

Minimum upshifting points

 1st
 to
 2nd
 15
 mph/
 24
 km/h
 or
 2.600
 rpm

 2nd
 to
 3rd
 25
 mph/
 40
 km/h
 or
 2.500
 rpm

 3rd
 to
 4th
 40
 mph/
 65
 km/h
 or
 2.700
 rpm

 4th
 to
 5th
 45
 mph/
 72
 km/h
 or
 2.300
 rpm

911 Carrera 2

Maximum downshifting points

 5th to
 4th
 128
 mph/206
 km/h
 or
 5.300
 rpm

 4th to
 3rd
 98
 mph/157
 km/h
 or
 5.100
 rpm

 3rd to
 2nd
 67
 mph/107
 km/h
 or
 4.500
 rpm

 2nd to
 1st
 39
 mph/62
 km/h
 or
 3.800
 rpm

Minimum upshifting points

 1st
 to
 2nd
 15
 mph/
 24
 km/h
 or
 2.600
 rpm

 2nd
 to
 3rd
 25
 mph/
 40
 km/h
 or
 2.500
 rpm

 3rd
 to
 4th
 40
 mph/
 65
 km/h
 or
 2.700
 rpm

 4th
 to
 5th
 45
 mph/
 72
 km/h
 or
 2.300
 rpm

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Maximum downshifting points

5th to 4th	143	mph/230	km/h	or	5.100 rpm
4th to 3rd	108	mph/174	km/h	or	5.000 rpm
3rd to 2nd	76	mph/122	km/h	or	4.600 rpm
2nd to 1st	40	mph/ 70	km/h	or	3.700 rpm

Minimum upshifting points

 1st
 to
 2nd
 15
 mph/
 24
 km/h
 or
 2.200
 rpm

 2nd
 to
 3rd
 25
 mph/
 40
 km/h
 or
 2.150
 rpm

 3rd
 to
 4th
 40
 mph/
 65
 km/h
 or
 2.400
 rpm

 4th
 to
 5th
 45
 mph/
 72
 km/h
 or
 2.000
 rpm

The control system for your turbo charged Porsche includes a wastegate. Condensation from the exhaust which accumulates in the wastegate can cause sticking and can also lead to premature corrosion of this component. At least once every time the car is driven, with the engine at operating temperature, accelerate at full throttle from a standstill up to 5500 rpm in first gear. This will cause the wastegate to open and blow out any accumulated condensation. Weekly highway driving of at least 30 minutes will also avoid sticking, minimize condensation builtup and help extend wastegate life.

Tiptronic

The Porsche Tiptronic is a four speed transmission which may be shifted while under load. This permits extremely short gear shifting time without interruption of power flow.

Tiptronic has a shifting gate with "automatic" and "manual" selection gates. The left gate contains the automatic selection positions, while manual upshifting and downshifting is possible in the right gate by tipping the selector lever. A lock button (arrow) on the selector lever prevents unwanted shifts while in the automatic selection gate. It must be pushed before the selector lever can be mov-ed from "P" to "R" and from "D" to 3, 2 and 1 as well as from "N" to "R" and from "R" to "P". The chosen selector lever position is shown in a display located on the speedometer face when the ignition key is inserted and/or vehicle lights are switched on.

Pull up parking brake lever and move the selector lever into "P" before leaving the vehicle.

Left selection gate – pertinent selector lever position is illuminated with the ignition "off", until the selector lever is moved into "P".



Right selection gate – selector lever position "D" is illuminated with the ignition "off", until the selector lever is moved into "P".

Note:

A gong is operated when opening a door, if the selector lever is not in "P" or the ignition key has not been removed.



Starting the engine / moving off

Ignition switch position:

- 0 selector lever is locked
- 1 selector lever movable
- 2 selecting a driving position is only possible by depressed brake pedal

For safety, the engine can only be started with the selector lever in "P" or "N".

To drive off, place your foot on the brake and, with the engine idling, move the selector lever to the desired drive position. Release the brake only when you are ready to move off. Power is transmitted whenever a forward or reverse gear is selected. Changing between the selection gates is possible at any time the lever is in position "D".

WARNING

While driving with the automatic speed control set (at speeds above 25 mph or 40 km/h), do not bring shift lever into the Neutral position to prevent excessive engine rpm.

A slip monitor is integrated in Tiptronic. The converter lockup clutch is opened and shifted into the next higher gear when a specified difference in speed between the front and rear axles is exceeded. This improves directional control under slippery conditions.

Never move the selector lever into "R" or "P" while the vehicle is moving or coasting to a stop. Damage to the transmission may result.

Stopping

When stopping temporarily, at traffic lights for example, the selector lever may remain in the drive position and the vehicle may be stopped by simply applying the brakes. -

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In order to save wear on the clutches, and excessive heat in the torque converter and transmission, move the selector lever into "N" (neutral) if the vehicle is stopped for a long time with the engine running. Do not hold the vehicle on a steep uphill gradient by accelerating, but instead by applying the foot or parking brake.

Parking

When parking your car in a tight space, regulate the road speed by releasing the foot brake in very small steps. Depress the accelerator pedal slightly!

Hauling a trailer

Move selector lever to desired range.

Shift down at appropriate time on uphill and downhill gradients in order to have sufficient power or braking effect from the engine and to keep application of the brakes to a minimum.

The rear spoiler can be extended manually for sufficient cooling of the engine when hauling a trailer or driving on mountain roads.



Automatic Gate

Gear shifting characteristics depend on the accelerator pedal position, road speed, engine speed, axial and lateral acceleration. Five different shift curve families are available between economy and sport, whereby the shift points are changed to lower or higher speeds depending on driving habits.

Upshifting before curves can be avoided by "releasing the accelerator pedal" quickly. A lateral acceleration sensor recognizes driving in a curve and avoids unwanted upshifts; the pertinent gear is held up to the speed limit, at which point there is then automatic upshift. The engine braking effect is thus fully utilized before entering a curve and this makes it possible to drive through curves in under power.

Selector Lever Positions

Position P - Park

Select only when car has been stopped.

Drive gears are locked mechanically with the selector lever in "P". Engage "P" only when car has been stopped and disengage only after applying the brakes.

Position R – Reverse

Engage only after car has been stopped and brakes have been applied.

Accelerate only after the lockup clutch has engaged.

Position N – Neutral

Selector lever position "N" is the same as the idle position of a manual transmission and should be selected for long stops (e.g. traffic jams) or towing. A driving range may only be selected with the engine running at idle speed.

The selector lever should not be moved from "D" to "N". If this occurs be careful to match RPMS to vehicle speed when moving the lever back into "D" (keep to the same RPM as

that while leaving range "D" whenever possible). Excessive engine speed could subject transmission clutches to heavy loads and damage could result.

The selector lever may be moved into "N" while driving if there is danger of the car skidding on slippery ice. Otherwise "N" should not be selected while driving.

Position D

This position is selected for normal driving. All forward speed gears are shifted automatically depending on the accelerator pedal position and road speed.

In selector lever position "D" the car starts in 2nd gear by accelerating slightly or in 1st gear by accelerating strongly.

Only accelerate after connection between the engine and transmission.

Position 3 - Overall Operation

Maximum permissible downshift speeds: from D to 3 = 4400 rpm or 111 mph.

The car moves off in 1st gear. This position is preferred on slight uphill or downhill gradients while hauling a trailer as well as on mountain roads without trailer hauling. There is better use of engine power and the braking effect from the engine is also stronger. The trans from the en shifted automatically up to 3rd gear, but will not engage 4th gear.

Position 2 - Overall Operation

Maximum permissible downshift speeds: from 3 to 2 = 3800 rpm or 72 mph.

The car moves off in 1st gear.

This position is provided for very steep uphill and downhill gradients as well as hauling a trailer on mountain roads. There is stronger engine braking since the transmission is not shifted up further than 2nd gear.

The transmission could be shifted between 1st and 2nd gear while driving depending on driving conditions and accelerator pedal position.

Position 1

Maximum permissible downshift speeds: from 2 to 1 = 2800 rpm or 35 mph.

This position is provided for slow driving or hauling a trailer on extremely steep uphill and downhill gradients.

First gear remains engaged during acceleration and coasting.

Irrespective of selector lever position or selector gate, the gear speed engaged at any given moment is indicated in the Speedometer.

Active Downshift (Brief Influence)

Rapid operation of the accelerator pedal (from approx. 34 mph on) causes immediate selection of the most sporty shift curve family, in other words the highest possible shift points. The transmission is downshifted accordingly.

Function stopped: accelerator pedal released by about 25 %.

Kickdown

The accelerator pedal must be operated beyond the kickdown to have optimal acceleration for passing. The transmission is then shifted back into the next lower gear depending on the accelerator lever position and road speed. When the transmission enters this mode higher RPM upshifts are included.

Kickdown shift speeds remain activated until the accelerator pedal is released to 50 % of the full throttle position.



Manual Gate

The manual gate can only be selected when the selector lever is in "D".

The currently engaged gear is maintained after changing from "D" to "M".

When changing from "M" to "D" the gear belonging to the currently used shift curve family is engaged.

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 There is no kickdown feature in the Manual mode. The transmission must be downshifted manually when driving in the manual gate for better acceleration from higher gears.

The next higher or lower gear can be selected at any time in the manual gate depending on the road speed.

The transmission can be shifted before or in a curve in this function.

The transmission is upshifted automatically without interruption of power flow and without operation of the selector lever after reaching an engine speed limit. It is automatically downshifted shortly before reaching idle speed.

Only the four forward speed gears can be selected in the manual gate.

Whenever the vehicle is to be parked the gear selector lever must be moved via "D" into Park.

If manual selection fails, an electronic control unit switches to the automatic program and "D" lights up in the display of the speedometer. Gears can be selected in the automatic gate. Bring your car to an authorized Porsche dealer for repairs.

Emergency starting

Should the engine fail to start see "Emergency starting with jumper cables" or consult your authorized Porsche dealer.

Do not start or tow the car without ATF in the transmission, as this will result in serious damage to transmission and torque converter.

Indicator lamp Emergency program

A control lamp in the clock lights up after turning on the ignition to check the light bulb and goes out after starting the engine.

If this indicator lamp lights up while driving, there is a fault in the system. At this point the program for the transmission will automatically go to the automatic 4th gear position regardless of the selector lever position.

Once the engine turned off when it is restarted, only 3rd gear is activated as an emergency driving gear in selector lever positions "D", 3, 2 or 1.

Adapt your driving habits to the changed situation and bring your car to an authorized PORSCHE dealer for repairs.

WARNING

Do not shift into "R" while the vehicle is moving forward. Damage to the vehicle may result as well as loss of control if the vehicle is moving forward fast enough to cause rear wheel lockup.



Parking Brake Lever

Parking brake force is mechanically transferred to the rear wheels by means of cables.

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

To set the parking brake,

• pull the lever **all the way up** (see arrow). With the ignition on, the brake warning light will come on if the lever is even slightly raised. A firm pull upward is required to properly engage the parking brake.

To release the parking brake,

 pull the lever slightly up as you depress the release button, and then push the lever all the way down.

The brake warning light on the dashboard will go out after the parking brake is fully released.

WARNING

- Release the parking brake fully. A partially engaged brake will overheat the rear brakes, reduce their effectiveness and cause excessive wear.
- Always set the parking brake when parking your car by pulling all the way up on the lever.
- The parking brake light is not an indicator that the parking brake is fully set; it is only intended to be a warning to release the parking brake before driving the car. If brake is not fully set, the vehicle may roll without control.

Brakes

Functioning of brake system

Your Porsche is equipped with a power assisted hydraulic dual circuit brake system with disc brakes at the front and rear. Both circuits function independently. One brake circuit operates the front and the other the rear. In the unlikely event of hydraulic failure of one circuit, push the brake pedal down firmly and hold it in that position. A mechanical linkage activates the second circuit, and you will be able to bring the vehicle to a stop. -

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WARNING

Failure of one brake circuit will impair the braking capability resulting in an increased stopping distance.

If one brake circuit has failed, the other will still operate. However, you will notice an increased pedal travel when you step on the brake. Should you encounter such experience, bring your vehicle safely to a full stop.Avoid driving the vehicle and instead have it towed to the nearest authorized Porsche dealer.

Brake Pedal

WARNING

- The movement of the brake pedal must never be obstructed by a floor mat or any other object. An obstruction of the pedal could increase the stopping distance. In case one of the two brake circuits fails, increased pedal travel is required to bring your vehicle to a full stop.
- Make sure that the size of your floor mat does not hamper the movements of either brake, clutch or accelerator pedals in any way.
Secure the floor mat against sliding into positions that could interfere with the safe operation of your vehicle.

- Do not "ride the brakes" by resting your foot on the pedal when not intending to brake. Overheating and premature wear of the brakes will result.
- Before descending a steep grade, reduce speed and shift transmission into a lower gear or driving position to control speed. Do not ride the brakes or hold pedal down too long or too often. This could cause the brakes to get hot and not function properly.

Brake operation and brake warning light

Make it a habit to check the operation of your brakes before driving. The brake warning light will light up if one of the brake circuits should fail. See "**Brake warning light**" for more details.

Automatic readjustment ensures that the brake pedal travel to the point of brake application always remains constant if the brake system is properly vented. The brake pedal travel may be about 20 mm until the brake responds.

If the pedal travel suddenly increases, air may have entered the brake system. A brake fluid loss is indicated by a warning light. Keep in mind that the braking distance increases very rapidly as the speed increases. At 60 mph/100 km/h, for example, it is not twice but four times longer than at 30 mph/50 km/h. Tire traction is also less effective when the roads are wet and slippery. Therefore, keep a safe distance from the car in front of you.

Brake Booster

To reduce the pedal pressure required, your Porsche is equipped with a hydraulic brake booster.

If pressure is lost, the buzzer, the central warning light and the brake pressure warning light in the instrument cluster will come on. Once stored pressure has been used up, considerably greater pedal pressure will be required.

Moisture or road salt on brakes affects braking

WARNING

Driving through water may reduce tire traction. Moisture on brakes from road water, car wash, or coating of road salt may affect braking efficiency. Cautiously apply brakes to test them after being exposed to such conditions. When the vehicle is driven on salted roads for extended periods, the brakes should be hosed down thoroughly about every 2 weeks. An automatic carwash facility cannot do this job properly. Brakes will dry after a few cautious brake apllications.

Brake wear

Our automobiles have excellent brakes, but they are still subject to wear, depending on how the brakes are used. Have the break system inspected at the intervals recommended in your Maintenance Booklet.

New brake pads or linings

Brake pads or linings may not have the highest possible braking efficiency when new. Therefore, allow for longer braking distance during the initial 100 to 150 miles or 150 to 250 kilometers of normal city driving; longer if fewer stops are realized.

Clutch Pedal

Always depress the clutch pedal fully when changing gears. Do not hold the car on a steep hill with the clutch pedal partially depressed. This will cause premature wear or damage.

ABS Brake System (Antilock brake system)

The ABS system represents a major contribution to the enhancement of active safety in your vehicle. This system prevents the wheels from locking in a panic stop on almost all road surfaces.

WARNING

In spite of the improved handling afforded by the ABS system, it still remains the responsibility of the driver to adapt the driving style to the prevailing road and weather conditions, as well as, obeying traffic laws. In no case, should the higher degree of safety offered by ABS be regarded as a justification for taking greater risks. Other vehicles not equipped with the ABS system may not be able to maintain control, especially on wet or poor road surfaces and thus may be more likely to impact you in the rear. To minimize that risk, use your ABS system to increase your ability to maneuver to avoid dangerous situations and not merely to try to stop in the shortest distance possible.

With ABS system in your vehicle, the following areas are enhanced:

Full steerability, vehicle remains steerable under all braking forces.

Good directional control, no swerving caused by locking of wheels under braking conditions.

Excellent stopping distance, stopping distances are usually reduced because controlled braking is maximized.

Prevention of wheel lock up, no brake-induced sliding and thus no localized tire wear from emergency braking.

The crucial advantage of ABS system over a conventional brake system is in the area of maintaining directional control and maneuverability of the car in emergency situations, including panic braking in turns.

Driving with the ABS System

A wheel speed sensor is fitted to each of the four wheels. If wheel slippage of either of the front wheels or the rear wheels is sensed during braking, the brake pressure is adjusted automatically until the wheel no longer slips. The brake pressure is regulated for each front wheel individually and for both rear wheels together.

