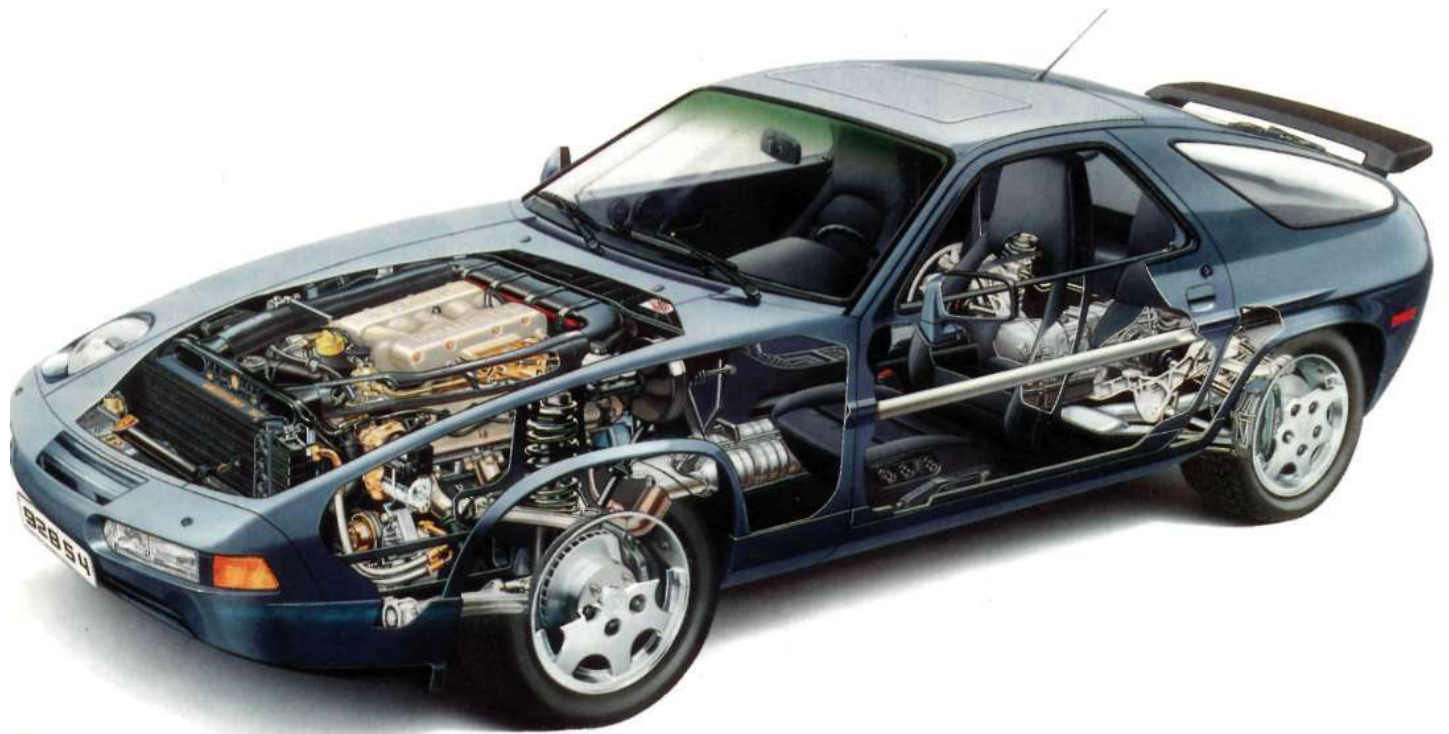


PORSCHE

Owner's Manual

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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 with your car's features and know how to operate your Porsche more safely. The better you know your Porsche, the more pleasure you will experience driving your new car.

A separate Warranty and Maintenance Booklet explains how you can

keep your Porsche in top driving condition by having it serviced regularly. It also 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 (PCNA).

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 PCNA.

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

Your car has thousands of parts and components which have been designed and manufactured in accordance with Porsche's high standards of engineering quality and safety. **Any alteration of the 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 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 propriétaires

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

Volkswagen Canada Inc.
Porsche Customer Assistance
Assistance à la Clientele Porsche
1940 Eglinton Ave. East
Scarborough
Ontario M1L2M2

Before Driving Off, Running In, Controls



Maintenance, Car Care



Practical Tips, Emergency Service



Vehicle Identification, Technical Data



Index



Pocket for Additional Information



Before Driving Off, Running In, Controls

Before going on a trip	8
In the driver's seat	9
Break-in hints.	10
Engine exhaust	10
Keys.	12-13
Theft protection.	14
Anti-theft alarm.	14
Doors.	14
Central door locking.	14-15
Interior lights.	16
Power windows.	17
Seats.	18-21
Mirrors.	22
Safety belts.	23-25
Child restraint anchorages.	25
Air bag system.	26-27
Brakes.	28-31
Limited slip differential.	32
Clutch.	33
Starting.	34-35
Controls, Instruments, Warning lights	36-48
Automatic climate control	49-52
Power sunroof.	54
Engine hood, hatchback	57-58
Transmission.	59-62

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 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 tires for damage and tire wear.
- See that wheel bolts are properly tightened and not loose or missing.
- Check engine oil level, add if necessary. Make it a habit to have engine oil checked with every fuel filling.
- Check coolant level to assure sufficient engine cooling.
- 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.

In the driver's seat...

- 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 and the information system display 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.
- 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 see the parking brake. Move the selector lever to "P" (Automatic transmission) or move the gearshift lever to reverse or first gear (Manual transmission). 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.

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 maximum engine speed of 5.000 rpm (revolutions per minute).

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

Do not let the engine labor, especially when driving uphill. Shift to the next proper 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 slightly higher than normal.

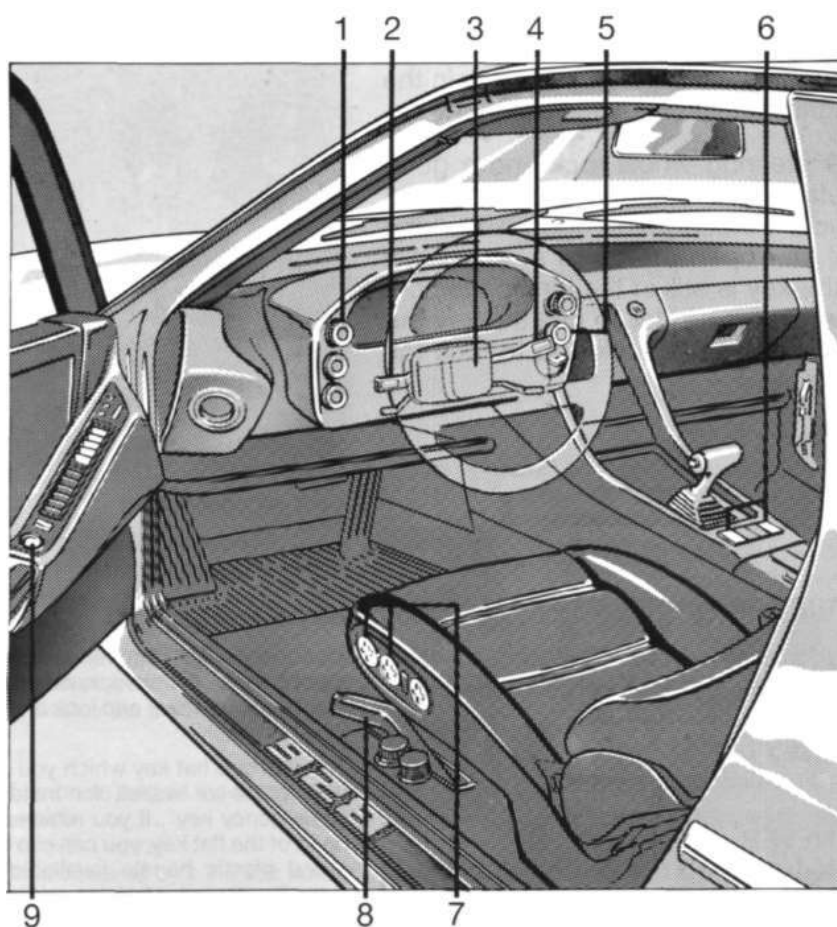
As always rate of oil consumption depends on the quality and viscosity of oil, the speed at which the engine is operated, the climate, road conditions as well as the amount of dilution and oxidation of the lubricant.

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.
- 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 but keep the hatchback closed. Have the cause immediately located and corrected.
- Because of inherent hazards, we do not recommend transporting objects larger than those fitting safely into the luggage compartment. Keep the hatchback closed while driving to prevent poisonous exhaust gas from being drawn into the vehicle.
- 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.

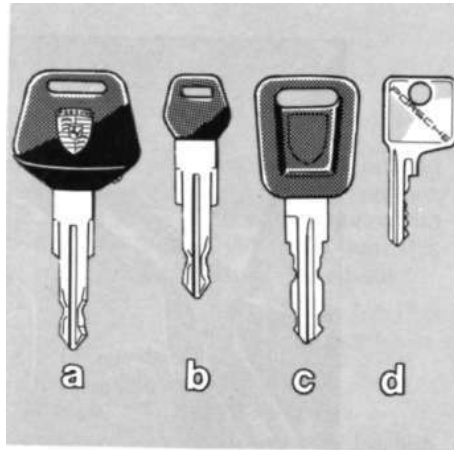
- 1 Light switch
- 2 Turn signal/headlight dimmer flasher/
parking light switch lever
- 3 Horn
- 4 Windshield wiper and windshield/
headlight washer switch lever
- 5 Emergency flasher switch
- 6 Switches for power windows
- 7 Controls for power seat
- 8 Parking brake lever
- 9 Side view mirror adjuster



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.



a Key with built-in flashlight
b Flat key
c Rear glove compartment key
d Key for lockable wheel nuts

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

Three keys are supplied with the vehicle. Each fits the ignition lock, door locks, hatchback lock, fuel filler cap lock and glove compartment lock.

There is one flat key which you can keep in your purse or wallet, for instance, as an "emergency key". If you remove the plastic head of the flat key, you can clip on an illuminated plastic handle (available from your Porsche dealer). Vehicles with a rear seat glove compartment receive two additional keys for the compartment lock.

Key "a" or "b" operate:

1. Door locks with central locking system
alarm system
power windows
power sunroof
interior lights
2. Ignition/starter switch with steering lock
3. Hatchback lock with alarm system
4. Fuel filler cap lock
5. Glove compartment lock

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.

Because of the symmetrical shape of the key shaft, there is no "wrong" way of inserting the key in the locks.

The new format of the keys makes unauthorized duplication of the keys virtually impossible. This means, however, that you yourself will not be able to get replacement

keys cut, unless ordered from the manufacturer.

For the lockable wheel nuts, three identical keys, are included. 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.

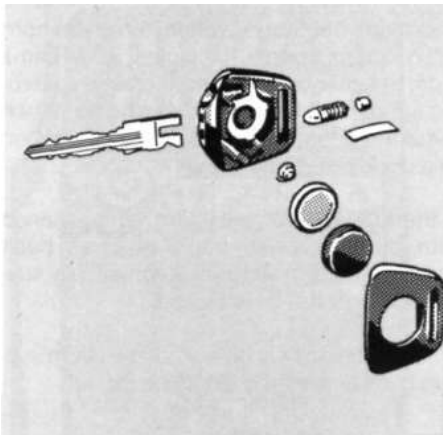
NOTE: It is a good idea to also keep a record of your key numbers in your wallet together with your license.

Key number

The key number of the ignition key is impressed on a plastic tag which comes with the keys. Detach this tag and keep it in a safe place.

For your protection against theft:

- Record the key numbers and keep them in a safe place, such as your wallet. Do not keep them in the vehicle.
- If you should lose a key, provide your Porsche dealer with the key number and the vehicle identification number to obtain a duplicate key.



Key light

Two of the 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 available battery (1.5 V) in the contact button.
3. Assemble key top as shown in the figure.

Theft protection

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

- Close windows and sunroof
- Remove ignition key
- Engage steering lock
- Lock the glove compartment
- Cover luggage
- Lock doors
- Lock petrol cap

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
- Radio
- Ignition

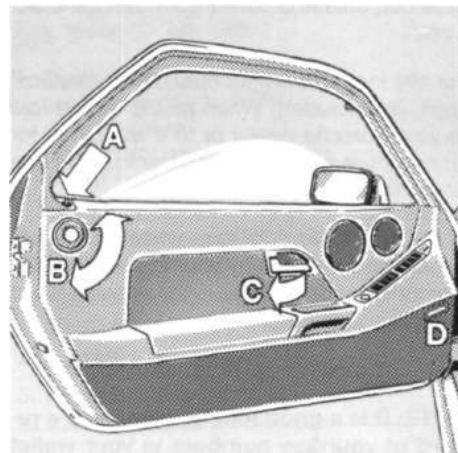
If an alarm contact is broken, the alarm horn will sound for approx. 4 minutes. At the same time, the interior lights and the hazard warning lights flash for approx. 4 minutes. When the alarm is triggered, the LEDs are switched to a double-flashing signal.

If the luggage-compartment lid is opened with the key when the alarm has been armed, the alarm status is automatically suspended until the lid is closed.

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 closing a door three times in rapid succession. The LEDs indicate this with a double-flashing signal.



Doors

To **open** doors from **outside**, pull the recessed door handle.

To **open** doors from **inside**, pull recessed handle "C" above armrest.

The armrests have a built-in storage compartment. To open, press knob in hand cut-out and tilt armrest outward. To close, tilt compartment toward door panel.

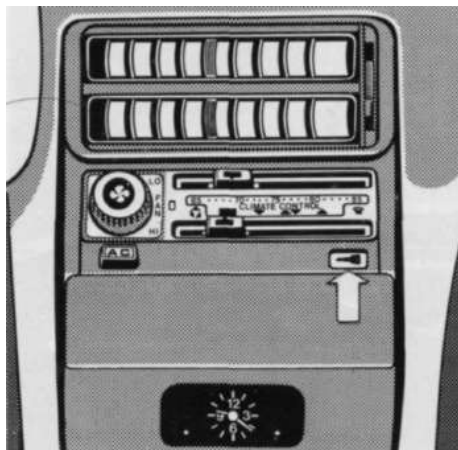
The courtesy light in the lower door panel "D" will come on when a door or the hatchback is opened. The light can also be turned on or off with the switch on the light housing.

Central door locking

With the central door locking system, both doors can be locked and unlocked electrically. The doors are locked when a key is turned in either door lock or when the key is turned further counterclockwise in the lock of the luggage-compartment lid.

When the doors are locked, the locking buttons (A) must be fully retracted.

The two doors can be locked individually from inside by turning button (B) or by pressing locking buttons (A). If one door is unlocked by turning button (B), the second door is automatically unlocked as well.



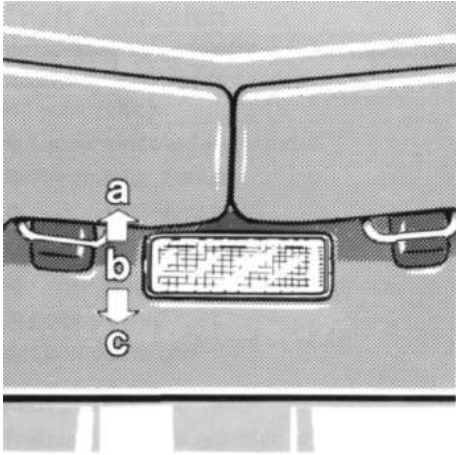
Central locking button

When the ignition has been switched on or when the ignition key is turned to position 1, both doors can be electrically locked or unlocked by pressing the central locking button in the center console. The lamp in the central locking button remains lit while the system is activated.

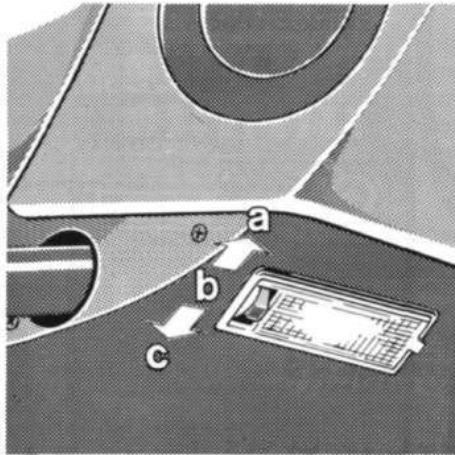
To prevent being accidentally locked out of the vehicle, the central locking system can only be actuated when the driver's door is closed (even if the passenger door is still open).

If the central locking system fails to work, open and close the two doors individually. The alarm system can be armed by closing a door three times in rapid succession.

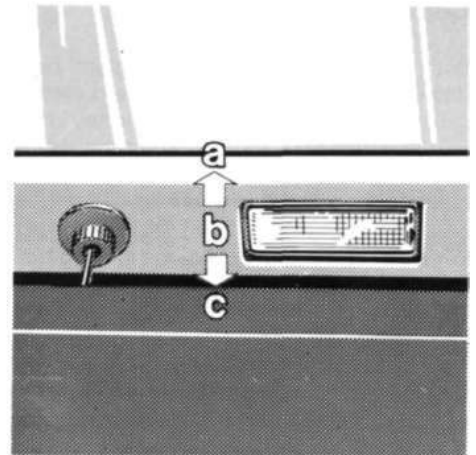
The central locking system can also be activated with the central locking button when the ignition key has been removed. To deactivate the system, switch on the ignition or turn button (B).



Interior light in headlining



Footwell light in lower part of door trim



Luggage compartment light in hatchback

Interior lights

The interior lights, which are independent from one another, come on, with the switch in the appropriate position, as soon as a door is unlocked or opened or the hatchback is opened.

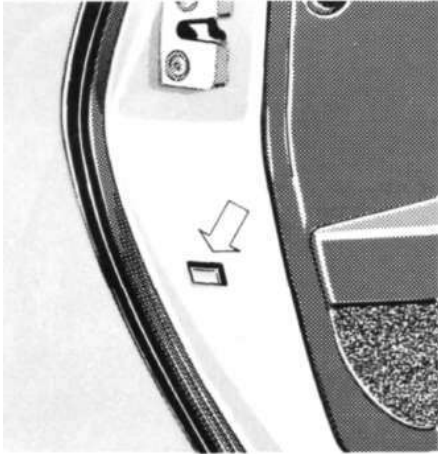
The interior lights go out after approx. 20 seconds after the doors are closed. The lights go out immediately if the ignition is switched on or the vehicle locked with the key.

The **interior lights** have the following switch positions:

- a - light comes on only when a door or the hatchback is opened
- b - light switched off permanently
- c - light switched on permanently

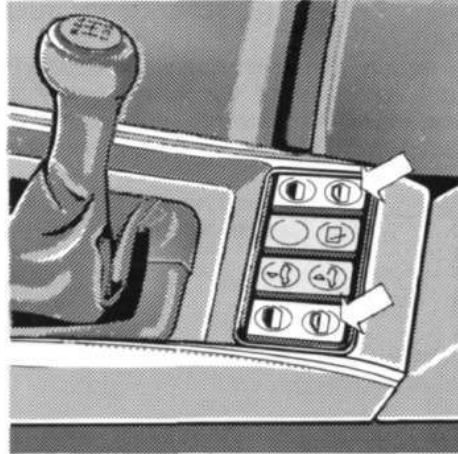
The interior light in the headlining and the luggage compartment light are switched on and off by tilting the lamp glass. The footwell lights are operated by the switch integrated in the light.

The light for the central fuse/relay board is switched on via the door contact switch.



Door warning lights

The red spot lights in the rear doorjamb will come on when a door or the hatchback is opened.



Power windows

To open or close, depress the rocker switches in the center console in front of the shift lever. The switches can only be actuated one at a time.

The power windows are operational when the ignition is turned on.

When the ignition is turned off or the ignition key removed, the power windows can be operated until one door is opened.

Opening windows

Tapping the switches moves the windows in stages to the desired position.

Pressing the switches for longer than 0.5 seconds automatically opens the windows fully. The movement of the windows can be stopped in any position by tapping the switch again.

Closing windows

To close the windows, the switch must be held down until the windows have reached the desired position.

With the ignition switched on, pressing the switch for longer than 0.5 seconds automatically closes the driver's door window fully. The movement of the window can be stopped in any position by tapping the switch again.

Door lock contact

If the key is held in the locking position when locking a door, the sunroof and the door windows will close in succession automatically.

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.

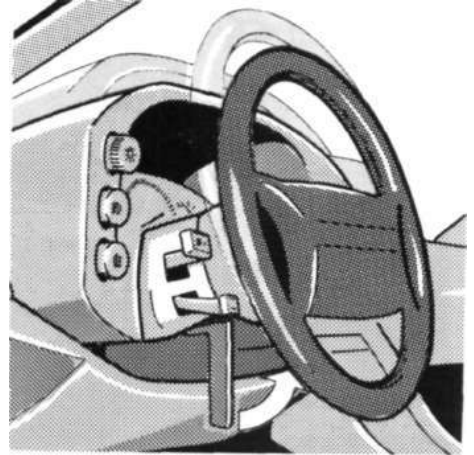
Remember, power is still supplied to the window switches until one door is opened.

Front seat adjustments

The correct seating position is all-important for safe and fatigue-free driving. In order to satisfy individual requirements, the seat has infinitely variable adjustment.

1. Operate longitudinal adjustment until your leg is fully stretched with the clutch pedal depressed while your foot is bent.
2. Adjust desired fore/aft height.
3. Clasp upper portion of steering wheel. Then adjust backrest inclination so that both shoulders remain in contact with the backrest even with your arms fully stretched.
4. If necessary, correct the longitudinal adjustment.

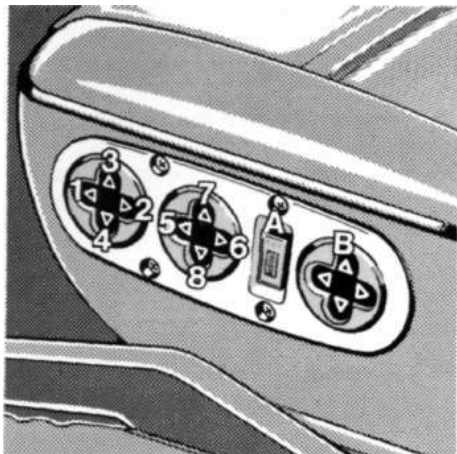
We recommend the following procedure for finding the correct position for the driver's seat:



Steering wheel adjustment

For maximum legroom and unobstructed view of the instruments, the height of the steering wheel, together with the instrument cluster unit, can be adjusted.

Release locking lever under instrument cluster for desired positioning (arrow), then lock securely.



- 1 ◀▶ 2 Longitudinal adjustment
- 3 ▲▼ 4 Height adjustment, front
- 5 ◀▶ 6 Backrest adjustment
- 7 ▲▼ 8 Height adjustment, rear
- A Seat heating system
- B Lumbar support

Front seats

Two multi-function switches control the electric motors for longitudinal adjustment, seat height and angle of backrest tilt.

Lumbar support (B)

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

- ◀▶ Lumbar support horizontal
- ▲▼ Lumbar support vertical



Seat heating system (A)

The heating system in the seat cushion and backrest is switched on and off by pressing the rocker switch.

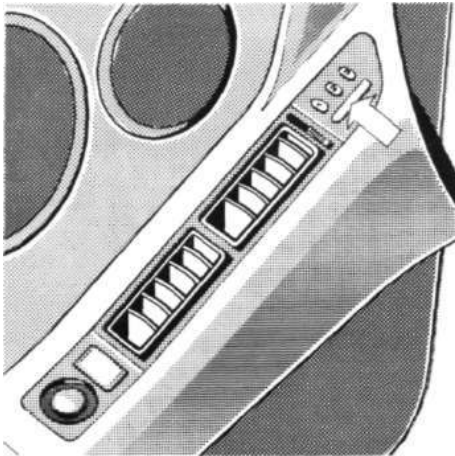
Press upper half of switch - heating on
Press lower half of switch - heating off

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

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

Manual operation

Should the electrical seat adjustment fail, you can use the hexagon socket-screw in the tool-kit for longitudinal seat adjustment by turning the servo-motor below the front of the seat.



Seat position memory

The seat position memory can store up to three different sitting positions. Each position stored in the memory comprises longitudinal adjustment, seat height, backrest angle, position and size of lumbar support and the position of the outside mirrors. The positions can be adjusted, stored or called up regardless of whether the engine is on or off.

Selecting a position

Adjust the seat and the two outside mirrors to the desired position by operating the switches for seat and mirror adjustment,

Storing a position

To store a position in the memory, press the memory button (arrowed) and the appropriate position button (button 1, 2 or 3). The memory button must be pressed before the position button.

Calling up a position

To set the seat to the position stored in the memory, the appropriate position button must be depressed until the seat reaches its final position. **The procedure is curtailed as soon as the button is released.** The buttons are illuminated for ease location.

Once the seat reaches its end position the mirrors are set automatically to the positions stored in the memory.

The seat switches always take priority over automatic adjustment. If a seat switch is operated, automatic adjustment is immediately interrupted.

Pilot lamp

A red pilot lamp is set in the memory button.

If adjustment is initiated, the pilot lamp lights up until the adjustment is completed. If the procedure is interrupted, the lamp goes out approx. 60 seconds after the ignition is switched off.

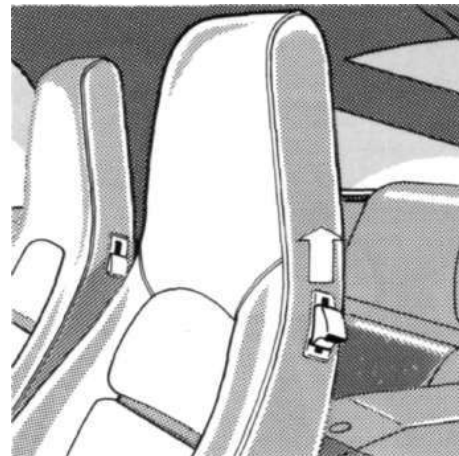


In order to **adjust the backrest**, pull the inside locking lever at the front of the seat upwards, set seat to desired position and release the lever.

When there is no load on the backrest, it will always be pushed forwards by spring force when the lever is pulled.

WARNING

Front seat passengers should not ride in a moving vehicle with the backrest reclined. Safety belts only offer protection when the backrest is upright and the belts are properly positioned on the body. Improperly positioned safety belts can cause serious personal injury in an accident.



Sports seat

Longitudinal adjustment and backrest adjustment are carried out manually on sports seats.

To move the seat **backwards and forwards**, pull the outside locking lever at the front of the seat upwards, move seat into desired position, release lever and ensure that the seat engages securely.

WARNING

Never unlock the driver's seat while the vehicle is in motion: the seat may move suddenly, causing you to lose control over the vehicle.

Backrest release

The backrest can be folded forward for easy access to the rear seats. To release, pull the lever on the side of the backrest up (arrow) and, at the same time, tilt the backrest forward. When the backrest is tilted back, the lock will engage automatically.

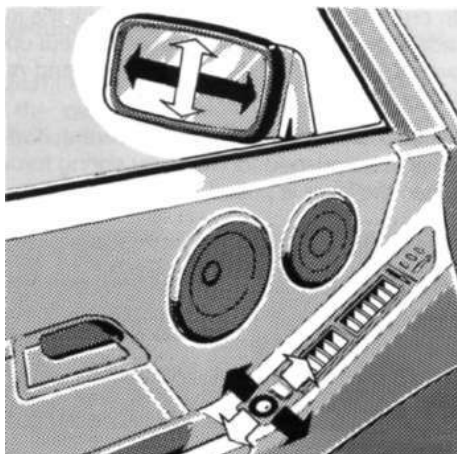
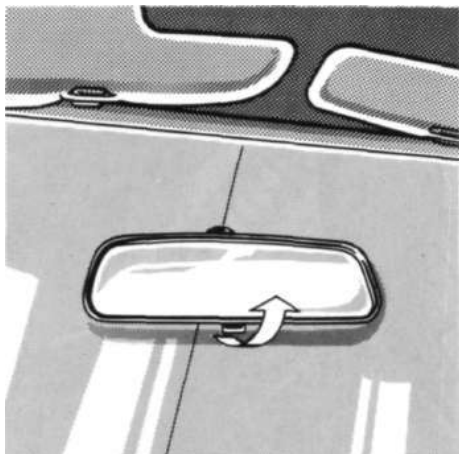
WARNING

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

Rear seats

The backrests of the rear seats can be tilted forward to provide additional luggage space.

To release backrest, pull the lever on side of the backrest up and, at the same time, tilt the backrest forward.



Heated outside mirrors with remote control

When the rear window defogger/defroster is switched on, the outside mirrors are also heated electrically. The outside mirrors are adjustable from inside of the vehicle by a four direction switch and a rocker switch located on the left door next to the side window vents in the armrest. The rocker switch selects either the left or right mirror for adjustment. Press the rocker switch into the appropriate position. 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 tight parking spots.

If necessary, the outside mirrors can also be adjusted manually.

Rear view mirrors

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.

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

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

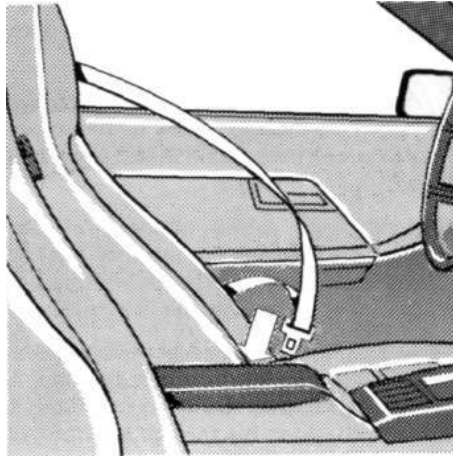
Safety belts

Warning

Failure to follow safety belt instructions may result in serious personal i n j u r y . |

Instructions

- For your and your passengers' protection, use safety belts at all times while the vehicle is in motion. Use child safety seats 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.
- 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 the instruction manual provided 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.
- For maximum effectiveness, the lap belt should be worn low across the hips.
- 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 excessive 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.



Safety belt warning system

An **audio-visual warning** system is interconnected with the driver's safety belt.

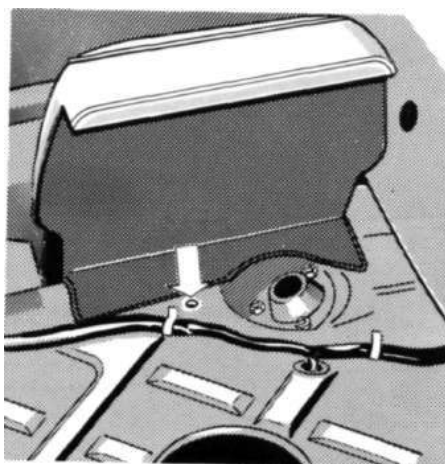
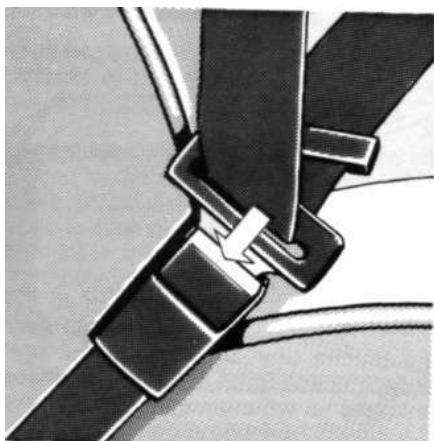
Every time the ignition is turned on, the **seat belt warning light** in the instrument cluster will come on for about 6 seconds as a reminder to buckle up. If the driver does not fasten the safety belt, the **gong** will continue for the duration of this 6 second period. The gong will go off as soon 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 belt and pull belt in continuous slow motion across your chest and lap.
- Insert belt 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.



Child restrained anchorages (Canada Models)

- 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 off the belt.
- To store lap/shoulder **belt, allow** belt to wind up on retractor as you guide latch to its stowed position.

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

The right child restraint anchorage is shown in the illustration (see arrow).

The hardware needed to attach **the tether** strap comes **with your** Porsche. The hardware can be moved to the other anchor point if required.

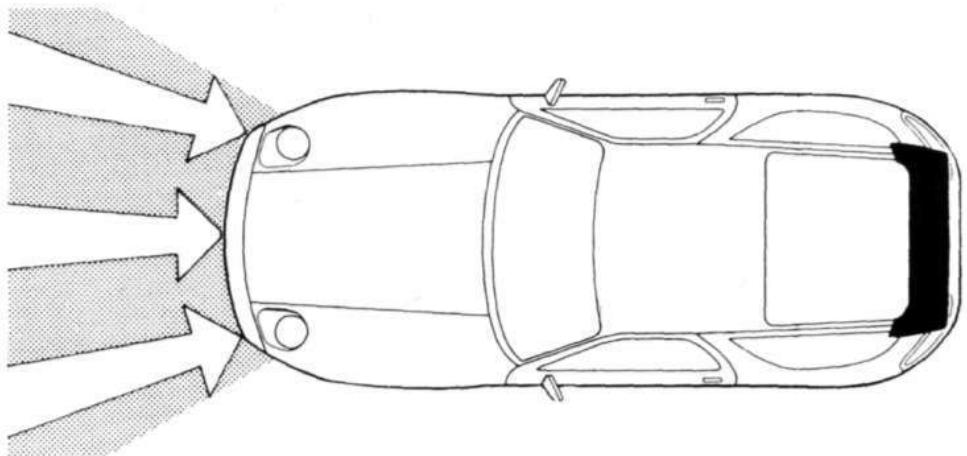
If a child restraint system is to be used, **the** necessary upper anchorage fitting must first be mounted on the respective anchor point.

Additional hexagon head bolts, spacers and fittings are available from your Porsche dealer.

To ensure proper installation **the anchor** fittings or fitting assemblies should be installed **or** repositioned by your Porsche dealer.

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.



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 with gas generator 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 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 air bag warning light in the instrument cluster. Upon activation of the vehicle ignition circuit, the air bag warning light 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 warning light during travel or repeated illumination longer than 5 seconds after ignition circuit is turned on.
- Illumination fails to light up during ignition circuit activation.

A malfunction in the air bag system will be indicated by the illumination of the air bag warning light accompanied by the fault message in the information system display.

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.

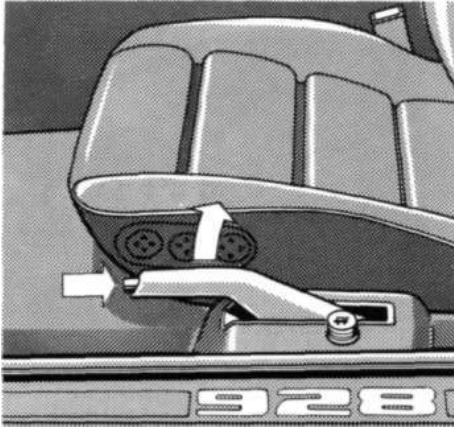
WARNING

- 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 to 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, on the windshield, as well as on all air bag components.



Parking brake lever (arrows)

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. Keep the button depressed as you lower the lever all the way down.

The parking brake light and the fault message in the information system display will go out after the engine is started and 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. Move the selector lever to "P" (Automatic transmission) or move the gearshift lever to reverse or first gear (Manual transmission). On hills also turn the wheels toward the curb.
- 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 at the rear. Both circuits function independently.

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.

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. 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 fluid warning light in the instrument cluster comes on accompanied by the fault message in the information system display to indicate that the level in the brake fluid reservoir is too low.

With correctly adjusted brakes, and a correctly working brake system, the pedal travel to the point of brake actuation should be 1-3/16" to 1-9/16" or 30 to 40 mm. Whenever the brake pedal travel exceeds this distance, have the brake system checked.

Keep in mind that the braking distance increases very rapidly as the speed increases. At 60 mph or 100 km/h, for example, it is not twice but four times longer than at 30 mph or 50 km/h. Tire traction is also less effective when the roads are wet or slippery. Therefore, always maintain a safe distance from the car in front of you.

Brake booster

The brake booster assists braking only when the engine is running.

When the car is moving while the engine is not running, or if the brake booster is defective, more pressure on the brake pedal is required to bring the car to a halt.

Moisture or road salt on brakes affects braking.

WARNING

Driving through water may reduce the 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 car-wash facility cannot do this job properly. Brakes will dry after a few cautious brake applications. _____

Brake wear

Our automobiles have excellent brakes, but they are still subject to wear, depending on how the brakes are used. Have the brake system inspected at the intervals recommended in your Warranty & 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 if fewer stops are realized.

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.

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.

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. _____

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 rhythmic 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.

If your ABS system should ever malfunction, the ABS system is automatically switched off, but the normal brake system, without ABS, would remain fully operational. Such a malfunction would be indicated by the illumination of the "ANTILOCK" light accompanied by the fault message in the information system display.

If the ABS system becomes inoperative, take your vehicle to your authorized dealer immediately.

Note

The control unit of the ABS brake system is set for standard tire size. 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.

Porsche limited-slip differential (PSD)

The PSD is an electronically controlled differential lock which switches on automatically without intervention from the driver.

It is an aid to driving off on road surfaces with varying degrees of traction and serves to improve driving stability when cornering with high lateral acceleration.

In spite of this it still remains the responsibility of the driver to adapt his style of driving to the prevailing road and weather conditions, as well as to the current traffic conditions. **The higher degree of safety afforded by this system must not be regarded as justification for taking greater risks.**

Aid for driving off

The PSD cuts in whenever a speed difference (slip) of more than 2 km/h occurs in the drive wheels and the speed of the vehicle is no higher than 30 km/h (19 mph). The extent of the differential locking effect is determined by the slip of the drive wheels. However, some skidding of both drive wheels cannot be avoided if acceleration is too severe.

Acceleration out of corners

The PSD cuts in over the entire speed range whenever the control unit receives a high lateral acceleration signal when accelerating out of corners and the inside wheel shows signs of slipping.

The lock transmits the non-transferable driving force of the inside wheel to the outside wheel.

The lock is opened for safety reasons if both wheels slip.

Deceleration in corners

If the control unit receives a high lateral acceleration signal at speeds of over 60 km/h (37 mph), a limited-slip torque is also built up when decelerating in corners to counteract any slewing of the vehicle.

Note

A solenoid valve regulates the gentle built-up and reduction of the limited-slip torque. The acoustic timing noise indicates that PSD regulation is occurring.

Should the control unit detect a fault in the limited-slip differential, the PSD is switched off for safety reasons and the following fault display appears in the information system:



You should then have your PSD tested at an Official PORSCHE Centre as soon as possible! The switching-off of your PSD changes the driving characteristics of the vehicle.

The switching-off of the ABS System always results in the PSD being switched off.

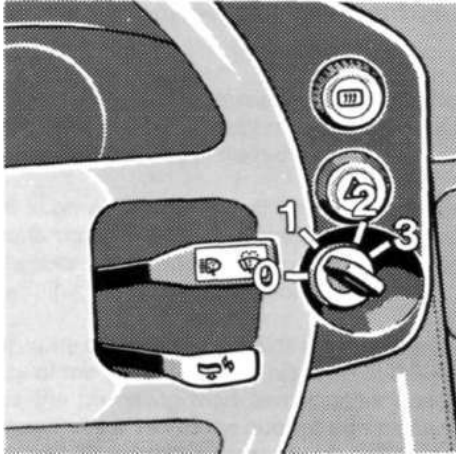
The **PSD indicator light** in the instrument cluster lights up when the limited-slip differential is activated or if both drive wheels slip.

Clutch

Due to the hydraulic operation of the clutch, a free travel of the clutch pedal of 0.1" or 2.5 mm is necessary.

Should this free travel suddenly become bigger, it could mean a malfunction of the clutch. See your Porsche dealer for rectification.

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.



Ignition/starter switch with steering lock

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

There are 4 switch positions:

- 0 **Steering locked.** All electric circuits wired through the ignition switch are turned off. The ignition key can only be withdrawn in the "0" position. The parking lights can be operated in this position by pushing the turn signal indicator lever up and down (also see "Parking lights"),
- 1 **Steering unlocked.** In this position all electric circuits are operational except for the following: turn signals, back-up lights, outside mirror remote control and rear window defogger/defroster.
- 2 **Ignition on, steering unlocked.** All electric circuits are operational. With the engine stationary, all warning lights will light up for a **bulb check**. (Lack of engine oil can, in contrast to all other functions, only be checked with the engine turned off and with the vehicle on level ground.)
- 3 **The starter is operated** by turning the ignition key to the right. As soon as the engine starts, release the key. It will spring back to position "2". With the engine running, the warning lights should go out except the warning light for the stop lamp, which will go out after depressing the brake pedal and the park brake light after fully releasing the parking brake.

To conserve battery power, the electric circuits for headlights, rear window defogger/defroster and wiper/washer system are temporarily interrupted during the starting process.

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 key must be returned to the "0" position. The non-repeat lock in the switch prevents the starter from being operated when the engine is running and thus from being damaged.

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

WARNING

Never remove 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, the gong will sound when the driver's door is opened. This is a reminder to remove the key.

For further details see "Starting Procedures" on the following page.

Starting procedures

WARNING

- Fasten safety belts before driving.
- 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.

Manual transmission:

Move gearshift lever to **Neutral**.

Automatic transmission:

Move selector lever to **Park**.

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 to 15 seconds of cranking, wait about 10 seconds before engaging starter again.

Do not let the engine idle to warm it up. After starting, drive vehicle at moderate speeds and with gradual accelerations. Avoid high rpm and full throttle operation until the engine has reached normal operating temperature.

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.

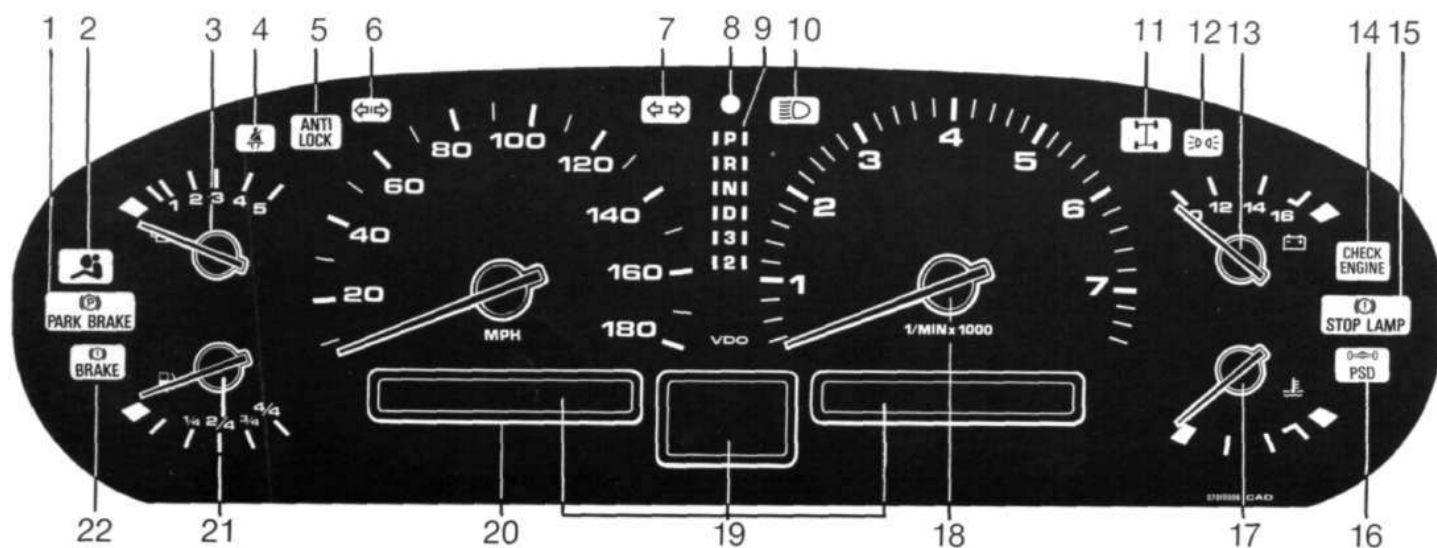
WARNING

- Before you check anything in the engine compartment, let the engine cool down. Hot components can burn skin on contact.
- The radiator fan switches on automatically when the coolant reaches a certain temperature and continues to run (even with ignition off) until the coolant temperature drops. Therefore, never touch the fan blades as they will rotate spontaneously when the thermo-switch turns the fan on.

If you have an automatic garage door...

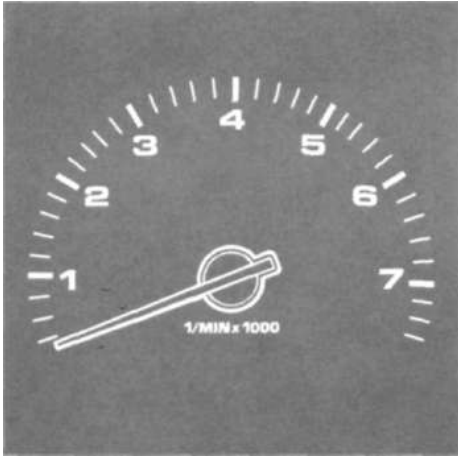
The transistorized ignition system in your Porsche may interfere with your electronically operated garage door. To check this: drive your Porsche close to the garage door and run the engine at different speeds.

If the garage door opens or closes without your 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.



Instrument cluster

- | | | |
|---------------------------------------|--|-------------------------------|
| 1 Park brake warning light | 9 Selector lever position indicator | 16 PSD warning light |
| 2 Air bag warning light | 10 High beam indicator light | 17 Coolant temperature gauge |
| 3 Oil pressure gauge | 11 Tire pressure warning light | 18 Tachometer |
| 4 Seat belt warning light | 12 Parking light indicator | 19 Information system display |
| 5 ABS warning light (ANTILOCK) | 13 Voltmeter | 20 Speedometer |
| 6 Trailer turn signal indicator light | 14 Emission control system malfunction indicator light | 21 Fuel level gauge |
| 7 Indicator warning light | 15 Stop lamp warning light | 22 Brake fluid warning light |

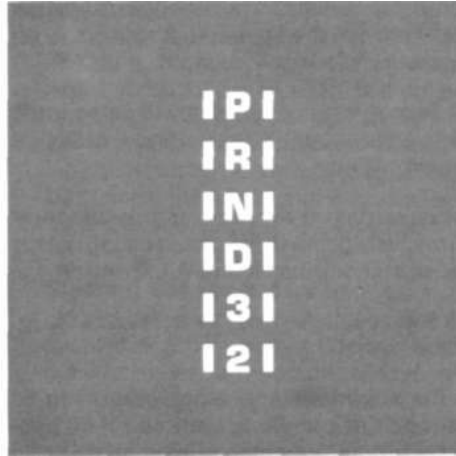


Tachometer

The tachometer shows engine speed in revolutions per minute (rpm).

The red mark at the end of the scale indicates the maximum permissible engine rpm. Before reaching this area, the next **higher** gear should be selected. Earlier shifting saves fuel.

Shift to the next **lower** gear when the engine rpm drops below 1500 rpm.

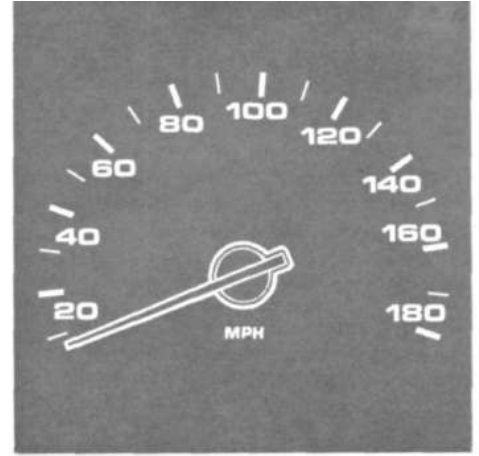


Indicator system for position of gearshift

Automatic transmission

Whenever the ignition is switched on, or the vehicle lights are switched on, the position of the gearshift lever lights up in the display field of the instrument cluster.

The display goes off when the key is removed or when the vehicle lights are switched off.



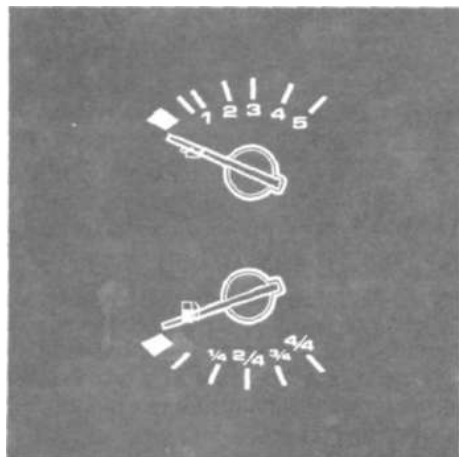
Speedometer

The speedometer indicates driving speed per hour.

In **USA**: miles per hour

In **Canada**: kilometers per hour

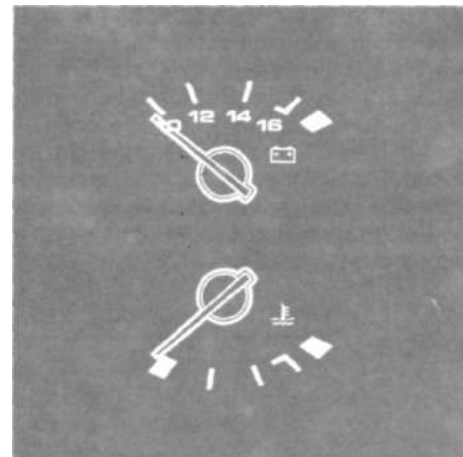
The **odometer** reading and the readings for tripmeters I and II appear in the information system display.



Check the engine oil level. If oil level is correct, do not drive the vehicle as severe engine damage may result. Contact your nearest Porsche dealer for assistance.

Oil pressure warning light

The oil pressure warning light comes on when the ignition is turned on and goes out as soon as the correct operating pressure is reached. Should the light come on during driving, this indicates that the oil pressure is not correct.



Oil pressure gauge Oil pressure warning light

Engine oil pressure is shown in bar. At 5000 rpm with the engine at normal operating temperature the oil pressure should be about 5 bar. A slight drop in oil pressure at higher temperatures is normal.

Should the oil pressure suddenly drop while driving or if the fault message appears in the information system display, **pull off the road and stop the engine immediately.**



Fuel level gauge and warning light

With the ignition on, the amount of fuel in the tank is indicated by the fuel gauge needle.

If the level is too low the fuel level warning light comes on and fault message appears in the information system display.

Fuel level warning light

This light comes on when the fuel reserve level in the tank is down to about 3.2 U.S. gals, or 12 liters. Time to refuel.



Voltmeter Alternator warning light

The voltmeter shows the overall condition of the charging system. The needle should normally stay in the 12 - 14 volt range when the engine is running. A temporary drop below 12 volts when starting the engine is normal. A fault message appears in the information-system display if voltage is too low.

The alternator warning light comes on when the ignition is turned on and goes out as the engine rpm increases. If the light does not light up when turning the ignition on, or if it

does not go out after starting the engine, there is a malfunction in the electrical system. If this is the case, contact your Porsche dealer. If the light flickers or stays on while you are driving, the V-belt may be loose or broken. The belt should be retensioned or replaced. The fault may also be in the regulator or the alternator itself. In this case, keep electrical consumption at a minimum and drive to the nearest workshop.



Coolant temperature gauge and warning light

Needle in left field - engine is cold

As long as needle is in left field, avoid high speeds and high engine rpm, until engine has reached normal operating temperature. Do not lug the engine.

Needle in center field - normal

Under normal driving conditions, needle should remain in center field. The needle may reach the right field, especially at high engine loads, but should return to "normal" when engine load is reduced.

Needle in right field - engine is warm

If needle enters the red mark, the engine is overheating. The warning light comes on and fault message appears in the information system display. Reduce speed and engine rpm. If it does not cause the temperature to decrease, pull off the road, turn off the engine and let it cool down.

Coolant temperature warning light

If the warning light comes on, check that the fans are working. See section "Cooling fan control". If the fans are not rotating, the power supply to the fan control is defective.

If the problem cannot be readily located, be sure the engine has cooled down sufficiently. Then drive to the nearest Porsche dealer, but carefully watch the coolant temperature gauge and the warning light. Try to avoid engine idling, very low speeds and engine speeds in excess of 4000 rpm.

For other details refer to "**Cooling System**".

Warning lights



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 accelerator 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 while 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 qualified 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.



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.



Every time the ignition is turned on, the seat belts warning light in the instrument cluster will come on for about 6 seconds as a reminder to buckle up. The light will go out as soon as the driver has buckled up. Should the light come on when the safety belt is buckled up, there may be a defect in the air bag system. **Take your vehicle to an authorized Porsche dealer immediately.**



The warning light goes on in the event of a malfunction in the air bag system. **If the light comes on, take your vehicle to an authorized Porsche dealer immediately.**



The warning light goes on in the event of a malfunction in the ABS system. The system is switched off; the normal brake system remains fully operational. **If the light comes on, take your vehicle to an authorized Porsche dealer immediately.**



The turn signal indicator light for trailer operation is not connected.



The turn signal indicator light in the instrument cluster will flash with the switch lever in either up or down position. If a turn signal bulb becomes defective, the indicator light flashes at about twice the normally frequency.



The high beam light in the instrument cluster will light up when the switch lever is pushed forward or the headlight flasher is operated. The blue light will go out when switching to low beam.



The warning light comes on if a tire loses pressure or if there is a fault in the tire pressure warning system.



The PSD indicator light comes on if the automatic limited-slip differential is activated.



The indicator comes on when the parking lights are turned on. The light will go out as soon as the headlights are switched on.



The warning light comes on and goes out after depressing the brake pedal. If the light **stays on** a bulb is defective.



The warning light **flashes** when the brake fluid level falls below the required minimum.

Information system

The information system helps enhance road safety and operational reliability. Automatically and without any action on the part of the driver, it provides notification of faults in a number of systems. In the event of a system malfunction, a symbol appears in the instrument cluster display, accompanied by an explanatory worded message.

The text appears in the language assigned to the national version of the vehicle. Your authorized Porsche dealer can change the information system to several languages stored in the system. However, the originally input language always appears after the battery has been disconnected.

The messages have been subdivided into three priority groups:

Priority I

Faults which are detrimental to road safety and operational reliability are indicated by red lettering and flashing symbols. Stop and rectify the fault immediately.

Priority II

Faults which could cause damage to your Porsche are indicated by red lettering and a symbol which does not flash. The fault in question must be rectified at the earliest possible opportunity.

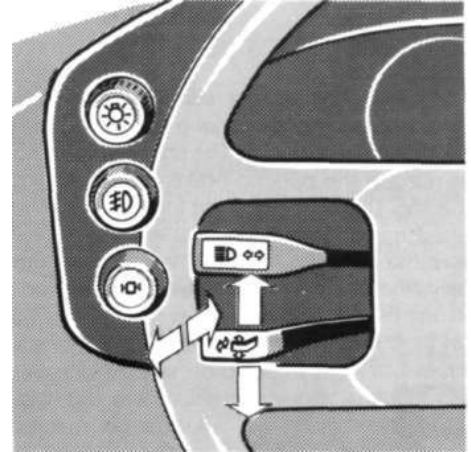
Priority III

If a part has to be changed or the water in the washing-water reservoir topped up, the fault is indicated by red lettering and a symbol which does not flash. In this event, it is not necessary to interrupt the journey immediately or seek the assistance of an authorized Porsche dealer.

If the oil level is too low, the corresponding fault message will appear as soon as the ignition is switched on, irrespective of whether the engine is started or not. The other fault messages can appear once the engine has been started and the brake pedal pressed. If the park brake is not released the warning lamp remains lit, accompanied by the fault message at speeds above 10 km/h (6 mph).

Fault acknowledgement

Pulling the control lever acknowledges the fault message and cancels the worded message. The messages issued for priority I and II faults are repeated 15 or 30 minutes and after acknowledgement after every engine start until the fault in question is rectified. Messages for priority III faults are issued once only. If the fault in question is not rectified, the message reappears every time the engine is restarted only.



Faults of different priorities occurring simultaneously are displayed in sequence. Once one fault is acknowledged, other faults of the same priority can be displayed, followed by those of lower priority. Each fault message must be acknowledged in turn, before the on-board-computer and auxiliary functions can be called up.

Warnings displayed in response to faults

Priority I	ENGINE TEMP.		TOO HIGH	over 250° F / 120° C, see "Cooling system"
	OILPRESSURE		INSUFFICIENT	See "Engine oil pressure"
	CHECK		BRAKE FLUID!	See "Brake fluid reservoir"
	TIREPRESSURE		CONTROL OFF	System malfunction, see "Tire pressure warning system"
	TIREPRESSURE		LOSS	Arrow indicates tire losing pressure, see "Tire pressure warning system"
Priority II	TIRE		PRESSURE	As a reminder of low pressure. Only after ignition has been switched off
	ENGINE TEMP.		TOO HIGH	Up to 246° F / 118° C, see "Cooling system"
	TOOTHED BELT		SERVICE	Toothed belt slack. Have belt checked and retensioned
	CHECK		OIL LEVEL!	See "Engine oil"
	SAVE POWER		SERVICE	See "Voltmeter"
	CHECK		COOLANT LEV.	See "Cooling system"
	CALL		RANGE!	See "Fuel gauge" and on-board computer functions
	RELEASE		PARK BRAKE	Message is cancelled once park brake is released
	ANTILOCK		OFF	See "ABS braking system"
	AIRBAG		MALFUNCTION	See "Air bag system"
	DIFFERENTIAL		CONTR. OFF	See "Automatic limited-slip differential (PSD)"
Priority III	BRAKE PADS		SERVICE	Brake pads down to wear limit – replace pads
	STOP LAMP		FAILURE	See "Fuses" and "Replacing bulbs"
	TAILLAMP		FAILURE	See "Fuses" and "Replacing bulbs"
	REFILL		WASHER FLUID	See "Windshield washer reservoir"

Selectable on-board-computer and auxiliary functions

When the ignition is switched on, the following appear:

Display, left: odometer reading Display, centre: last on-board-computer function selected Display, right: tripmeter I reading

With the ignition on, the on-board-computer and auxiliary functions below can be called up in turn with the aid of the information-system control lever. The letters, digits and symbols for all the function displays are orange. Any messages concerning faults occurring simultaneously in the car will appear in red. Once the ignition is switched off, the last function selected is displayed until the central locking system is activated, or for a period not longer than 4 minutes.