On a road surface which is slippery on only one side, the rear wheel which is braking on the slippery surface determines the brake pressure which will be applied equally to both rear wheels. This ensures that directional stability is maintained. However, if braking force approaches the wheel locking-up point for all wheels (panic braking)the ABS system will intervene in a way comparable with rapid rythmic braking. The proper operation of ABS is perceived by the driver as a pulsating brake pedal in conjunction with audible noise and perhaps some vibration. The driver is thereby warned to reduce vehicle speed appropriate for the prevailing road conditions. 2=

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The functional readiness of all the main electrical components of the ABS is checked by an electronic monitoring system both before and while you drive. When the ignition is switched on the ABS warning lamp and the central warning lamp will light up; they should go out again when the engine is started, at the latest. If the ABS warning lamp fails to go out, this indicates that ABS has been deactivated due to a fault. If the warning lamp lights up while you are driving, this indicates that a fault has occurred. In both cases, normal braking, as in vehicles without ABS, is still retained. The ABS system should, however, be examined at an authorized Porsche dealer immediately to prevent the occurrence of further faults.

Note

The control unit of the ABS brake system is set for standard tire sizes. If non-standard tires are fitted, the control unit may misinterpret the speed of the vehicle, because of the variant data it receives from the sensors on the axles.

If the difference in rolling radius exceeds approx. 6 %, the control unit deactivates the ABS system and the ABS warning lamp lights up.





· Č Light Switch

The light switch is a two-stage **rotary switch**. Turning the knob to the first stop switches on the parking lights; at the second stop the headlights switch on. The **indicator**, **headlight dip/full beam and flasher stalk** on the left side of the steering column is used to change from dipped to full beam. The dashboard is also illuminated when the lights are switched on. The brightness of the instrument lighting can be continuously adjusted by turning the knob located between the small and large instrument clusters.

〇丰 Fog Lights

The fog lights are turned on by a push-pull switch knob in the dashboard panel in addition to the headlights. The switch knob is illuminated when the fog lights are on.

When the high beams are switched on, the fog lights will go out automatically.

With the ignition key removed, the circuit for the fog lamps is interrupted.

Rear Window Defogger

The heated rear window is operated by a push-pull switch in the center of the dashboard. The outside rear-view mirrors are also heated when the heated rear window is on. The warning lamp in the switch is lit as long as the heating is on.

In the convertible only, the outside mirrors are heated via the push-pull switch.

Cigarette Lighter

The cigarette lighter can be operated by pushing the knob in. When ready for use, the lighter will snap back.

With the cigarette lighter removed, the socket may be used for small electrical appliances, such as a shaver, hand vacuum cleaner or air compressor to inflate the collapsible emergency spare tire. The maximum rating of such equipment should not exceed 120 Watt/12 Volt. **Do not damage the socket** by trying to insert plugs of the wrong design.

Interior Lights





Coupé

Joupe

In the Coupe, two lights are located on the sides of the roof liner.

By pressing the left and right ends, each light can be independently set to the following three positions:

- a) Light off
- b) Light comes on only when a door is open
- c) Light is on continuously

In the Targa and Cabriolet, the interior light is located in the windshield frame between the two sun visors.

By pressing the top and bottom of the lens, the light can be set to the following three positions:

- a) Light is on continuously
- b) Light off
- c) Light comes on only when a door is open

Unless turned off at the switch, the interior lights come on whenever a door is unlocked or opened.

They go out after a delay of app. 20 seconds when the doors are closed, or immediately if the ignition is switched on or the car is locked with the key.



Rear Window Wiper

The wiper is controlled by a rocker switch on the instrument panel. To prevent scratching of the rear window, the wiper should be sufficiently wet before use.

The wiper automatically switches off after 2 or 3 strokes.



Ashtray (A)

Tap upper edge of ashtray; it opens by itself. Pull out insert to empty. Push insert into place again and press ashtray closed.

WARNING

Never use ashtray as waste paper disposal, as it could pose a fire hazard.

Glove Compartment (B)

The glove compartment is lockable with the key. To open the glove compartment turn the knob clockwise.

WARNING

Keep glove compartment door closed while driving to prevent injury during a collision.



Rear stowage compartments

To open the rear stowage compartments, turn the knob to the right. For added security, the knobs are lockable.

Special retaining lugs are fitted on the stowage compartments for securing items of luggage.

In the cabriolet, the stowage compartments are protected by the central locking and alarm systems.







Sun visors

To protect the driver and the passenger from side glare, the sun visors in the Coupé can be moved to the sides after lifting them out of their center mounting.

Vanity mirror

The vanity mirror which can be closed with a sliding cover, is located in the cover trim underneath the sun visor.

A Emergency Flasher

If your car is disabled or parked under emergency conditions, depress the HAZARD switch to make all four turn signals flash simultaneously. The light in the switch flashes at the same frequency.

The emergency flasher works independently of the turn signal lever position.

WARNING

- Whenever stalled or stopped for emergency repair, move the car well off the road. Turn 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.
- Do not park or operate the car where the hot exhaust system may come in contact with dry grass, brush, fuel spill or other flammable material. This is a fire hazard.
- Before working on any part in the engine compartment, turn the engine off and let it cool down sufficiently. Hot components can burn skin on contact.



Turn Signal/Headlight Dimmer/Flasher/Parking Light Switch Lever

This lever serves the following four switch functions:

Turn signals With ignition on:

- 1. Lever up right turn signal
- 2. Lever down left turn signal

The turn signal lever turns off automatically when the steering wheel is straightened out after completing a turn.

Lane changer

To indicate your intention when changing lanes on expressways, slightly lift or depress the lever to the resistance point. The lever will return to the OFF position when released.

If a turn signal bulb becomes defective, both indicator lights in the tachometer will come on simultaneously with reduced brightness.

Headlight dimmer (Headlight switch all the way out)

With ignition on:

- Push lever towards instrument panel to select high beam. The blue indicator light in the tachometer lights up when the high beam is switched on.
- 4. Pull lever toward steering wheel to select low beam.

Headlight flasher With ignition on or off:

You can flash signal other motorists with the headlights (in lieu of horn) by slightly pulling lever toward the steering wheel and then releasing it. The blue indicator light in the tachometer will go on/off as you pull/release the lever.

Parking lights With ignition off:

- 1. Lever up right front and rear parking lights on.
- 2. Lever down left front and rear parking lights on.

The green indicator light in the speedometer will light up when the parking lights are switched on.



Windshield Wiper/Washer Lever

The wiper/washer lever has four switch positions:

- 0 Wipers off
- 1 Low speed wiping
- 2 Medium speed wiping
- 3 High speed wiping
- 4 Intermittent operation

Windshield washer Switch positions 5 and 6

If the lever is pulled towards the steering wheel to the fifth position, the windshield washer pump will operate. When the lever is released, the wipers will complete two or three drying strokes.

In the sixth position the washer and wipers operate simultaneously.

Before using the wipers make sure that the windshield is sufficiently wet; otherwise it could be scratched. Wiper blades should be checked regularly and replaced at least once a year.

The windshield washer nozzles are heated when the ignition is on.

Avoid running the wiper blades over a dry windshield to prevent scratching the glass. Spray on washer fluid first. A scratched windshield will reduce visibility.

Always loosen blades frozen to glass before operating wipers to prevent damage to wiper motor.

Headlight Washers Switch position 7

When the headlights are on (full or dipped beam), the headlight washers operate when the wiper/washer switch is briefly pressed towards the dashboard. -

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The washer pump supplies high-pressure water to the spray nozzles in front of the headlights. A relay limits the spray duration; if the headlights are very dirty, the washing process must be repeated. Stubborn dirt (such as insect smears) should be removed frequently.

Because the system uses a lot of water, a tank with a capacity of about 7.4 liters is installed to supply both the windshield washer and headlight washers. If the water level drops to about 2 liters, a warning light in the small instrument cluster comes on.



V Intermittent Wiper Switch

The intermittent wiper interval can be adjusted by turning the knob located between the speedometer and the clock.

WARNING

Worn or dirty wiper blades will reduce visibility, making driving hazardous. Clean blades regularly to remove road film and carwash wax buildup.

See "Car care instructions".



1 Set/accelerate 2 Cancel 3 Reset

Automatic Speed Control

The automatic speed control allows you to maintain a constant cruising speed of 25 mph (40 km/h) or higher, without actuating the accelerator pedal. Any manual operation, such as accelerating, gearshifting or braking can be done independent of the automatic speed control. The spring loaded control lever operating the automatic speed control is located just below the wiper/washer lever.

While driving with the automatic speed control set at speeds above 25 mph (40 km/h), do not bring shift lever into neutral or selector lever into position "N" as excessive engine rpm will result.

To operate the automatic speed control

Accelerate to the desired cruising speed, push lever toward instrument cluster (arrow 1) and release. This sets the cruising speed and stores it in a memory.

After a second or two, automatic speed control will take over and you can remove your foot from the accelerator pedal. The set cruising speed will be maintained automatically.

WARNING

Do not use the cruise control when it may be unsafe to keep the car at a constant speed. For example, a constant speed may not be safe in heavy traffic, or on winding or slippery roads. With the cruise control system engaged, the engine speed will noct return to idle when removing the foot from the accelerator pedal.

Please observe all local and national speed limits.

Passing: If you want to drive faster for a brief moment, for example when passing another vehicle, step on the accelerator. When you take your foot off the accelerator pedal, the preset speed will automatically be resumed.

Gearshifting: When shifting gears, the automatic speed control is only disengaged as long as the clutch pedal is depressed. The preset speed will be resumed as soon as you take your foot off the clutch pedal.

Braking and stopping: Whenever you apply the brake or come to a stop, the automatic speed control is disengaged. Press the lever down (arrow 3), and the preset speed will be resumed.

Switching system off: To switch off the automatic speed control, move the lever toward you (arrow 2). To resume the preset speed, move the lever down (arrow 3).

To change the preset cruising speed

Increase preset speed:

Accelerate by depressing the accelerator pedal. when the desired speed is reached push lever toward instrument cluster (arrow 1) and take your foot off the accelerator pedal. Now the new cruising speed is set and stored in the memory. An an alternative, you can hold the lever in the front position (arrow 1), without depressing the accelerator pedal. The car will accelerate on its own. When the desired speed is reached, release the lever.

Decrease preset speed:

Apply the brake, which will disengage the automatic speed control. When the vehicle has slowed down to the desired speed, push lever toward instrument cluster (arrow 1) to set the new cruising speed.

As an alternative, disengage the automatic speed control by moving the lever toward you (arrow 2). When the vehicle has slowed down to the desired speed, push lever toward instrument cluster (arrow 1) to register the new cruising speed in the memory.

Note

When driving up a hill, if the engine power is insufficient in a particular gear, the speed control will be disengaged automatically. Shift to a lower gear to avoid lugging the engine.



1 Fuel gauge

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- 2 Low fuel indicator
- 3 Low washer tank
- 4 Oil level gauge
- 5 Engine oil temperature gauge
- 6 Central warning light
- 7 Interlock warning light
- 8 Antilock brake warning light
- 9 Check Engine
- 10 Brake pad wear indicator
- 11 Parking brake indicator

- 12 Oil pressure warning light
- 13 Brake pressure/Brake fluid warning light
- 14 Oil pressure gauge
- 15 Warning buzzer
- 16 Left turn signal
- 17 High beam indicator
- 18 Right turn signal
- 19 Tachometer
- 20 Bordcomputer
- 21 Odometer
- 22 Speedometer

- 23 Seat belt warning light
- 24 Alternator warning light
- 25 Rear spoiler warning light
- 26 Convertible
- 27 Air Bag
- 28 Clock
- 29 Tiptronic
- 30 Hazard warning indicator
- 31 Parking light indicator
- 32 Check engine fan belt

Central Information Panel

The central warning light and the warning lights for the individual functions are located in the instrument dials.

Functions of the central information panel

- · Activation of warning lights
- Activation of central warning light and warning buzzer, based on priority.
- Bulb check, when ignition is first turned "on".
- Partly speed-dependent activation of warning lights, central warning light and warning buzzer.

Information is provided by the individual warning lights, the central warning light, and (for Priority I warnings) an additional audible warning, so that the driver is notified even if the instruments cannot be observed due to traffic conditions.

The warning lights come on for a function test when the ignition is switched on, and go out once the engine has started.

The **spoiler** warning light does not go out until the vehicle reaches a speed of approx. 4 mph/7 km/h (motion detection).



Cancel Button

The cancel button in the center console is used to cancel the central warning light and the warning buzzer.

Warning Buzzer

The warning buzzer between the large instrument cluster and the tachometer produces a repeating intermittent tone. Total duration of the warning is approx. 7 seconds. 7

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Priority I	Priority II	Priority III
Malfunctions that are monitored and detected by the system, and will impair driving safety, are indicated by the warning light, central warning light and warning buzzer.	by the system, and might impair driving	Malfunctions that are monitored and detected by the system and require, for example, re placing a part or adding washer fluid, are indi- cated by the warning light .
The central warning light and warning buzzer can be cancelled.	The central warning light can be cancelled.	
Be sure to read the	description of each individual warning light on	the following pages.
Warning functions:	Warning functions:	Warning functions:
Brake pressure	Brake fluid level	• Brake pad wear
 ABS (Antilock brake system) 	Parking Brake	Washer fluid level
 Interlock warning 	• Fan belt	
	Oil pressure	
	Low fuel	
	• Spoiler	
	Convertible	
	t (

• Air Bag/Seat belt warning light



Small instrument cluster

Fuel gauge

When the ignition is on, this gauge indicates the amount of fuel in the tank. If the fuel level is low, the warning light goes on.

Warning light

This warning light goes on when the fuel level in the tank drops to about 2.6 U.S. gals or 10 liters (911 Turbo approx. 3,9 U.S. gals or 15 Liters). Refill the tank at the next opportunity.

Never drive until the fuel tank is completely empty.

If the warning light blinks on and off, there is a fault in the system. The light will then no longer indicate a low fuel level. Consult an authorized Porsche dealer to have the fault corrected.

🕄 Washer fluid

Before the fluid reservoir for the windscreen and headlight washing systems runs out, the warning light goes on when approximately 2 liters remain. Total capacity is approx. 7 Liters.

Oil level gauge

The oil reservoir contains sufficient oil when the indicator on the **oil level gauge** is horizontal, provided the car is level and the oil is at normal operating temperature. Never allow the oil level to drop so low that the indicator is in the red portion of the dial: under unfavorable conditions, this may result in engine damage.

During driving, the oil level gauge is inaccurate due to changes in engine speed and oil temperature. Movements of the needle while driving are of no significance. If the oil gauge indicator **begins to drop as engine speed increases** when the car is stationary (engine at normal operating temperature), this indicates that the gauge is functioning properly. If the oil gauge reads at maximum when the ignition is switched on (engine off), there is a fault in the gauge or the oil level sensor. In such cases, check the oil level with the oil dipstick (engine at operating temperature, idleing, and on level ground) before driving off. Have the condition corrected at the nearest authorized Porsche dealer.

It is recommended that you check the oil level on the gauge before you turn off the engine (after it has reached normal operating temperature).

The engine oil level must also be checked between maintenance services.

For information on oil changes and shop services, see the section on "Measuring oil level in the tank".

WARNING

When you check anything in the engine compartment, be careful. Hot components can burn skin on contact.



Large instrument cluster

Oil temperature gauge

The engine oil temperature affects the service life of the engine. You should therefore drive at moderate engine speed (max. 4500 rpm) for the first five minutes after starting.

If the needle moves into the red zone, you should moderate your speed; if this does not cause the temperature to decrease, consult an authorized Porsche dealer immediately.

Oil pressure gauge

The oil pressure should be at least 3.5 bar (911 Turbo 4,5 bar) at an engine speed of 5,000 rpm. When the oil is hot, the red oil pressure warning light may light briefly at idle without endangering the engine.

However, if the oil pressure drops suddenly while driving or if the red warning light comes on, the engine must be turned off immediately. If there is enough oil in the engine oil tank, have the malfunction corrected at the nearest authorized Porsche dealer.

Central Warning Light

The central warning light and the individual warning lights come on when the ignition is turned on, to confirm that they are functioning. If a malfunction should occur, the central warning lamp and the corresponding warning light will come on. The vehicle should then be taken immediately to the nearest authorized Porsche dealer.

Longitudinal and Transverse Interlock Warning Light

This warning light indicates a malfunction or failure of the interlocks. If this occurs, you must adjust your driving to the resulting changes in your Porsche's handling characteristics. Consult an authorized PORSCHE dealer to have the malfunction corrected.

CHECK

Emission Control System Malfunction Indicator Light (U.S. only)

Vehicles having this indicator light are equipped with a special on-board diagnostic system. This system monitors the various components of the Emission Control System.

The light comes on when the ignition is switched on. It will go out after the engine is started, if you have started without depressing the pedal. This is to assure you that the malfunction indicator light is functioning properly.

If the light does not go out after starting the engine, or if it should come on always qhile driving, this indicates that there is a malfunction in the Emission Control System. Have the cause corrected promptly by an authorized Porsche dealer or a qulified workshop.

Each monitored component in the Emission Control System has been coded. In case of a malfunction the respective component will be identified and the fault stored in the control unit's memory.

The stored data can be displayed by a flashing code of the malfunction indicator light to assure an accurate diagnosis. For further information of the codes and repair procedures, see your authorized Porsche dealer.

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Antilock brake system

When the ignition is switched on the ABS warning lamp and the central warning lamp will light up; they should go out again when the engine is started, at the latest. If the ABS warning lamp fails to go out, this indicates that ABS has been deactivated due to a fault. If the warning lamp lights up while you are driving, this indicates that a fault has occurred. In both cases, normal braking, as in vehicles without ABS, is still retained. The ABS system should, however, be examined at an authorized Porsche dealer immediately, so as to prevent the occurrence of further faults which may have other, unforeseeable effects.

Brake-pad Wear Indicator

The brake pad warning light comes on when the ignition is turned on and goes out after the engine is started.

If the light stays on when the engine is running or comes on while driving, the brake pads are worn, excessively.

Do not continue operate the vehicle but have your authorized Porsche dealer check and replace the brake pads.

Brake Pressure/Brake Fluid Indicator Light

If the indicator light goes on while driving, the brake fluid level may be too low, or (if the brake pedal travel has increased) one of the two braking circuits may have failed.

If the car is not driven for a long time, or if the brake pedal is applied repeatedly while the engine is off, the brake booster pressure reserve may run low. If the brake pressure, interlock and central warning lights come on after starting the engine, you should not drive off until the pressure necessary for the brake booster and interlock control system has built up, and the warning lights go out.

If the warning buzzer sounds when the warning light is on, the pressure reserve is too low. If the warning light starts to blink after it lights, this indicates a defective warning switch.

When the pressure reserve is too low, the interlock warning light is simultaneously activated, and there is then no guarantee that the interlocks will function.

If the pressure reserve is low or if a brake circuit has failed, greater braking pressure will be required and stopping distances will be longer.

Consult the nearest authorized Porsche dealer immediately to have the condition corrected.

BRAKE Parking Brake Light

The parking brake light will be on when the ignition is on and the parking brake has been pulled up even slightly. The light is a warning to release the parking brake before driving the car. The light does not indicate that the brake has been pulled up far enough to prevent the car from rolling. The light goes out only when the parking brake is fully released.



Tachometer

The first red mark on the tachometer dial is a visual warning of the maximum engine speed. A governor interrupts the fuel supply if the enaine is loaded above this limit during acceleration. Always bear in mind the maximum change-down engine speeds before selecting a lower gear.

WARNING

Downshifting at too high a speed can cause serious damage to your vehicles engine.







The **turn signal indicator lights** (green) blink at the same rhythm as the turn signal that is on.

If one turn signal is faulty, both indicator lights light up simultaneously but with reduced brightness.

$\bigcirc \equiv$ High Beam Indicator Light

The **high beam indicator light** (blue) lights up when the high beams are switched on or when the headlight flasher is used, and goes out when the beams are dipped.

Speedometer

The speedometer indicates the vehicle's speed in miles and kilometers per hour.

The upper odometer records the total distance travelled.

The lower odometer records trip mileage, and can be reset to zero at any time by pressing the reset knob below it.

(There is no tripmeter in vehicles with onboard computer.)



Rocker switch for clock time setting

Clock

The clock time is set by pressing the rocker switch to the right of the steering column (below the clock).

Press briefly Press and hold

- set forward one minute
- continuous setting

👗 Seat Belt Warning Light

This warning light stays on until the tongue of the driver's side seat belt has been inserted into the buckle.

Should the lamp light up together with the Central Warning lamp when the seat belt is buckled on, there may be a defect in the airbag system. To rectify this, visit an authorized Porsche dealer without delay.

-+ Alternator Warning Light

The alternator warning light (red) monitors the alternator and its drive belt. It comes on when the ignition is turned on, and goes out when the engine is running. If the warning light suddenly flickers or burns steadily while driving, the drive belt may be loose or broken, and must be tightened or replaced. Alternatively, the condition may involve the voltage regulator or the alternator itself; in such cases an authorized Porsche dealer must be consulted.

Rear Spoiler Warning Light

After the engine starts, the warning light does not go out until the car exceeds a speed of ca. 7 km/h. The warning light comes on if the spoiler does not extend above 80 km/h, or does not retract or return to its final position below 15 km/h.

If the rear spoiler does not extend at high speeds, driving stability will be impaired by the resulting rear axle liftoff, so adjust your driving to the change in driving characteristics.

Engine cooling will no longer be sufficient; monitor the oil temperature and reduce speed. Consult an authorized Porsche dealer to have the malfunction corrected.

Should the speed-dependent control system fail, the rear spoiler can be extended manually.

Convertible Top Indicator Light

The indicator light for the Cabriolet folding top lights up when the folding top is opening and closing until the folding top has reached its final position. Only drive the vehicle when the folding top has reached the front or back final position (indicator light is off).

🕺 Air Bag

See "Air Bag System" for details.

CO Engine Fan Belt Warning Light

This warning light indicates that the cooling fan belt has broken. If this occurs, **engine cooling will not be sufficient**, and a new fan belt must be installed. **The vehicle must not be driven.** Serious damage to engine may occur.

DOE Parking Light Indicator Light

The **parking light indicator light** (green) lights up when the parking lights are switched on, but goes out when the headlights are on (high or dipped beam).

Indicator lamp Emergency program

A control lamp in the clock lights up after turning on the ignition to check the light bulb and goes out after starting the engine. If this indicator lamp lights up while driving, there is a fault in the system. At this point the program for the transmission will automatically go to the automatic 4th gear position regardless of the selector lever position.

Once the engine turned off when it is restarted, only 3rd gear is activated as an emergency driving gear in selector lever postions"D", 3, 2 or 1.

Adapt your driving habits to the changed situation and bring your car to an authorized Porsche dealer for repairs.

WARNING

Do not shift into "R" while the vehicle is moving forward. Damage to the vehicle may result as well as loss of control if the vehicle is moving forward fast enough to cause rear wheel lockup. 111





On-board computer functions

Function displays:

Distance to next fill-up*



Average fuel consumption*

On-board Computer

The on-board computer is operated by means of the 4-function switch in the steering column. The functions are displayed on the display in the tachometer.

All functions appear in orange letters, figures and symbols.

With the ignition switched on, the control stalk can be used to call up the on-board computer functions in stages. After the ignition is switched on, the function last displayed is automatically selected.

When the ignition is switched off, the display automatically switches to the "tripmeter" function, which is displayed for a further max. 4 min. or which is terminated when the central locking system is operated.

*These functions are not displayed in the 911 Turbo.



Reset display -----

Average speed



Reset display ----

Tripmeter



Reset display 0.0

Digital speedometer



Outside temperature



Note:

The outside temperature display does not indicate, if ice es on the road.. Even if a temperature above 32° F (0° C) is displayed, ice may still form on the road, for instance on bridges or when the road passes through a forest.

Boost pressure - 911 Turbo



When the engine speed reaches approx. 4000 rpm during acceleration, the boost pressure should be between 0.6 and 0.7 bar. If a defect causes the boost pressure to exceed this figure considerably, a safety switch cuts off the fuel supply.



Operation

Push the control stalk away from you (3)

 This calls up the on-board computer selection mode and displays all function symbols. The function is displayed and the appropriate function symbol flashes.

If the selection mode is not exited within approx. 2 min. by selecting a new function, the currently displayed function is automatically selected.

Push the control stalk downwards (2)

- The functions can be selected by running through them one by one clockwise.
 Push the control stalk upwards (1)
- The functions can be selected by running through them one by one anti-clockwise.
 Pull the control stalk towards you (4)
- The selection mode is displayed and the function and appropriate function symbol shine constantly. The remaining symbols go out.

Another function display can be selected by moving the control stalk to positions 1 or 2.

Resetting the currently displayed function

- Average fuel consumption
- Average speed
- Tripmeter

0.0

For each Reset function, the control stalk must be pulled towards the steering wheel for more than 3 sec. (stalk position 4). The displayed function is reset to zero.





Automatically Regulated Air Conditioning System

WARNING

- Familiarize yourself thoroughly with the proper use and function of the ventilation/heating, defogging/defrosting and the air conditioning system.
- For safe driving it is extremely important that you follow the operating instructions in this manual. If in doubt, consult with your Porsche dealer.
- Maximum heating output and fast defrosting can be obtained only after the engine has reached normal operating temperature.

Function:

Air for heating and ventilation is drawn in through the air intake in the rear deck lid by the engine fan. Air for heating is then diverted by an electric fan and sent to the left and right heat exchangers and then on to the heater through valve systems, controlled by differential pressure, in the left and right heating sections. The purpose of the differential pressure control system is to allow heated air to pass forward freely in heating mode. If hot air is not required in the passenger compartment, the valve boxes allow hot air to exhaust into the wheel housings. In the heater, fresh air entering in front of the windshield is first mixed with recirculating air that enters the system in the middle of the footwell. Both openings have shutoff valves: the fresh air valve is actuated

by an electric motor and the recirculating air valve opens or closes depending on the pressure within the heater. The cold air is then divided into two streams and enters the intake housing in front of the fans on the right and left sides. The hot air sections bringing air from the engine also open into this intake housing. A temperature mixing valve regulates these hot and cold air streams before they are mixed in a fan. After passing through the right and left fans, the mixed air is fed into a pressure channel from which air ducts lead to the vents.

Note:

To ensure proper air intake, the fresh air inlet behind the front hood must be kept free of snow and ice in the winter.

Operation:

The automatic heating system regulates temperature inside the car by means of the temperature sensor (1).

The interior temperature set on the **temperature selector (5)** is kept constant even if climatic conditions change.

However, the selected temperature cannot be lower than the current outside temperature.

Air distribution for the top and bottom vents is controlled separately with two slide controls (4), on above the other. The **upper slide** (4) controls the amount of air emerging through the defroster vents and center vents. At the extreme left position, the windshield vents are closed and the center and side vents are open. At the extreme right position, air can emerge from the windshield vents and the centre and side vents. The amount of air emerging from the centre and side vents is determined by opening and closing the vents themselves. PL

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The **lower slide (4)** controls air flow into the footwells (open to the right, closed to the left).

The two slides can be set, independently of one another.

The **center and side vents** can be opened and closed with the knurled wheels beside each vent.

Knurled knob up – vent closed Knurled knob down – vent open.

The vanes can be moved to deflect air in the desired direction.

Fan Switch (3)

The fan speed can be controlled with a rotary switch (3) which has 5 click stops. At the "0" setting the fan runs at minimum speed.



Defroster button (6)

To defog the windows as quickly as possible, press the defroster button (indicator light comes on).

The center and footwell vents will now close automatically after a short delay, regardless of the positions of the upper and lower slides (4). All of the air flow will then be directed to the windshield and the side windows. The automatic heating system will also switch to the maximum fan speed (setting 4), and set itself to an interior temperature of at least 75° F/24° C. This prevents overheating of the passenger compartment.

If your Porsche is equipped with an air conditioner, the compressor will also automatically operate (outside temperature permitting) in order to dehumidify the air flow. The center vents automatically close.

Air recirculation switch (2)

If you wish to prevent outside air from entering the car (for example if exhaust fumes are present), press the air recirculation switch (2) (indicator light comes on) to shut off the flow of fresh air.

Air will be drawn out of the passenger compartment through the rear seats.

The air conditioner operates only when the engine is running.

Its cooling output depends on engine speed. High cooling output will therefore also require increased engine speed, especially in city driving or congested traffic.

The air conditioner can be activated, regardless of air distribution settings, by pressing the **air conditioner switch (7)** (indicator light comes on). When the system is switched on, the air conditioner compressor is switched on by a magnetic clutch.

Under normal conditions, fresh air is drawn in and passed through an evaporator to remove heat and humidity. Cooled air then enters the passenger compartment through the center and side vents and the footwells.

For maximum cooling set the fan switch (3) to position 4, close the windows, close air distribution slide controls (4), turn the temperature selector (5) all the way to the left, and press the air recirculation switch (2).

Under normal conditions the system will always mix in some fresh air to maintain air quality.

If your Porsche has been parked in the sun, it is advisable to air out the interior by running the air conditioner with the windows open. In damp weather, the air conditioner compressor can also be switched regardless of the outside temperature in order to dehumidify the incoming air. This prevents the windows from fogging up.

Important Note:

Compressor belt tension should be checked at the recommended maintenance intervals. If the air conditioner fails (uncooled air emerges from the vents when the system is on) an authorized PORSCHE dealer must be consulted.

Function:

The automatic system regulates the temperature inside your Porsche based on the temperature set on the temperature selector (5). Interior temperature is kept constant even if climatic conditions change.

Cold and warm air are mixed automatically by air mixing valves driven by two servomotors, which are controlled by an interior temperature sensor and two temperature sensors located in the air conditioner unit.

Air flow can be controlled using the slide controls (4), and by closing the center and side vents.

There are several ways of adjusting an automatically regulated air conditioning system to individual requirements:

The upper slide control (4) can be used to direct air towards the windshield (right – open; left – closed).

The lower slide control (4) can be used to direct air towards the footwells (right – open; left – closed).

Car telephone

Any portable telephone or radio transmitter which is used in a Porsche must be properly installed in accordance with the technical requirements of Porsche The antennas for all radios and telephones with a transmitting antenna must be externally mounted. The improper installation of radios or telephones or use of a radio or telephone with a transmitting antenna inside the car may cause the warning lights to come on. See your authorized Porsche dealer for details.

Radio reception

The reception quality of your car radio changes constantly while you are driving. Interference due to buildings, topographic features or the weather are inevitable. FM stereo reception is particularly sensitive to changing conditions To suppress interference, you can switch your radio over to "mono" operation or select a different FM stereo channel.



Release Handle for Front Hood (Luggage Compartment)

Unlocking the hood

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Pull the handle located under the left side of the dashboard.

The lever is lockable on the Cabriolet and Targa.

Opening the hood

Lift the front of the hood slightly, and release the safety catch by pushing the lever upward.

Make sure windshield wiper arms are not raised up from windshield when you open the hood.

A light in the lid comes on when the front hood is open.



Closing the hood

Lower the hood and press down on the lock until it clicks shut.

WARNING

Should you notice at any time while driving that the hood is not secured properly, please stop at once and close it.



Before working on the engine, make sure that it is turned off and cool. If you must work on the engine while it is running, be careful to ensure that items of clothing (ties, sleeves etc.), jewelry or long hair cannot get caught in the V-belts or fan.

Release Handle for Rear Lid (Engine Compartment)

The release handle for the engine compartment lid is recessed in the left door pillar. Pull the handle to release the lock; the compartment lid can now be opened.

The engine compartment light is always switched on when the lid is open, regardless of the vehicle light setting. The lock is designed to open automatically if the operating cable should break.

Note:

When closing the rear lid, press down on the outside edges until the lock engages; do not press on the middle of the lid.









Power Sunroof

The sunroof is controlled through a springloaded rocker switch located above the ignition switch. With the ignition on, appropriate movement of the switch brings the roof into the desired position. when released, the switch returns to its neutral position and roof motion stops. The sunroof is equipped with a safety clutch which disengages the drive mechanism when certain resistance is met, thus minimize the possibility of accidental injuries.

Do not operate the sunroof at driving speeds exceeding 62 mph or 100 km/h. The force to overcome wind resistance at higher speeds may cause damage to the sunroof.

Manual operation

In the event of an electrical failure, the sunroof can be closed manually.

The tool kit is stowed in the luggage compartment.

- 1. Open the zipper above the rear window and remove the left-hand cover (3 screws).
- 2. Undo the tensioning screw on the drive mechanism using the angled screwdriver.
- Insert the hand crank into the sunroof drive mechanism with the screwdriver handle and close the sunroof by turning the crank.

The cause of this fault should be eliminated as soon as possible by an authorized Porsche dealer.

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Targa Folding Top





The folding top is secured to the roll bar by means of three pins, and to the windshield frame by two locks, facilitating easy removal and installation.

Roof racks or ski-racks cannot be mounted on the Targa roof. Your Porsche dealer will advice you on suitable racks for your Targa.

Removing folding top

Clean the roof prior to removal to prevent road dust or dirt from soiling your clothes. When storing roof in luggage compartment, protect it from objects which could damage the surface.

- Insert both operating handles into the right and left lock receptacles located in the front roof support bow; position both handles pointing to the center.
- 2. Turn both handles approx. 90° until they point vertically downwards.

- 3. Step out of the car. Tilt the roof at the front bow and remove with a forward motion.
- Place the roof with its rear edge on a soft support (such as both shoe tips) and apply simultaneous pressure to the middle of both bows. Fold the roof by applying light pressure to the sides.