On-board-computer functions

Press the control lever forwards to enter the on-board-computer selection mode.

INSTANT	16,9 MPG	FUEL RATE
AVERAGE	12,5 MPG	FUEL RATE
REMAINING	130 M → 0	DISTANCE
OUTSIDE	-12,5 * °C	TEMPERATURE
AVERAGE	80 MPH	SPEED

The function selected appears in the centre display. Worded messages appear on the left and right. Push the lever up to select the next function; pushing the lever down calls up the previous function. The worded messages are cancelled when the lever is pulled, or automatically after 4 minutes.

After this, the auxiliary functions reappear in the left and right displays.

American measuring units will be changed into metric units by pulling the lever twice within 1 second (this applies only for U.S. specified vehicles).

Pull control lever for 3 seconds to reset.

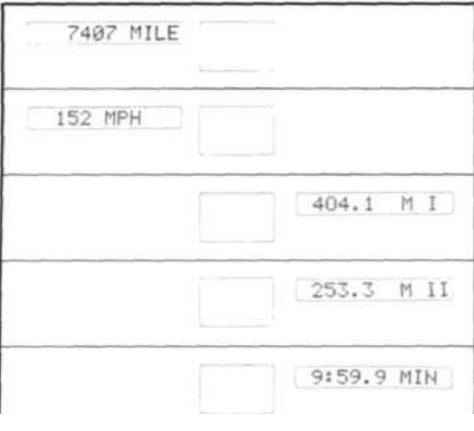
Range calculated on the basis of fuel left in tank, present consumption and average consumption.

Reading between -40° and +140° F. (-40° and + 60° C). The outside temperature display is not an ice warning!

Pull control lever for 3 seconds to reset.

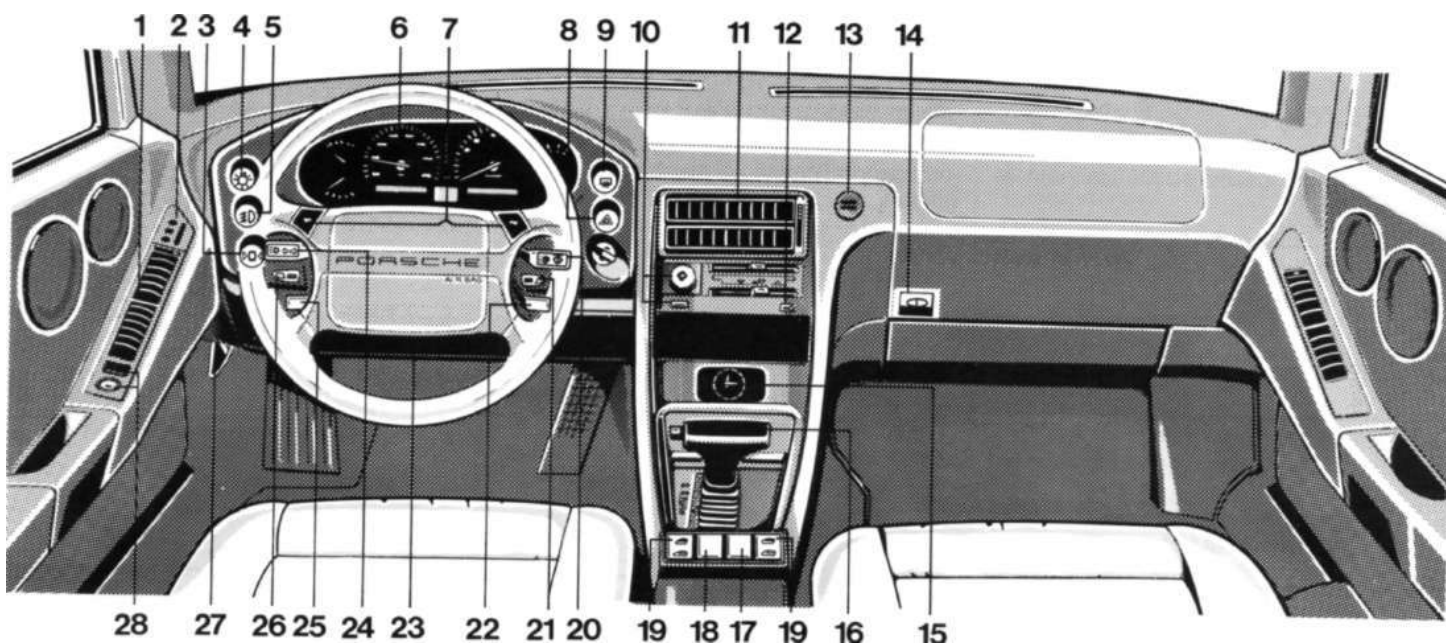
Auxiliary functions

Pull the control lever to call up auxiliary functions

	Push the lever down to change from odometer reading to digital speedometer reading and vice versa. Push the lever up to select tripmeter 1, tripmeter II or stopwatch. To reset the tripmeters, press the zero button in the instrument cluster for at least 2 seconds. Tapping the button is sufficient for operating the stopwatch.	Memory cannot be erased
		Readings at speeds above 10 km/h (6 mph)
		Tripmeter for distance travelled
		Tripmeter for interim readings or distances between refuelling stops
		Start: push button for 1st time Stop: push button for 2nd time Reset: push button for 3rd time*

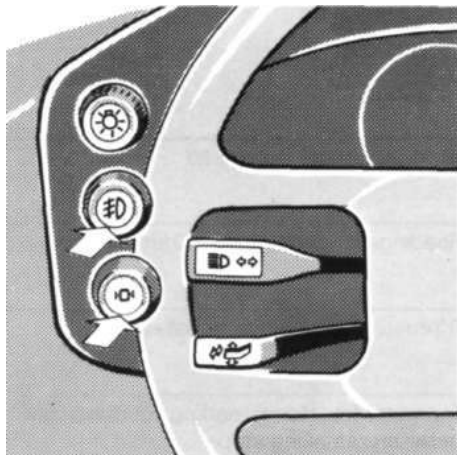
American measuring units will be changed into metric units by pulling the lever twice within 1 second (this applies only for U.S. specified vehicles).

* Stop is indicated by a flashing colon.
A four-digit reading appears once the stopwatch has been stopped.
Once the stopwatch has been activated, it continues to run even after the ignition is switched off.



Dashboard panel

- | | | |
|--|--|---|
| 1 Side window defogger/defroster vents | 10 Automatic climate control | 21 Intermittent wiper interval control and intensive windshield cleaning switch |
| 2 Seat position memory | 11 Center air vents | 22 Automatic speed control lever |
| 3 Zero button | 12 Central door locking button | 23 Locking lever for steering wheel/instrument cluster height adjustment |
| 4 Light switch | 13 Inside-temperature sensor | 24 Turn signal/headlight dimmer flasher/parking light switch lever |
| 5 Fog light switch | 14 Glove compartment lock | 25 Control lever for information system |
| 6 Instrument cluster | 15 Clock | 26 Instrument illumination control |
| 7 Horn | 16 Gearshift/selector lever | 27 Engine compartment hood release lever |
| 8 Emergency flasher switch | 17 Rear window wiper switch | 28 Side view mirror control |
| 9 Rear window defogger switch | 18 Sunroof switches | |
| | 19 Power window switches | |
| | 20 Windshield wiper and windshield/headlight washer switch lever | |



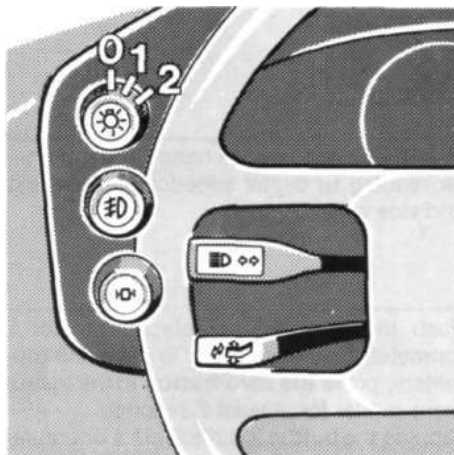
Fog lights

With headlights on the fog lights can be turned on or off by depressing the switch. The switch is illuminated when the fog lights are on.

Zero button

This button is used to operate the stopwatch and to reset the tripmeter I and II. The button must be pressed for at least 2 seconds to reset the tripmeter.

Tapping the button is sufficient for operating the stopwatch.
(see also "Information system")

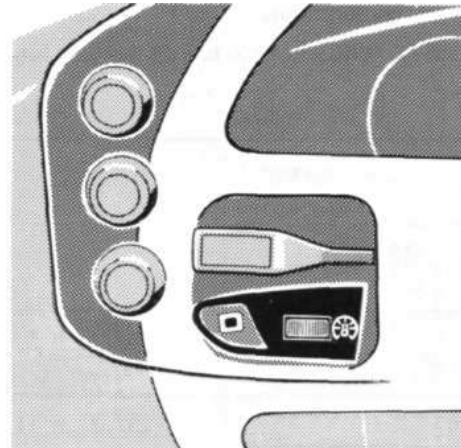


Light switch

- Parking lights - 1st position
- Headlights - 2nd position (with ignition on)

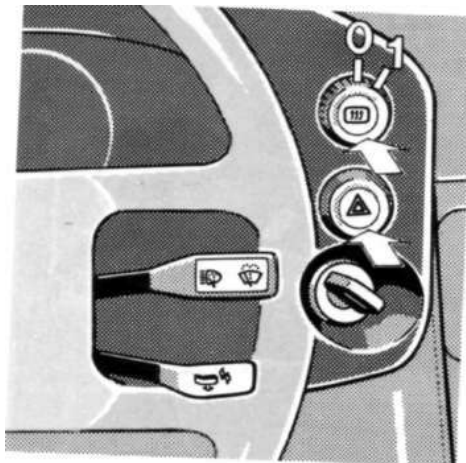
Tail lights, side marker lights, license plate and instrument lights and the shift pattern illumination for automatic transmission selector lever are on in both switch positions.

When you open the door while the lights are on, the **gong** will sound. It is your reminder to switch off the lights.



Instrument illumination control

With headlights on, the brightness of the instrument illumination can be adjusted by turning the thumbwheel on the left side underneath the instrument cluster.



Rear window defogger/defroster

The rear window defogger/defroster heating element is actuated by a push button/rotary switch. The switch is illuminated when the heating element is energized.

After the rear window has been cleared, switch off the rear window defogger to avoid unnecessary drain on the battery.

To defog - switch **not** depressed

0 Heating element off.

1 Heating element on. The heating element will provide a steady energy output to keep the rear window free from fog.

To defrost - switch depressed (arrow)

0 Heating element is fully energized for defrosting. After about 15 minutes the heating turns off automatically.

1 Heating element is fully energized for defrosting. After about 15 minutes, the heating element automatically reduces energy output to "defogging".

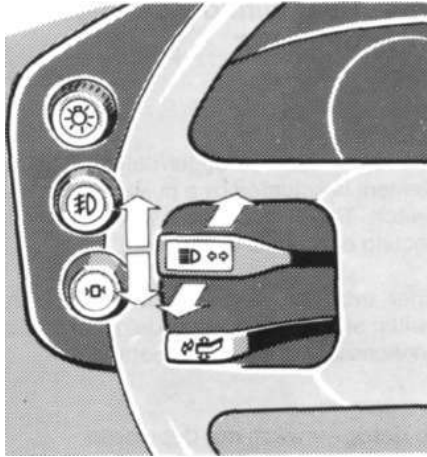
WARNING

- 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.
- 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.
- 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.
- Remember the air conditioner condenser fan is thermostatically controlled and may come on at anytime, regardless of ignition switch position.

Emergency flasher switch

If your car is disabled or parked under emergency conditions, depress the 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 ignition switch position.



Switch lever for turn signal/
headlight dimmer with ignition on
and parking lights with ignition
off

Turn signal indicator

Lever up - right turn signal
Lever down - left turn signal

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

If a turn signal bulb is defective, the indicator light flashes at about twice of the normal frequency.

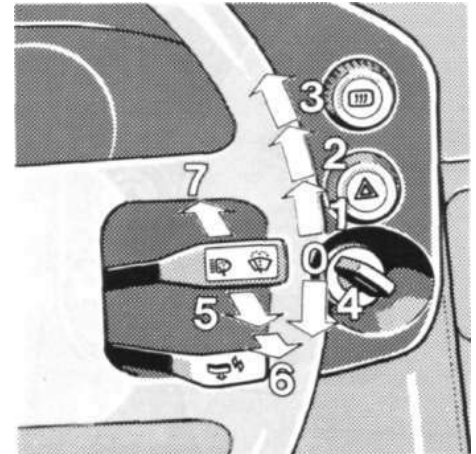
Lane changer

To indicate your intention when changing lanes on expressways, slightly push the turn signal indicator lever up or down to the resistance point. The lever turns off automatically when released.

High beam/low beam headlight dimmer- with light switch in position 2, push lever forward to select high beam. The blue indicator light in the instrument cluster lights when high beam is switched on.

Pull lever toward steering wheel to select low beam.

You can flash signal other motorists by repeatedly pulling and releasing the lever.



Switch lever for windshield wiper/
washer and headlight washer

Headlight flasher

During daylight, you can flash signal other motorists with your additional headlights (in lieu of horn) by repeatedly pulling and releasing the lever. With headlights on, the additional headlights will flash together with the headlights.

Parking lights

Lever up -
right side parking lights on

Lever down -
left side parking lights on

This lever has 7 switch positions. The electric wiper system is actuated by pulling the lever up or down to the following 4 positions:

- 0 wipers turned off
- 1 wipers on slow speed
- 2 wipers on medium speed
- 3 wipers on fast speed
- 4 **Intermittent wipe:** The wipers operate automatically at regular intervals.

- 5 **Windshield washer:** Pulling the lever from its basic position towards the steering wheel activates the windshield washer pump in the first stage.

Releasing the lever causes the wiper to perform several dry wipes.

- 6 In the second stage, the windshield washer and the wipers operate together. When the ignition is switched on, the washer nozzles are heated.

- 7 **Headlight washer:** Push lever toward instrument cluster to operate headlight washer.

A separate pump supplies high-pressure water to the spray nozzles located in front of the headlights on the bumper. The high pressure stream soaks the dirt on the lenses and washes it off. Repeat the wash cycle as necessary to remove heavy dirt accumulation.

The headlight washer system operates only with the headlights on.

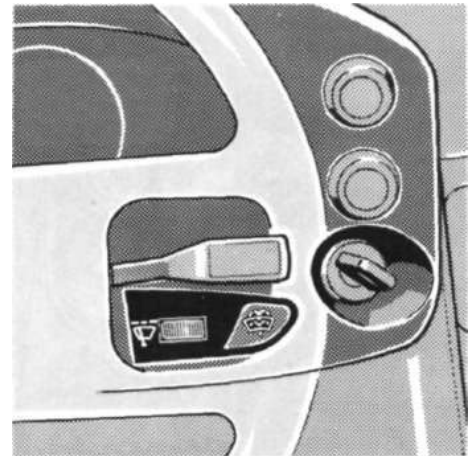
Avoid running the wiper blades over a dry windshield to prevent scratching the glass. Spray on washer fluid first. A scratched windshield will reduce visibility.

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

WARNING

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

Clean all inside and outside window glass regularly. See "Car care instructions".



Wiper interval

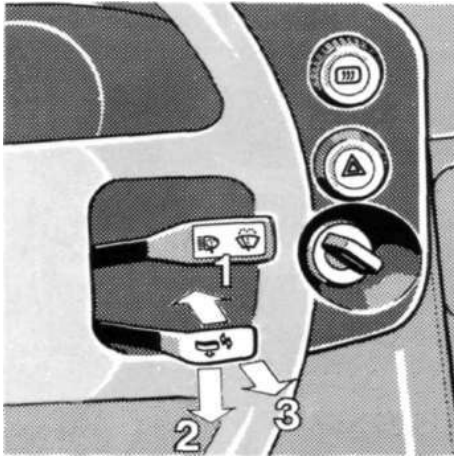
The wiper interval can be adjusted by turning the thumbwheel in the instrument cluster.



Intensive windshield cleaning

With the intensive cleaning feature you can remove even firmly adhering silicon dirt from the windshield. Briefly depress the switch and the metering pump will pump the Special Porsche Silicon Remover onto the windshield.

The length of spraying is limited by a time-delay relay in order to prevent excessive use. If necessary, repeat the operation. Then turn on the windshield washer system.



1 Set/accelerate 2 Reset 3 Cancel

Automatic speed control

The automatic speed control allows you to maintain a constant cruising speed of 30 mph (50 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 30 mph or 50 km/h), do not bring shift lever into the Neutral position 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 not return to idle when removing the foot from the accelerator pedal.

Please observe all local and national speed limits.

Passing: When you want to drive faster for a brief moment, for example when passing another vehicle, actuate 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. Move the lever down (arrow 2), and the preset speed will be resumed.

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

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.

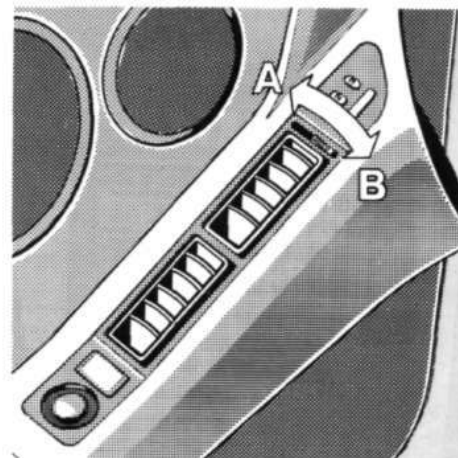
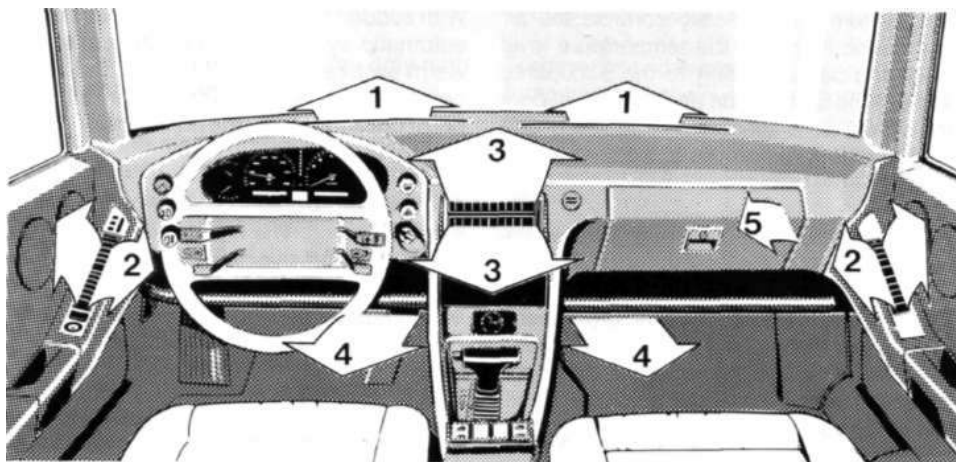
As an alternative, you can hold the lever in the front position (arrow 1), without depressing the accelerator pedal. The car will accelerate on its own. When the desired speed is reached, release the lever.

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 3). 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.



Air outlets

- 1 Defogger/defroster nozzles for windshield
- 2 Defogger/defroster vents for side windows
- 3 Air vents for passenger compartment
- 4 Air outlet nozzles for foot wells
- 5 Air nozzle inside glove compartment

Air outlets for windshield and footwell

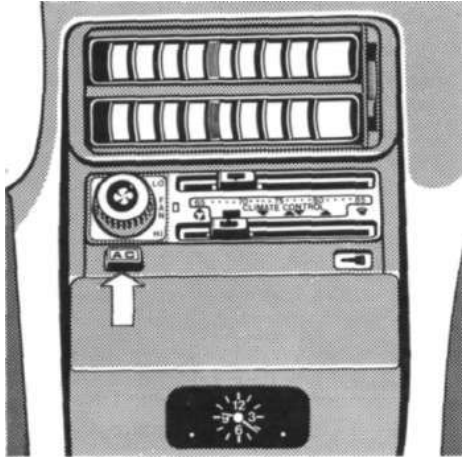
The air outlets for the windshield and the footwell are fixed in place. Only the fan switch is used to regulate the air flow.

Center and side nozzles

The air flow from the center and side nozzles can be varied by pivoting the nozzle inserts and by adjusting the vents.

A lever attached at the side of the nozzles provides continuous control for the air flow to the side and center nozzles.

- A - Nozzle opened
- B - Nozzle closed



Automatic climate control

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. _____

This system automatically controls the air flow distribution and the temperature level inside the car according to the occupants wishes. The distribution and mixture of cool and warm air is electrically regulated and kept constant, regardless of weather conditions.

Servomotor-controlled air mixing valves automatically mix the cold and warm air.

The temperature inside the vehicle (temperature sensor behind the screen mask) and outside the vehicle (temperature sensor in the wheel box) are used for quick identification of temperature fluctuations and control of the servomotor.

"AC" pressure switch

When the weather is warm, supplying of fresh air is not always enough to attain the desired temperature within the car.

First set the temperature desired using the temperature lever. Then switch on the air conditioner by pressing the AC switch in the center console (arrow).

If no cooling of the air is required in transitional or colder seasons, the air conditioner should not be switched on due to considerations of fuel economy.

With sudden fluctuations in temperature, the automatic system regulates the control of warm air, fresh air, and, if the air conditioner compressor has been switched on, the supply of cooling air until the preset inside temperature is reached.

The air conditioner works only when the engine is running. The higher the engine rpm, the more intensive the cooling effect. Air from inside the car is drawn through the evaporator for cooling and then reenters the car interior through the air outlets.

Proper operation of the air conditioner is guaranteed only if the windows and roof are closed and the outlet nozzles at the side and the center are fully opened.

If the vehicle has been standing for a fairly long time in intense sunlight, it is recommended that the inside of the vehicle be thoroughly ventilated by opening the car windows and switching on the air conditioner.

When the air conditioner is switched on, additional cooled air reaches the glove compartment through a nozzle.

In damp weather it is recommended to switch on the air conditioner, even if the outside temperature is low. This dehumidifies the air and prevents the windshield from fogging up.

Important notes:

- The air conditioner operates only with the engine running.
- When the air conditioner is switched on, at least one air outlet vent must be opened, since otherwise the vaporizer can ice up. The condensate forming during operation of the air conditioner escapes through openings at the bottom of the vehicle.
- The air conditioner must be switched on briefly at least once a month to lubricate the seals and bearings of the air conditioner compressor and the expansion valve. This is particularly important in the winter when the air conditioner is not needed. The outdoor temperature must be above 32° F/0° C.
- Whenever the air conditioner does not function properly, e. g. no cold air escapes even though the unit is switched on, switch it off and immediately see your Porsche dealer.

The following controls make possible optimum adjustment of the unit to your individual air conditioning desires.

Temperature control - upper lever

The lever provides continuous control for the temperature in the passenger compartment. Shoving it to the right raises the temperature. The value on the temperature scale corresponds to an average inside temperature.

No automatic temperature control takes place in program settings  and .

Fan speed control - rotary switch knob

The **air volume** is controlled by a 4-speed fan. When the ignition is turned on, the fan automatically operates at low speed, even with the switch in 0 position. By turning the knob clockwise, fan speeds 1 - 4 can be selected to increase the air volume.

Program control - lower lever

There are several programs available in order to adapt to individual needs with an automatically controlled air conditioner:



Supply of outside air switched off. For brief operation, e.g. when passing through disagreeable odors.



Air flow distribution only through side window and center air vents.



Air flow distribution through footwell outlets. The side and center vents can be opened optionally.



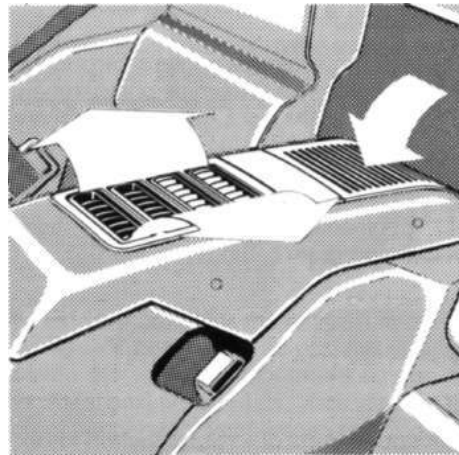
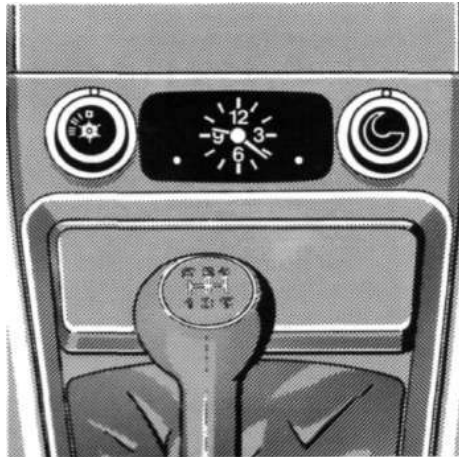
Air flow distribution through windshield and footwell outlets. The side and center vents can be opened optionally.



Air flow distribution through windshield outlets. The side and center vents can be opened optionally.



Automatic air flow distribution for heated air through windshield outlets and open side window vents. Heating system and fan motor are automatically switched on maximum output and high speed for fast defrosting or defogging. At temperatures above 32° F/0° C the air conditioner compressor switches on automatically.



Additional vaporizer for increased cooling output

In vehicles with increased cooling unit output there is an additional vaporizer with a fan installed instead of the floor console.

When the air conditioner switch is pressed in, and the air conditioner is turned on, the back vaporizer can be switched on by turning the button at the left in the center console to the right. Fan speeds from 1 to 3 can be adjusted.

Turning the button at the right to the right increases the cooling output from the rear vaporizer.

The inside air is drawn in through the rear grid, cooled, and circulated in the floor area. If the AC switch has not been pushed in, only circulation of the air is provided.

Clock

Left button: clockwise adjustment.

Right button: anticlockwise adjustment.

Tapping the button: minute hand jumps forwards one minute.

Pressing the button: the longer the button is pressed, the quicker the clock is adjusted.

Cigarette lighter

The cigarette lighter can be operated with the ignition in position 1 or 2. To operate, push in knob. 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.

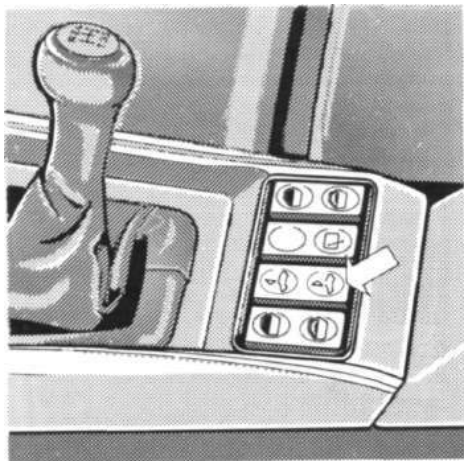
Do not damage the socket by trying to insert plugs of the wrong design.

Ashtray

The ashtray is located in front of the gearshift lever in the center console. To empty tray, pull it out of its well.

WARNING

Never use ashtray as waste paper disposal. Fire hazard!



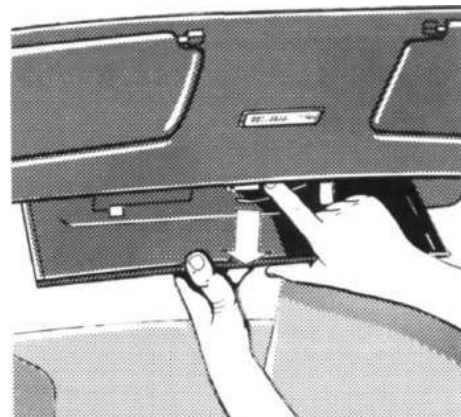
Opening sunroof

Tapping the switch opens the sunroof in stages to the desired position.

Pressing the switch for longer than 0.5 seconds automatically opens the sunroof fully. The movement of the sunroof can be stopped at any position by tapping the switch again.

Closing sunroof

To close the sunroof, the switch must be pressed until the sunroof has reached the desired position.



Manual operation

If the electric drive mechanism fails, the roof can be operated manually. The crank handle provided for this purpose is in the glove compartment.

Remove the cover from the electric drive mechanism at the rear of the headliner by pulling it down and disengaging the spring catch.

Remove screw and washer on bottom of drive mechanism. Keep screw and washer within easy reach.