Installing folding top

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- Place the roof with its rear edge on a soft support (shoe tips) and pull sideways to unfold. Simultaneously push both pivoting linkages outward to tension the cover.
- 2. Guide the top assembly into the rear supporting pawls in the roll bar and push to the rear until fully seated.
- 3. Applying light pressure from above, press the forward end of the top down onto the windshield frame.
- Insert both operating handles right and left into the receptacles. The handles must point downwards.
- 5. Pressing the roof downwards with one hand, turn the handle to the center as far as it will go.

Repeat the same procedure on the other side. Then remove the handles.

Convertible Top

The construction of the weatherproof convertible top enables you to open and close the top with ease. A brief operational procedure can be found on back of the sun visor on the driver's side.

WARNING

The convertible top should never be opened or closed while the vehicle is in motion.

The vehicle may only be driven with the top in the full up or down position (indicator light off).

Avoid opening or closing top when vehicle is not relatively level. Otherwise, damage to top mechanism could occur.

Do not leave the top open for a long period of time (several days). If possible, close the top overnight. This will ensure that the fabric and the rear window remain free of creases. Do not operate the top if the vehicle is standing on the jack or on a floor jack. Lower vehicle before operating top.

Caution: Risk of injury

When opening or closing the top, make absolutely sure that you and your passengers have removed your hands, fingers, hair, etc., from between the linkage or top and the windshield frame.

Opening the top

The top can only be opened with the vehicle stationary.

Note:

To prevent scratches, it is advisable to wash the window with clear water before opening the top if it is dirty or dusty.

At temperatures below 32° F (0° C) the rear window must be opened before opening the top.

Carefully put down the window and do not bend. Window may break.



- 1. Turn ignition key to ignition lock position 2 (engine stopped).
- 2. Operate rocker switch until indicator light goes out (end position).
- 3. Put on cover over top and secure

Closing the top

- 1. Take off the cover.
- Operate the rocker switch until the indicator light goes out (top locked in windshield frame).









Attaching folding top cover

Remove covering boot from storage pocket in luggage compartment, slide over collapsed top and secure in place with the snap fasteners provided.

The so-called Tenax studs (4 on both left and right) must be pulled before buttoning takes place. Attach elastic straps.

WARNING

Do not drive with convertible top down without the covering boot. The force of the wind could loosen the padding and cause damage. Remove the covering boot and return to storage pocket in luggage compartment. When removing the cover, first of all detach the elastic straps, then undo the Tenax studs (pull before unbuttoning) and fold back the corners of the cover.

Emergency Operation with top open

- 1. Remove caps of emergency operation mechanism on both rear side parts.
- 2. Take the wheel nut wrench from the tool kit and loosen both screws approx. four turns.
- 3. Pull up the top and carefully put down on the windshield frame.
- 4. Operate the rocker switch until the indicator light goes out. If the elctrical locking system for the top is defective, turn both locks with a screwdriver until the locks are visibly locked. Indicator light off. The defect should be repaired immediately by an authorized Porsche dealer.







Tonneau Cover

With the top down, the tonneau cover protects the interior of your car against wind, weather and inquisitive looks. For driving, the tonneau cover can be opened by means of a zipper.

Attach tonneau cover

- 1. Fully recline both backrests.
- 2. Fully lower side windows.

- Pull cover caps on the instrument panel off the press stud bottom parts. Make sure you don't lose the caps!
- 4. Fit tonneau cover in the same way as the hood cover. Begin by fastening the Tenax/press studs along the instrument panel as fas as the doors and button the holding strap down to heel panel (A). Then fasten the remaining press studs/TENAX studs along the rear.

Cauton! Before buttoning in or out, pull the press-studs.

5. Close zippers in the middle and at the doors.

Open tonneau cover for driving

- 1. Open zipper in the middle and at the door.
- Loosen press-studs on the instrument panel and the door molding. Fold back front half of tonneau cover and fold in sides of cover by approximately 20 cm. Turn sewn-in rubber band upward and fold half of tonneau cover forward.
- 3. Place seat in driving position.
- 4. Fasten folded cover with rubber bands to the press-buttons on the heel plate (arrow).

Maintenance, Car Care



- Battery
 Brake fluid reservoir
 Washer fluid reservoir
 Washer fluid reservoir
 Fuel tank
 Oil dipstick
 Power steering
 Top up engine oil here

Cautions, Engine Oil
Checking engine ail land
Checking engine oil level
Brake fluid
Power steering /2
Power steering
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in other countries
Fuel tank and windshield/headlight
Washer fillers
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Fuel Evaporation Control
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Car care instructions

Exercise Extreme Caution when Working under the Engine Hood

The engine compartment of any motor vehicle is a potentially hazardous area. If you are not fully familiar with proper repair procedures, do not attempt the adjustments described on the following pages. This caution applies to the entire vehicle.

WARNING

Ignoring following instructions may cause serious personal injury.

- Only work on your vehicle outdoors or in a well ventilated area.
- Ensure that there are no open flames in the area of your vehicle at any time when gasoline fumes might be present. Be especially cautious of such devices such as hot water heaters which ignite a flame intermittently.
- Before working on any part in the engine compartment, turn the engine off and let it cool down sufficiently. Hot engine compartment components can burn skin on contact.
- Be alert and cautious around engine at all times while the engine is running.
- If work has to be done with the engine running, always set the parking brake, and make sure the shift lever is in neutral or the selector lever to position "N".

- In particular, be very careful to ensure that items of clothing (ties, sleeves etc.), jewelry or long hair cannot get caught in the fan, V-belts or other moving parts.
- Your Porsche is equipped with a transistorized ignition system with breakerless distributor. When the ignition is on, high voltage is present in all wires connected with the ignition system; therefore, exercise extreme caution when working on any part of the engine while the ignition is on or the engine is running.
- Always support your car with safety stands if it is necessary to work underneath the car. The jack supplied with the car is not adequate for this purpose.
- When working underneath the car without safety stands but with the wheels on the ground, make sure the car is on level ground, that the wheels are blocked, and that the engine cannot be started.

REMOVE THE IGNITION KEY.

- Do not smoke or allow an open flame around the battery or gasoline.
- · Keep a fire extinguisher in close reach.
- Incomplete or improper servicing may cause problems in the operation of the car. If in doubt about any servicing, have it done by your authorized Porsche dealer or any other properly equipped and qualified workshop.

 Improper maintenance during the warranty period may affect your warranty coverage.

Engine Oil

Engine oil consumption

It is normal for your engine to consume oil. The rate of oil consumption depends on the quality and viscosity of oil, the speed at which the engine is operated, the climate, road conditions as well as the amount of dilution and oxidation of the lubricant.

Because of these variables, no standard rate of oil consumption can be established, but drivers should expect increased oil consumption at high speed and when the engine is new.

- The engine in your vehicle depends on oil to lubricate and cool all of its moving parts. Therefore, the engine oil should be checked regularly and kept at the required level.
- Make it a habit to have the engine oil level checked with every fuel filling.
- Lack of sufficient engine oil may lead to severe engine damage.
- The oil pressure warning light is not an oil level indicator. The oil pressure light indicates serious engine damage may be occuring when lit, if rpms are above idle speed.





Checking Engine Oil Level in the Reservoir

WARNING

There is a danger of injury if long hair, ties, sleeves or jewelry become caught in the V-belts, fan or other moving parts. Hot engine parts constitute a burn hazard.

Be especially careful that the dipstick is not caught in the fan, V-belts or other moving parts.

The oil level is always measured with the car on a level surface, with the engine idling at normal operating temperature.

Do not remove filler cap when the vehicle is not level, otherwise oil may run out.

Before measuring, the engine must be allowed to idle for thirty seconds to allow the oil to level out in the reservoir. This applies to readings on the gauge in the small instrument cluster as well as measurements with the dipstick.

Pull out the dipstick, wipe it with a clean lintfree cloth, and reinsert it all the way into the tube; then pull the dipstick back out and read off the oil level.

The two marks on the dipstick indicate the minimum and maximum oil levels; the level must never be allowed to exceed or fall below these marks. The difference between the two marks corresponds to about 1.7 liters (911 Turbo 1,5 liters).

Always make sure that the dipstick is carefully inserted with the handle downward, and that it is not hitting the engine compartment lid.

Engine Oil Recommendation

Recommended oil viscosity ranges dependent on ambient temperatures:

Ambient temperatures (seasonal)	SAE Viscosity Range Mineral oil based engine oils	synthetic oil based engine oils
mostly greater than 50° F/10° C	15 W-40 20 W-50 40	10 W-40
mostly lower than 50° F/10° C	15 W-40 10 W-40 10 W-30	15 W-50
mostly lower than 14° F/-10° C	10 W-30 5 W-30	10 W-30 5 W-30

Use only classified engine oils with the service designation of API SF/CC, SF/CD, SG/CC, SG/CD.

Don't utilize thin oils for general use.

Be aware of special viscosity grades for high or low ambient temperatures if using mineral based engine oils or ask for engine oils which have received a special approval by Porsche.

Oil change

All current engine oils are compatible with each other, i.e. when making an oil change it is not necessary to flush the engine if you wish to use a different brand or grade of oil. Since, however, each brand of oil has a special composition, you should, if possible, use the same oil brand if it becomes necessary to top up between oil changes. Porsche engines have long intervals between oil changes. You can make best use of these long oil change intervals by using multigrade oils since these are largely independent of seasonal fluctuations in temperature. If your vehicle is used frequently in stop-andgo traffic in cold weather, the engine will not always be properly warmed up. Condensation from products of combustion may accumulate in the oil. In this case, it is advisable to change the oil more frequently so that your engine once again has 100 % efficient engine oil.
Engine oil performance class

Engine oil is not only a lubricant, but also serves to keep the engine clean, to neutralize the dirt which penetrates into the engine against corrosion. To perform these functions, the oil is provided with additives which have been specially developed for these functions. The efficiency of an oil is expressed, for example, by the API classifications. The requirements for Porsche engines are API class SF/CC, SF/CD or SG/CC, SG/CD.

Viscosity

Like all liquids, engine oil is viscous when cold, and thin-bodied when warm. The viscosity of an oil is expressed by its SAE class. For cold viscosity (measured at temperatures below 32° F/0° C) the SAE class is given as a number and the letter "W" (as in winter), for hot viscosity (measured at 212° F/100° C) the SAE class is given only as a number.

The viscosity of an oil is, therefore, always the same if it has the same number of an SAE class. E.g.: A 10 W-30 oil and a 10 W-40 oil have the same viscosity when cold (below 0° C); when hot (at 212° F/100° C) the oil with the number 30 is thinner than the oil with the number 40.

Oils with two viscosities are called multigrade oils; oils with only one viscosity are termed single-grade oils.

Single-grade oils can only be used for the narrow temperature range identified by their SAE number; multigrade oils cover a wider temperature range.



Checking Brake Fluid

The transparent brake fluid reservoir is in the luggage compartment on the left-hand side. Check the level regularly. It should always be between the "Min." and "Max." lines. The level will drop gradually during normal operation as the disc brake pads wear and are automatically adjusted. This is normal. If the brake fluid level drops too low, seek the advice of an authorized Porsche dealer.

Brake fluid is hygroscopic, and therefore must be renewed every two years.

Always refill the system with new (unused) brake fluid. See chapter headed "Filling Capacities" for specification and quantities.

To add brake fluid, unscrew the cap. The vent hole in the cap should be kept clean and open.

WARNING

- Every 2 years the brake fluid has to be replaced. See your Maintenance Booklet.
- If brake fluid must be added to the reservoir, use only new and unused DOT 4 brake fluid that meets SAE specification J 1703 and conforms to Motor Vehicle Safety Standard 116.
- Do not use any other brake fluid or brake fluids that have absorbed moisture from the open air, or brake fluid that is dirty. It may cause premature wear or unreliable braking action.
- Do not add or mix DOT 5 silicone type brake fluid with the brake fluid in your vehicle as severe component corrosion may result. Such corrosion could lead to brake system failure.
- Brake fluid is poisonous. Brake fluid is also harmful to the paint of your vehicle.



Power Steering

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The power steering system uses hydraulic power to boost manual the steering forces.

The rubbing noises heard when the steering is at full lock are normal, and do not indicate a malfunction in the steering system.

Bear in mind that when the engine is shut off (during towing, for example), or if the power steering fails, no steering boost will be provided and steering will require considerably more effort.

Checking the hydraulic fluid

The reservoir is mounted on the right wheel well in the engine compartment.

The fluid level in the transparent container should be between the upper and lower marks. Top up with hydraulic fluid if necessary. Use only the fluid specified in the "Fluid Capacities" section.

Fuel Economy

Fuel economy will vary depending on where, when and how you drive, optional equipment installed, and the general condition of your car. A car tuned to specifications and correctly maintained, will help you get maximum fuel economy.

- · Have your vehicle tuned to specifications.
- Fuel injection should be adjusted to specifications.
- Spark plugs should be clean, properly gapped and fire efficiently.
- Air cleaner should be dirt free to allow proper engine "breathing".
- · Battery should be fully charged.
- · Wheels should be properly aligned.
- Tires should be inflated at correct pressure.
- · Keep a light foot on the gas pedal.
- 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 up early helps to save fuel.
- Avoid unnecessary idling. Turn the engine off.

- Prolonged "warm up" idling wastes gas. Start the vehicle just before you are ready to drive. Accelerate slowly and smoothly.
- 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.
- Use air conditioner only when needed.
- All electrical accessories contribute to increased fuel consumption.

The EPA estimated m.p.g. is to be used for comparison purposes, actual mileage may be different from the estimated m.p.g., depending on your driving speed, weather conditions and trip length. Your actual highway mileage will probably be less than the estimated m.p.g.

Please observe all local and national speed limits.

Operating Your Porsche in other Countries

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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 converter could result;
- service may be inadequate due to lack of proper service facilities, tools or diagnostic equipment;
- replacement parts may not be available or very difficult to get.

Porsche cannot be responsible for the mechanical damage that could result because of inadequate fuel, service or parts availability.

If you bought your car 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.



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Fuel Tank and Windshield/Headlight Washer Fillers

The filler necks for the fuel tank (B) and the windshield/headlight washer reservoir (A) are in the left front fender under a flap. To open the flap, pull the release button on the left side of the instrument panel.

Be sure the fuel filler is closed when adding cleaning fluid or water to the washer reservoir.

To protect the paint finish when filling the fuel tank, a protective apron has been provided. Do not use engine coolant anti-freeze or any other solution that can damage the car paint, in the washer reservoir.

Fuel tank capacity

Fuel tank capacity is listed under "Filling Capacities".

Never keep on driving until the tank is completely empty.

Porsche does not recommend the use of fuel additives.

If you lose your fuel filler cap, replace it immediately with a cap of the same design to reduce the possibility of a fire in a collision.

Fuel Recommendations

Your Porsche is equipped with a catalytic converter and must use UNLEADED FUEL ONLY.

Carrera 2/4

Minimum octane rating is 95 RON "Premium unleaded fuel" (90 CLC or AKI). If unleaded premium fuel is not available, a built-in "Electronic oktane™ Knock Control" makes it possible for temporary use also to refuel with unleaded regular fuel with at least 91 RON (87 CLC or AKI). Federal law prohibits use of leaded fuel in this vehicle. The use of UNLEADED FUEL ONLY is critically important to the life of the catalytic converter. Deposits from leaded gasolines will ruin the converter and make it ineffective as an emission control device.

Cars with a catalytic converter have a smaller fuel tank opening, and gas station pumps have smaller nozzles. This will prevent accidental pumping of leaded fuel into cars with a catalytic converter.

Unleaded fuel may not be available outside the continental U.S. and Canada. Therefore, we recommend you do not take your car to areas or countries where unleaded fuel may not be available.

Octane ratings

Octane rating indicates a gasoline's ability to resist detonation. Therefore, buying the correct octane gas is important to prevent engine "damage".

The RON octane rating is based on the research method. The CLC (U.S. Cost of Living Council octane rating) or AKI (antiknock index) octane rating usually displayed on U.S. gasoline pumps is calculated as research octane number plus motor octane number, divided by 2, that is written as:

RON+MON $\frac{R+M}{2}$ or

The CLC or AKI octane rating is usually lower than the RON rating:

95 RON equals 90 CLC or AKI

Always use unleaded fuel with octane ratings of at least 95 RON or 90 CLC or AKI.

WARNING

Never carry additonal fuel in portable containers in your car. Such containers, full or partially empty, may leak, cause an explosion, or result in fire in case of a collision.

Gasolines containing alcohol

Gasoline containing alcohol is available at gas stations in some areas. The gas pump may not be labeled to identify that alcohol is present in the gasoline. If it is labeled, it may not identify what amount and type(s) of alcohol are used. We recommend you **do not** use fuels where the alcohol content cannot be identified.

Gasolines containing methanol

Do not use fuels containing methanol (methyl alcohol, wood alcohol). The use of fuel containing this type of alcohol can result in vehicle driveability and performance problems and may damage critical parts of your vehicle's fuel and emission control systems.

Gasolines containing ethanol

A mixture of unleaded gasoline and ethanol (ethyl alcohol, gain alcohol) is sold in some areas. This mixture is sometimes called "Gasohol". You may use gasohol in your Porsche, provided it contains no more than 10 % ethanol, and the octane requirements for your vehicle are met. However, we strongly recommend switching back to gasoline without ethanol, if you experience any of the following problems with your vehicle:

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

Continued use of gasohol under these conditions may cause costly damage to the fuel system and the emission control system of your vehicle.

Emission Control System

In the Interest of Clean Air

Pollution of our environment has become a problem that is of increasing concern to all of us. We urge you to join us in our efforts for cleaner air in controlling the pollutants emitted from the automobile.

Porsche has developed an emission control system that controls or reduces those parts of the emission that can be harmful to our environment. Your Porsche is equipped with such a system.

Porsche warrants the Emission Control System in your new car under the terms and conditions set forth in the Warranty Booklet.

You, as the owner of the vehicle, have the responsibility to provide regular maintenance service for the vehicle and to keep a record of all maintenance work performed. To facilitate record keeping, have the service performed by authorized Porsche dealers. They have Porsche trained mechanics and special tools to provide fast, 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 unless approved by the manufacturer.
- 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 or engine.
- Do not continue to operate your vehicle if you detect engine misfire or other unusual operating conditions.

Starting

 Do not leave vehicle engine idling unattended after starting. If warning lights should come on to indicate improper operation, they would go unheeded. Extended idling also produces heat, which could result in overheating or other damage to the vehicle or other property.

Parking

 As with any vehicle, do not park or operate your vehicle in areas where combustible materials, such as dry grass or leaves, can come into contact with a hot exhaust system.

Undercoating

 Do not apply additional undercoating or rustproofing on or near the exhaust manifold, exhaust pipes, catalytic converter or heat shields. During driving the substance used for undercoating could overheat and cause a fire.

How Emission Control Works

When an automobile engine is running, it uses energy generated through the combustion of a mixture of air and fuel. Depending on whether a car is driven fast or slowly or whether the engine is cold or hot, some of the fuel (hydrocarbons) may not be burned completely but be discharged into the engine crankcase or exhaust system. Additonal haydrocarbons may enter the atmosphere through evaporation of fuel from the fuel tank. These hydrocarbons (HC), when released into the air, contribute to undesireable pollution.

In addition, carbon monoxide (CO) and oxides of nitrogen (NOx) contribute to engine emissions. They, too, are formed during the combustion process and discharged into the exhaust system.

To reduce these pollutants, your Porsche is equipped with a precisely calibrated fuel injection system to assure a finely balanced air/fuel mixture under all operating conditions.

Oxygen sensor

The oxygen sensor, installed in the exhaust pipe continuously senses the oxygen content of the exhaust and signals the information to an electronic control unit. The control unit corrects the air/fuel ratio, so that 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 converter

The catalytic converter is an efficient "cleanup" device built into the exhaust system of the vehicle. The catalytic converter burns 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 converter. Therfore, only unleaded gasoline without additives must be used. The catalytic converter will be damaged by

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- · push or tow starting your vehicle
- · misfiring of the engine
- turning off the ignition while the vehicle is moving or
- · by other unusual operating conditions.

Do not continue to operate your vehicle under these conditions, as otherwise fuel can reach the catalytic converter. This could result in overheating of the converter. Federal law prohibits use of leaded gasoline in this car.

Fuel Evaporation Control

Fuel Tank Venting

The evaporation chamber and the carbon canister prevent fuel from escaping to the atmosphere at extreme high outside temperatures, when driving abruptly around curves and when the car is parked at an incline or in any other nonlevel position.

Vapor control system and storage

When the fuel tank is filled, vapors are collected in the evaporation chamber by a vent line leading the vapors to the carbon canister where they are stored as long as the engine does not run.

Purge system

When the engine is running, the fuel vapors from the canister will be mixed with fresh air from the ambient air of the canister. This mixture will be directed to the intake air housing via the tank vent line, mixed with the intake air and burned during normal combustion.

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Car care instructions

Regular and correct care helps to maintain the value of your car and is also a precondition for the New Vehicle Warranty and the Anti Corrosion Warranty.

Your authorized Porsche dealer has specially developed car-care products from the Porsche program available either singly or as complete car-care sets. He will be pleased to help you select suitable products.

Whether you use Porsche products or other commercially available cleaning agents first make sure of their correct application.

The Porsche paint finish is of a high quality baked synthetic enamel. The color and enamel type designation are indicated on the "paint number sticker". When buying touch-up paint, always give the paint and the car's identification numbers to your dealer.

A well-cared for Porsche can look like new for many years. It all depends on the amount of care the owner is willing to give the car.

WARNING

• Cleaning agents may be poisonous. Keep them out of the reach of children.

- Observe all caution labels. Failure to do so may result in serious personal injury or property damage.
- Always read directions on the container before using any product. These directions may contain information necessary to avoid personal injury.
- Most chemical cleaners are concentrates which require dilution. High concentrations might cause problems ranging from irritation to serious injury as well as damage to your vehicle.
- Do not use gasoline, 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 well ventilated areas.
- Do not clean the underside of chassis, fenders, wheel covers, etc., without protecting your hands and arms as you may cut yourself on sharp-edged metal parts.
- Moisture and road salt on brakes may affect braking efficiency. Test the brakes after each vehicle washing.

Washing

The best method of protecting your car from the damaging effects of the environment is frequent washing and the application of a preservative. The underside of your vehicle should also be washed thoroughly, at the latest when salt is no longer spread on the roads.

The longer salt, road dust and industrial dust, dead insects, bird droppings or substances from trees (resin, pollen) are allowed to remain on the bodywork, the more serious is their harmful effect.

Bodywork which is inaccessible to the car wash must be cleaned by hand and dried.

New cars should be washed carefully with plenty of clear water to protect the new paint work. Dark paint finishes show up the smallest of surface damage (e.g., scratches) more readily than lighter colors.

Dark colors are also more susceptible to scratches because of the composition of their pigments and therefore require special care and attention.

When washing by hand, use abundant water, a soft sponge or wash brush, and the Porsche car shampoo. Begin by spraying the body thoroughly with water to rinse away loose dirt. Do not wash your car in bright sunlight or while the bodywork is still hot. After washing, rinse the car with plenty of water and then dry with a chamois leather.

Do not use the same chamois leather for drying as you use for cleaning the windshield and windows.

The moisture which gets on to the brakes during a car wash can reduce braking efficiency or make the brakes pull unevenly. Always apply the brakes a few times after washing the car to test braking efficiency and dry the brake discs.

Dust should never be wipped off the car with a dry cloth since dust particles are abrasive and could dull and damage the surface finish.

Cleaning the convertible top

The life and appearance of your convertible top are to a large extent dependent on proper care and servicing.

Whenever possible, park your car in shade as continuous sunshine will attack the top material, rubber and color.

Remove bird droppings immediately since the acid in them will make the rubber swell and the convertible top will become leaky.

Open convertible top only when it is completely dry, otherwise damp stains and scrub marks may occur which cannot be removed. Before washing, or if the convertible top is dusty, brush with a soft brush in the direction of the line of the fabric. Clean rear window with a soft, antistatic cloth or with the Porsche spray-on window cleaning agent. The convertible top does not have to be washed each time the car is washed.

It is usually sufficient to spray or wash it with clean water. Only if the convertible top is extremely dirty, wet with lukewarm soapy water (e.g. washing agent for delicate fabrics) using a sponge or soft brush and rub gently. Then spray the convertible top with clean water until there is no soapy solution left on it.

Avoid car washes. The brushes could cause scratches on the rear window.

Do not affix stickers or adhesive strips to the rear window or cover it with plastic film. This causes discoloration and can damage the rear window.

The convertible top must remain closed while drying.

If leaks develop in the convertible top or at its seams and fold, they can be rectified with an impregnating agent approved by Porsche.

After treatment, remove any impregnating agent from the rear window or the car's body.

Never clean the convertible top or rear window using kerosene, stain remover, gasoline, paint thinner or solvent; they attack the layer of rubber between the fabric and endanger water-resistance and durability. Try to remove the stains by rubbing carefully with a soft rubber sponge.

Never remove snow and ice using a sharp edged object. To de-ice rear window use commercial de-icing spray.

Incorrect care and treatment can damage the convertible top and cause leaks. Any repair work can be done by your authorized Porsche dealer.

Preservation

The paintwork contains certain oils which maintain its high luster and prevent it from becoming brittle. Climatic influences can remove these oils from the paintwork. This should be counteracted by applying a paint preservative early enough to restore the oils preserving the high luster and preventing dirt from settling on the surface and industrial dust penetrating the paint.

Provided it is washed and treated with preservative regularly, the brand new finish of your car will be retained for years to come. Apply the Porsche paint preservative after the car wash and polish it dry to obtain a bright

finish or simply add the Porsche liquid preservative regularly to the final rinse water and rub down with a leather chamois.

Cleaning and preserving engine compartment

The engine compartment and the surface of the engine are treated with a corrosion-inhibitor at the factory.

If degreasing solvents are used to clean the engine compartment or the engine is washed down, the process almost invariably removes the corrosion-inhibiting coating. It is then absolutely necessary to have a durable preservative applied to all surfaces, body seams, joints and assemblies in the engine compartment. This also applies when corrosion-inhibited parts are replaced.

Effective rust-proofing is particularly important during the cold weather season. If your car is driven frequently in areas where salt has been spread on the roads, the whole engine compartment should be cleaned thoroughly after the winter to prevent salt causing any lasting damage. A full underbody wash should also be performed at the same time.

Windows

The road dust which settles on the windshield and windows contains particles of tire rubber and oil residue. The interior trim and upholstery release particles, particularly in strong sunlight, which collect on the insides of the windows. These deposits are augmented by impurities in the air which enters the car through the fresh air vents.

The Porsche spray-on window cleaner can be used to clean the windows, both inside and outside. Remember to clean the wiper blades as well and replace them once or twice every year, depending on condition. If you use a chamois leather for the windows, do not use it for the paintwork as it will otherwise pick up a certain amount of preservative or polish and could smear the windows and thus impair vision.

Remove dead insects with the Porsche insect remover.

Polishing

Do not resort to using Porsche polish until it becomes evident that the normal preservatives no longer produce the desired finish.

Caution: Do not apply silicone polishes to the windshield or windows.

The paintwork of your car is exposed to all manner of mechanical and chemical conditions, particularly climatic ones such as bright sunlight, rain, frost and snow. Ultraviolet light, rapid changes in temperature, rain, snow, industrial dust and chemical deposits constantly

attack the paint which is only able to withstand such exposure in the long term if it is given regular care and attention.

Black matte finished parts should not be treated with preservatives or polishes as this will spoil the matte effect.

Spots and stains

Tar stains, grease, oil spots and dead insects cannot always be removed by washing alone. They can cause discoloration if allowed to remain on the paintwork. They should therefore be removed without delay with Porsche Tar Remover or Porsche Insect Remover.

Wash the affected area immediately after treating it.

Minor paint damage

Minor paint damage, such as scratches, scores or chips caused by flying stones, should be covered immediately with the Porsche Touch-up Applicator before corrosion sets in. However, if there are already traces of corrosion, they must first be removed carefully and thoroughly. Coat the area with a rust-proofing primer and finish off with a top coat. The paint code and color number are found on the vehicle's paint data plate.

Undersealing

The underside of your car is durably protected against chemical and mechanical influences.

As it is not possible to exclude the risk of damage to this protective coating in day to day driving, it is advisable to have the underside of the car inspected at certain intervals - preferably before the start of winter and again in spring - and the undersealing restored as necessary.

Your authorized Porsche dealer is familiar with the bodyseal treatment procedures and has the necessary equipment for applying factory approved materials. We recommend that you entrust him with all such work and inspections.

Unlike conventional spray oils, undersealing and rust-proofing compounds based on bitumen or wax do not attack the anti-drumming materials applied at the factory.

Before applying fresh underseal, carefully remove deposits of dirt and grease. Once it has dried, the new undersealing compound forms a tough protective coating which provides efficient rust-proofing of the floor panels and components.

WARNING

Do not apply any undersealing on or near exhaust manifold, exhaust pipe, catalytic converter or heat shields. With the engine running, the material may overheat and ignite.

Always apply a fresh coating of suitable preservative to unprotected areas after cleaning the underside of the body or the engine or carrying out repairs to underbody components.

Light lenses and plastics

Use only soap and water solution for cleaning the plastic light lenses. Never use chemical cleaning agents for this purpose. The same applies to other plastic parts and plastic films.

Door, roof and window seals

Rubber seals tend to age and become brittle or crack if they are not treated occasionally with glycerine or talcum powder.

Light alloy wheels

Pitting may occur if metallic particles which cause contact corrosion (e.g. brass or copper in brake dust) are allowed to remain on the aluminium for too long.

Regular care is necessary in order to retain the attractive surface finish. The wheels should be washed down with a sponge or wash brush about every two weeks. In areas where salt is spread on winter roads or there is a lot of airborne industrial dust, it is best to clean the wheels weekly.

The Porsche Light Alloy Wheel Cleaner (pH-value 9.5) can be used for this purpose.

If the pH-value of the detergent is incorrect, the protective coating on the wheels will be destroyed.

Every three months you should coat the wheels with a non-corrosive grease (vaseline) after cleaning. Using a clean cloth thoroughly rub the grease into the surface.

Polishes which dissolve oxides, as frequently used for other metals, or abrasive tools or agents are unsuitable because they break down the oxide film of the protective coating and will cause discoloration of the wheel.

Leather care

Leather is a natural material. The tanned hide is a product of nature. The natural surface markings of leather skins, such as creases, healed scratches, insect bites, structural differences and slight variations in shade and grain add to the attractiveness of the real leather product.

We recommend that the leather be treated or cleaned initially after the first few weeks or after the car has covered a few thousand miles. Only by doing so can the leather patina, which emphasizes the inherent qualities of the leather upholstery, begin to form.

Cleaning is best performed with a white, soft woolen cloth and a cleaning agent with a neutral soap basis (mild soap and water solution). If the leather is heavily soiled the Porsche Cockpit Cleaner can also be used. Please follow the instructions on the containers carefully.

Do not use aggressive cleaners or hard objects.

Take special care not to dampen the other side of the perforated leather trims.

Once you have cleaned the leather (especially the heavily used leather seats) treat it with the Porsche Leather Care Agent. Leather should be cleaned and treated several times a year, depending on how quickly it becomes dirty.

Should the leather become damaged during use (e.g. when transporting sharp objects or if tools etc. should slip) the damage can be made less conspicuous using the Porsche Leather Color Coating.

Fabric, upholstery and carpets

Use only a vacuum cleaner or a medium stiff brush. Remove stains and spots with Porsche stain remover.

The Porsche range of accessories includes floormats to protect the carpets in Summer and Winter.

Care of the seat belts

If it becomes necessary to clean the belts, you can use any mild washing agent. Allow the belts to dry prior to retracting, but avoid direct sunlight.

If unsuitable cleaners are used or any attempt is made to dye or bleach the belts, the webbing may be weakened and thus constitute a safety risk.

Storing your Porsche Vehicle

If you intend to store your Porsche for a prolonged period, please consult your authorized Porsche dealer. The staff will be glad to advise you on the most suitable and necessary methods. -

Practical Tips, Emergency Service

Cautions, Tool kit, Car jack	
Tires, wheels	
Roof rack	
Spare wheel	
Lockable wheel nut	
Changing a wheel	
Lifting the car	
Fuses and relays	
Removing battery	99 – 101
Emergency starting	102, 103
Replacing bulbs	104 – 107

Exercise Extreme Caution when Working under the Engine Hood

The engine compartment of any motor vehicle is a potentially hazardous area. If you are not fully familiar with proper repair procedures, do not attempt the adjustments described on the following pages. This caution applies to the entire vehicle.

WARNING

Ignoring following instructions may cause serious personal injury.

- Only work on your vehicle outdoors or in a well ventilated area.
- Ensure that there are no open flames in the area of your vehicle at any time when gasoline fumes might be present. Be especially cautious of such devices such as hot water heaters which ignite a flame intermittently.
- Before working on any part in the engine compartment, turn the engine off and let it cool down sufficiently. Hot engine compartment components can burn skin on contact.
- Be alert and cautious around the engine at all times while the engine is running.
- If work has to be done with the engine running, always set the parking brake, and make sure the shift lever is in neutral or the selector lever to position "N".