Power sunroof

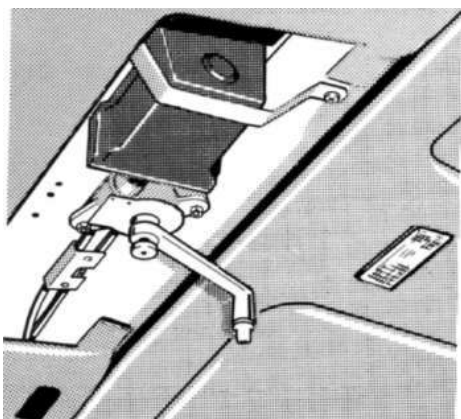
The roof can be opened and closed, fully or partially, by depressing the respective symbol on the rocker switch in the center console in front of the gear shift lever.

The mechanism has a built-in safety feature. Should the moving roof encounter an obstacle, it will stop automatically to avoid possible injury.

Door lock contact

If the key is held in the locking position when locking a door, the sunroof and the door windows will close in succession automatically.

Do not operate the sunroof at driving speeds exceeding 60 mph or 100 km/h. The force to overcome wind resistance at higher speeds may cause damage to the sunroof.



Rear window wiper

Install handle in slot of drive mechanism and tighten thumb screw.

Close the roof, remove the handle and reinstall washer and screw. Replace the cover.

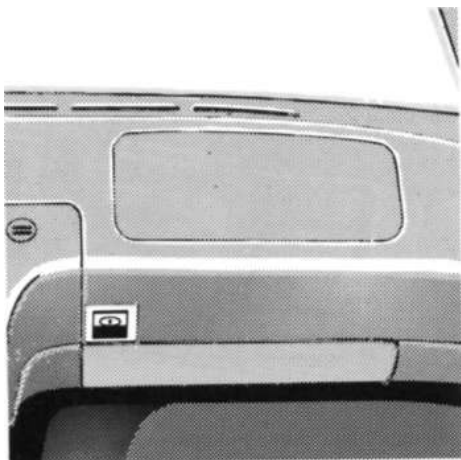
Do not depress the rocker switch but let your Porsche dealer correct the fault.

To avoid scratching the glass, the rear window should be sufficiently wet before turning on the wiper.

To actuate the wiper, push the rocker switch in the center console.

The wiper action disengages or engages automatically when the luggage compartment lid is opened or closed.

When cleaning the rear window, the wiper arm should be lifted only slightly.



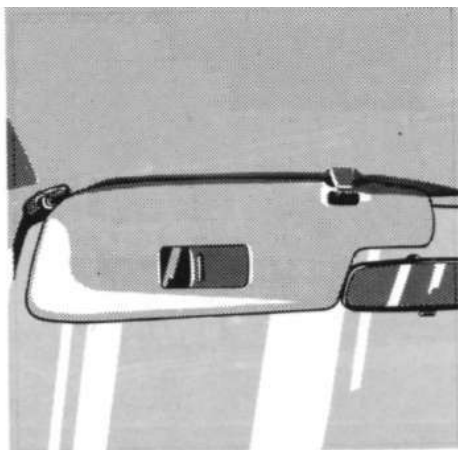
Glove compartment

The illuminated glove compartment can be opened by pulling the recessed handle.

The glove compartment can be locked or unlocked with either the master or the auxiliary key.

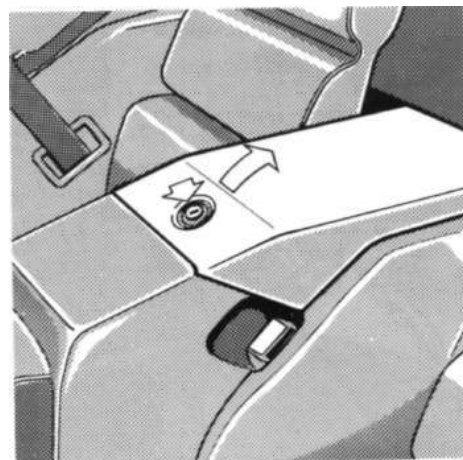
WARNING

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



Rear seat glove compartment

To open the glove compartment, press the button (arrow) and lift the lid. The glove compartment is lockable.



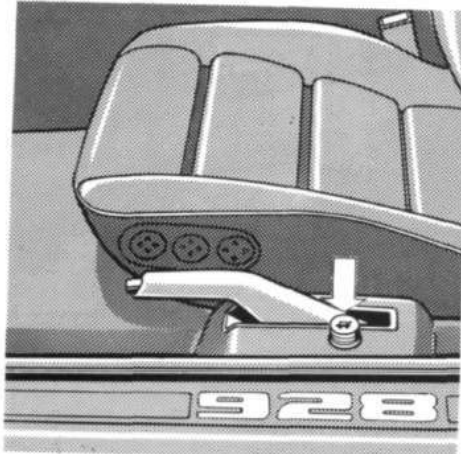
Sun visors

The front sun visors can be moved to the sides as well as forward (arrows).

The rear sun visors can be moved backward.

Vanity mirror

The vanity mirrors are incorporated into the rear side of the sun visors and can be fastened with a slide.

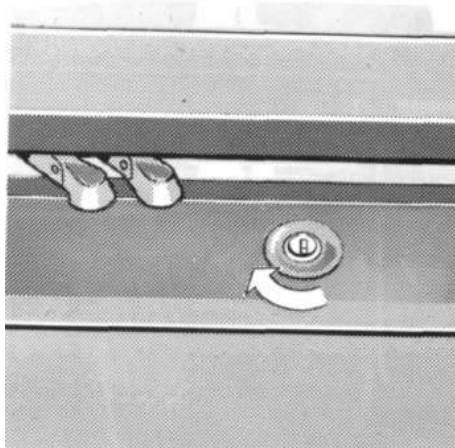


Hatchback release

With one or both doors open, you can release the hatchback by pulling either the button on the left of the driver's seat or the respective button on the right of the passenger's seat. The hatchback will open automatically.

Also see "Hatchback".

Be careful when removing large objects through the rear. Sharp edged objects may damage the defogger wires in the rear windows.



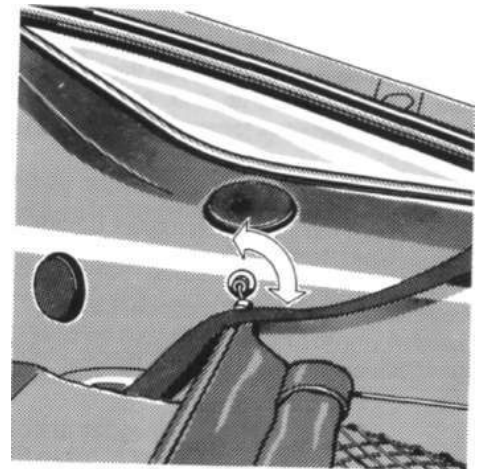
Hatchback

To open...

see "Hatchback release" or insert the key into the lock and turn clockwise. The hatchback springs up slightly under spring pressure. Lift the hatchback by hand to open.

To close...

Lower the hatchback slowly and then push down with both hands until lock snaps shut. Pull up on hatchback to make sure it is securely locked.



Luggage compartment

Luggage and other belongings are protected from the sun and "inquisitive eyes" by the luggage cover.

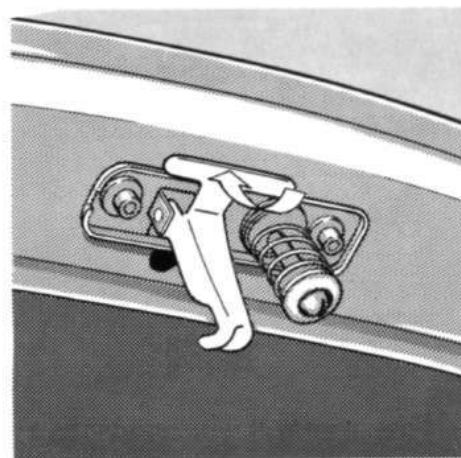
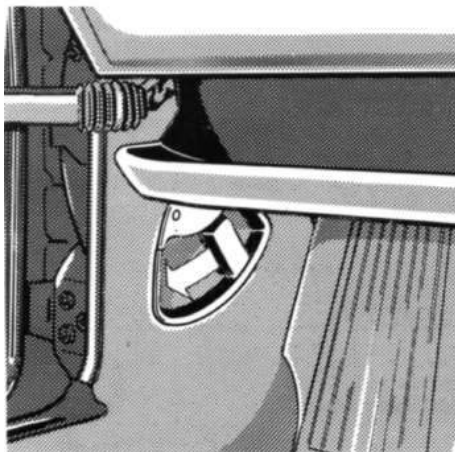
To release the luggage cover, turn the end sleeves of the hangers about 90°.

To prevent luggage and other objects from sliding around while the car is in motion, you can secure them with the **luggage net**. The eyelets for this purpose can be found behind the rear bolster and on the luggage compartment floor.

The backrests of the rear seats can be tilted forward to provide additional luggage space. To release backrest, pull the lever on side of the backrest up and, at the same time, tilt the backrest forward.

WARNING

Because of inherent hazards, we do not recommend transporting objects larger than those fitting safely into the luggage compartment. Keep the hatchback closed while driving to prevent poisonous exhaust gas from being drawn into the vehicle.____



Engine compartment hood

To release

Slide the release lever (arrow) on the left side underneath the dashboard panel.

The hood springs up slightly under spring pressure.

To open

Lift hood slightly and press safety catch handle upward (arrow). Then lift up the hood.

The windshield wipers should not be tilted forward.

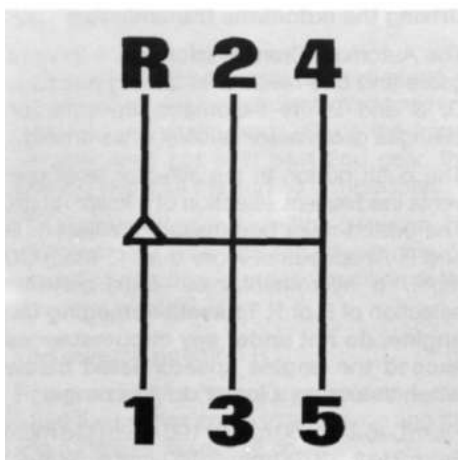
With light switch in either position 1 or 2, the engine compartment light will come on automatically.

To close

Lower the hood slowly and then push down with both hands until the lock snaps shut.

WARNING

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



Gearshifting manual transmission

The Porsche transmission with servo-lock synchronisation permits rapid and precise shifting of gears. When changing gears make sure 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 this page.

Reverse

Reverse should only be selected after the vehicle has come to a complete stop.

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

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

The gear positions are illustrated in the diagram.

If you wish to shift from **1st gear** into **Reverse**, the gearshift lever must first be brought into the **Neutral** position and then shifted into Reverse. This is necessary because of the reverse gear lock-out mechanism.

For smooth shifting, observe the following shift points which apply to standard gear ratios only:

Maximum downshifting points

5th to 4th gear
143 mph/230 km/h or 5000 rpm

4th to 3rd gear
100 mph/160 km/h or 5200 rpm

3rd to 2nd gear
70 mph/113 km/h or 4800 rpm

2nd to 1st gear
45 mph/ 75 km/h or 4500 rpm

Minimum upshifting points

1st to 2nd gear
15 mph/24 km/h or 2200 rpm

2nd to 3rd gear
25 mph/40 km/h or 2400 rpm

3rd to 4th gear
40 mph/64 km/h or 2750 rpm

4th to 5th gear
45 mph/72 km/h or 2300 rpm

Please observe all local and national speed limits!

Controls for automatic transmission

The individual driving ranges are selected automatically depending on

- selector lever position
- speed
- accelerator pedal position

The position of the gear shift lever lights up in the instrument cluster display field whenever the vehicle lights or ignition are switched on.

Remember the following basic rules:

Apply the parking brake or foot brake before selecting a driving position. When the selector lever is in a driving position, the car may creep even at idle speed. Therefore, do not release the parking brake or foot brake until you are ready to move.

Do not accelerate while selecting a driving position. At this time the engine must run at idle speed so that no undue stress will be placed on the automatic clutches in the transmission.

Do not step on the accelerator until positive contact has been made.

Under no circumstances may the selector lever be moved from a driving range to N while the car is travelling at speeds in excess of 40 km/h (25 mph) - see "Tempostat".

If the selector lever is unintentionally moved into Neutral (N) while driving, take your foot off the accelerator pedal and wait until the engine speed has dropped to idle before selecting a driving position.

Never shift into reverse (R) or Park (P) when the car is in motion.

Never get out of the driver's seat when the engine is running and the selector lever is not in the "P" position. **Move the selector lever to "P" and apply parking brake.**

Always make sure the selector lever is in the "P" position when checking under the hood. Otherwise, any increase in engine speed may set the vehicle in motion, **even with the parking brake applied.**

A driving position must never be used for holding the vehicle at rest uphill. Always use your foot brakes when stopped on inclines.

[WARNING]

While driving with the automatic speed control set (at speeds above 30 mph or 50 km/h), do not bring shift lever into the Neutral position to prevent excessive engine rpm.

Starting the engine

is only possible when the selector lever is in **Neutral** or in **Park (N or P)**. As long as one of the driving positions is engaged a safety switch prevents the engine from being started.

Driving the automatic transmission

The Automatic Transmission has 4 forward gears and one reverse. In driving positions D, 3 and 2 the Automatic Transmission changes gears automatically while driving.

The push button in the selector lever prevents inadvertent selection of a lower range. The button must be pressed to select 1, R and P. At speeds of more than 15 km/h (10 mph), a hydromechanical lock prevents selection of R or P. **To avoid damaging the engine, do not under any circumstances exceed the engine speeds listed below when selecting a lower driving range:**

From D to 3 4250 rpm or 190 km/h (118 mph)
From 3 to 2 3700 rpm or 110 km/h (68 mph)

Position D

is the driving position normally used for city and highway driving. It ranges from zero to top speed, and all four gears shift automatically depending on driving speed.

Position 3

is to be used for mountain driving or slow driving, when towing a trailer and also when you want to make use of the engine's braking effect. In "3", the first, second and third gears will engage automatically.

Position 2

This position is to be used when climbing or descending extreme gradients and towing a trailer on mountain roads. Since the transmission does not shift past 2nd gear, the braking effect of the engine is increased.

The transmission may switch between 1st and 2nd gear when driving, depending on prevailing conditions and the position of the accelerator pedal.

The reverse position R

Reverse position should be selected only when the car has come to a full stop and the engine is running at idle speed.

The back-up lights come on automatically when you engage Reverse (with ignition on).

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.

Putting the car in gear

With the parking brake or foot brake set, shift into the range you wish to use, usually position D. To accelerate, release the brake and depress the accelerator pedal.

WARNING

Do not release the brake before you are prepared to move, because power is transmitted to the wheels as soon as a driving range is engaged. _____

Selecting a driving position while driving

is easy. Simply release the accelerator pedal and move the selector lever from the position you are into the position you want. Then step on the accelerator again.

WARNING

Do not shift to a lower driving position until vehicle speed has dropped below the specified limits. Engine speed will suddenly increase and may cause engine damage and loss of vehicle control. _____

Stopping

When stopping temporarily, at traffic lights for example, it is not necessary to move the selector lever to Neutral. Simply apply the brakes. To start again release the brake and accelerate.

Position P — Parking

When parking your car, apply the parking brake first, and then move the selector lever to position P. To do this, depress the button and push the lever through R to P. The transmission is then mechanically locked. Park may only be engaged when the car is stationary.

Do not remove the key from the ignition steering lock until you have parked the car, because removal of the key locks the steering wheel.

Shift out of the Park position, before releasing the parking brake.

When the car is parked on a steep hill, shifting out of Park may be a little harder. This is due to the weight the car exerts on the transmission.

Position N — Neutral

Shift to this position for standing with brakes applied.

Never use Neutral for coasting downhill. You may lose control over the car because of reduced braking and cause serious damage to the transmission when a driving range has to be selected.

Maneuvering

When alternating between forward (D) and reverse (R) (for instance, while maneuvering the car into a tight parking space), only shift into **Reverse** or **Drive** when the car has come to a full stop and the engine is running at idle speed.

Stuck in snow, mud or sand

When alternating between **Drive** and **Reverse** in an effort to free the vehicle, depress the accelerator pedal lightly while the transmission is in gear, and release the accelerator pedal while shifting. Do not race the engine and avoid spinning the wheels.

Do not repeat "rocking" back and forth with wheels spinning at high engine speed and heavy throttle, as serious damage may be caused in the automatic transmission and other critical parts.

If you cannot free the vehicle after a few "rocking" attempts, call for help or a tow truck.

Accelerator pedal position

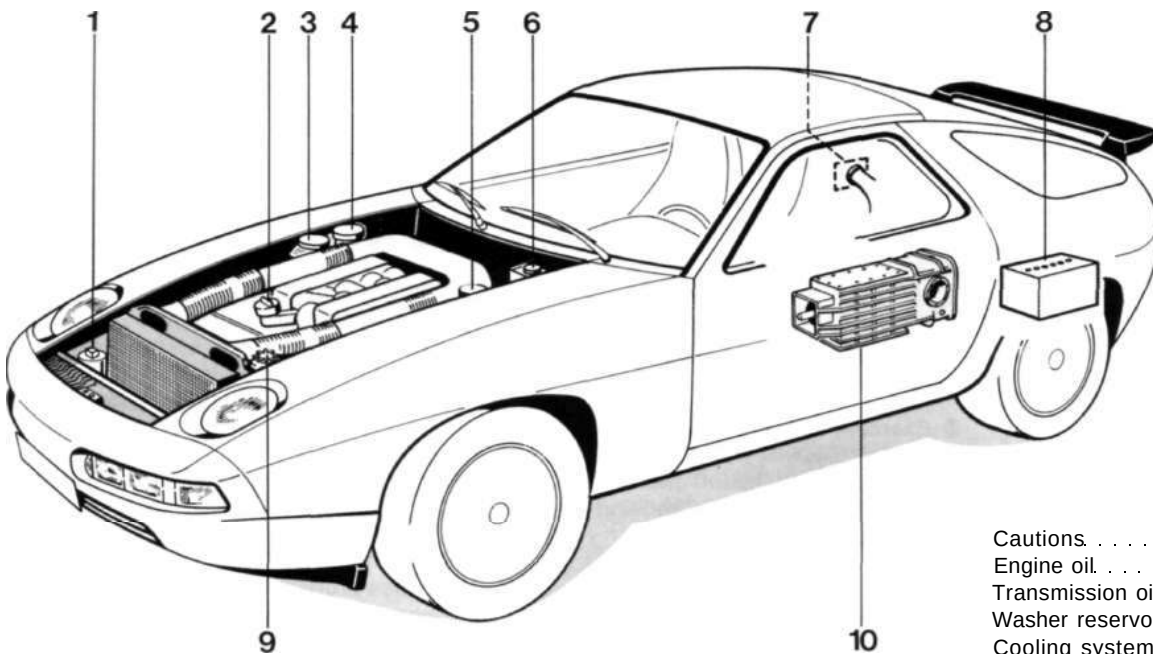
- Under moderate acceleration in the **partload range**, upshifts are effected at low speeds for the sake of economy and quietness.
- **Under full acceleration**, the upshift points slide to higher speed ranges.
- To achieve optimum acceleration (for overtaking), the accelerator pedal must be pressed down past its point of resistance at full load (**kick-down**). The transmission can shift down to a lower gear, depending on selector-lever position and road speed. When engine speed increases, the transmission shifts up into the next gear.

Be careful when using the kickdown on slippery roads. Rapid acceleration may cause skidding.

As soon as you release the pedal from the kickdown position the next higher gear can be automatically engaged.

Please observe all local and national speed limits.

Maintenance, Car Care



- 1 Refrigerant
- 2 Engine oil
- 3 Windshield/headlight washer fluid
- 4 Coolant
- 5 Brake fluid

- 6 Concentrated cleaning fluid
- 7 **Fuel**
- 8 Battery electrolyte
- 9 Hydraulic fluid for steering
- 10 Transmission oil or **ATF**

Cautions.	.64
Engine oil.	.65-67
Transmission oil.	.68
Washer reservoir.	.68-69
Cooling system.	.69-70
Power steering.	.71
Air filter.	.71
Brake fluid reservoir.	.72
Refrigerant.	.72
Fuel.	.73-75
Roof racks.	.75
Car care instructions.	.76-80

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.
 - Even after the engine has stopped, the radiator fan may continue running until temperature of the coolant has dropped to a certain level. Therefore, never touch the fan blades as they will rotate spontaneously when the thermostat turns the fan on, even with ignition off.
 - 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 either Neutral or Park.
 - Exercise extreme caution to prevent neckties, jewelry or long hair from getting caught in the fan blades, the drive belts, or any other moving engine 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.

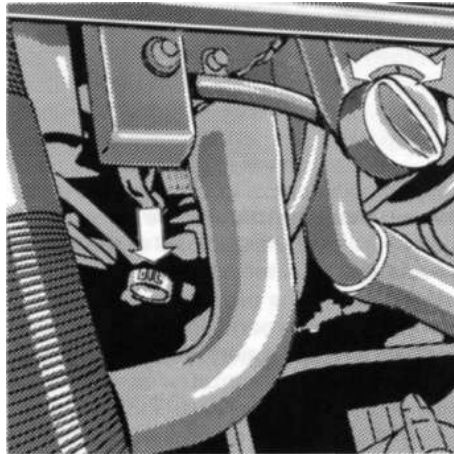
Engine oil

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 an increased oil consumption at high speeds 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 level should be between the "max" and "min" marks on the dipstick. If the oil level drops below the "min" mark, a fault message appears in the information system display when the ignition is switched on. Top up the engine oil.



Checking oil level

To get a true reading, the car should be on level ground. After turning off the engine, wait a few minutes for the oil to return to the oil sump.

1. Pull out dipstick and wipe it dry with a clean cloth or paper towel.
2. Reinsert dipstick; push it in all the way down for an accurate reading.
3. Pull dipstick out again. The oil level is correct if it is between the "max" and "min" marks on the dipstick.
4. If oil level is below "min" mark, or not showing on dipstick, add oil immediately.

The difference between the two marks is about 1.6 U.S. qt. or 1.5 Liter.

Should the engine oil level be too low, the central warning light and the engine oil level warning light will flash as soon as the ignition is turned on (see "central warning light system"). Do not start the engine but add oil immediately or contact your Porsche dealer.

See "Cautions"

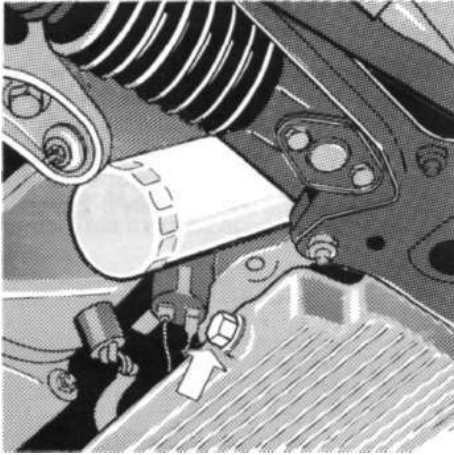
Adding engine oil

Only add the amount of oil that is needed. The correct oil grade and viscosity recommendation is given under "Engine Oils".

1. Remove oil filler cap (arrow).
2. Top up with quality oil labeled "API Service SF or SE".
3. Check oil level with the dipstick - upper mark should not be exceeded.
4. Replace cap and tighten.

WARNING

The oil filler cap and dipstick must be secure to avoid oil spills and resulting fire **hazard.**



WARNING

- When removing oil drain plug with your fingers, keep your arms as high as possible. This will prevent hot oil from running down your arm. Wear eye protection.

Before changing the engine oil yourself, make sure that the disposal of the engine oil and the oil filter as special wastes is carried out in the proper manner. Do not dump it on the ground, into open streams or down sewage drains. Your zoning regulations or environmental rules will tell you how you can dispose of it. Should the disposal of old engine oil present a problem, we suggest that you have your oil changed at your dealer or at a service station.

Oil change intervals specified in the Warranty & Maintenance booklet accompanying the vehicle apply to normal operating conditions and must be adhered to, including intervals for oil filter change.

If you drive mostly short distances, or if you operate the vehicle in dusty areas, or under predominantly stop-and-go traffic conditions, or when temperatures remain below freezing for extended periods, the engine oil should be changed more frequently.

Changing oil and filter

High quality multi-grade oils are suitable for all year round driving. Seasonal oil changes are therefore not necessary. Only if multi-grade oils are not readily available, a single-grade oil of the correct viscosity can be used. Specifications of the various oils to be used are detailed under "Filling Capacities and Engine Oil". **The use of oil additives is not recommended by Porsche.**

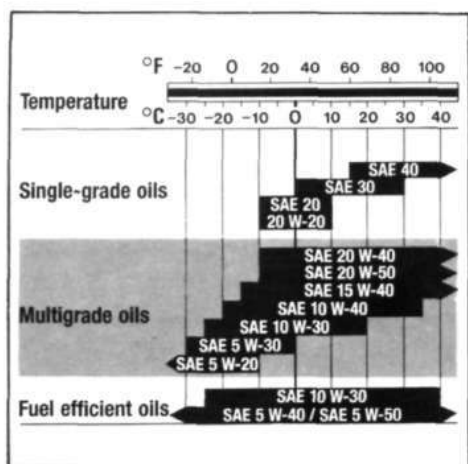
Changing engine oil

With the engine at operating temperature and ignition off.

Remove the engine guard before working at the bottom of the engine.

1. Loosen and remove oil filler cap.
2. Loosen oil drain plug (arrow) on oil pan and allow oil to drain completely.
3. Loosen oil filter element with appropriate wrench and remove.
4. Lightly coat new filter seal with oil.
5. Screw on new filter element until seal just contacts the crankcase. Only hand-tighten according to filter manufacturer's instructions on container or filter element.
6. Clean oil drain plug and replace, using a new gasket. **Do not overtighten the plug.**
7. Fill the crankcase with the required amount of engine oil labeled "API Service SF or SE" (see "Filling Capacities"). **Do not overfill.**
8. Reinstall oil filler cap and tighten securely.
9. Run engine at various speeds for 3 - 5 minutes and check for leaks. Check the oil level with dipstick. Top up if necessary.

See "Cautions".



Examples of approved viscosity classes



LOOK
FOR THIS
LABEL

Engine oils

Use only engine oils which meet the specifications designated by Porsche. Your Porsche dealer will be glad to advise you on the correct type of oil for your engine.

These oils can be intermixed.

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 or multigrade fuel efficient oils since these are largely independent of seasonal fluctuations in temperature.

If your vehicle is used in stop-and-go traffic in winter, the engine will not always reach its optimum operating temperature. Condensation from products of combustion may accumulate in the oil. It is therefore advisable to change the oil in spring so that your engine once again has an efficient engine oil.

Engine oil performance class

Engine oil is not only a lubricant, but also serves to keep the engine clean, to neutralize the dirt which penetrates into the engine through combustion and to protect the engine against corrosion. To perform these functions, the oil contains additives which have been specially developed for these functions. So-called mineral oils are produced directly from crude oil. The oils can be further refined (hydrocrack) or totally converted through a number of chemical processes (synthetic oils). These oils are structurally more efficient and require fewer additives than simple mineral oils.

The efficiency of an oil is expressed, for example, by the API classifications which are divided into categories "S" and "C". The degrees of quality are expressed by final letters in alphabetical order. The requirements for Porsche engines are API class SE/CC to SF/CD.

Viscosity

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 0° C) the SAE class is given as a number and the letter "W" (as in winter); for hot viscosity (measured at 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 100° C) the oil with the number 30 is thinner than the oil with the number 40.

Single-grade/multigrade oils

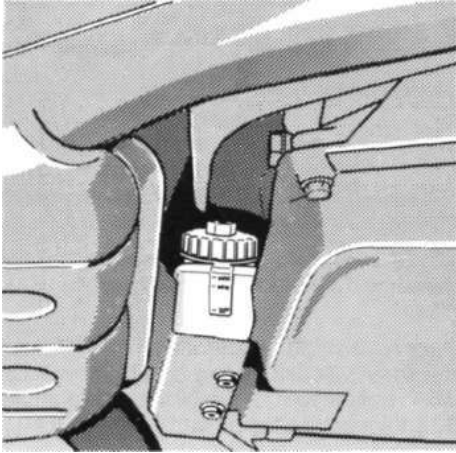
Oils with two viscosities are called multigrade oils; oils with only one viscosity are termed single-grade oils.

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

Fuel efficient oils

Fuel efficient oils have low viscosity at low temperatures and high thermal stability at high temperatures.

As high-performance oils, these oils are manufactured only as synthetic or hydrocrack oils at present.



Checking the ATF level

The ATF should be checked at the intervals listed in your **Maintenance Schedule**. A correct ATF level is very important for the proper functioning of the transmission.

The reading should be done when the ATF is warm, with the engine idling, the selector lever in Neutral and the parking brake applied.

The level of the ATF can be checked visually through the transparent reservoir, located at the rear end of the transmission housing. You have enough ATF, if the fluid level is between the MAX and the MIN mark on the reservoir.

The level should never be above or below these two marks.

Should the fluid level in the transparent reservoir drop below the MIN mark or rise above the MAX mark, do not just add or drain ATF. Have your dealer check and correct the cause promptly.

In the event of a noticeable loss of ATF, contact your dealer immediately.

Changing the ATF

The ATF has to be changed at the intervals listed in your **Maintenance Schedule**. When refilling, the level must reach **the mark below** the MIN mark. Also see "Filling Capacities".

Manual transmission oil

The transmission oil has to be changed at the intervals listed in your **Maintenance Schedule**.

Hypoid oil SAE 75 W 90 labeled "For Service API/GL5 or Mil-L 2105B" **must be used for the manual transmission** (also for limited slip differential). Also see "Filling Capacities".

We recommend that you have the transmission oil changed at your Porsche dealer, who has the required lubricants and the necessary filling equipment.

If you suspect an oil leak in the transmission, have your dealer check it out immediately.

Automatic transmission fluid

The torque converter and the transmission are lubricated with Automatic Transmission Fluid (ATF). The final drive requires hypoid oil SAE 75 W 90 only.

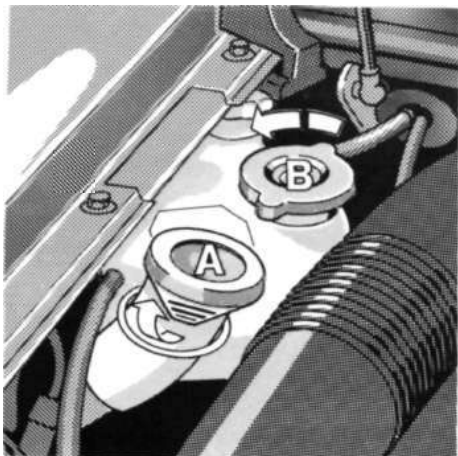
Do not tow the car or run the engine without ATF in the transmission.

The automatic transmission may be damaged by even a tiny speck of dirt, only a clean funnel or spout must be used when adding ATF.

Windshield washer fluid reservoir (A)

The transparent fluid reservoir is located in the right rear in the engine compartment, in front of the expansion tank (see illustration). As clear water is normally not adequate to keep your windshield and headlights clean, add a cleaning solution to the water.

To top up with washing fluid, you can pull out the filling tube extension.



Cooling system (B)

For year round driving, anti-freeze is added at the factory for temperatures down to:

- 23° F/-30° C for U.S.
- 40° F/-40° C for Canada

Because of its anti-corrosion properties, antifreeze should also remain in the cooling system for summer operation. Cooling system capacity and specified anti-freeze and water ratios are listed under "Filling Capacities".

Use any quality phosphate-free anti-freeze containing ethylene glycol, available at your Porsche dealer. **Anti-freeze other than specified by Porsche for aluminium engines and radiators may cause corrosion of the cooling system, leading to engine overheating and damage.**

Only for topping up coolant, a small amount of anti-freeze containing ethylene glycol and phosphates may be used if recommended.

The anti-corrosion properties and the antifreeze consistency will diminish gradually. We recommend renewing the coolant mixture at least every 2 years.

WARNING

Even after the engine has stopped, the radiator fan may continue running until temperature of the coolant has dropped to a certain level. Therefore, never touch the fan blades as they will rotate spontaneously when the thermostat turns the fan on, even with ignition off.

Checking coolant level in expansion tank

A correctly functioning cooling system requires only minor care. The coolant level should be checked from time to time, and always before going on a longer trip.

The **expansion tank** with filler cap opening is located in the right rear of the engine compartment (see illustration). Since the expansion tank is transparent, it is not necessary to unscrew the filler cap.

When the engine is cold, the coolant level should reach the manufacturing seam on the expansion tank. When the engine is warm, the coolant level will be above the manufacturing seam.

Since the closed cooling system loses almost no coolant, **topping up** is normally not required. An obvious loss of coolant indicates leakage. The fault will be indicated by a fault message in the information system display. Top up the coolant and contact your dealer.

To assure that the windshield washer and the headlight washer systems also function at freezing temperatures, anti-freeze/cleaning solution must be added to the water beforehand. Follow the instructions on the can for the right amount to be used.

Do not use engine coolant antifreeze or any other solution that can damage the car paint.

WARNING

- Do not open the filler cap when the engine is hot because of the danger of scalding. Allow the engine to cool down. Protect your hands, arms and face.
- Using a thick rag, open the cap carefully and only enough to allow excess pressure to escape before removing the cap.

To avoid damage to the engine, **only add cold antifreeze and cold water** to the cooling system **when the engine is also cold**.

A warm engine should only be topped up if the coolant level has dropped appreciable below the manufacturing seam. Too much added coolant will escape through the pressure cap when coolant warms up.

For more details see "coolant temperature gauge and coolant temperature warning light".

Fan control

This device permits cooling output to be adapted to the operational status of the engine. A control unit processes the information it receives from the sensors in the engine compartment and passes the appropriate signals to the fans. If more air is needed, the speed of the two continuously adjustable

electric cooling fans is increased. If the temperature of the coolant drops below 75 °C, the fans are switched off; in the event of a fault, they operate at maximum speed.

The system has both auto and remote supervision. Should a component fail, the coolant temperature warning light gives indication of excessively high coolant temperatures and a fault message appears in the information-system display.

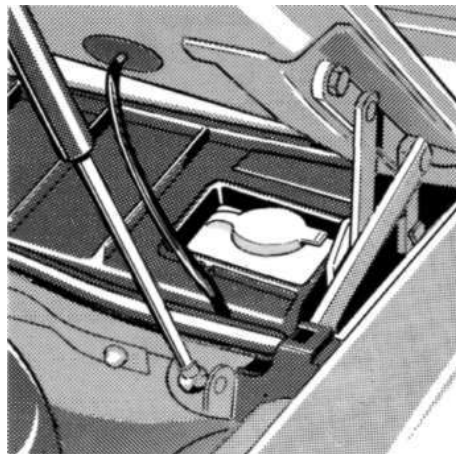
When the engine is warm, the fans may continue to run after the ignition key has been removed. To avoid any danger of injury, the fans are switched off when the engine-compartment hood is opened. However, this protective measure to prevent the fans starting suddenly while the hood is open is only fully operative as long as the key is removed from the ignition.

Winter operation

At the beginning of the winter season, have the coolant checked for anti-freeze concentration.

The ratio between water and anti-freeze, necessary to prevent freezing, depends on the anticipated outside temperatures. The ratios can be taken from the mixing chart listed under "Filling Capacities" or from the container of the antifreeze manufacturer.

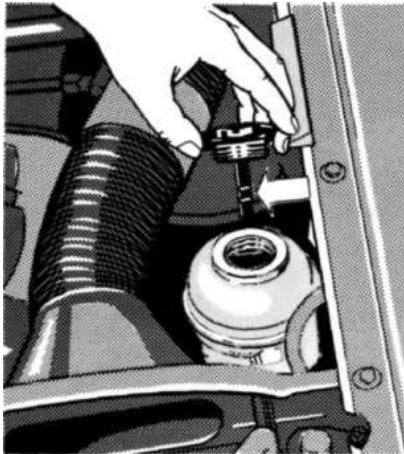
Increasing the anti-freeze in the coolant further than shown on the container is not only uneconomical, it is also detrimental to engine cooling.



Intensive windshield cleaning system reservoir

The reservoir is located in the engine compartment beneath the windshield.

To prevent damage and discoloration to paintwork, you should use **only "Porsche Special Silicone Remover"**.



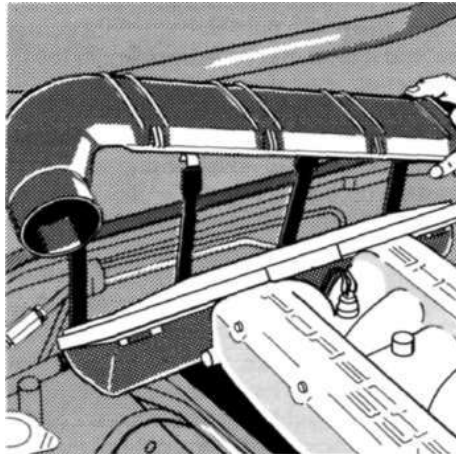
Power steering fluid reservoir

The reservoir is located in the engine compartment on the left side.

To check fluid level...

1. Remove cap from reservoir.
2. With engine running at operating temperature, the fluid level should meet the mark on the reservoir. **If necessary, top up with ATF Dexron®.**
3. Reinstall cap and make sure that sealing ring is seated correctly.

If the engine is not running, power assisted steering is no longer effective. You can continue to steer the car but considerably more effort will be required to turn the steering wheel.



Changing air cleaner filter element

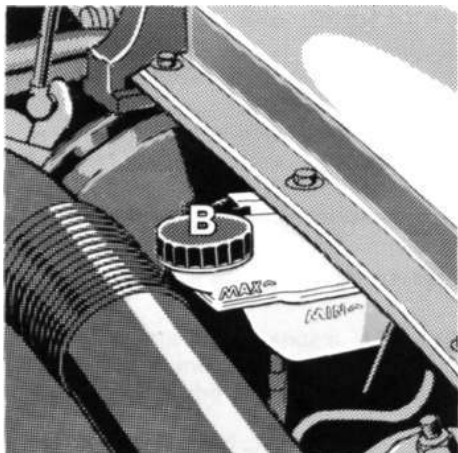
A dirty air cleaner not only reduces engine performance, but can lead to premature engine wear. The filter element must be replaced at the intervals listed in your **Maintenance Schedule**. If driving is mostly done in areas where the air is very dusty, the air cleaner should be checked and cleaned frequently — perhaps daily.

1. Detach air intake hoses from air cleaner housing. Make sure that each hose stays connected to the toothed belt covers.
2. Loosen rubber fasteners and remove top of filter housing together with filter element.

3. Clean filter housing with lint-free rag and install new filter element.
4. Reattach air intake hoses to air cleaner housing.

WARNING

The paper filter element must never be cleaned or soaked with gasoline, cleaning solvents or oil. Doing so may cause a fire or explosion and result in serious personal injury.



Brake fluid reservoir (B)

The brake fluid reservoir is located in the engine compartment.

The brake fluid reservoir has three chambers: one for each of the dual brake circuits, and one for the clutch.

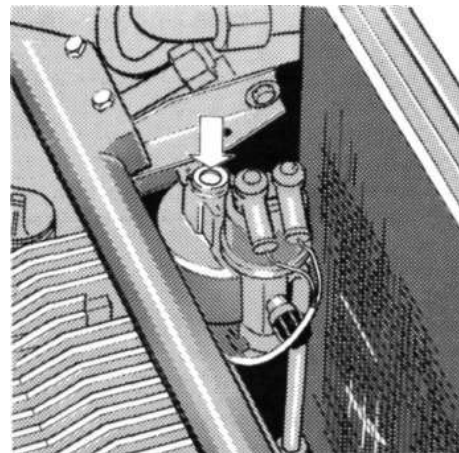
Check the brake fluid level regularly. Since the reservoir is transparent, the fluid level can be checked without removing the filler cap. The fluid level should always be between the MIN and MAX marks.

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

Should the fluid level drop below the MIN mark, the brake fluid warning light comes on and a fault message appears in the information system display. Pull off the road, stop the engine and add brake fluid immediately or contact the nearest Porsche dealer to have the cause located and corrected.

WARNING

- Every 2 years the brake fluid has to be replaced. See your Warranty & Maintenance booklet.
- If brake fluid must be added to the reservoir, use only new and unused DOT 3 or 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.
- The brake warning light does not indicate brake fluid level. Check fluid level between regular maintenance services.
- Brake fluid is poisonous. Brake fluid is also harmful to the paint of your vehicle.



Checking refrigerant level

Check the refrigerant level in the reservoir at least once a year because the fluid diminishes gradually during operation.

Turn on the air conditioner and observe refrigerant level through sight glass (arrow) in the reservoir.

Occasional bubbles are normal.

Foam or a constant stream of bubbles indicate that the system does not contain enough refrigerant.

In case the system requires recharging, contact your Porsche dealer. He has qualified personnel and the necessary equipment.



Fuel filler cap

The fuel filler cap is located under the flap in the rear quarter panel behind the right rear wheel.

When putting the cap back on the fuel filler neck, be sure cap is securely seated. Twist cap clockwise, until it stops with an audible click and then lock with the ignition key.

We recommend you turn off the engine when filling the fuel tank.

Fuel tank capacity

Fuel tank capacity is listed under "Filling Capacities"

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.

Minimum octane rating is 95 RON/85 MON "Premium unleaded fuel" (90 CLC or AKI). Federal law prohibits use of leaded fuel in this vehicle.

Regular unleaded fuel with a minimum octane rating of 91 RON/ 82 MON (87 CLC or AKI) can be used temporarily, due to a built-in "Electronic Octane™ Knock Control", if premium unleaded fuel is not available. In this case avoid full throttle operation.

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

Octane ratings

Octane rating indicates a 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:

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

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 additional 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, grain 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.

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 dirtfree to allow proper engine "breathing".
- Battery should be fully charged.
- Wheels should be properly aligned.
- Tires should be inflated at correct pressures.
- 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 equipment 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

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 considerable 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.

Roof racks

Normal commercially available roof racks **cannot** be fitted. If an original Porsche rack (as available hitherto) is fitted, the permissible roof load is 35 kg (77 lbs).

With the "New Porsche Roof Transport System" you can transport a wide variety of sports and hobby equipment, up to a roof load of 75 kg (165 lbs).

There are many different racks to choose from. Your Porsche dealer will be glad to advise you on the versatility of the "New Roof Transport System".

To ensure minimum noise, maximum comfort and economy and a desirable level of safety when driving with an unloaded roof rack, you should not exceed a maximum speed of 180 km/h (110 mph).

When the roof rack is loaded, the recommended maximum speed depends on the nature, size and weight of the load. You should not, however, exceed a speed of 140 km/h (85 mph) at any time. Make sure that the load is carefully mounted. Secure it additionally by locking the roof transport system.

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 wiped off the car with a dry cloth since dust particles are abrasive and could dull and damage the surface finish.

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 floor mats 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.	82
Tool kit, car jack.	83
Tires, wheels.	84-87
Tire pressure warning system.	87-89
Spare tire.	90
Lockable wheel nuts.	91
Changing a wheel.	92-93
Lifting vehicle.	93
Fuses and relays.	94
Battery.	95-96
Emergency starting.	97-98
Replacing bulbs.	99-103
Headlight adjustment.	104
Manual operation of headlights.	105
Emission control system.	106-107
Fuel evaporation control.	108

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.

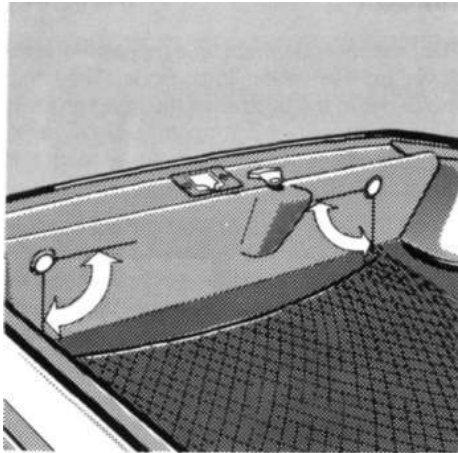
WARNING

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.
- Even after the engine has stopped, the radiator fan may continue running until temperature of the coolant has dropped to a certain level. Therefore, never touch the fan blades as they will rotate spontaneously when the thermostat turns the fan on, even with ignition off.
- 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 either Neutral or Park.
- Exercise extreme caution to prevent neckties, jewelry or long hair from getting caught in the fan blades, the drive belts, or any other moving engine 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.

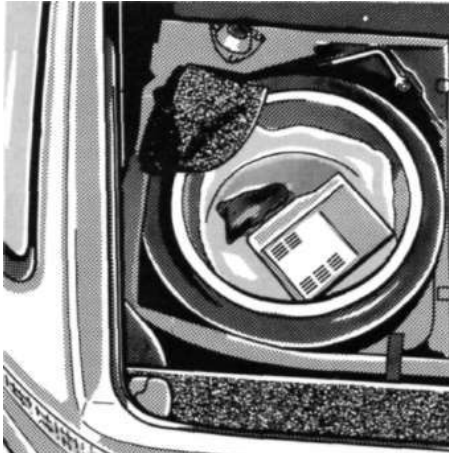


Tool kit

The tool kit is a lift-out tray fitted into the rear cross wall of the car. To remove or replace the tray, turn both holding knobs 90° (arrows).

The tool kit contains tools needed for minor emergency road side repairs or adjustments.

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



Car jack

The car jack and the rim wrench are located underneath the luggage compartment, together with the collapsible spare tire. The tire is covered by a lid with a quick release catch.

WARNING

- Use the jack only for changing a wheel. Never jack up other vehicles or other loads with it.
- Follow all warnings and instructions found in this manual for changing a tire.
- The 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.

Tires/Wheels

The original equipment tires 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 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

The tire pressures are monitored by the tire pressure warning system.

WARNING

Incorrect tire pressures cause increased tire wear and adversely affect road holding of the vehicle, leading to loss of control.

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 (1.6mm).

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.

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.
- Replace missing valve dust caps.
- Keep oil, fuel, brake fluid, etc. away from tires.
- 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 on an axle is replaced it should be noted that the difference in tread depth on one axle must not exceed 30 %.

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 right angles. Exercise care when parking along curbs.

Tire replacement

The tire makes and types specifically mentioned in your vehicle papers are binding, when changing to different tires, be sure to observe the applicable regulations in your country. If in doubt, contact your Porsche dealer or Porsche importer of your country.

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 final standards concerning tire strength at speeds above 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. As a matter of principle, only tires of the same make and type should 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

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 fitting tires already mounted on rims, ensure that the colored wheel bolt is closest to the valve. Always screw the lockable wheel nut onto this bolt. When removing, mark the direction of rotation on each wheel, e.g. FR, FL, RR and RL. This precaution ensures that the wheels will be remounted in the same position, thus obviating the risk of imbalance.

When balancing light alloy wheels, use only adhesive balancing weights supplied through the Porsche parts service.

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 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 remounting, put tires with the most tread depth at the front. Have tires/wheels balanced as soon as possible.

The supposition that tires become long wearing due to storage and age is unfounded. Chemical additives, which make the rubber elastic, lose their effectiveness in the course of time and the rubber perishes. **Therefore, the tires, especially the collapsible spare tire, should from time to time undergo a visual check. For this, pump up the collapsible spare tire.**

Under no circumstances should tires be older than 6 years.

The age of the tire can be seen from the "DOT" code number. If, for example, the last three numbers read 128, this means it was produced in the 12th week of 1988.

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.

Radial ply M+S tires should be inflated with the same cold tire inflation pressures required for the regular radial ply tires. However, do not exceed the maximum tire inflation pressure listed on the tire sidewall.

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 fitting tires already mounted on rims, ensure that the colored wheel bolt is closest

to the valve. Always screw the lockable wheel nut onto this bolt. When removing, mark the direction of rotation on each wheel, e.g. FR, FL, RR and RL. This precaution ensures that the wheels will be remounted in the same position, thus obviating the risk of imbalance.

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

Should snow chains be necessary, they must be mounted on the drive wheels only.

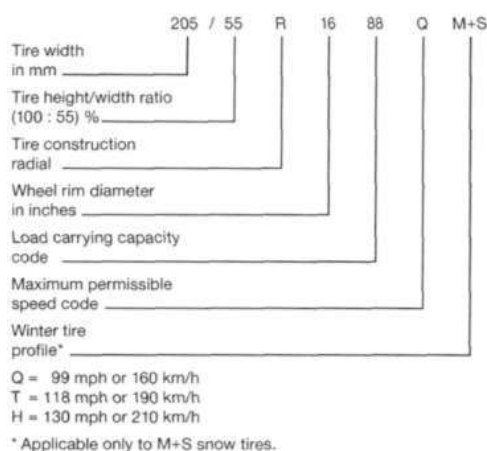
Check with local authorities for possible restrictions.

Use only snow chains with fine pitch links, so that enough space remains between the chains and the inside of the wheel arches.

Drive wheels must rotate freely with chains mounted to prevent damage to body, axle or brake components. Follow instructions issued by the supplier of the chains. 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 (149 mph).

Tire Pressure Warning System

The tire pressures are monitored by a warning system that

- monitors correct tire pressure more precisely and reliably than any tire-pressure gauge in the tool kit, at a service center or workshop,
- takes the effect of temperature on tire pressure into account. (Style of driving, load, roadspeed, outside temperature, sunlight and the heat radiated by the engine affect the temperature of the air in the tires),
- assures excellent handling and low fuel consumption by correct tire pressures,
- helps prevent incipient tire damage and increased tread wear due to low tire pressures.

Method of operation

Two pressure-operated switches in each wheel monitor the tire pressures. If the pressure in the tire drops beneath the trip pressure to which the switches are set (front 2.35 bar, rear 2.85 bar) or if there is a malfunction in the system, a corresponding message appears in the display in the instrument cluster.

When the ignition is switched on, the warning light in the instrument cluster comes on as a check. The light goes out as soon as the engine is started. Automatic tire-pressure monitoring begins once a distance of approx. 20 meters (66 ft) has been covered at a speed of at least 5 km/h (3 mph).

The tire pressure warning system takes the effect of tire temperature on tire pressure into account. Nevertheless, it is possible that the pressure in the tire may not be as high as the pressure required for a given driving situation.

Therefore, the system may not issue a warning immediately after the car pulls away. Even if the tire pressure is not corrected, the warning may not be repeated after the ignition has been switched off and the car restarted, if the same conditions do not re-occur. Nevertheless, the pressure is too low for a particular combination of speed and temperature, in other words, for a particular driving situation.

In the interests of your own safety, correct the tire pressures at the earliest possible opportunity.

Low tire pressure has an adverse effect on handling. Damage to the tire and wheel may also result.

If the information system repeatedly signals a loss of pressure at brief intervals, or if the pressure is considerably lower than specified (approx. 0.5 bar/8 psi), tire damage may be suspected.

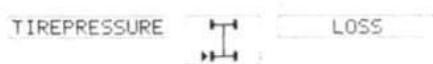
The tire must be replaced or the spare wheel fitted as soon as possible. Failure to do so could result in serious personal injury or property damage.

To avoid damaging the pressure-operated switches, the tire pressure applied when a new tire is fitted must not exceed 6 bar (88 psi).

Fault messages while underway

See also "Information system"

A loss of tire pressure is indicated by the warning light and a message which appears in the information-system display:

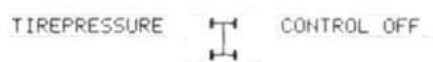


(by way of example, rear left)

The arrow indicates the wheel losing pressure. If the ignition is switched off, a reminder remains visible for approx. 2 minutes.

The tire pressure of the spare wheel is not monitored. This display also appears when the spare wheel is fitted.

If the System develops a fault, the warning light in the instrument cluster comes on and the following message appears:



The system shuts down because of a malfunction. Tire pressure is no longer monitored. Contact your authorized Porsche dealer if a system malfunction message appears.

Fault messages can be acknowledged and the worded messages cancelled. However, the warnings are repeated periodically after they have been acknowledged and every time the engine is restarted, until the fault in question is rectified.

Checking tire pressures

There is always a certain amount of pressure loss, because the tire rubber is very slightly permeable to air (diffusion).

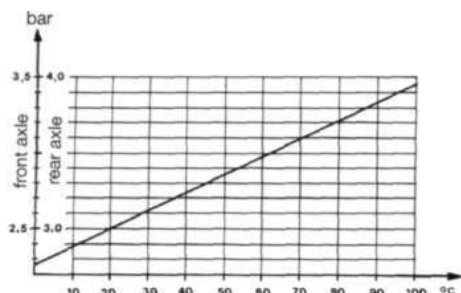
Tire pressure must be checked if the "Pressure loss" message appears. Increase pressure in the tire concerned by 0.3 bar (5 psi), to the specified pressure at least. Since pressure losses due to diffusion are roughly equal for both the wheels on either axle, the pressure in the other tire on the axle must be increased to the same level. Never reduce a higher pressure!

The specified pressures at 20° C are 2.5 bar (36 psi) front, 3.0 bar (44 psi) rear.

Switch the engine off before adjusting tire pressures, so that the warning system can register the new pressure settings.

To measure or correct tire pressure exactly, therefore, the temperature of the tire must be known (see graph).

Tire pressure increases by approx. 0.1 bar (1.5 psi) for every 10° C (18° F) increase in the temperature of the air inside the tire. Therefore, the correct pressure in tires that have been driven until warm is always above the specified pressure. Never reduce tire pressure while the tires are warm.



air temperature in the tire

Brief test of the tire pressure warning system

Please conduct this test every time a wheel or tire is changed. The car need travel no more than some 20 meters (66 ft) at a speed of at least 5 km/h (3 mph) with the tires inflated as follows:

1. **Tire pressure 0.5 bar (8 psi) beneath specified pressure: front 2.0 bar (28 psi), rear 2.5 bar (36 psi)**

While driving, observe the instrument-cluster display.

The arrows concerned must flash.

If an arrow indicates steadily instead of flashing, **one** pressure-operated switch in the wheel concerned is defective and must be replaced.

Do not exceed 50 km/h (30 mph). At speeds above 50 km/h (30 mph), the display always flashes.

2. **Tire pressure 0.5 bar (8 psi) above specified pressure: front 3.0 bar (44 psi), rear 3.5 bar (52 psi)**

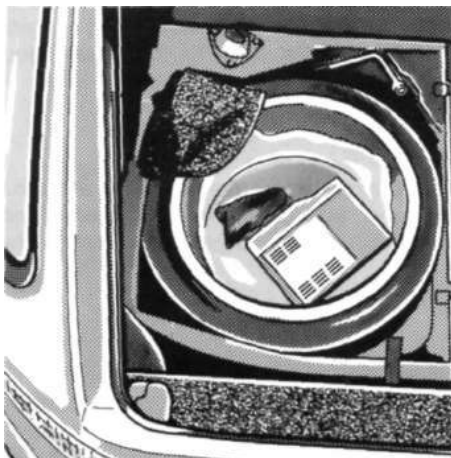
While driving, observe the instrument-cluster display.

There should be no fault messages.

A fault message indicates that there is a system malfunction.

In the event of a fault message, contact your authorized Porsche dealer.

3. **Do not forget to correct tire pressures to the specified settings after the brief test.**



Collapsible spare tire

The spare tire is stored underneath the luggage compartment cover. It is covered by a lid with a quick release catch. The car jack, the electric air compressor kit and the tire pressure tester are stored inside the wheel rim. This kit also includes a plastic cover for the road wheel to keep luggage compartment or car interior clean.

Due to tread and space saver design features of the collapsible tire, car handling may be affected.

Therefore, 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. Fitting the spare wheel at the front improves handling of the car and reduces wear on the tires. 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.
2. Attach hose of air compressor to tire valve and insert plug of electric cord into cigarette lighter socket.
3. **The required tire pressure is 36 psi or 2.5 bar.** Check pressure with tire pressure gauge.
4. Disconnect hose and electric cord and store air compressor.
5. 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 is released from the collapsible tire, it will return to its original shape after cooling down for several hours. Store collapsible tire in the luggage compartment.

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

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.

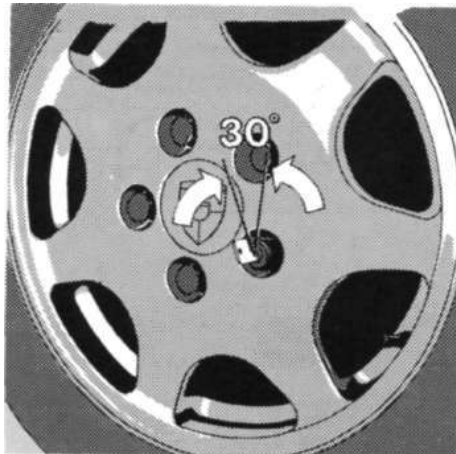
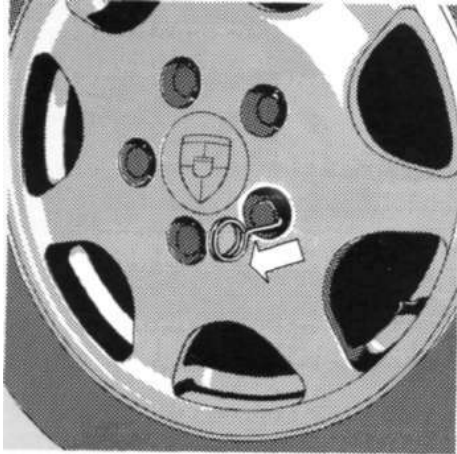
If air compressor does not work

- .. 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 object to prevent short circuit.
- .. Check if fuse is blown. Replace with new equivalent fuse.

Maintenance of air compressor

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

The air filter should be cleaned periodically to assure maximum efficiency of the unit.