- In particular, be very careful to ensure that items of clothing (ties, sleeves etc.), jewelry or long hair cannot get caught in the fan, V-belts or other moving parts.
- Your Porsche is equipped with a transistorized ignition system with breakerless distributor. When the ignition is on, high voltage is present in all wires connected with the ignition system; therefore, exercise extreme caution when working on any part of the engine while the ignition is on or the engine is running.
- Always support your car with safety stands if it is necessary to work underneath the car. The jack supplied with the car is not adequate for this purpose.
- When working underneath the car without safety stands but with the wheels on the ground, make sure the car is on level ground, that the wheels are blocked, and that the engine cannot be started.

REMOVE THE IGNITION KEY.

- Do not smoke or allow an open flame around the battery or gasoline.
- · Keep a fire extinguisher in close reach.
- Incomplete or improper servicing may cause problems in the operation of the car. If in doubt about any servicing, have it done by your authorized Porsche dealer or any other properly equipped and qualified workshop.

 Improper maintenance during the warranty period may effect your warranty coverage.

Tool Kit and Car Jack

The tool kit and jack are stowed in the front luggage compartment. The tool kit contains tools needed for minor roadside repairs or adjustments.

Regulations in some countries require additional tools. Details should be obtained before leaving for a foreign country.

WARNING

- Use the jack only for changing a wheel. Never jack up other vehicles or other loads with it.
- The jack must never be used as a support to work underneath the vehicle. If the jack is accidently dislodged, you could be seriously injured. When working under the vehicle, always use safety stands specifically designed for this purpose.

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Tires/Wheels

The original equipment tires and wheel rims on your Porsche comply with all applicable Federal Motor Vehicle Safety Standards.

For your driving safety remember the following:

- Wheel rims and wheel bolts are matched to fit your Porsche.
- If you intend to use other than original equipment wheels, be sure that they conform to Porsche specifications for your model.
- The use of wheel rims and wheel bolts that do not meet specifications of the original factory installed equipment will affect the safe operation of your vehicle.
- Before you plan on exchanging wheels, or snow tires already mounted on wheel rims, consult your authorized Porsche dealer. He has the technical information necessary to advise you which wheel rims and wheel bolts are compatible with the original factory installations.

Tire pressures

WARNING

Incorrect tire pressure cause increased tire wear and adversely affect road holding of the vehicle, leading to loss of control. Always use an accurate tire pressure gauge when checking inflation pressures. Do not exceed the maximum tire inflation pressure listed on the tire sidewall. (Also refer to "Technical data"). Cold tire inflation pressure means: when a car has not been driven for at least 3 hours or less than 1 mile. Never let any air out of warm tires to meet cold tire pressure specifications.

Tire traction

WARNING

When driving on wet or slushy roads, a wedge of water may build up between the tires and the road. This phenomenon is known as aquaplaning and may cause partial or complete loss of traction, vehicle control or stopping ability. Reduce speed on wet surface.

Tire life

Tire life depends on various factors, i.e., roads, traffic and weather conditions, driving habits, type of tires and tire care.

Inspect your tires at least every 2000 miles or 3000 km for wear and damage. If you notice uneven or substantial wear, wheels might need alignment or tires should be balanced or replaced.

Tires must always remain on same side of vehicle.

After changing, adjust tire pressure and torque wheel nuts diagonally to 94 ftlb (130 Nm). See "Changing wheels".

Tire wear

The original equipment tires on your Porsche have built-in wear indicators. They are molded into the bottom of the tread grooves and will appear as approximately 1/2 in (12 mm) bands when the tire tread depth is down to 1/16 of an in (1.6 mm).

When the indicators appear in two or more adjacent grooves, it is time to replace the tires. We recommend, however, that you do not let the tires wear down to this extent. Worn tires cannot grip the road surface properly and are even less effective on wet roads.

In the United States, state laws may govern the minimum tread depth permissible. Follow all such laws.

WARNING

Do not drive with worn tires or tires showing cuts or bruises as they may lead to sudden deflation.

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If you notice that tires are wearing unevenly, consult your Porsche dealer. Uneven wear may not always be due to improper wheel alignment. It can be the result of individual driving habits such as cornering at high speeds. If the tire pressure is not checked and adjusted regularly, abnormal tire wear can also occur.

Tire care

WARNING

- Avoid damaging tires and wheel rims. If you must drive over a curb or other obstacle, drive slowly and at an obtuse angle. Frequently check tires for uneven wear and damage.
- · Remove imbedded material.
- Replace worn or damaged tires immediately.
- Keep oil, fuel, brake fluid, etc. away from tires.
- · Replace missing valve dust caps.
- · Keep tires inflated correctly.

Tire damage

Regularly check tires for imbedded material, cuts, punctures, cracks and bulges (side wall).

In case of tire damage, where it is uncertain whether there is a break in the ply with all its consequences or tire damage caused by thermal or mechanical overloading due to a loss of pressure or any other prior damage, we recommend that the tire be replaced for safety reasons.

If one faulty tire is replaced it should be noted that the difference in tread depth on one axle must not exceed 30 %. Handling inconsistencies may result.

Perform visual inspection.

Parking at the curb

Hard impacts against curbs (or traffic islands) are dangerous and may cause hidden tire damage which is not noticeable until later. (Danger of accidents at high speeds). Tires have a memory!

WARNING

If you must drive over a curb, drive slowly and, if possible, at obtuse angles. Exercise care when parking along curbs.

Tire replacements

If you do not use a Porsche recommended replacement tire, make sure that you purchase your new tires from a reputable tire specialty dealer and that the dealer complies with all manufacturers warnings for those tires.

Before mounting new tires, check with your Porsche dealer about the current release status.

For tires with ZR quality standard, there are currently no standards concerning tire strength at speeds above 150 mph/240 km/h.

For this reason, only use tire makes and types tested by Porsche.

Tires should be replaced at least on one axle at a time. Only tires of the same make and type must be combined. Mixed tires are not permissible. Whenever you replace tires, make certain that you install new valves. Initially, new tires do not have their full traction. You should therefore drive at moderate speeds during the first 60 - 120 miles (100 - 200 km).

Have new tires mounted by an expert only.

Wheel balancing

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 A wheel should always be balanced after a tire repair. Even with regular use a wheel can get out of balance, and should, therefore, be balanced from time to time. Unbalanced wheels may affect car handling and tire life. When balancing wheels, use only balancing weights supplied through the Porsche dealer.

Wheels

If you intend to use other than original equipment wheels, be sure that they conform to Porsche specifications for your model.

Check with your authorized Porsche dealer regarding the correct wheel specifications for type and model year.

Removing and storing tires

The driving direction should be clearly marked on all tires before removing them for storage. This is to make sure that they are mounted and run in the same direction as before. When mounting tires pre-fitted on rims, ensure that the colored wheel bolt is opposite the valve. Always screw the locking-up wheel nut onto this colored bolt. Put a marking indicating the direction of rotation on any wheel removed from the car (e.g. FR, FL, RR, RL). This precaution will ensure that the wheels are refitted in their original position and that no imbalance occurs.

The supposition that tire durability and performance are immune to the effects of storage and age is unfounded. Chemical additives, which make the rubber elastic, lose their effectiveness in the course of time and the rubber becomes brittle and cracks. Therefore, the tires, especially the collapsible spare tire, should from time to time undergo a visual check. To accomplish this, pump up the collapsible spare tire.

Under no circumstances should tires older than 6 years be used on your Porsche. The age of the tire can be obtained from the "DOT" code number. If, for example, the last three numbers read 121, then the tire was produced in the 12th week of 1991.

Store tires in a cool and dry place.

Snow tires

For a better grip on snow and ice use radial M+S tires or snow tires with studs. Check with your local Motor Vehicle Bureau for possible restrictions.

WARNING

The standard tires profile and rubber mixture are optimized for wet and dry driving conditions, and may not prove favorable for snow conditions. Therefore install M+S tires before driving in such conditions. Failure to use the proper tires and wheels could result in loss of control and damage to the vehicle and personal injury.

Before mounting snow tires, consult with your Porsche dealer. He has the technical information necessary to advise you on wheel and tire compatibility.

Snow tires should have the same load capacity as original equipment tires and should be mounted on all four wheels. Snow tires with studs should be run at moderate speeds when new in order to give the studs time to settle.

When mounting tires pre-fitted on rims, ensure that the colored wheel bolt is opposite the valve. Always screw the locking-up wheel nut onto this colored bolt. Put a marking indicating the direction of rotation on any wheel removed from the car (e.g. FR, FL, RR, RL). This precaution will ensure that the wheels are refitted in their original position and that no imbalance occurs.

WARNING

Tires with badly worn treads and studs are very dangerous. Make sure they are replaced immediately.

Do not drive a vehicle equipped with snow tires at prolonged high speed. Snow tires do not have the same degree of traction on dry, wet or snowfree roads as a normal tire. Furthermore, snow tires wear rapidly under these conditions.

Snow tires do not fulfill their purpose if the tread depth is less than 5/32 in/4 mm. Comply with all state and local laws governing snow tire and tread depth requirements.

Snow chains

WARNING

Snow chains cannot be fitted on the standard size wheels. To prevent damage to body, axle or brake components, snow chains can be fitted only to the rear wheels, and only with the tire/rim combination listed in the Technical Data.

To ensure adequate clearance between chain and body, Porsche recommends only the use of fine-link chains such as those approved by Porsche.

Follow instructions issued by the supplier of the chains.

Different states and countries have varying statutory requirements regarding maximum speed. Check with local authorities for possible restrictions.

Remove chains as soon as roads are free of ice and snow.

Tire designations

Due to new speed and load ratings for radial tires, new designations have come into force for snow tires for your Porsche.



The designation to be used for ZR tires is e.g., 245/45 ZR 16 (Z = code letter for radial tires for speeds above 240 km/h (150 mph).

Roof racks

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The installation of commercially available roofracks is not compatible with the roof design of your Porsche.

When installing the **Genuine Porsche Roofrack** now available, the maximum permissible weight load of 75 lbs or 35 kg must not be exceeded.

The "New Genuine Porsche Roofload Transport System" provides for maximum permissible weight loads of up to 165 lbs or 75 kg. Your Porsche dealer will be glad to advise you which type of roofrack can best serve your individual needs and load carrying requirements.

WARNING

Make sure that the load is carefully mounted. Secure it additionally by locking the roof transport system.





Spare Wheel, Jack, Tool Kit

The spare wheel is stored in the luggage compartment under the floor mat. In front of the spare wheel is the jack, the tool kit with compressor and tire pressure gauge as well as a plastic bag. To protect the floor covering, place the flat road tire into this bag before storing it under the front hood.

Use the jack only for changing a wheel. Do not use it as a support to work underneath the car.

Collapsible Emergency Spare Tire

Your Porsche is equipped with a collapsible spare tire, which made it possible to provide a large 20-gal, fuel tank without reducing trunk space. However, tread and space saver design features of the collapsible tire may affect car handling. Therfore, do not drive more than 50 mph/80 km/h with moderate acceleration when using the collapsible spare tire. It is for emergency use and short distances only. The spare wheel may only be fitted at the front. This means that when one of the rear wheels is defective, the intact front wheel on the same side of the car must be fitted at the rear. This improves handling of the car and reduces wear on the tires. This applies for cars equipped with locking differential, in particular. Only one collapsible spare tire may be fitted to the car. Remount the original road tire as soon as possible. Inflating the collapsible tire

WARNING

Do not overinflate your spare tire.

Inflate the collapsible tire with the electric air compressor that comes with your Porsche. Do not use other equipment!

- 1. Mount spare wheel **before** inflating the tire.
- Attach hose of air compressor to tire valve and insert plug of electric cord into cigarette lighter socket.

- The required tire pressure is 36 psi or 2.5 bar. Check pressure with tire pressure gauge.
- Disconnect hose and electric cord and store air compressor.
- Have flat road tire repaired and remounted on car at next service stop. Remember, the collapsible tire is for emergency use and short distances only.

When the air released from the collapsible tire, it will return to its original shape after cooling down for several hours. Store collapsible tire in compartment underneath the luggage compartment floor mat.

Tire tread depth

As required by law, the tread depth of the collapsible tire is the same as that of the original equipment tire. Replace a worn collapsible spare tire in time.

If air compressor does not work

-Check if tobacco or any other foreign matter is lodged in the cigarette lighter socket. Remove carefully with a wooden pick. Do not use metal objects to prevent short circuit.
 -Check if fuse is blown. Replace with new fuse of equivalent amperage.

Maintenance of air compressor

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The air compressor is maintenance-free. Do not apply oil or any other lubricant.

The collapsible spare tire cannot be repaired or mounted with standard workshop equipment. Repair and remounting must only be done by the tire manufacturer.





The wheels of your Porsche are guarded against theft by means of a wheel nut lock, consisting of a wheel nut and a slip-on sleeve with lock.

The locking mechanism is identical for all four wheel nuts. When taking the vehicle to your Porsche dealer or to a workshop for wheel or tire service, remember to leave one key with the service attendant.

In case of loss, duplicate keys cannot be furnished by your authorized Porsche dealer. Do not leave these keys in the vehicle. Keep them in a safe place.

To unlock a wheel

- 1. Pull off the plastic cap with the hook from the tool kit.
- 2. Insert the key into the lock and turn until it engages in the recess.
- 3. Turn the key slightly and withdraw it together with the lock.

To lock a wheel

- 1. Remove key and press on plastic cap.
- 2. Fit wheel nut lock to the colored wheel bolt opposite the valve until it clicks into place.

Changing a Wheel

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Failure to follow these instructions may result in serious personal injuries to you or to bystanders.

- If you have a flat tire, move a safe distance off the road. Turn the emergency flasher on and use other warning devices to alert other motorists.
- Do not park your vehicle where it may contact dry grass, brush or other flammable material. The hot parts of the exhaust system could set such materials on fire, thereby causing both property damage and severe or fatal physical injury.
- Passengers must not remain in the vehicle when it is jacked up.
- Before you change a wheel, be sure the ground is level and firm. If necessary, use a board under the jack to ensure that the jack does not sink into the ground.
- Set the parking brake and block the wheels opposite the flat tire on the other side of the vehicle.
- The jack is only to be used for changing a wheel. Do not use it as a support to work under the car.
- Never jack the car up by the body or the bumpers.

Sequence of operation

- 1. Loosen the wheel nuts about one turn. Do not yet remove the nuts.
- Insert the jack in the jacking point and raise the car until the wheel being changed is completely off the ground.

Do not raise the vehicle until you are sure the jack is securely engaged.

- 3. Fully unscrew all wheel nuts and install spare wheel. Make sure that the colored wheel bolt is opposite to the valve. Screw the locking wheel nut onto the colored wheel bolt.
- 4. When the spare wheel is in position, reinstall the nuts and handtighten them crosswise. Be sure the wheel nuts are inserted with the beveled edge toward the wheel. When tightened alternately, the nuts will center the wheel correctly.
- 5. Attach hose of the compressor to tire valve, insert plug of electric cord into cigarette lighter socket. After a few minutes the required tire pressure (36 psi or 2.5 bar) will be reached. Check pressure with the pressure gauge.
- 6. To lower the car, turn the jack handle counterclockwise till tire touches ground.
- 7. Fully lower the vehicle and remove jack.

8. Firmly tighten the wheel nuts again in a crosswise pattern.

Correct tightness of the wheel nuts is important. Correctly tightened nuts should have a torque of 94 ftlb.(130 Nm). This torque can be obtained with the wheel nut wrench by any person of average strength. If in doubt about the correct tightness of the wheel nuts, have it checked with a torque wrench by your authorized Porsche dealer or at a service station.



front

Lifting the car

Jacking points for car jack (A) and platform lift (B)

The **front** jacking points are located at the front on the side of the floor pan, under the side member and the wheel well.

The **rear** jacking points are located at the rear on the side of the floor pan under the side member. When working, be careful not to damage any sensitive components in the vicinity of the jacking points.

WARNING

- Follow all warnings and instructions found in this manual for changing a tire
- The car jack must never be used as a support to work underneath the vehicle. If the jack is accidentally dislodged, you or bystanders could be seriously injured. When working under the vehicle always use safety stands specifically designed for this purpose.
- Jacking at any other place may damage the vehicle or may result in personal unjuries.

Platform lift (B)

Before driving onto a platform lift, make certain that there is sufficient clearance between the vehicle and the lift. **The vehicle must be lifted only at the indicated jacking points**.



Garage lift (B)

A garage lift must also be used only at the jacking points illustrated for the platform lift.

The car must not, under any circumstance, be jacked up by the engine, transmission or front/rear axles. This can cause serious damage to the engine on the vehicle.



Luggage compartment

Fuses and relays

Each individual circuit is protected by safety fuses to prevent short circuits and overloads in the electrical wiring and components.

One fuse box is located on the right side of the luggage compartment and one on the left side of the engine compartment, and they have a black plastic cover.

A diagram of fuse and relays assignments is located on the inside of the compartment lid.



Engine compartment

Replacing fuses

Switch off the component in question.