Lock-up wheel nuts

The wheels of your vehicle are theftproof by means of a wheel nut lock. The wheel nut lock consists of a wheel nut and a plug-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 Porsche dealer. Do not leave these keys in the vehicle. Keep them in a safe place.

To unlock a wheel

1. Remove protective plastic cap from wheel nut.
2. Insert key all the way and turn left about 30°.
3. Remove lock sleeve together with inserted key.
4. Replace protective plastic cap.

To lock a wheel

1. Remove protective plastic cap from wheel nut using the hook from the tool kit.
2. Insert key, turn it back 30° to right and remove. Slide lock sleeve over wheel nut until you feel it lock in.
3. Make sure that the edge of the lock sleeve rests firmly against base of wheel nut.
4. Replace protective plastic cap.

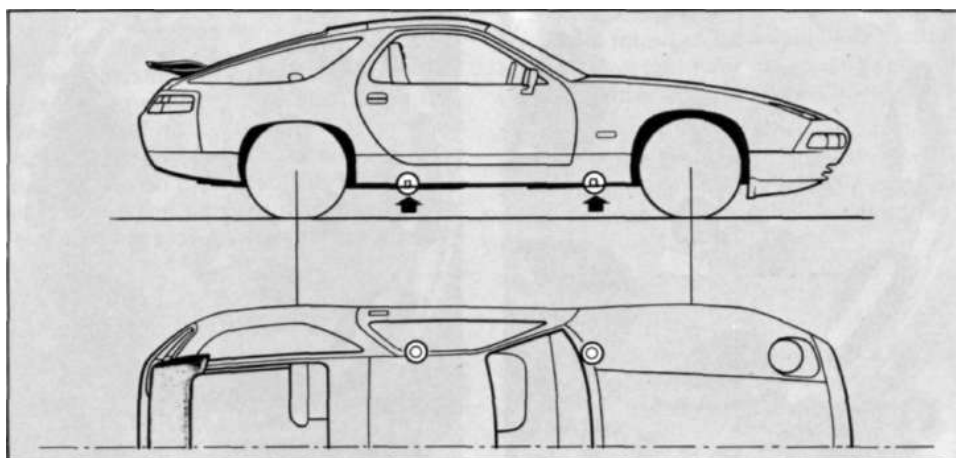
To avoid unbalancing the wheels, always fit the lockable wheel nut to the colored bolt beside the valve.

Changing a wheel

WARNING

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 material 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

Loosen the wheel nuts about one turn, Do not yet remove the nuts.

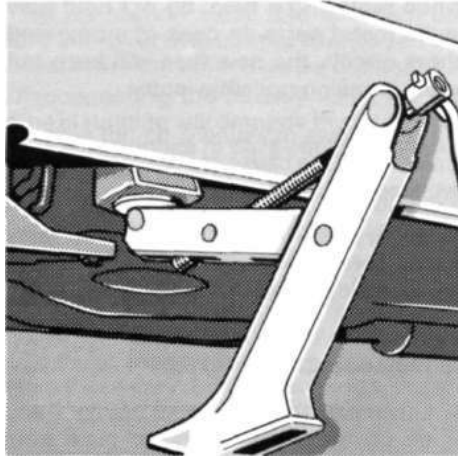
Securely insert the car jack in the front jack port located under the body. There are two on each side; front and rear.

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

3. To raise the car, turn the handle clockwise. Only raise the car as much as is needed to change the wheel.
4. Fully unscrew all wheel nuts, remove the wheel and put the collapsible tire on.
5. When the spare wheel is in position, reinstall the nuts and handtighten them

crosswise. When tightened crosswise, the nuts will center the wheel correctly. Make sure that the coloured wheel bolt is closest to the valve. Screw the lockable wheel nut onto this bolt.

6. Inflate the collapsible spare tire with the air compressor. Check pressure with tire pressure gauge.
7. To lower the car, turn the jack handle counterclockwise till tire touches ground.
8. Fully lower the vehicle and remove jack.
9. Firmly tighten the wheel nuts again in a crosswise pattern.



Lifting vehicle

Lifting with car jack

The jack ports are located below the front and the rear of the doors underneath the floor pan, hidden from view.

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 injuries.

The vehicle should never be lifted or jacked up from underneath the engine oil pan, the transmission housing, or the front or rear axle. This could lead to serious damage.

Lifting with workshop hoist or floor jack

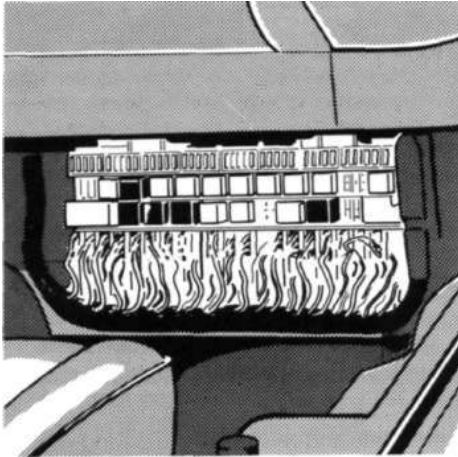
Make sure there is sufficient clearance between pads and vehicle before driving vehicle onto hoist, especially if the vehicle has a large front panel or spoiler. **The vehicle must be lifted only at the lift points for the car jack.**

Take care to avoid damaging critical components which are close to the lift points.

WARNING

When removing components such as engine block, transmission housing, fuel tank, wheels, front or rear axle, anchor vehicle to hoist or add corresponding weights to maintain the center of gravity. Otherwise the vehicle might tilt or slip off the hoist, causing serious damage or personal injury.

Correct tightness of the wheel nuts is important. Correctly tightened nuts should have a torque of 94 ft. lb. (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 wheel nuts, have it checked with a torque wrench by your dealer or at a service station.



When replacing a fuse, do not hold fuse by its metal parts. In case of a repeated short circuit, the new fuse will burn out again, causing possible injury.

If a fuse blows repeatedly, do not keep on replacing it. The cause of the short circuit or overload must be found.

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

To replace a fuse...

1. Lift carpet in the passenger's footwell and tilt up the protective cover plate from fuse/relay board.
2. In a blown fuse, the metal strip has melted. In order to replace the fuse, it must be pulled out. The tool for doing this is located at the top left on the central electrical system. If there is doubt, or, for example, in the dark, the fuse can be tested by inserting it at the test point on relay XVI. If the fuse is defective, the diode in the relay does not light up.
3. Carefully install new fuse. Use only fuses with the same rating as replacements!
4. Replace cover plate and carpeting.

It is advisable to always carry a few spare fuses in the car.

Relays

Under the fuses, there are relay boards attached for various electrical switching functions. Testing and replacement of a defective relay should only be done by an authorized Porsche dealer.

The relay for the rear window wiper is located on the back left, under the tool plate, the time relay for the seat heater is located under the seat.

Fuses and relays

A failure in the electrical system may be caused by a blown fuse or a faulty relay.

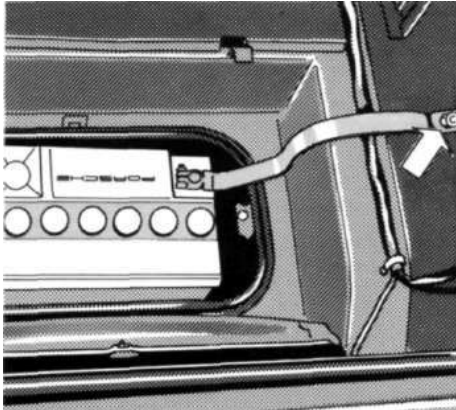
The central fuse/relay board is located in the passenger's footwell and protected by a cover plate. The light for the board comes on when a door is opened.

The use of the fuses and relays is shown in a list on the floor board.

Before replacing a fuse, turn off all electrical components and the ignition; remove the key. Replacing a fuse or a relay with the engine running or the ignition on could cause electrical shock.

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

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



Battery - 12 Volt

The battery is located underneath the collapsible spare tire in the luggage compartment. The battery is accessible after taking out the spare tire.

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. First disconnect the negative ground wire at body (arrow) and then the positive cable. To reconnect battery, reverse the procedure.

This precaution must also be taken before charging with a rapid charger, as the alternator may otherwise be damaged. Disconnecting the battery while 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. If the battery is disconnected, the data for the engine electronics stored in the control unit are erased. When the battery is reconnected, the engine should be run for approx. 10 minutes to allow the control unit to re-acquire these data. During this period, the engine may idle unevenly or too fast.

WARNING

- Do not lay tools or other metal objects on the battery as they could cause a short circuit across the battery terminals.
- Do not expose the battery to an open flame or electric spark. Hydrogen gas generated by the battery is explosive.
- 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 vent caps of **each** cell. The fluid level should meet the indicator mark in each cell. If necessary, top off 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 the summer than in the winter, and more often when driving long distances. Only fill up to mark, otherwise the electrolyte will overflow when the battery is being charged and cause damage.

Battery care

- 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 window 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 lose 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 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 NEGATIVE (-) to NEGATIVE (-).

- 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.
- 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 N or P 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

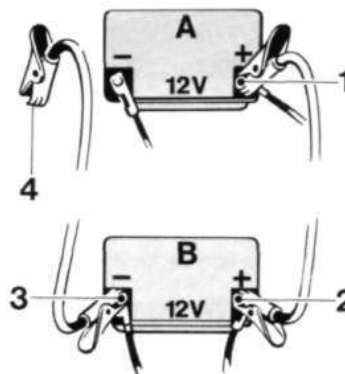
- To avoid serious personal injury and damage to the vehicle, heed all warnings and instructions of the jumper cable manufacturer.
- Only jumper cables of adequate diameter cross-section and fitted with insulated alligator clips should be used.
- The jumper cables must be long enough so that neither vehicles nor cables touch another.
- When connecting jumper cables, make sure that they cannot get caught in any moving parts in the engine compartment.

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

Always connect POSITIVE (+) to POSITIVE (+), and NEGATIVE (-) to NEGATIVE (-).

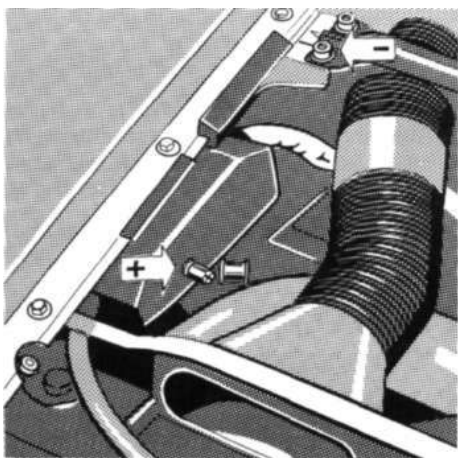
1. Connect camp of plus-cable to positive (+) terminal of discharged battery.
2. Connect camp on opposite end of cable to positive (+) terminal of booster battery.
3. Connect camp of minus-cable to negative (-) terminal of booster battery.

4. Connect camp on opposite end of cable to a bare metal part 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.
6. With engine running, remove jumper cables from both cars in exact reverse order: Steps 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.



Start assist connecting points sequence

On right side of engine compartment you will find a positive (+) battery post (remote connection).

First connect clamp at end of positive (+) cable to the remote connection in the engine compartment (+ arrow). Then connect clamp at other end of positive (+) cable to the positive (+) terminal of the booster battery.

Next connect clamp at end of negative (-) cable to the negative (-) terminal of the booster battery. Then connect clamp at other end of negative (-) cable to the engine compartment strut rod (- arrow).

Caution: The cable clamps must not contact each other, and the plus-cable leading to the positive (+) post must not contact any metal pan of the car.

Caution: Do not try to start car by pushing or towing. Damage to the catalytic converter and other components of the car may result.

Replacing bulbs

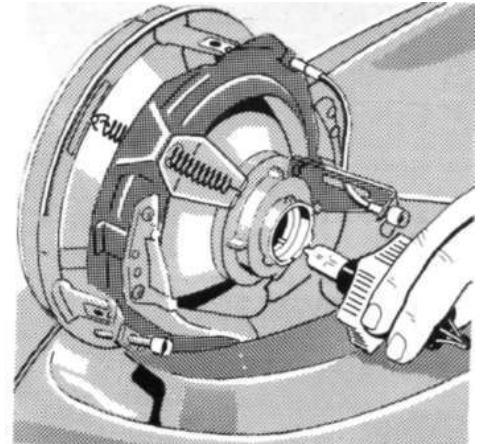
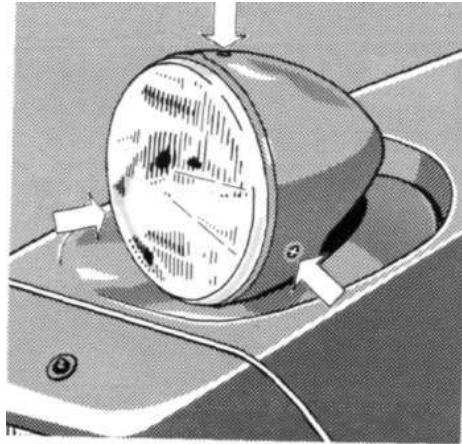
To avoid short circuits, turn off the respective electrical components when changing light bulbs.

Keep bulbs free of grease and dirt. Hold them only with a clean cloth or soft paper.

Do not use chemical cleaning agents for the plastic lenses. Plastic lenses should only be cleaned with water or a mild soap/water solution.

We recommend you keep an assortment of spare bulbs in the car.

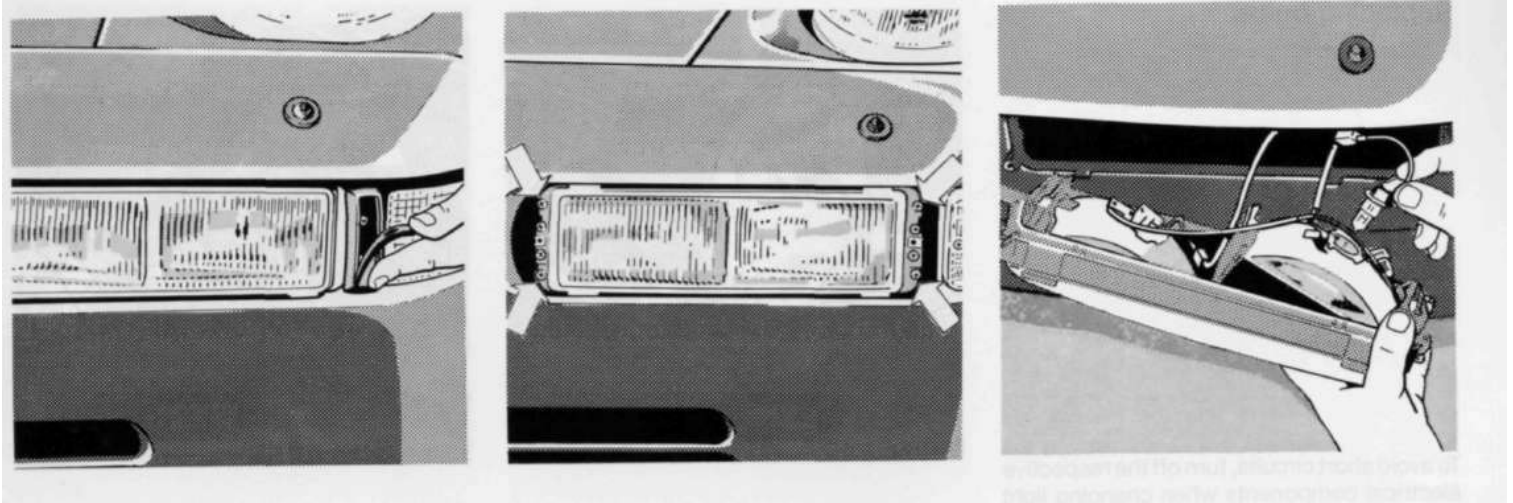
When traveling abroad, remember that some countries require spare bulbs as part of the safety equipment.



Headlights

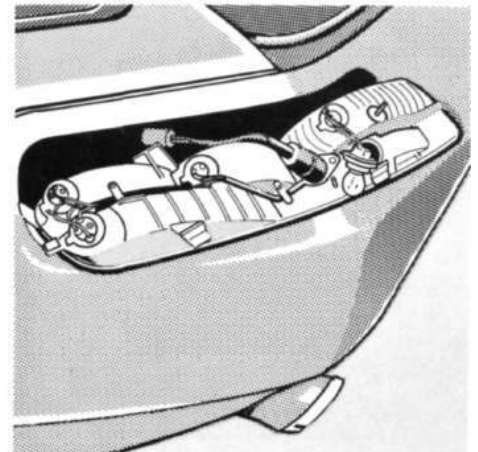
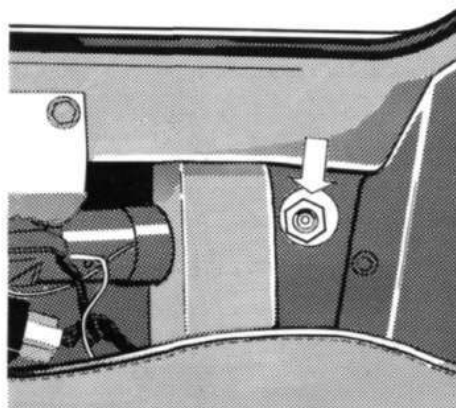
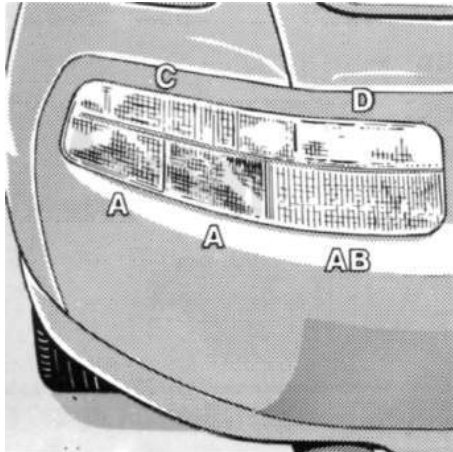
(high beam, low beam)

1. Turn the ignition on.
2. Turn light switch to position 2 to raise the headlights.
3. Turn the ignition off.
4. Unscrew the 3 Phillips screws (arrows) and remove headlight cover.
5. Turn holder of defective bulb anticlockwise to limit stop and remove.
6. Unplug wires, replace bulb and reconnect the wires.
7. Reinstall bulbholder. Be sure that guide pins on bulb base fit into socket of reflector. Turn bulbholder clockwise to limit stop.
8. Check functioning of bulb and adjust headlights.
9. Reinstall headlight cover.



Additional headlights (fog lights, high beam)

1. Remove cover of rubber buffer.
2. Remove Phillips screws from rubber buffer and the transparent side cover with a screwdriver.
3. Remove Phillips screws holding the lamp (arrowed) and pull out the lens as a unit.
4. Disconnect wire. Push down holding clamp for bulb.
5. Remove defective bulb and replace. Be sure guide pins on bulb base fit into socket of reflector.
6. Reinstall lamp, tighten screws. Check functioning and adjustment of light.
7. Install rubber buffer and side cover and tighten retaining screws.



Tail lights

The tail lights are housed in one unit.

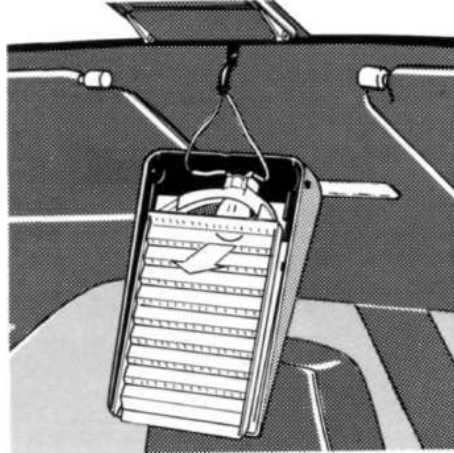
A - tail lights
 B - stop light
 C - turn signal light
 D - back-up light

If a tail light or stop light fails, a fault message appears in the information system display.

1. Remove tool tray from the rear cross wall inside luggage compartment.

Use the spark plug spanner to unscrew the hex nut (arrowed) which holds the tail light unit in place and remove the unit from the rear bumper.

3. Turn holder of defective bulb anticlockwise to limit stop and remove bulbholder.
4. Remove bulb from bulbholder and fit new bulb. Reinstall bulbholder and turn clockwise to limit stop.
5. Install tail light unit in bumper and tighten retaining nut.
Do not overtighten.
6. Check function of light.



Front turn signal lights Front parking lights

1. Remove screws holding the lens and remove lens.
2. Remove bulb from bulbholder and fit new bulb.
3. Reinstall lens, tighten screws. Check functioning of light.
4. Install plastic trim and tighten retaining screws.

Additional stop light

1. Remove Phillips screws from light unit and remove unit.
2. Lightly pull lens out and replace defective bulb.
3. Check functioning of light.
4. Reinstall lens and light unit. Tighten retaining screws.



License plate lights

1. Unscrew both screws and lift out lamp housing.
2. Replace bulb.
3. Reinstall lamp housing and make sure it is firmly seated.
4. Check light.

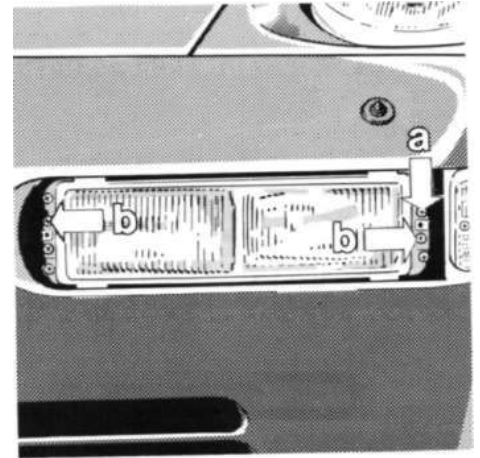
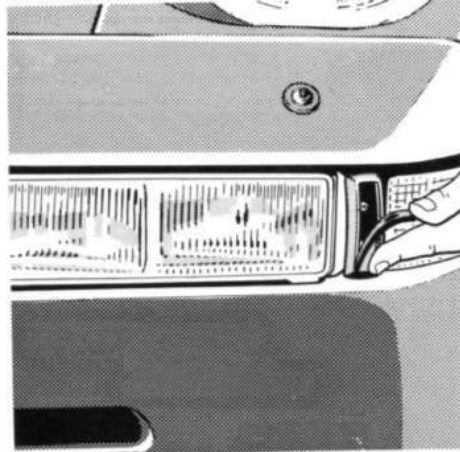
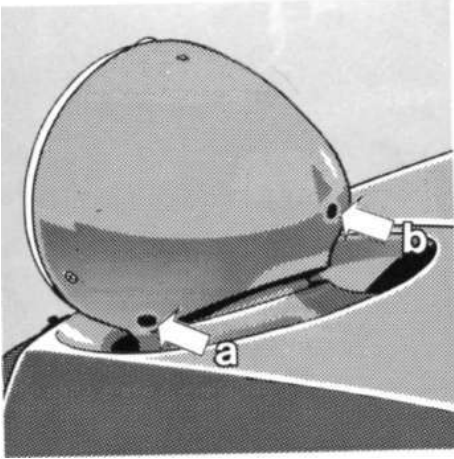
Interior lights

The following description applies to the dome lights, courtesy lights and the luggage compartment light:

1. Insert screwdriver in cut-out on headliner and carefully pry out the lamp housing.
2. Remove defective bulb between contact springs and insert new bulb.
3. Insert one side of the lamp housing into cut-out and press firmly on the other side. Light unit will snap into place.

Ashtray light

1. Remove the two screws in ashtray housing and pull the housing upward and out.
2. Slide bulb holder out of the housing and replace defective bulb.
3. Slide bulb holder back into housing and check light by turning on the ignition.
4. Reinstall the ashtray housing.



Headlight adjustment

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. 155 lbs (70 kg).

Tire pressure must be correct.

Roll car forward a few feet so that the suspension settles into normal position.

1. Remove cover of rubber buffer.
2. Remove Phillips screws from rubber buffer and the transparent side cover with a screwdriver.

Adjustment screws

Each headlight and each additional headlight has two adjusting screws. One for lateral and one for vertical setting. Each fog light has one adjusting screw for vertical adjustment. By turning these screws left or right, the corresponding beam position is effected. Each fog light has one adjusting screw for vertical adjustment.

Screw "a" (lateral adjustment)

right turn = beam moves right

Screw "b" (vertical adjustment for headlight and fog light)

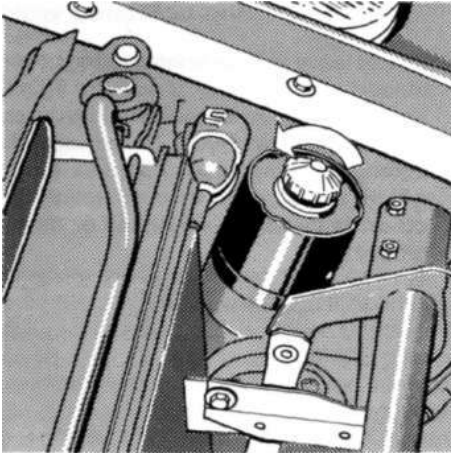
right turn = beam moves up

left turn = beam moves down

Screw "b" (vertical adjustment for additional headlight only)

right turn = beam moves down

left turn = beam moves up



Manual operation of retractable headlights

If the retractable headlights do not work automatically, they can be opened manually by turning the knob on the end of the motor drive shaft (arrow). To do this, remove the rubber cap from the driving motor. The connecting rod assembly is designed in such a way that it needs only be turned to the left to either raise or retract the headlights.

WARNING

Do not turn the knob on the drive shaft as long as the automatic mechanism is operating. The motor may turn suddenly and cause injury. Before turning the knob, check whether the motor will work with the ignition in position 1 or 2 and the light switch in position 2.

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 & Maintenance 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 Warranty & 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.
- 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. Additional hydrocarbons may enter the atmosphere through evaporation of fuel from the fuel tank. These hydrocarbons (HC), when released into the air, contribute to undesirable pollution.

In addition, carbon monoxide (CO) and oxides of nitrogen (NO*) 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 "clean-up" 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. Therefore, only unleaded gasoline without additives must be used.

The catalytic converter will be damaged by

- 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 expansion chamber and the safety valve prevent fuel from escaping to the outside at extreme high outside temperatures and when the car is driven or parked at an incline or in any other non-level position. The safety valve works as a restrictor in the tank vent line between the expansion chamber and the carbon canister.

Vapor control system and storage

When the fuel tank is filled, vapors are collected in the expansion chamber and filler-tube by a vent line leading the vapors to the activated carbon canister where they are stored as long as the engine does not run. During running of the engine, the vapors are stored in the activated carbon canister as long as the temperature controlled ON/OFF valve is in the OFF-position.

The temperature controlled ON/OFF valve stops purging of the canister during all other running conditions of the engine if the coolant temperature of the engine is below a defined temperature.

Purge system

Fuel vapors from the carbon canister will be mixed with fresh air taken from the engine compartment. This mixture will be directed via two vacuum controlled valves to the air intake system housing.

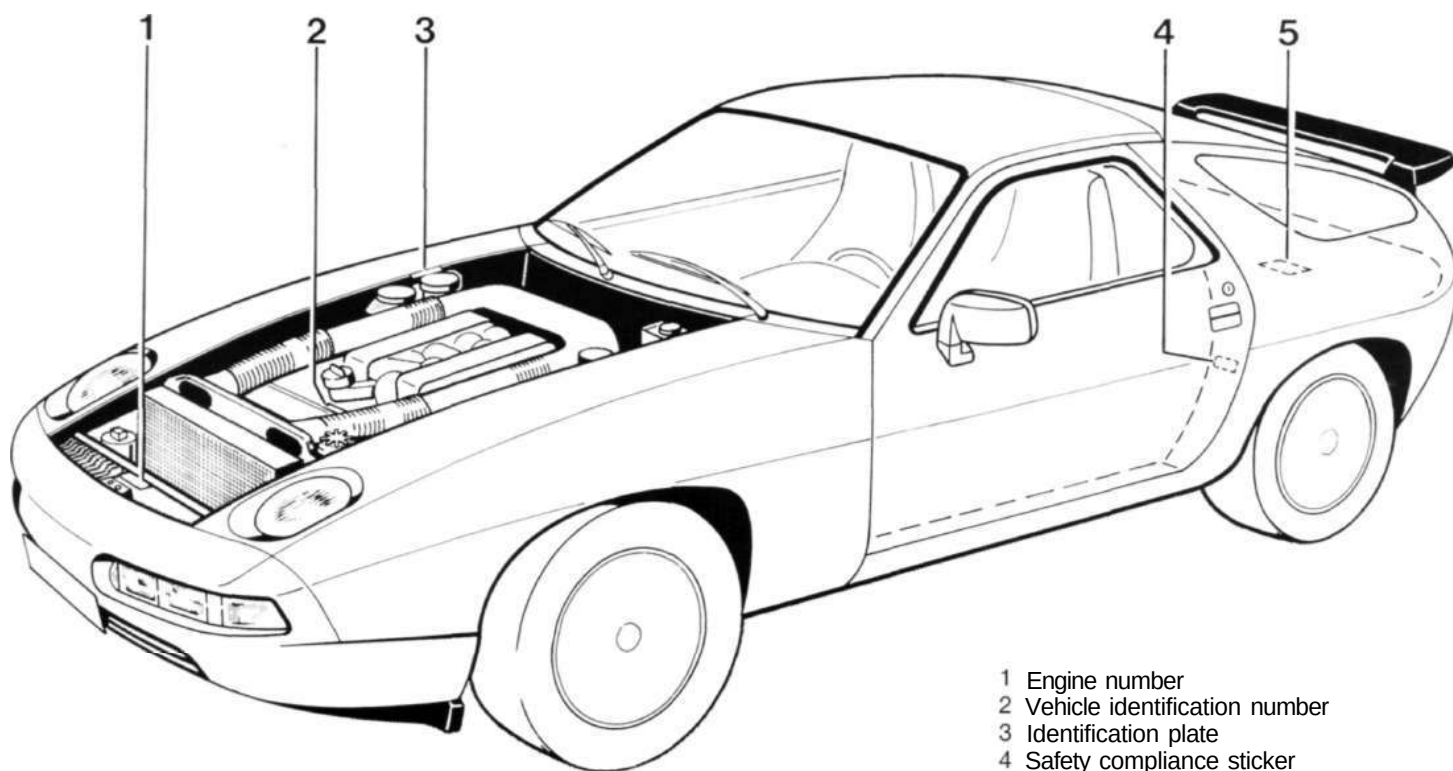
The temperature controlled ON/OFF valve has the following functions:

To stop purging of the canister during idle (the rich vapor flow from the canister would influence the mixture characteristic).

To allow purging of the canister during all other running conditions of the engine.

The vacuum controlled ON/OFF valve has the function to control the purge flow (high intake vacuum means low purge flow and low intake vacuum means high purge flow).

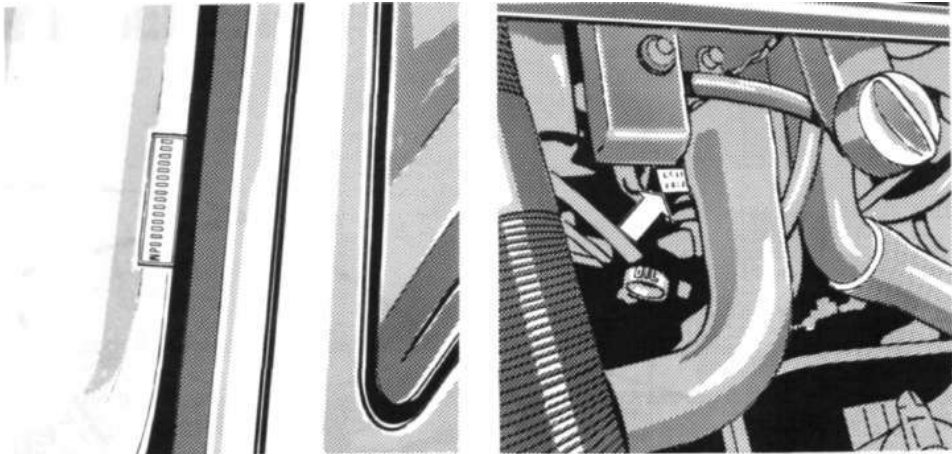
Vehicle Identification, Technical Data



- 1 Engine number
- 2 Vehicle identification number
- 3 Identification plate
- 4 Safety compliance sticker
- 5 Paint data
- 6 Vehicle identification label

Vehicle identification

When ordering spare parts or submitting inquiries, always quote vehicle identification and engine number to assure correct and prompt service.



Radio number

The radio number is beneath the ashtray cover. The number is revealed by removing the ashtray.

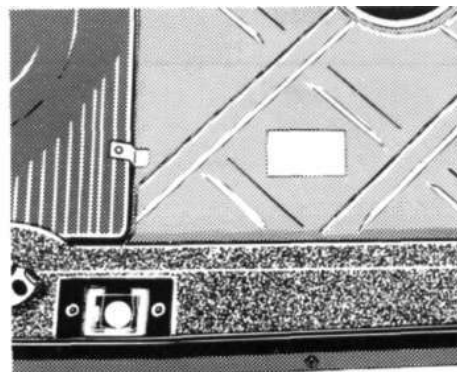
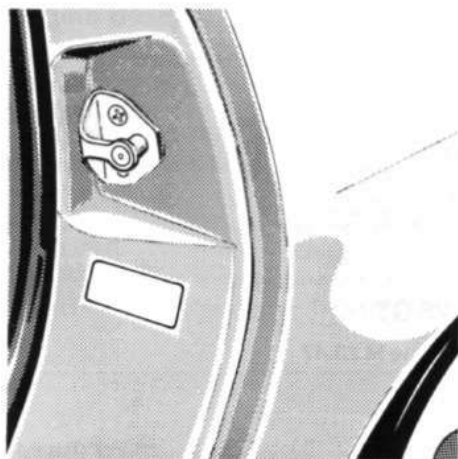
Vehicle identification number

In accordance with Federal Safety Regulations, the vehicle identification number of your car is located on the left* windshield post and can be seen from the outside.

Engine number

The engine number is stamped on the front reinforcing rib in the top half of the crankcase.

* 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.



Safety compliance sticker

The safety compliance sticker is your assurance that your Porsche complies with all Federal Motor Vehicle Safety Standards which were in effect at the time the vehicle was manufactured. It is located on the door-sill on the driver's side.

This 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 underneath the luggage compartment floor cover, next to the spare wheel well.

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 Warranty and Maintenance booklet.

Paint number

The paint number sticker is on the door jamb on the driver's side.

Technical data

	928 S4	928 GT
	Engine M 28.42	Engine M 28.47
Number of cylinders	8	
Bore	3.94 in / 100 mm	
Stroke	3.11 in / 78.9 mm	
Displacement	302.5 cu.in. / 4957 cm ³	
Compression ratio	10 : 1	
SAE net-horsepower SAE J 1349	315 hp / 235 kW at 6000 rpm	326 hp / 243 kW at 6200 rpm
SAE net-torque SAE J 1349	317 ft.lb. / 430 Nm at 3000 rpm	317 ft.lb. / 430 Nm at 4100 rpm
Max. permissible rpm	6600	6800
Fuel octane rating	95 RON (90 CLC or AKI $\left(\frac{R+M}{2}\right)$ rating on fuel pumps in U.S.A.) PREMIUM UNLEADED FUEL ONLY	
Spark plugs	Bosch WR 7 DC, WR 7 DP	
Spark plug gap	0.028 + 0.004 in / 0.70 + 0.1 mm	
Battery capacity	12 Volts, 72 Ah	
Alternator output	1610 W / 115 A AC	
Firing order	1 - 3 - 7 - 2 - 6 - 5 - 4 - 8	
Ignition	Transistorized ignition system	
Fan belts	Alternator: Polyrib K 6-858; air pump 12.5 x 925-F0 toothed belt; air conditioning pump 12.5 x 1125; servo pump 12.5 x 975	
Valve clearance	Hydraulic valve clearance compensation	

Engine design

Design	8 cylinders in V configuration
Operating cycle	4 stroke
Cooling	water-cooled with two electric fans
Lubrication	pressure-fed from sump
Cylinder block and head	light metal alloy
Valve operation	2 overhead camshafts per cylinder bank
Camshaft drive	toothed belt and chain
Crankshaft	forged
Fuel supply	electric pump
Fuel injection	AFC (Air Flow Control)

Power train

Manual transmission G 28/55

Automatic transmission A 28/16

	Number of teeth	Gear ratio	Gear ratio
Gear ratio 1st gear	$\frac{32 \cdot 44}{22 \cdot 17}$	$\triangleq 3.765 : 1$	3.870 : 1
2nd gear	$\frac{32 \cdot 38}{22 \cdot 22}$	$\triangleq 2.512 : 1$	2.250 : 1
3rd gear	$\frac{32 \cdot 32}{22 \cdot 26}$	$\triangleq 1.790 : 1$	1.440 : 1
4th gear	$\frac{32 \cdot 27}{22 \cdot 29}$	$\triangleq 1.354 : 1$	1.000 : 1
5th gear	$\frac{1}{1}$	$\triangleq 1.000 : 1$	
Reverse	$\frac{32 \cdot 50}{22 \cdot 22}$	$\triangleq 3.306 : 1$	5.590 : 1
Rear axle ratio	$\frac{30}{11}$	$\triangleq 2.727 : 1$	2.538 : 1
Clutch	Single plate disc		
Power transmission	Double constant velocity joints and drive shafts		

Rims, tires, wheel alignment

Summer tires.	front 225/50 ZR 16 on rims 7 J x 16 H 2 (65 mm**) rear 245/45 ZR 16 on rims 8 J x 16 H 2 (52.3 mm**) or front 225/50 ZR 16 on rims 7.5 J x 16 H 2 (65 mm**) rear 245/45 ZR 16 on rims 9 J x 16 H 2 (52.3 mm**)
Snow tires.	205/55 R 16 88Q M+S on 7 J x 16 H 2 (65 mm**) rims front and 8 J x 16 H 2 (52.3 mm**) rear or 225/50 R 16 92 Q M+S on 7 J x 16 H 2 (65 mm**) rims front and 8 J x 16 H 2 (52.3 mm**) rear The load rating and the code letter for maximum permissible speed (e. g. 88 Q) are minimum requirements. When buying new tires or changing tires, follow the instructions in the section "Tires and Tire Care". To ensure that the tire pressure warning system operates properly, rims with pressure switches must be used.
Collapsible spare tire.	165-15 8 PR 89 P on 5.5 J x 15 H 2 rim. Maximum speed 50 mph or 80 km/h.
Tire pressure, front and rear with cold tires . . .	36 psi or 2.5 bar front, 44 psi or 3.0 bar rear; 36 psi or 2.5 bar for collapsible spare tire.
Snow chains.	Mounting only on drive wheels-possible with snow tire size 205/55 R 16 on rims 8 J x 16 H 2. Maximum speed 30 mph or 50 km/h.
Wheel camber*.	Front-30'±10'; rear-40'±10'; difference left to right max. 10'
Toe-in*.	Front+15'±5'; rear+10'±5'; difference left to right max. 10'
Toe angle difference*.	At 20° lock to left and right - 1°±20'
Caster*.	3° 30'±30'; difference left to right max. 20'

* At curb weight (unladen with full tank) "Rim offset

Weights

Curb weight ¹⁾	3505 lbs/1590 kg
Maximum load capacity.	640 lbs/ 290 kg
Maximum permissible weight.	4189 lbs /1900 kg
Maximum axle load, front*.	2028 lbs/ 920 kg
Maximum axle load, rear*.	2425 lbs/1100 kg
Permissible rack load*.	165 lbs/ 75 kg

¹⁾ Do not exceed maximum permissible weight
¹⁾ Automatic 3549 lbs /1610 kg

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 a sticker located on the doorsill 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 may not be increased by the use of roof, ski or luggage racks, unless passenger capacity is reduced accordingly.

Dimensions (at permissible max. load)

Wheelbase.	98.43 in / 2500 mm
Wheel track, front.	61.06 in / 1551 mm
Wheeltrack, rear.	60.90 in / 1546 mm
Turning circle (curb to curb).	31 ft 5 in / 9.6 m
Turning circle (wall to wall).	37 ft 8 in / 11.5 m
Length.	178.07 in / 4523 mm
Width.	72.28 in / 1836 mm
Height (at curb weight).	50.47 in / 1282 mm
Ground clearance.	4.72 in / 120 mm

Performance*

	928 GT	928 S 4
Maximum speed.	171 mph (275 km/h)	165 mph (265 km/h)
Acceleration 0 - 60 mph.	5.8 seconds	6.3 seconds
Time for 1/4 mile.....	14.1 seconds	14.5 seconds
Time for 1 km.	25.2 seconds	25.9 seconds

* At curb weight and half-load capacity excluding optional equipment and accessories.

Climbing performance

	928 GT	928 S 4
Approximate values at curb weight and half-load capacity		
1st gear approx.	63 %	63 %
2nd gear approx.	53 %	47 %
3rd gear approx.	34 %	25 %
4th gear approx.	23 %	15 %
5th gear approx.	15 %	

Brake system

Hydraulic dual circuit brake system with front and rear brake circuits
Front and rear: Disc brakes
Brake power assist
Parking brake acting on rear wheels

Chassis suspension

Unitized construction
Suspension. Independent suspension with double control arms, coil spring and shock absorber assembly for each wheel, front and rear
Shock absorbers. Double acting hydraulic shock absorbers, front and rear
Stabilizers. Diameter 1,1 x 0,16 in (28 x 4 mm) front, 0,89 x 0,14 in (22.5 x 3.5 mm) rear

Filling capacities

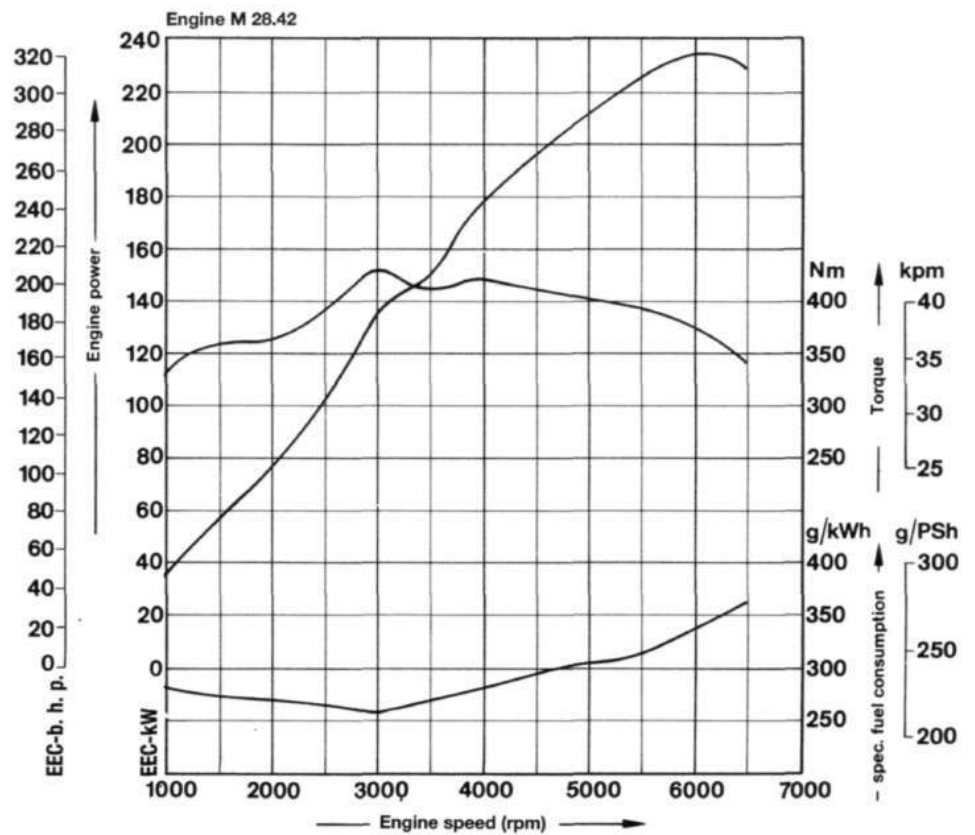
Engine oil	Approx. 2 U.S. gals. or 7.5 liters. Check oil level with dipstick a few minutes after engine has stopped. The difference between the max. and min. marks on the dipstick is approx. 1.6 U.S. qts. or 1.5 liters.
Cooling system with heating	Approx. 4.23 U.S. gals. or 16 liters. Factory filled to -22°F (-30°C) for U.S.A. and -40°F (-40°C) for Canada. Only use phosphate-free anti-freeze containing ethylene glycol recommended for aluminum engines and radiators.
Manual transmission (also for limited slip differential)	Approx. 1.2 U.S. gals. or 4.5 liters. Use hypoid oil SAE 75 W-90 conforming to API/GL 5 or Mil-L 2105 B".
Automatic transmission with torque converter	Approx. 2.46 U.S. gals. or 9.3 liters ATF Dexron®. At oil changes 1.93 U.S. gals. or 7.3 liters are required.
Differential of automatic transmission	Approx. 0.8 U.S. gal. or 3 liters hypoid oil SAE 75 W-90 conforming to API/GL 5 or Mil-L 2105 B.
Power steering	Approx. 0.74 U.S. qt. or 0.7 liters ATF Dexron®.
Fuel tank	Approx. 23 U.S. gals. or 86 liters including a reserve of 3.2 U.S. gals. or 12 liters. Premium unleaded fuel only! Minimum octane rating 95 RON (90 CLC or AKI $\left(\frac{R+M}{2}\right)$ rating on fuel pumps in U.S.A.).
Brake fluid	Approx. 0.42 U.S. pint or 0.2 liters. Only use brake fluid conforming to specification SAE J 1703, DOT 3 or DOT 4.
Windshield/headlight washer system	Approx. 2 U.S. gals. or 7.5 liters.
Intensive windshield washer system	Approx. 1.3 U.S. pint or 0.6 liter. Only use "special silicone remover".
Refrigerant for air conditioning	Approx. 33.5 oz or 950 g (air conditioning with additional vaporizer 40.5 oz or 1150 g). Refrigerant R 12 (C Cl ₂ F ₂).

Cooling system mixing chart

(Average values)

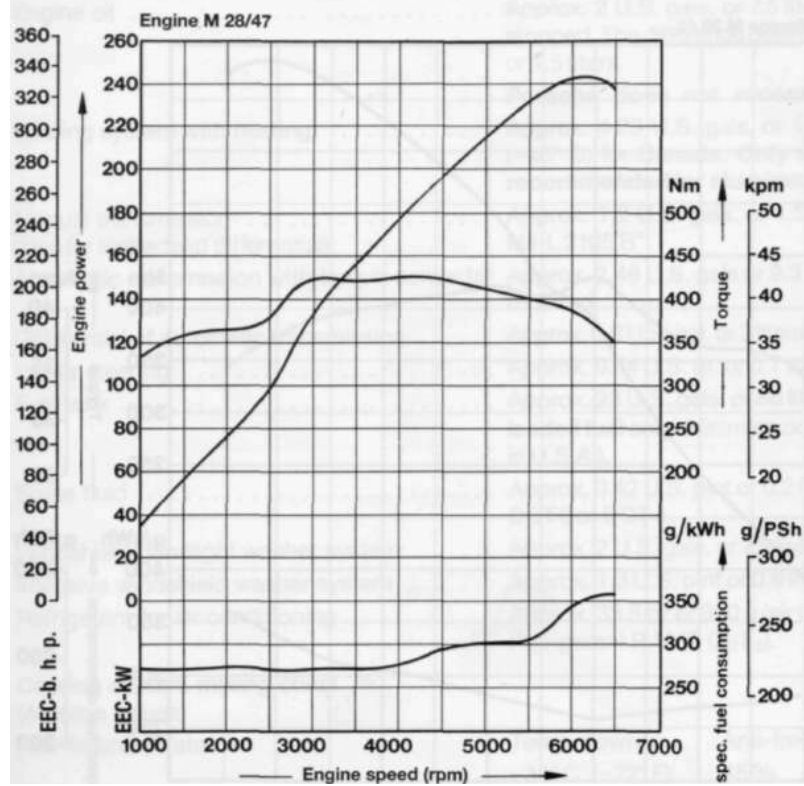
Anti-freeze – Water	Temp. down to	Anti-freeze	Water	Anti-freeze	Water
	-30°C (-22°F)	45 %	55 %	7.2 liters / 7.6 U.S. qts.	8.8 liters / 9.3 U.S. qts.
Consult your authorized dealer	-35°C (-31°F)	50 %	50 %	8.0 liters / 8.4 U.S. qts.	8.0 liters / 8.4 U.S. qts.
about approved anti-freeze mixtures.	-40°C (-40°F)	55 %	45 %	8.8 liters / 9.3 U.S. qts.	7.2 liters / 7.6 U.S. qts.

Full-load curves



Full-load curves

928 G_T

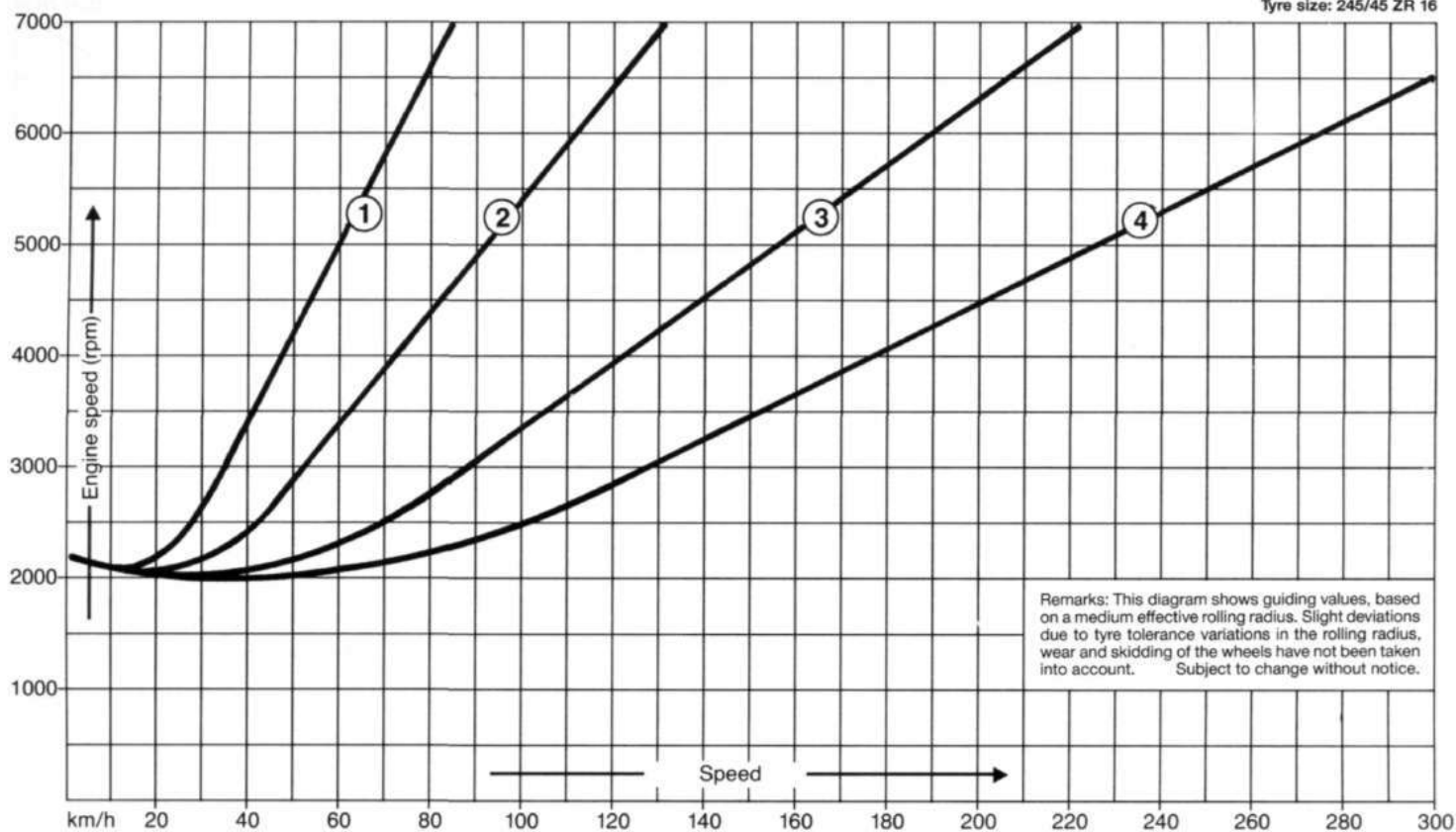


Transmission diagram

Automatic A 28/16



Tyre size: 245/45 ZR 16



Index

U

Index

A

ABS brake system. 30-31

Acceleration kick-down. 62

Accelerator pedal. 62

Adjusting headlights. 104

Air bag system. 26-27, 39

Air compressor. 90

- conditioning. 50-52

- cleaner filter. 71

Alarm system. 14

Alternator warning light. 37-38

Anti-freeze. 69-70, 116

Antilock brake system. 30-31

Anti-theft alarm. 14

Ashtray/light. 53, 103

Automatic garage door. 35

- speed control. 48

- transmission. 60-62

- transmission fluid (ATF). 68

B

Battery. 95-96

Brake booster. 29

- fluid. 72

- pads. 10, 29

- parking. 28, 61

- pedal. 29

- system. 28-31

- warning light. 29

Break-in-hints. 10

Bulbs - replacing. 99-103

C

Capacities. 116

Car care instructions. 76-80

Catalytic converter. 107

Cautions. 64, 82

Center console. 44

Central door locking. 15

Changing a wheel. 92-93

Child restraint systems. 25

Cigarette lighter. 53

Cleaning. 76-80

Climate control system. 50-52

Clock. 53

Clutch. 33

Collapsible spare tire. 90

Coolant temperature gauge. 38

Cooling system. 69-70

- fan control. 70

Corrosion prevention. 76-80

D

Dashboard. 44

Defogging/defrosting. 45

Dimensions. 114

Directional signals. 39, 46

Doors locks. 14-15

Driving hints. 8-9

E

Electrical system. 94-105

Emergency flasher. 45

- starting. 61, 97-98

Emission control system. 106-107

Engine compartment. 77

- exhaust. 10

- hood release. 58

- number. 110

- oil. 65-67, 116

Engine specifications. 112

- speed, maximum. 10, 59, 112

F

Fan - radiator. 70

Fan switch. 51

Filling capacities. 116

Flasher - emergency. 45

Fog lights. 44, 100

Fuel economy. 74-75

- evaporation control. 108

- filler cap. 73

- gauge. 37

- recommendations. 73

- tank. 73, 116

Fuses and relays. 94

G

Gasohol. 74

Gasoline - octane ratings. 73, 75, 112, 116

Gear ratios. 116

Gearshifting. 59

Glove compartment. 56

Gong. 12, 24, 34, 44

H

Hatchback release. 57

Headlights. 44, 46, 99-100, 104-105

Headlight dimmer/flasher. 46

- washer lever/reservoir. 46-47, 69

- switch. 44

Heater/ventilation controls. 49-50

High beam/low beam lever/light. 39, 46

Hood release. 57-58

I/J

Identification plates. 110-112

Ignition/steering lock. 34

Information system. 40-43

Instrument cluster. 36

- illumination. 44

Intensive windshield cleaning/
switch/reservoir. 47, 70

Interior lights.16, 103
 Intermittent wiper interval.47
 Jack.83, 90, 93
 - lifting points.92-93

K/L

Keys.12-13, 91
 Kickdown - acceleration.62
 Lane changer.46
 Leather.79
 Lights - ashtray.103
 - fog.44, 100
 - interior.16, 103
 - license plate.103
 - parking.46, 102
 - stop.101, 102
 - switch.44
 - tail.101
 - turn signal.46, 102
 - vanity mirror.56
 - warning.38-39
 Limited slip differential - PSD.32, 39
 Lockable wheel nuts.91
 Locks - doors, wheels.14-15, 91
 Luggage compartment.57-58
 - light.16
 Lumbar support.19

M/O

Manual transmission.59
 Mirrors.22, 56
 Octane ratings.73, 75, 112, 116
 Odometer.36, 43, 44
 Oil changing/checking.65-68
 - filter.66
 - grades.67, 116
 - pressure gauge/warning light.37
 - transmission.68
 On-board-computer functions.42
 Oxygen sensor.107

P

Paint number.111
 Paint damage.78
 Parking brake lever.28
 Parking brake light.39
 - lights/lever.46, 102
 Performance.117
 Polishing.77-78
 Power steering fluid.71, 116
 - windows.17
 Pressure - tires.84, 88, 90, 114
 PSD - Limited slip differential.32, 39

R

Radiator fan.70
 Rear seats.21
 - window defogger/defroster.45
 - window wiper switch.55
 - view mirrors.22
 Refrigerant.72, 116
 Reporting safety defects.2
 Roof rack.75, 114

S

Safe driving hints.8-9
 Safety belts.23-24
 Seats, front/rear/electric.18-21
 - heating.19
 - position memory.20
 Selector lever.60-62
 Shift points.59
 Sliding roof - electric.54
 Snow chains.86, 114
 Spare tire - collapsible.90
 Specifications - engine.112
 Speed control - automatic.48
 Speedometer.36
 Starting hints/engine.35, 106
 Steering lock.34
 Sun visors.56
 Sunroof.54-55

T

Tachometer.36
 Technical data.112-116
 Theft protection.14
 Tires.84-87
 Tire pressure warning system.87-89
 Tire size/pressure.86, 90, 114
 Tool kit.83
 Transmission.59-62, 68, 113
 Trip odometer.36, 43, 44
 Turn signal lights/lever.46, 102

U

Undercoating.78, 106
 Unleaded fuel.73, 112, 116
 Upholstery, care of.79

V

Vanity mirror.56
 Vehicle care.76-80
 Vehicle identification.110-111
 - label.111
 Ventilation/heater controls.49-52
 Voltmeter.37-38

W/z

Warning functions.41
 Warning indicator lights.38-39
 Washer system.46-47, 68-69
 Washing the car.76-77
 Weights.114
 Wheels.79, 84-87, 114
 Wheel changing.92-93
 - nuts, lockable.91
 Window switches.17
 Windshield washer reservoir.68-69
 - wiper interval.47
 - wiper washer lever.46-47
 Zero button.44

PORSCHE

Warranty & Maintenance

These warranties are provided by
PORSCHE CARS NORTH AMERICA, INC.