Open the snap catches and remove the plastic cover.

A melted metal strip indicates a blown fuse.

To determine whether a fuse is operating properly, remove the fuse using the plastic gripper provided in the fuse box (A). Insert the fuse into the test socket on top of the relay (arrow). If the fuse is intact, the green indicator light will come on. If the indicator does not light, the fuse is defective and must be replaced

Plug-in relays for various electrical switching functions are located in the central electrical unit.

Defective relays should be checked and replaced by an authorized Porsche dealer.

Note

If a fuse that has just been replaced burns out again shortly afterwards, the electrical system must be checked immediately by an authorized Porsche dealer, so that the short-circuit can be located and corrected.

Never try to "repair" fuses: you may cause serious damage to other parts of the electrical system.

The battery must be disconnected before starting any work on the electrical system due to the danger of short circuits.

Replacement fuses may be stored in sockets in the plastic cover.

If you need a circuit diagram, your authorized Porsche dealer will be glad to assist you.

However, in order to avoid damage to the electrical installation or electronical systems we recommend having all work, including the installation of electrical accessories, done by your authorized Porsche dealer.

-





Removing Battery

Keep vent caps on to avoid spillage.

- First disconnect negative (-) ground cable.
- Then disconnect positive (+) cable.
- · Pull off the central vent hose.
- Use the special wrench in the tool kit to loosen the mounting bracket.

To reinstall battery, reverse the above procedure. Be sure to reconnect the positive (+) cable first. Then reconnect the negative (-) cable and then attach the central vent hose.

Battery - 12 V

The battery is located on the left side in the luggage compartment under the floor mat. A replacement battery should always have the same rating as the original equipment battery. Specifications are printed on the battery housing.

Before work is done on the electrical system, the battery must be disconnected to prevent short circuiting. Disconnect the negative ground strap first, then the positive cable. When reconnecting the battery, connect the positive cable first and then the ground (negative) strap.

This precaution must also be taken before charging with a rapid charger, as the alternator may otherwise be damaged.

Disconnecting the battery when the engine is running will damage the alternator. This also applies to cars equipped with a battery main switch.

Never drive the car with a disconnected battery as this will damage the alternator.

Carrera 2/4:

Disconnecting the battery will erase short term memory stored in the electronic engine control unit. Once the battery has been reconnected, the engine must run for about 10 minutes while the control unit re-acquires this information. During this period, the idle speed may be high or variable. If engine operation does not return to normal, your authorized Porsche dealer can perform a "system adjustment" on your car.

WARNING

- Do not lay tools or other metal objects on the battery as they could cause a short circuit across the battery terminals, damaging the electrical system
- Do not expose the battery to an open flame or electric spark. Hydrogen gas generated by the battery is explosive. Serious personal injury can result.
- Do not let battery acid come in contact with skin, eyes, fabric or painted surfaces.
- If you get electrolyte, which is an acid, in your eyes or on skin, immediately rinse with cold water several minutes and call a doctor.
- Spilled electrolyte must be rinsed off at once with a solution of water and baking soda to neutralize the acid and prevent damage to fabric and metal.

Checking the electrolyte fluid level

The electrolyte fluid level in your battery can be checked by unscrewing and opening the filler and vent caps of **each** cell. The fluid level should meet the indicator mark in each cell. If necessary, top up with distilled water.

How often water must be added depends on operating conditions and on the time of year. Generally, the electrolyte level must be checked more often in summer than in the winter, and more often when driving long distances.

Only top up to mark, otherwise the electrolyte will overflow when the battery is being charged and cause damage.

Car battery

- · Battery should be securely mounted.
- Terminals and connections should be kept clean and properly tightened. Corrosion can be prevented by coating terminals and connections with petroleum jelly or silicone spray.
- Vent caps must be securely tightened to prevent spillage.

Winter operation

During the winter months, battery capacity tends to decrease as temperatures drop. Additionally, more power is consumed while starting, and the headlights, heater, rear win-

dow defogger, etc., are used more frequently. Curtail unnecessary power consumption, particularly in city traffic or when travelling short distances only. Let your Porsche dealer test the battery's capacity before winter sets in. A well charged battery will not only prevent starting problems but will also live longer.

Battery charging

Automotive batteries loose their efficiency when not in use. The charge available in your battery can be measured with a hydrometer. We recommend that battery voltage be tested by your Porsche dealer who has the appropriate equipment. If the car is not driven for prolonged periods, the battery must be charged at least every 6 weeks. A discharged battery allows rapid formation of sulfates, leading to premature deterioration of the plates.

WARNING

- Charge battery in a well ventilated area. Keep away from open flame or electrical spark. Do not smoke. Hydrogen gas generated by the battery is explosive.
- Electrolyte fluid that may spill during charging should be washed off with a solution of warm water and baking soda to neutralize the acid.

- If you get electrolyte in your eyes or on your skin, immediately rinse with cold water for several minutes and call a doctor.
- Never charge a frozen battery. It may explode because of gas trapped in the ice. Allow a frozen battery to thaw out first.
- Never use a fast charger as a booster to start the engine. This may seriously damage the vehicle's electrical system and the charger.
- Fast charging a battery is dangerous and should only be attempted by a competent mechanic with the proper equipment.

Slow battery charging

WARNING

Heed all warnings and follow instructions that come with your battery charger.

- Disconnect battery cables and the central vent hose and remove the battery. All vent caps should be open. If fluid level is low, it should be topped up to the full mark in each cell.
- Connect charger cables.
 Charger cables must be connected POSITIVE (+) to POSITIVE (+) and NEGA-TIVE (--) to NEGATIVE (--).

- -1 1 ---P P P P 3 --2 2 3 ------P
- Do not connect or disconnect charger cables while charger is operating.
- Switch on charger.
- Normally, a battery should be charged at no more than 10 percent of its rated capacity. Rated capacity of the battery in your vehicle is listed on the battery housing.
- After charging, turn off charger and disconnect charger cables. When the electrolyte fluid has stopped "bubbling" in the cells, close the vent caps.
- Tighten the vent caps and reinstall battery.

Emergency Starting with Jumper Cables

WARNING

- Improper use of booster battery to start a vehicle may cause an explosion.
- Lead-acid batteries generate explosive gases. Keep sparks, flames and lighted cigarettes away from batteries.
- Do not charge a frozen battery, thaw it out first. Gas trapped in the ice may cause an explosion.
- No attempt should be made to jump start any vehicle with a low electrolyte level in the battery. Explosive gases may escape, resulting in an explosion.
- Check electrolyte level of each cell. If necessary, fill with distilled water to just above plates.
- Make sure the voltage of both batteries is the same.
- The capacity (Ah) of the booster battery should not be lower than that of the discharged battery.
- Vehicle with discharged battery: turn off lights and accessories, remove key, move lever to Neutral and set parking brake.

- Vehicle with booster battery should not be running. Disconnect ground cable.
- Remove vent caps from booster battery and discharged battery. Preferably lay a cloth over open vents to reduce explosion hazard.

How to use jumper cables

WARNING

- To avoid serious personal injury and damage to the vehicle, heed all warnings and instructions of the jumper cable manufacturer.
- The jumper cables must be long enough so that neither vehicles nor cables touch another.
- Insert a dry cloth between the positive clamp and the body of your car to prevent a short circuit.

Improper hook-up of jumper cables can ruin the alternator.

Always connect POSITIVE (+) to POSI-TIVE (+), and NEGATIVE (---) to a bare metal part.

1. Connect clamp of plus-cable to postitive (+) terminal of discharged battery (1).

- 2. Connect clamp on opposite end of cable to positive (+) terminal of booster battery (2).
- 3. Connect clamp of minus-cable to negative (-) terminal of booster battery (3).
- 4. Connect clamp on opposite end of cable to a bare metal part (4) of car with discharged battery. Connect clamp as far away from battery as possible.
- 5. Start engine in the usual manner. If engine fails to start, do not continue to crank but contact nearest workshop.
- With engine running, remove jumper cables from both cars in exact reverse order: Step 4 through 1.
- 7. Reconnect ground cable of booster battery.







A - Discharged battery B - Booster battery

Do not try to start car by pushing or towing. Damage to the catalytic converter, the transmission, and/or other components of the car may result.

Replacing Bulbs

To avoid short circuits, turn off the respective electrical components when changing light bulbs.

Keep bulbs free of grease and dirt. Hold them only with a clean cloth or soft paper.

Do not use chemical cleaning agents on the plastic lenses. Plastic lenses should only be cleaned with water or a mild soap/water solution.

We recommend you have an assortment of spare bulbs in the car.

When travelling abroad don't forget that some countries require spare bulbs as part of the safety equipment.



Headlight

Changing bulb

- 1. Remove screw (A) from base of trim ring and lift off trim ring.
- 2. Remove the 4 screws from the headlight unit (arrowed) and withdraw headlight.
- Disconnect plug from bulb, turn retaining nut (B) counter clockwise through approx. 90° and remove defective bulb.
- Insert new bulb so that it engages the 3 lugs in the reflector. Turn retaining nut (B) clockwise through 90° to limit stop.



- Reconnect plug, reinsert headlight unit and tighten the 4 retaining screws.
- 6. Check headlight operation and setting.
- 7. Place trim ring in position and tighten screw.

Adjusting headlights

For access to the headlight adjustment screws remove the two rubber plugs from the headlight trim ring.

Headlight adjustment should be done with a headlight aiming device under the following conditions:

At curb weight of car (i.e. car ready for use and with full fuel tank).



Driver's seat should be occupied by a person or a weight of approx. 165 lbs. (75 kg).

Tire pressure must be correct.

Roll car forward a few feet so that the suspension seeks its normal position.

Headlight adjustment screws

Screw "a" (lateral adjustment) right turn = beam moves right left turn = beam moves left

Screw "b" (vertical adjustment) right turn = beam moves up left turn = beam moves down



Front Side Marker Light

- 1. Remove screw and take off lens.
- 2. Remove defective bulb and replace.
- 3. Reinstall lens and tight screw.
- 4. Check light.



Front Turn Signal

- 1. Remove nuts and screw on lens panels 1 and 2, and remove both covers.
- 2. Remove screws on indicator housing and pull housing forward and out.
- 3. Twist bulb socket to the left and pull out. Replace defective bulb (bayonet mount).
- 4. Insert bulb socket and twist clockwise.
- 5. Insert turn signal housing and fasten with Phillips screws (be sure the screws seat properly).
- 6. Install lens panels 1 and 2 and fasten.
- 7. Check that turn signal operates.



Rear Turn Signal, Stop Lights, Rear Parking Light, Rear Side Marker Light

- 1. Unscrew screw in lens, and swing lens out.
- Twist holder with defective bulb counter clockwise and remove bulb; replace defective bulb (bayonet mount).
- 3. Insert bulb holder and twist clockwise.
- 4. Swing lens back into place and tighten screw (be sure the screw seats properly).
- 5. Check that bulb operates.



Fog Lights

- 1. Unscrew and remove left and right lens panels.
- 2. Unscrew both Phillips screws on lens, and remove lens.
- Disconnect cable plug, press down on retainer clamp and slide sideways.
- Remove defective bulb and replace with a new one. The guide pin must fit into the recess in the reflector.
- 5. Install and fasten lens and lens panels. Check that fog light operates.



Back-up Lights

- Unscrew the 3 Phillips screws on the panel and remove the panel.
- 2. Twist holder containing defective bulb counter clockwise and pull out.
- 3. Replace defective bulb (bayonet mount).
- 4. Insert bulb holder and twist clockwise.
- 5. Install panel (make sure that it snaps into the three lugs at the bottom) and fasten with the 3 Phillips screws.
- 6. Check that bulb operates.






License Plate Light

-3

2

1

- 1. Unscrew both screws and remove the cover.
- 2. Remove defective bulb from between contact springs and insert a new bulb.
- Install cover, making sure that the rubber gasket is properly seated. Tighten screws and check that light operates.

Luggage Compartment Light

- 1. Unscrew both screws and remove the entire light. Pull bulb holder out of cover.
- 2. Press defective bulb gently into its holder, twist and remove. Insert new bulb.
- 3. Insert bulb holder into guide slots in the cover and press in.
- 4. When reinstalling the light, make sure the gasket is properly seated. Tighten screws and check that light operates.

Interior Lights

The following description applies to both the glove compartment light and the interior lights:

- Insert a screwdriver under the edge of the light and carefully pry it out of the panel cut-out.
- 2. Remove defective bulb from between contact springs and insert a new bulb.
- 3. Insert light in the cut-out and press in, first at one end and then at the other. Check that light operates.

Vehicle Identification, Technical Data



1 Paint-data plate

- 2 Vehicle identification label
- 3 Vehicle identification number
- 4 Safety compliance sticker 5 Engine number

Vehicle Identification

When ordering spare parts or submitting inquiries, always quote the vehicle identification and engine number to ensure correct and prompt service.





Radio number

The radio number is printed on two labels, one on the card supplied with the keys and the second in the car, fixed above the ashtray slot.

Vehicle identification number

In accordance with Federal Safety Regulations, the vehicle identification number of your car is located on the left* windshield pillar and can be seen from the outside.

Engine number

The engine number is stamped on the right side of the crankcase next to the fan housing.

* Throughout this booklet and other Porsche publications applicable to USA vehicles, left is designated as the driver's side of the vehicle, and right as the passenger's side of the vehicle.





The paint data plate is located on the lefthand side of the luggage compartment beneath the mat.

The paint data plate of custom-painted vehicles is stored in the glove compartment.

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. This sticker is located on the left doorjamb.

The sticker also shows the month and year of production and the vehicle identification number of your car (perforations) as well as the Gross Vehicle Weight Rating and the Gross Axle Weight Rating.

Vehicle identification label

The vehicle identification label is located below the locking mechanism of the front hood.

This label contains the following information:

- 1. Vehicle Identification Number
- 2. Vehicle Code
- 3. Engine and Transmission Code
- 4. Paint and Interior Code
- 5. Option Codes

A duplicate of this label is in your Maintenance Booklet.

Technical Data

Engine

Number of cylinders Bore Stroke Cubic capacity Compression ratio Net-horsepower, SAE J 1349 at crankshaft speed Net-torque, SAE J 1349 at crankshaft speed Maximum rpm Spark plugs Spark-plug gap Batterv Alternator Ignition system Valve clearance engine cold V-bels - Fan - Altenator/fan - Alternator/Tiptronic - Altenator/AC AC

Carrera 2/4

12.5 x 1080 La

6

3 94 in /100 mm 3.01 in./76.4 mm 219.7 cu. in./3600 cm³ 11.3:1247 hp/184 kW 6100 rpm 228 ft. lb./310 Nm 4800 rpm 6700 rpm Bosch FR 5 DTC 0.026 in. \pm 0.004 in./0.7 \pm 0.1 mm 12 V. 72 Ah Three-phase, 1610/115 A Electronic, dual ignition, knock control Intake and exhaust valve 0.10 mm 9.5 x 776 La 9.5 x 760 La

Turbo

6

3.82 in./97 mm 2.93 in./74.4 mm 201.3 cu. in./3299 cm³ 7.0:1 315 hp/235 kW 5750 rpm 332 ft. lb./450 Nm 4500 rpm 6800 ± 100 rpm Bosch WR 6 DPO 0.024 in. ± 0.004 in./0.6 ± 0.1 mm 12 V. 72 Ah Three-phase, 1610/115 A Electronic map-controlled Intake and exhaust valve 0.10 mm 9.5 x 776 La

Polyrib 1411 K6

Only use Original Porsche-approved belts.

Power Train

Carrera 4

Rear engine, rear-mounted transmission, connected to rigid drive unit between rear-wheel and front-wheel differentials by connector tube.

Torsionally elastic drive shaft mounted in transaxle tube between rear and front drives. Constant torque distribution by planetary gear in rear axle drive: 31 % to front wheels

69 % to rear wheels

Longitudinal clutch interlock is controlled on the basis of axle slippage. The lamellar clutches in the longitudinal and transverse interlocks can be engaged using a full-interlock button.

but only at speeds below 19 mph/30 km/hour.

Carrera 2

Rear-mounted engine and gearbox bolted together to form single drive unit. Drive to rear wheels via dual articulated shafts.

Turbo

Rear-mounted engine and gearbox bolted together to form single drive unit. Drive to rear whels via dual articulated shafts. Limited slip differential controlled by drive torque.