Porsche Cars North America, Inc.,
100 West Liberty Street,
P.O.Box 30911,
Reno, Nevada 89520-3911

is the sole importer and distributor of Porsche vehicles
in the United States and offers these warranties on U.S.
model vehicles only.

Services performed by your authorized
dealer will be recorded in the maintenance
record by your service adviser.

(Pocket for Customer Identification Card)



I M P O R T A N T

If you are unsuccessful in resolving your concerns about service of your vehicle with the dealer personnel as suggested in the CUSTOMER SATISFACTION sections in the Warranty & Maintenance Booklet and the Supplement, Porsche is currently using the services of the American Arbitration Association (AAA) for its informal dispute resolution mechanism, but

Porsche reserves the right to change this system without further notice.

To confirm the Informal Dispute Resolution Mechanism's address you may call 1-800-255-5177.

The address of the AAA is:
American Arbitration Association
140 West 51st Street
New York, New York 10020-1203

PORSCHE WARRANTY & MAINTENANCE

Throughout the world, the name "Porsche" means the highest levels of quality, performance and pride of ownership. Porsche Cars North America's Warranty & Maintenance procedures were designed to protect and preserve all three of these highly sought after attributes.

Porsche pride in the quality of our cars is a tradition that began more than 40 years ago, to when the legendary Porsche 356 began setting a new sports car standard in quality, reliability and the unparalleled joy of Porsche automobile ownership. In today's highly automated automobile industry, Porsche cars of the 1990's continue to receive handmade care and craftsmanship where this is the best way to achieve excellence. Your Porsche sports car is thus the end result of the high standards of workmanship maintained throughout Porsche AG's modern plants in and near Stuttgart, West Germany.

Throughout its manufacture, your Porsche automobile received many quality inspections. And before it was cleared to leave the factory, it was driven more than 20 miles over public roads by a specially trained factory test driver (weather permitting). But even after all of this, there were two more quality checks: at Porsche Cars North America's ("PCNA's") Pre-Delivery Inspection Center after it landed in the U.S., and once again at your dealer's.

Now that your Porsche vehicle is in service, it can be expected to deliver "Porsche like" performance and satisfaction only to the extent that it is maintained as those who designed this superb vehicle intended. Please refer to the "Car Care Instruction" and "Maintenance" sections of this booklet for helpful care tips and maintenance intervals. It is important to follow these instructions for several reasons: first, they will help keep your Porsche automobile looking and performing in top condition; secondly, the warranty coverage on your

car is dependent on proper routine maintenance and generally on the way you care for and use this very special sports car.

Every Porsche vehicle sold through one of PCNA's authorized dealers is protected by a comprehensive system of warranties. You should review the detailed coverage contained in this booklet under "Warranty", but here is a quick summary of how your car is covered:

New Car Limited Warranty:

24 months, unlimited mileage—Porsche remains one of the few automakers with an unlimited-mileage new-car general warranty. Beginning on the date your car is first put in service, this warranty covers all factory-installed parts under normal use. Both parts and labor are covered. Porsche is unique in that tires are even covered, prorated based on tread depth and credited toward another purchase. Expendable maintenance items, normal wear and tear, and road hazards on tires are not covered (see the detailed description under "New Car Limited Warranty" for what is and is not covered, how to get warranty service, your responsibilities, etc.).

Paint Limited Warranty:

36 months, unlimited miles. The Porsche factory goes to great lengths to ensure a superb finish on every car that carries the famous Porsche crest. Should a flaw develop in the finish of your Porsche automobile, it may be covered under this warranty (see specific details under "Paint Limited Warranty").

Corrosion Limited Warranty:

120 months, unlimited mileage. Reliability, durability, long life and value have always been designed into every Porsche vehicle. Porsche's research and development into "long life" technologies throughout the 1970's resulted, in 1980, in the first 6-year corrosion perforation warranty on a production car. In 1986 this protection was increased to ten full years. At the time of printing, Porsche remains one of

one of only two manufacturers offering this warranty, which carries important inherent long-term safety, appearance and handling benefits.

Emission Control Defects Warranty:

5 years, 50,000 miles. This warranty, which is in addition to the Porsche New Car Limited Warranty described above, certifies (1) that your Porsche was designed, built and equipped to conform to all U.S. emission standards applicable at the time of manufacture, and (2) that it is free from defects in materials and workmanship that would cause it not to meet those standards (see detailed description).

Emission Controls Performance Warranty:

5 years, 50,000 miles. This warranty essentially states that if you maintain, care for and use your Porsche vehicle as described in this booklet and in the Owner's Manual and it should fail an EPA-approved emission test, PCNA will, in the first 2 years or 24,000 miles, cover the cost of making all necessary adjustments, repairs and replacements necessary for the vehicle to pass the test; after 2 years/24,000 miles, PCNA will cover the cost of performing this work on the emission system components listed in this booklet up to 5 years, 50,000 miles (whichever occurs first).

California Emission Performance and Defects Warranty.

Applies to California vehicles only. The short-term emission defects warranty is 3 years/50,000 miles. Be sure to read the details of your rights and responsibilities under the California Emission Control Warranty sections of this booklet. California Emission Extended Defects Warranty applies to California vehicles only. The extended emission defects warranty is 7 years/70,000 miles. Be sure to read the details of your rights and responsibilities under the California Emission Control Warranty sections of this booklet.

Replacement Parts & Accessories Limited Warranty.

You are urged to always specify only Genuine Porsche replacement parts. Parts supplied by PCNA and installed by an authorized Porsche

dealer at the time of purchase are covered for 1 year from the date installed. (See details about "normal vehicle use" and exclusions in this booklet.)

Porsche Roadside Assistance Program.

This comprehensive, customer-oriented program* is designed to give new-Porsche buyers an extra level of security and peace of mind. Every new 1991 Porsche automobile bought or leased is covered 24 hours a day, seven days a week for the 24 month new vehicle warranty period through the Amoco® Motor Club. The membership card and a special manual are found in the glove compartment. New-Porsche vehicle owners can now depend on the availability of roadside assistance no matter what time or even what day it is.

365 days a year, an 800 number (1-800-272-7677) accesses roadside assistance that includes:

- Winching service for stuck vehicles
- Jump starts - per Porsche recommendations
- Emergency gasoline
- Towing when necessary
- Spare tire installation
- Lost keys or lock-out assistance
- Nearest dealer referral
- Trip planning, including rental car discounts

All of these emergency services are available in the U.S. and Canada and are applicable whether due to a mechanical failure or a collision. Additionally, new Porsche vehicle buyers will be reimbursed for a rental car when their car will be unavailable for more than 24 hours due to a warranty repair; and they will be reimbursed (up to \$500.00 per person) for local meals, lodging, and alternate transportation when a trip

•Pending approval in the State of California

is interrupted more than 150 miles from their home. Also unique to the program is that the vehicle is covered regardless of who is driving. And the Roadside Assistance is transferable within the warranty period of the vehicle.

By following the few simple suggestions in this booklet and in your Porsche Owner's Manual, you are assured many satisfying miles of Porsche sports car ownership in an elite segment of the motoring public.

Customer Satisfaction

It is very important to us at Porsche Cars North America that you are highly satisfied with your Porsche sports car. Authorized Porsche dealers are trained to help you get the most from your Porsche automobile ownership experience. Sometimes, in spite of the many safeguards to the contrary, problems occur anyway. Generally, any problems that may arise can be solved most effectively by speaking with one of the dealership's managers, such as the Service Manager or General Manager.

In the event that the problem goes unresolved, please follow the procedures outlined in the Owner's Warranty and Maintenance Guide Supplement included in your Porsche automobile's glove compartment.

Always carry your Warranty & Maintenance booklet with you when you take your Porsche car to an authorized dealer for service. It provides your Service Advisor with the information they need, and enables them to record each service that is vital to proper warranty decision-making.

If you sell your Porsche automobile, the Owner's Manual and this Warranty & Maintenance booklet should be left in the vehicle to make

all operating safety and maintenance information available to the next owner.

If you change your address, or if you bought this Porsche vehicle used, be sure to send in a "Notice of Address Change/Notice of Used Car Purchase" post card. This card may be found in this booklet or obtained from your Porsche dealer.

1 st Owner Address	4 th Owner Address
Tel. No. Delivery Date Dealer's Name	Tel. No. Purchase Date Mileage
2 nd Owner Address	5 ^h Owner Address
Tel. No. Purchase Date Mileage	Tel. No. Purchase Date Mileage
3 rd Owner Address	6 th Owner Address
Tel. No. Purchase Date Mileage	Tel. No. Purchase Date Mileage

Vehicle Identification

Warranty

Car Care Instructions

Maintenance

Customer Service

PORSCHE

First in-service date of your Porsche:

10 - 8 - 92
Month Day Year

At Mileage
196
DAVID A GOLDFORB
Registered owner

Recipient's signature
Roy A Crow
Dealer Representative's signature

Speedometer Replacement

Month Day Year
(to be filled in by authorized dealer)

At Mileage

Present this booklet to an authorized Porsche dealer if vehicle service is required.

Porsche Cars North America, Inc.

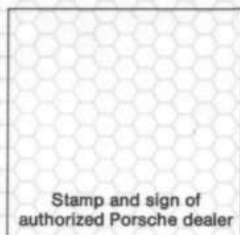
Vehicle Identification

WP0RRZ926MS810194
928 940

M2847-85M G2855- 3M

L80K QK

C02 XD4 158 418 498
570 850 935 980
09991



Vehicle Identification Codes:

1. Vehicle Identification No.
2. Type/Type description
3. Engine Code/Transmission Code
4. Paint No./Interior
5. Optional Equipment

Warranty

Summary of Warranty Coverage.....	8
New Car Limited Warranty.....	9-11
Emission Control Defects Warranty.....	12-13
Emission Controls Performance Warranty.....	14-17
California Air Resources Board California Emission Control Warranty Statement	18
California Emission Performance and Defects Warranty.....	19-21
California Emission Extended Defects Warranty.....	22-24
Replacement Parts and Accessories Limited Warranty.....	25-26
Corrosion Limited Warranty.....	27-28
Paint Limited Warranty.....	29-30

SUMMARY OF WARRANTY COVERAGE provided by PORSCHE CARS NORTH AMERICA, INC.

12 Months Unlimited Mileage	24 Months See below for mileages	36 Months See below for mileages	60 Months 50,000 Miles	84 Months 70,000 Miles	120 Months Unlimited Mileage
Replacement Parts and Accessories Limited Warranty					
New Car Limited Warranty Unlimited Mileage					
Paint Limited Warranty Unlimited Mileage					
California Emission Performance and Defects Warranty 50,000 miles					
Emission Controls Performance Warranty					
Emission Control Defects Warranty					
California Emission Extended Defects Warranty					
Corrosion Limited Warranty					

Porsche Cars North America, Inc. is the sole importer and distributor of Porsche vehicles in the United States and offers these warranties on U. S. model vehicles only.

NEW CAR LIMITED WARRANTY

This warranty is given to the owner of any 1991 or later Porsche automobile distributed by PCNA and sold by an authorized Porsche automobile dealer in the United States.

Time and Mileage Period

This warranty begins on the date the car is first delivered to the first retail purchaser, or the date it is first used as a demonstrator, lease or company car, whichever comes first. The car is covered for 24 months, regardless of mileage.

Warranty Coverage

PCNA will repair or replace with a new or remanufactured part, at its sole option, any factory-installed part that is defective in material or workmanship under normal use. (Normal vehicle use is described in this Booklet.) Warranty repairs will be made free of charge for parts and labor at an authorized Porsche automobile dealer except for tires which are prorated based upon tread depth and credited towards another purchase. Any repaired or replaced parts are covered only for the remainder of this warranty. All parts replaced under this warranty become the property of PCNA.

Emergency Repairs

Should the car become completely disabled, requiring repair in order to be driven, and there is no authorized Porsche automobile dealer in the vicinity, have the repair performed sufficient to drive the car and return the replaced parts and paid repair order to PCNA Customer Service for reimbursement consideration.

If further documentation is necessary to the decision for reimbursement, you will be contacted by PCNA Customer Service.

This Warranty Does Not Cover:

- Emission control systems, Corrosion or Paint. (Refer to these **Emission Control, Corrosion and Paint Limited Warranties** in this Booklet).
- Tires damaged by road hazard. (Refer to the tire manufacturer's warranty that came with the car. If you need further assistance, contact your authorized Porsche automobile dealer.)
- Parts that fail due to lack of required maintenance or use of non PCNA distributed parts.
- Normal wear or deterioration of any part.
- Cleaning and polishing.
- Lubrication, unless part of a warranty repair.
- Contamination of fuels or lubricants.
- Air conditioner refrigerant charge after the first maintenance, unless part of a warranty repair.
- Glass breakage and/or scratches that are not due to a defect in material or workmanship.
- Appearance items that are not due to a defect in material or workmanship.
- Any car registered or normally driven outside of the United States.
- The replacement of expendable maintenance items (such as spark plugs, filters, worn wiper blades, worn brakes or worn clutches) when the replacement is not due to a defect in material or workmanship.
- Any car with an odometer that has been altered so that the actual mileage cannot be determined.
- Dealer-installed accessories. (Refer to the **Replacement Parts and Accessories Limited Warranty** in this Booklet.)
- Wheel balancing and wheel alignment beyond the first maintenance unless part of a warranty repair.
- Unauthorized modifications.

- Service adjustments (such as timing, valve adjustment, idle speed, mixture adjustments, brake, clutch, headlight, drive belts and cam belt) beyond the first maintenance unless part of a warranty repair.
- Improper repairs.
- Abuse, accident, acts of God or other events beyond the control of PCNA, competition, racing or track use.

To Get Warranty Service

You must take your car, along with proof of purchase date, to an authorized Porsche automobile dealer during normal service hours. If the car is not drivable because of a defect covered by this warranty, call the nearest authorized Porsche automobile dealer for further assistance.

If you cannot get warranty service, or you are dissatisfied with the service or with a warranty decision, refer to the **Customer Satisfaction** section in this Booklet.

Your Responsibility

You must maintain your Porsche according to the **Maintenance Schedule** and **Car Care Instructions** in this Booklet and keep the receipts as proof of maintenance.

Your Responsibility for Normal Vehicle Use

Your Owner's Manual (which includes specific recommendations against using your car in certain ways) was written with the assumption that you will use your car only in ways for which it was designed:

- To carry passengers and cargo within specified load limits. (The load limits are specified on labels located in different places depending on the model of your Porsche.) See your Owner's Manual for their locations.
- To be driven on reasonable road surfaces within legal speed limits.

- To generally be driven daily over a distance of several miles. In the event of prolonged storage, contact your local authorized Porsche automobile dealer for instructions.
- To be run on unleaded gasoline of 95 Research Octane Number or higher (Anti-Knock Index (AKI) or U.S. Cost of Living Council (CLC) of 90 or higher).
- To be properly maintained according to the **Maintenance Schedule** in this Booklet.

This Warranty is Subject to the Following Limitation and Disclaimer

PCNA disclaims any responsibility for loss of time or use of the parts or the vehicle in which the parts are installed, transportation or any other incidental or consequential damage. Any implied warranties, including the implied warranties of merchantability and fitness for a particular purpose, are limited to the duration of this written warranty.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

This specific warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Warranty Outside the U.S.

If your car is brought to an authorized Porsche automobile dealer outside the U.S., PCNA's warranty will not be applicable and defective parts will be repaired or replaced only within the terms and limitations of the warranty for new Porsche vehicles for your model year in effect in the country where such authorized Porsche automobile dealer is located.

A vehicle which is imported by an individual into Canada must comply with all Canadian Governmental requirements. Furthermore, in order to process warranty claims, the vehicle must also be registered with the Authorized Canadian Importer of Porsche vehicles. For free vehicle registration, contact an authorized Canadian Porsche dealer.

EMISSION CONTROL DEFECTS WARRANTY

This warranty is in addition to the Porsche New Car Limited Warranty.

Time and Mileage Period

This warranty begins on the date the car is delivered to the first retail purchaser, or the date it is first used as a demonstrator, lease or company car, whichever comes first, and continues for 5 years or 50,000 miles, whichever comes first.

Warranty Coverage

PCNA warrants to the owner of this car that the automobile was designed, built and equipped to conform at the time of sale with all U.S. emission standards applicable at the time of manufacture, and that it is free from defects in material and workmanship which would cause it not to meet those standards.

This Warranty Does Not Cover:

- Failures or malfunctions resulting from abuse, improper repairs, misuse, alteration, accident, acts of God or other events beyond the control of PCNA, use of leaded gasoline or lack of proper maintenance as specified in the Maintenance Schedule. (As proof of proper maintenance, you must have receipts showing that all scheduled maintenance has been done. These receipts should remain with the car if it is sold. Claims for repair or adjustment necessary solely because of defects in material or workmanship will not be denied because the car or engine was not properly maintained or used.)
- Replacement of expendable maintenance items (such as spark plugs, filters, hoses, belts, coolant or lubricants) beyond their first scheduled maintenance.
- Loss of time or use of the car, or to the extent permitted by law or regulation, any other consequential damages.

- Any car with an odometer that has been altered so that the actual mileage cannot be determined.
- Any car registered or normally driven outside of the United States, Puerto Rico or the U.S. Virgin Islands.

Your Responsibility for Normal Vehicle Use

Your Owner's Manual (which includes specific recommendations against using your car in certain ways) was written with the assumption that you will use your car only in ways for which it was designed:

- To carry passengers and cargo within specified load limits. (The load limits are specified on labels located in different places depending on the model of your Porsche.) See your Owner's Manual for their locations.
- To be driven on reasonable road surfaces within legal speed limits.
- To generally be driven daily over a distance of several miles. In the event of prolonged storage, contact your local authorized Porsche automobile dealer for instructions.
- To be run on unleaded gasoline of 95 Research Octane Number or higher (Anti-Knock Index (AKI) or U.S. Cost of Living Council (CLC) of 90 or higher).
- To be properly maintained according to the **Maintenance Schedule** and **Car Care Instructions** in this Booklet.

This Warranty is Subject to the Following Limitations and Disclaimers

PCNA disclaims any responsibility for and this warranty does not cover incidental or consequential damages including but not limited to loss of time or use of the parts or vehicle in which the parts are installed. Any implied warranties, including the implied warranty of merchantability and fitness for a particular purpose, are limited to the duration of this written warranty.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Warranty Outside the U.S.

If your car is brought to an authorized Porsche automobile dealer outside the U.S., PCNA's warranty will not be applicable and defective parts will be repaired or replaced only within the terms and limitations of the warranty for new Porsche vehicles for your model year in effect in the country where such authorized Porsche automobile dealer is located.

A vehicle which is imported by an individual into Canada must comply with all Canadian Governmental requirements. Furthermore, in order to process warranty claims, the vehicle must also be registered with the Authorized Canadian Importer of Porsche vehicles. For free vehicle registration, contact an authorized Canadian Porsche dealer.

Car Care Instructions

Washing.....	32-33
Cleaning the convertible top.....	33
Preservation.....	33-34
Windows.....	34
Polishing.....	34
Spots and stains.....	34
Minor paint damage.....	34
Undersealing.....	35
Light lenses and plastic.....	35
Door, roof and window seals.....	35
Light alloy wheels.....	35
Leather care.....	35-36
Fabric, upholstery and carpets.....	36
Care of the seat belts.....	36
Storing your Porsche vehicle.....	36

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 the braking efficiency and dry the brake discs.

Dust should never be wiped 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.

The convertible top must only be opened and stored 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 folds, 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.

Warning

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.

Warning

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 floor mats 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.

Maintenance

Maintenance Schedule.....39-43

Maintenance Record.....44-47

Record of Brake fluid and coolant

fluid renewal.....48

Record of camshaft belt check.....49

Record of Air bag system check.....50

I. Required for the Emission Control System

Required at 2 000 – 2 500 miles / 3 200 – 4 000 km

	944 S 2	Carrera 2	Carrera 4	928 S 4	928 GT
Change engine oil and oil filter	●	●	●	●	●
Check valve clearance		●			
Check system adaption	●	●	●	●	●

Required every 15 000 miles / 24 000 km

	944 S 2	Carrera 2	Carrera 4	928 S 4	928 GT
Change engine oil and oil filter	●	●	●	●	●
Check valve clearance		●			

Required every 30 000 miles / 48 000 km

	944 S 2	Carrera 2	Carrera 4	928 S 4	928 GT
V-belt and Polyrib belt: check condition and tension	●	●	●	●	●
Replace spark plugs (at least every two years)	●	●	●	●	●
Auxiliary air pump: replace filter element				●	
Air filter: replace filter element	●	●	●	●	●

Note to owner:

The fuel filter should be replaced every 60 000 miles / 96 000 km.

The terms "inspect" and "check" include all associated work such as checking the condition, adjustments, readjustments, corrections and replenishment. They do not include the repair, replacement or overhaul of components or assemblies.

II. Required Maintenance and Lubrication Service

Required at 2000 – 2500 miles / 3200 – 4000 km	944 S 2	Carrera 2	Carrera 4	928 S 4	928 GT
Front Axle: check toe adjustment including tire condition, tire pressure (tire pressure-excludes 928)	●	●	●	●	●
Diagnosis System: read out fault memory	●	●	●	●	●
Visual inspection for leaks: oils and fluids	●	●	●	●	●
Cam/Balance shafts' belts: check condition and tension	●				
Cooling and heating system: check for leaks	●				
Coolant hoses: check condition and tighten hose connections	●			●	
Coolant (antifreeze): check level and antifreeze content	●			●	
Crankcase ventilation: check tightness of hose connections	●	●	●	●	
Intake air: check hoses, lines and connections for tightness	●	●	●	●	
Brake pedal: check play of brake pedal	●	●	●	●	
Brake hoses and lines: visual inspection for leaks, damage and corrosion.	●	●	●	●	
Check brake fluid level	●	●	●	●	
Manual transmission, axle drives: check oil levels	●	●	●	●	
Automatic transmission: check fluid level		●	●	●	
Exhaust system: visual inspection of the exhaust system for leaks and damage	●	●	●	●	
Check screw connections for tightness and attachment	●	●	●	●	
Check operation of convertible top	●	●	●	●	
Check operation of vehicle lights	●	●	●	●	
Windshield washer, headlight washer: check operation, fluid level and nozzle settings, check antifreeze content for the winter season	●	●	●	●	
During road or dynamometer test:					
Brake pedal, parking brake, brake power assist unit, clutch, automatic speed control, steering, heating, air conditioner and instruments: check operation	●	●	●	●	
Kick down: check operation		●	●	●	
Drive train, longitudinal- and lateral limited slip differential: check for noises and operation		●	●	●	
Visual inspection for leaks: oils and fluids	●	●	●	●	

Required every 15 000 miles / 24 000 km

	944 S 2	Carrera 2	Carrera 4	928 S 4	928 GT
Diagnosis System: read out fault memory	●	●	●	●	●
Visual inspection for leaks: oils and fluids	●	●	●	●	●
Toothed belt for power steering pump: check condition	●	●	●	●	●
Cam/Balance shaft's belts: check condition and tension	●	●	●	●	●
Cooling and heating system: check for leaks, Coolant hoses: check condition	●	●	●	●	●
Coolant (antifreeze): check level and antifreeze content	●	●	●	●	●
Crankcase ventilation: check tightness of hose connections	●	●	●	●	●
Fuel system: visual inspection for leaks, damages, clearance and tightness of line connections	●	●	●	●	●
Intake air: check hoses, lines and connections for tightness	●	●	●	●	●
Parking brake: check free travel of parking-brake lever	●	●	●	●	●
Brake pedal: check play of brake pedal. Brake hoses and lines: visual inspection for leaks, damage and corrosion, Check brake fluid level. For 928: visual inspection of components for Tire Pressure Warning System and Brief test	●	●	●	●	●
Brake system: visual inspection of brake pads and discs to check for wear	●	●	●	●	●
Clutch: check play or final position of clutch pedal	●	●	●	●	●
Clutch plate: check for wear	●	●	●	●	●
Hydraulic clutch actuator: visual inspection for leaks	●	●	●	●	●
Steering rack: check screw connections for tightness	●	●	●	●	●
Visual inspection of the bellows for damage. Tie rods: check play, tightness and dust caps	●	●	●	●	●
Power-assisted steering: visual inspection for leaks, check fluid level	●	●	●	●	●
Ball joints: visual inspection of dust caps for damage, Wishbone: check screw connections for tightness	●	●	●	●	●
Front wheel bearings: check play	●	●	●	●	●
Manual transmission/ axle drives: check oil level	●	●	●	●	●
Automatic transmission: check fluid level	●	●	●	●	●
Limited slip differential regulator: check fluid level	●	●	●	●	●
Drive shafts: visual inspection of sleeves for leaks and damage	●	●	●	●	●
Exhaust system: visual inspection for leaks and damage, check screw connections for tightness and attachment	●	●	●	●	●
Tires: check condition and correct tire pressure (tire pressure-excludes 928)	●	●	●	●	●
Door stop: check operation and lubricate	●	●	●	●	●
Door hinges: lubricate	●	●	●	●	●

Required every 15 000 miles / 24 000 km

	944 S 2	Carrera 2	Carrera 4	928 S 4	928 GT
Check door, engine hood locks and safety hooks on front hood for tightness and operation	●	●	●	●	●
Seals for doors, hood and roof: remove abraded rubber, apply suitable lubricant	●	●	●	●	●
Safety belt: check operation and condition	●	●	●	●	●
Check operation of vehicle lights. All headlights: check setting	●	●	●	●	●
Horn: check operation	●	●	●	●	●
Retractable headlights: lubricate linkage	●	●	●	●	●
Throttle linkage: check for smooth movement and full throttle opening	●	●	●	●	●
Resonance flap: check for smooth movement	●	●	●	●	●
Check active cleaning system and fluid level	●	●	●	●	●
Windshield washer, headlight washer: check operation, fluid level and nozzle settings, check antifreeze content for the winter season	●	●	●	●	●
Battery: check fluid level	●	●	●	●	●
Check operation of all electrical control equipment and options	●	●	●	●	●
Heater, ventilation and air conditioner blower: check operation	●	●	●	●	●

During road or dynamometer test:

Brake pedal, parking brake, brake power assist unit, clutch, automatic speed control, steering, heating, air conditioner and instruments: check operation	●	●	●	●	●
Kick down: check operation	●	●	●	●	●
Drive train, longitudinal- and lateral limited slip differential: check for noises and operation	●	●	●	●	●
Visual inspection for leaks: oils and fluids	●	●	●	●	●

Additionally required every 30 000 miles / 48 000 km

	944 S 2	Carrera 2	Carrera 4	928 S 4	928 GT
Automatic transmission: change ATF, clean ATF strainer or change filter resp.	●	●	●	●	●
Drive belts: check condition and tension	●	●	●	●	●
Drive belt tensioner: check oil level	●	●	●	●	●

Additionally required every 45 000 miles / 72 000 km	944 S 2	Carrera 2	Carrera 4	928 S 4	928 GT
Camshaft Drive belt: Replace. Check condition and tension after 2 000–2 500 miles (3 200–4 000 km) and document in space provided	●				
Additionally required every 60 000 miles / 96 000 km	944 S 2	Carrera 2	Carrera 4	928 S 4	928 GT
Manual transmission and axle drives: change oil	●	●	●	●	●
Automatic transmission: change oil in differential		●	●	●	●
Camshaft Drive belt: Replace. Check condition and tension after 2 000–2 500 miles (3 200–4 000 km) and document in space provided				●	●
Required every 2 years	944 S 2	Carrera 2	Carrera 4	928 S 4	928 GT
Brake system: change brake fluid	●	●	●	●	●
Cooling system: change coolant fluid	●	●	●	●	●
Limited slip differential regulator: change brake fluid				●	●
Required after 4, 8, 10 and then every 2 years	944 S 2	Carrera 2	Carrera 4	928 S 4	928 GT
Air bag system check	●	●	●	●	●

The recommended service intervals apply under normal driving conditions. If you drive mainly in dusty areas, check the air cleaner element more often and replace if necessary. The conditions of oil, and wear-and-tear items (such as tires, brakes, clutch lining) depend greatly on the amount of driving and on driving habits. Therefore, oil and wear-and-tear items should be checked more frequently, and if necessary replaced at shorter intervals. Also, the battery electrolyte level should be checked more often. A complete maintenance and lubrication service should be performed at least once a year, preferably before the winter. The same applies to protective undercoating for the vehicle.

Exchange and new parts require the same servicing as components of new vehicles.

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