Trasmission Gear ratios:	Carrera 4	Carrera 2	Tiptronic	Turbo
1st gear	3.50 : 1	3.50 : 1	2.48 : 1	3.15 : 1
2nd gear	2.12 : 1	2.06:1	1.48:1	1.79:1
3rd gear	1.44:1	1.41:1	1.00:1	1.27:1
4th gear	1.09 : 1	1.09:1	0.73:1	0.97:1
5th gear	0.87 : 1	0.87:1		0.76:1
Reverse	2.86 : 1	2.86:1	2.09:1	2.86:1
Final drive ratio:	3.44 : 1	3.33:1	3.56 : 1	3.44 : 1

Road Performance

	Carrera 4	Carrera 2	Tiptronic	Turbo
1st gear	86 %	70.0 % (70.0 %)*	67.7 % (66.0 %)*	74 %
2nd gear	41 %	46.1 % (45.0 %)*	34.7 % (33.0 %)*	55 %
3rd gear	24 %	27.1 % (26.5 %)*	20.0 % (19.0 %)*	34 %
4th gear	15 %	17.6 % (17.0 %)*	11.8 % (11.0 %)*	22 %
5th gear	11 %	12.2 % (12.0 %)*		15 %

* (Turbo look)

Climbing Performance

Maximum speed in mph/km/h	Carrera 4* 162/260	Carrera 2* 162/260 (158/255)	Tiptronic* 159/256 (156/251)	Turbo** 168/270
Acceleration 0 – 60 mph	5.5 seconds	5.4 seconds	6.4 seconds	4.8 seconds
1/4 mile with dead start	14.1 seconds	13.9 seconds	14.4 seconds	13.4 seconds

(Turbo look)

* At DIN empty weight and half load, without performance-inhibiting extra equipment (air conditioning, special tyres, etc.)

** At DIN empty weight plus driver, without performance-inhibiting extra equipment

Brake System

Hydraulic dual circuit brake system with front and rear brake circuits, ABS assistance Front and rear: Disc brakes Brake power assist Parking brake acting on rear wheels

Tires, **Rims**

		Tires Carrera 2, Carrera4	Rims	Rims offset	Tire pressure
Summer tires	front	205/55 ZR 16	6J x 16 H2	52 mm	36 psi (2.5 bar)
	rear*	225/50 ZR 16	8J x 16 H2	52 mm	44 psi (3.0 bar)
Alternatively	front	205/50 ZR 17	7J x 17 AH	55 mm	36 psi (2.5 bar)
	rear	255/40 ZR 17	8J x 17 AH	52 mm	36 psi (2.5 bar)
		Turbo, Turbo look			Contraction A tool services P
	front	205/50 ZR 17	7J x 17 AH	55 mm	36 psi (2.5 bar)
	rear	255/40 ZR 17	9J x 17 AH	55 mm	36 psi (2.5 bar)
		Carrera 2, Carrera 4			
Snow tires	front	205/55 R 16 89 Q M+S	6J x 16 H2	52 mm	36 psi (2.5 bar)
	rear*	225/50 R 16 92 Q M+S	8J x 16 H2	52 mm	44 psi (3.0 bar)
Alternatively	front	205/55 R 16 89 Q M+S	6J x 16 H2	52 mm	36 psi (2.5 bar)
	rear	205/55 R 16 89 Q M+S	8J x 16 H2	52 mm	44 psi (3.0 bar)
	front	205/50 R 17 89 Q M+S	7J x 17 AH	55 mm	36 psi (2.5 bar)
	rear*	225/45 R 17 90 Q M+S	8J x 17 AH	52 mm	36 psi (2.5 bar)
		Turbo/Turbo look			
	front	205/50 R 17 89 Q M+s	7J x 17 AH	55 mm	36 psi (2.5 bar)
	rear*	225/45 R 17 90 Q M+s	8J x 17 AH	52 mm	44 psi (3.0 bar)
					Turbo look 36 psi (2.5 bar)

The load capacity coefficient (e.g. 90) and maximum speed code letter (e. g. Q) are minimum requirements. When fitting new tires or changing tires, please observe notes given in the section headed Tires/Wheels.

Snow chains	Chains can be mounted only on the rear wheels; maximum speed 30/mph/50 km/h. Use only Porsche-authorized snow chains. Snow chain clearance can be guaranteed only on the tire + rim combination marked*.
Spare wheel	165/70 – 16 92 P collapsible tire on 5 1/2 J x 16 rim Tire pressure, for use as front or rear wheel, is always 36psi (2.5 bar overpressure). Maximum speed 80 km/h.

	Carrera 4	Carrera 2	Carrera 2 Tiptronic		Carrera2 Tiptronic Turbo look	Turbo
Curb weight	. 3252/1475	. 3031/1375	.3097/1405	. 3164/1425	. 3230/1465	3274/1485
Total permissible weight	. 3913/1775	. 3693/1675	. 3759/1705	. 3560/1615	. 3627/1645	3935/1785
Permissible axle load, front 2	1631/ 740	. 1499/ 680	.1499/ 680	. 1543/ 700	. 1543/ 700	1631/ 740
Permissible axle load, rear 2)	. 2315/1050	. 2315/1050	.2315/1050	.2161/ 980	. 2161/ 980	2513/1140
Permissible rack load 4)	. 165/ 75	. 165/ 75	. 165/ 75			165/ 75

6

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F

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The vehicle capacity weight (max. load) the Gross Vehicle Weight Rating (GVWR) and the Gross Axle Weight Ratings (GAWR) for front and rear, are listed on the sticker on doorjamb on the driver's side. The gross vehicle weight rating includes the weight of the basic vehicle plus full fuel tank, oil and coolant, plus max. load which combines passenger (150 pounds/68 kg per designated seating position) and luggage weight. Luggage weight is not increased by the use of roof, ski or luggage racks, unless passenger capacity is reduced accordingly.

²⁾Do not exceed total permissible weight.

⁴⁾Only when original Porsche basic luggage rack is used.

Dimensions

(at maximum gross weight)

Carrera 2/4	Turbo/Turbo look	
Length 168,3 in./4275 mm	168,3 in./4275 mm	
Width 65,0 in./1652 mm	69,9 in./1775 mm	
Height (empty weight) 51,6 in./1310 mm	51.6 in./1310 mm	
Wheel base	89,4 in./2272 mm	
Ground clearance* 4,5 in./ 115 mm	4,5 in./ 115 mm	
Front track 6 J x 16 rims 54,3 in./1380 mm (7 J x 17: 54,1 in/1374 mm)	7 J x 17 rims 56,5 in./1434 mm	
Rear track 8 J x 16 rims 54,1 in./1374 mm (8 J x 17: 53,9 in/1368 mm	9 J x 17 rims 58,8 in./1493 mm	
	8 J x 17 rims 59,0 in./1499 mm	
Turning circle 11,95 m		
Overhang angle front* 12,5°; Carrera 2 12,5°	front 12,5°	
rear* 13,5°; Carrera 2 13,5°	rear 14,0°	
Ramp angle	15,0°	

Capacities			
Engine	Carrera 2/4:	Total oil capacity approx. 12.5 U.S. qts./11.5 liters Oil change:Requires about 9.5 U.S. qts./9 liters.	
	Turbo:	Total oil capacity approx. 13,74 U.S.qts/13 liters Oil change: Requires about 10,6 U.S.qts./10 liters Reference indication is the level on the oil dipstick, measured with the engine idling at normal operating temperature. Only use oils tested and recommended by Porsche. Your authorized Porsche dealer will gladly advise you. See section special "Engine Oils".	
Transmission and differential Carrera		Front axle: approx 1,27 US.A. qts/1,2 liters; Rear axle: approx. 4,02 U.S. qts./3,8 liters SAE 75 W 90 gear oil, API classification GL 5 (or Mil-L 2105 B)	
	Carrera 2:	approx. 3.8 U.S. qts./3.6 liters, Tiptronic approx. 1.9 U.S. qts/0.9 liter SAE 75 W 90 gear oil, API classification GL 5 (or Mil-L 2105 B)	
	Turbo:	approx 3,9 U.S. qts./3,7 liters SAE 75 W 90 gear oil, API classification GL 5 (or Mil-L2105 B)	
Automatic transmission with	converter	approx. 2,38 U.S. gals./9 liters ATF-Dexron IID	
Fuel tank		20.3 U.S. gals./77 liters, including approx. 2.6 U.S. gals./10 liters reserve. (Turbo approx.	
		3.9.U.S. gals./15 liters). Premium unleaded Fuel only: 95 RON (90 CLC or AKI ($\frac{R+M}{2}$) rating on fuel	
Brake fluid reservoir	Carrera 4/Turbo:	pumps in USA approx. 1.59 U.S. pint/0.75 liter use only brake fluid meeting SAE J 1703 DOT 4 and conforming to Motor Vehicle Safety Standard No. 116.	
	Carrera 2:	approx. 0.71 U.S. pint/0.34 liter. use only brake fluid meeting SAE J 1703 DOT 4 and conforming to Motor Vehicle Safety Standard No. 116	
Windshield washer		approx. 6.62 U.S. qts./7.0 liters	
Power steering		approx. 1.06 U.S. qts./1.0 liter ATF Dexron	
Refrigerant for air conditioning		approx. 33 oz./930 g. Refrigerant R 12 (CCL ₂ F ₂)	

Full-power Curves

Carrera 2/4





E = E E E E E 6 --1 6 -E 0 -F E 6 1



Acceleration Curve

Carrera 2/4 5.speed-transmission

240-140-5 220 200-120-4 - 180-100 - 160-- 140-3 80-- 120-Ε 8 60 - 100 -80-40-60udu mile 40-10 Vehicle at curb weight according to DIN and half-load capacity 20-1/4 b 20 km/h hdm Time (s) 20 25 30 35 5 10 15 40 Ċ.

Acceleration Curve



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Turbo

Transmission Diagram

5-speed-transmission



e

Carrera 4



Transmission Diagram Carrera 2 5-speed-transmission ¹/min 280 Km/h 180 mph





Carrera 2

Acceleration Curve

Turbo



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911 RS America

Supplement to Owner's Manual

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Only valid in conjunction with the Owner's Manual 911 Carrera 2/4; 911 Turbo

Because our vehicles undergo continuous development, equipment and specification may not be as illustrated or described in this Owner's Manual.

Because of different legal requirements in the individual countries, the equipment of your vehicle may vary slightly from that described in this Owner's Manual. ar customer,

have decided in favor of a **PORSCHE 911 RS America**, which distinguishes itself from the standard rrera 2 by its more sportily tuned suspension and its lighter weight.

ight has been saved by simplification of the interior appointments, the omission of rear seats and a luction in the number of comfort and convenience-enhancing features. In addition, the **911 RS America** litted with a fixed rear spoiler.

s brochure describes the differences in standard equipment from that of the 911 Carrera 2, so as to ke the handling and care of your **911 RS America** easier.

wish you enjoyable motoring.

rs sincerely,

Ing. h.c. F. Porsche Aktiengesellschaft



Interior door opener

To open the door, pull the loop.

Door rear view mirror

To adjust the door mounted rear view mirror, press the mirror glass in the desired direction. The mirror is not heated, nor it is motorized.



Rear stowage compartments

To open the rear stowage compartments, turn the knob clockwise, shown by the arrow.

Special retaining hooks are fitted on the stowage compartments for securing items of luggage with belts.

Technical Data

Engine

Number of cylinders Bore Stroke Cubic capacity Compression ratio Net-horsepower, SAE J 1349 at crankshaft speed Net-torque, SAE J 1349 at crankshaft speed Maximum rpm Spark plugs Spark-plug gap Battery Alternator Ignition system Valve clearance engine cold Alternator/fan AC

Only use Original Porsche approved belts.

6

3.94 in./100 mm 3.01 in./76.4 mm 219.7 cu. in./3600 cm³ 11.3:1247 hp/184 kW 6100 rpm 228 ft.lb./310 Nm 4800 rpm 6700 rpm Bosch FR 5 DTC $0.026 \text{ in.} \pm 0.004 \text{ in.} / 0.7 \pm 0.1 \text{ mm}$ 12 V. 72 Ah Three-phase, 1610/115 A Electronic, dual ignition, knock control Intake and exhaust valve 0.10 mm 9.5 x 776 la 12.5 x 1080 La

Transmission

Gea	r ratios:	
1st	gear	3.50:1
2nd	gear	2.06:1
3rd	gear	1.41:1
4th	gear	1.09:1
5th	gear	0.87:1
Reve	erse	2.86:1
Fina	l drive ratio:	3.33:1

Road Performance

1st gear	70.0 %
2nd gear	46.1 %
3rd gear	27.1 %
4th gear	17.6 %
5th gear	12.2 %

Climbing Performance

Maximum speed in mph/km/h
Acceleration 0–60 mph
1/4 mile with dead start

162/260 5.4 seconds 13.9 seconds

At DIN empty weight and half load, without performance-inhibiting extra equipment (air conditioning, special tires, etc.)

Brake System

Hydraulic dual circuit brake system with front and rear brake circuits, ABS assistance Front and rear: Disc brakes Brake power assist Parking brake acting on rear wheels only.

Tires, Rims

		Tires	Rims	Rim offset	Tire pressure
Summer tires	front rear	205/50 ZR 17 255/40 ZR 17	7J x 17 AH 8J x 17 AH	55 mm 52 mm	36 psi (2.5 bar) 36 psi (2.5 bar)
Snow tires	front rear*	205/55 R 16 89 Q M+S 225/50 R 16 92 Q M+S	6J x 16 H2 8J x 16 H2	52 mm 52 mm	36 psi (2.5 bar) 44 psi (3.0 bar)
Alternatively	front rear front rear*	205/55 R 16 89 Q M+S 205/55 R 16 89 Q M+S 205/50 R 17 89 Q M+S 225/45 R 17 90 Q M+S	6J x 16 H2 8J x 16 H2 7J x 17 AH 8J x 17 AH	52 mm 52 mm 55 mm 52 mm	36 psi (2.5 bar) 44 psi (3.0 bar) 36 psi (2.5 bar) 36 psi (2.5 bar)

The load capacity coefficient (e.g. 90) and maximum speed code letter (e.g. Q) are minimum requirements. When fitting new tires or changing tires, please observe notes given in section headed Tires/Wheels in the 911 Carrera 2/4 Owner's Manual.

Snow chains	Chains can be mounted only on the rear wheels; maximum speed 30 mph/50 km/h. Use only Porsche-authorized snow chains. Snow chain clearance can be guaranteed only on the tire + rim combination marked*.
Spare wheel	 165/70 – 16 92 P collapsible tire on 5 1/2J x 16 rim. Tire pressure, for use as front or rear wheel, is always 36 psi (2.5 bar). Maximum speed 50 mph/80 km/h. "The wheel and tire combination is designed only for emergency operation of the vehicle and should be replaced as soon as possible."

Curb weight	2954/1340
Total permissible weight	3351/1520
Permissible axle load, front ²⁾	1433/ 650
Permissible axle load, rear ²⁾	1984/ 900
Permissible rack load 4)	165/ 75

The vehicle capacity weight (max. load) the Gross Vehicle Weight Rating (GVWR) and the Gross Axle Weight Ratings (GAWR) for front and rear, are listed on the sticker on doorjamb on the driver's side. The gross vehicle weight rating includes the weight of the basic vehicle plus full fuel tank, oil and coolant, plus max. load which combines passenger (150 pounds/68 kg per destignated seating position) and luggage weight. Luggage weight is not increased by the use of roof, ski or luggage racks, unless passenger capacity is ordered accordingly.

2) Do not exceed total permissible weight.4) Only when original Porsche basic luggage rack is used.

Dimensions

(at maximum gross weight)

Length Width Height (empty weight) Wheel base Ground clearance* Front track Rear track		168,3 in./4275 mm 65,0 in./1652 mm 51,6 in./1310 mm 89,4 in./2272 mm 4,5 in./ 115 mm 7J x 17 rims 54,1 in/1374 mm 8J x 17 rims 53,9 in/1368 mm	
Turning circle Overhang angle	front* rear*	39,18 ft/11,95 m 12,5° 13,5°	
Ramp angle		14,5°	

Capacities

Engine	Total oil capacity approx. 12.5 US. qts./11.5 liters Oil change: Requires about 9.5 US. qts./9 liters. Reference indication is the level on the oil dipstick, measured with the engine idling at normal operating temperature. Only use oils tested and recommended by Porsche. Your authorized Porsche dealer will gladly advice you. See section special "Engine Oils" in the 911 Carrera 2/4 Owner's Manual .
Transmission and differential	approx. 3.8 U.S. qts./3.6 liters, SAE 75 W 90 gear oil, API classsification GL 5 (or Mil-L 2105 B)
Fuel tank	20.3 U.S. gals./77 liters, including approx. 2.6 U.S. gals./10 liters reserve. Premium unleaded Fuel only: 95 RON (90 CLC or AKI ($\frac{R+M}{2}$) rating on fuel pumps in USA
Brake fluid reservoir	approx. 0.71 U.S. pint/0.34 liter. Use only brake fluid meeting SAE J 1703 DOT 4 and conforming to Motor Vehicle Safety Standard No. 116
Windshield washer	approx. 6.62 U.S. qts./7.0 liters