

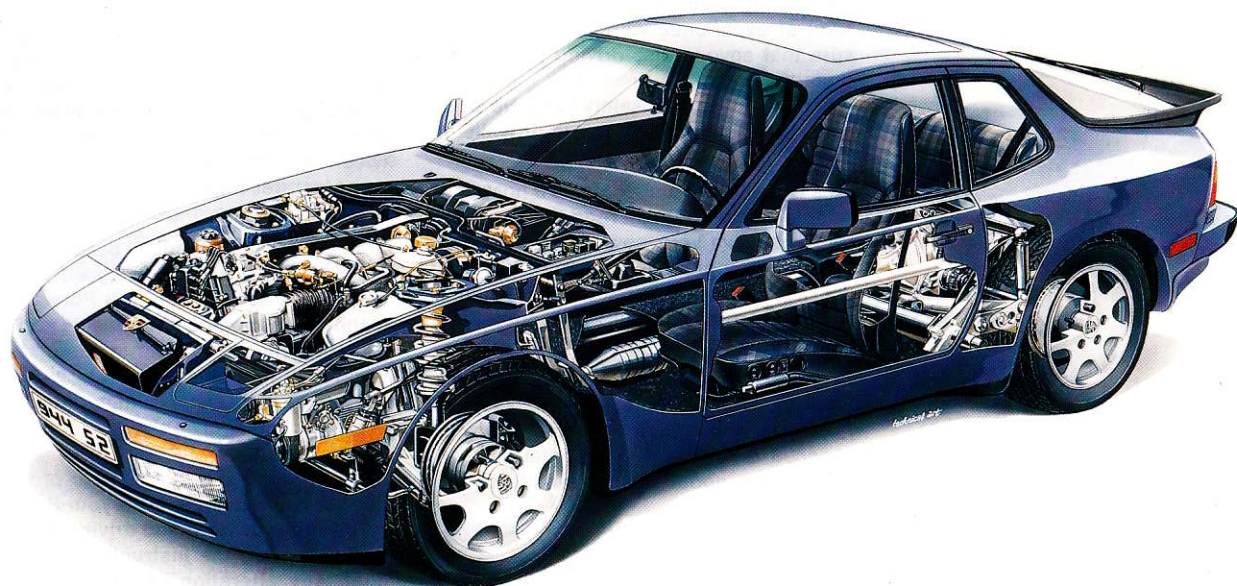
BMW

944 S2
944 Turbo

Owner's Manual

PORSCHE

944 S2
944 Turbo



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Printed in Germany

Dear Owner,

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

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

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

A separate 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.

If you believe that a vehicle or item of motor vehicle equipment (such as tires, lamps, etc.) has a potential safety-related defect, you may notify the National Highway Traffic Safety Administration (NHTSA). You may either call toll free at 800-424-9393 (or 366-0123 in Washington, DC) or write Administrator, NHTSA, 400 Seventh Street, S.W., Washington, DC 20590. NHTSA investigates alleged safety-related defects and may order a recall and remedy campaign if it finds that a safety defect exists in a group of vehicles and the manufacturer does not voluntarily conduct a recall and remedy campaign. However, NHTSA does not become directly involved in the dealings between a particular consumer and vehicle manufacturer regarding a defect in the consumer's vehicle.

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.

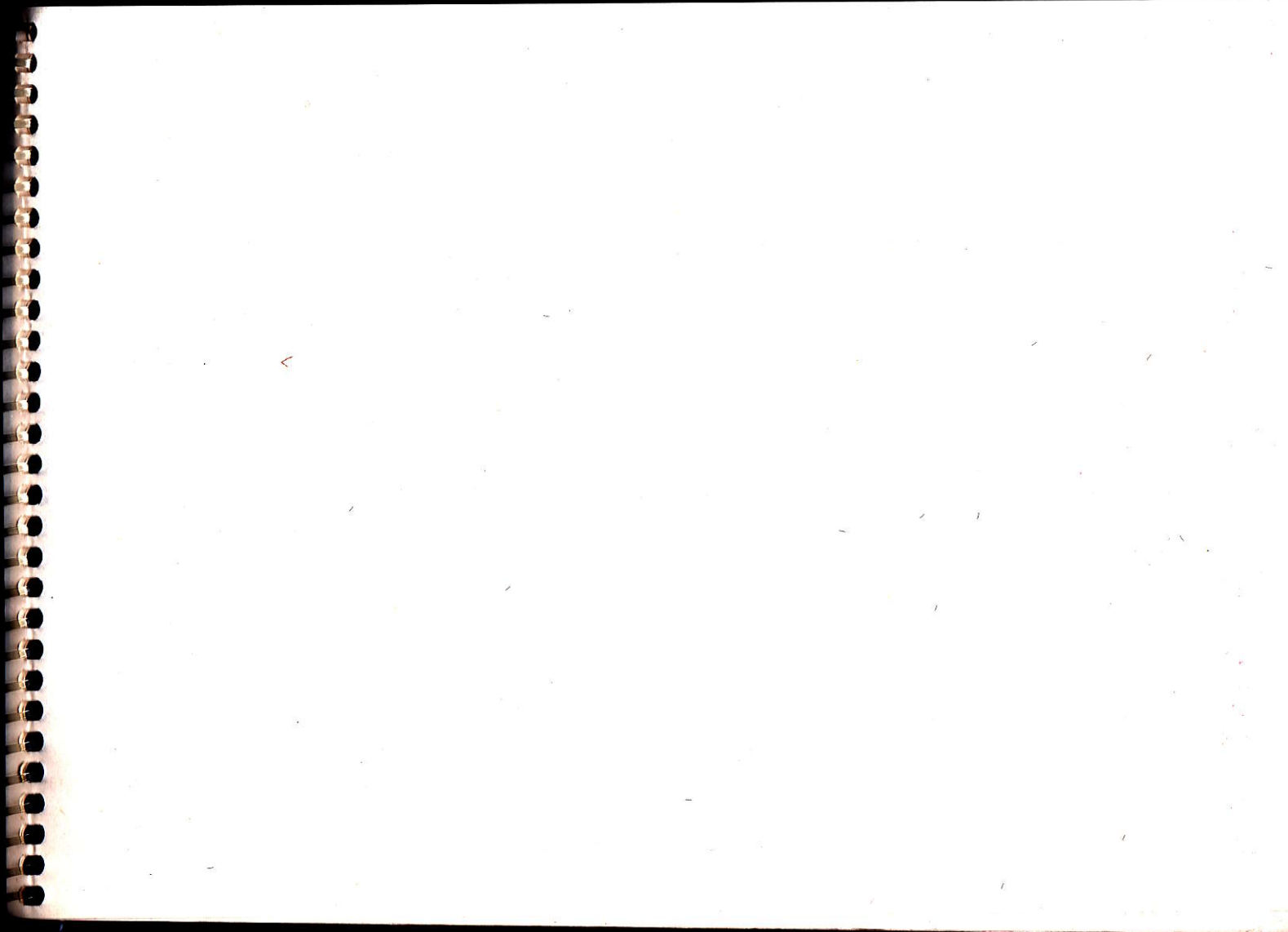
Note to owners

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

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

Note aux propriétaires

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



Before Driving Off, Running In, Controls

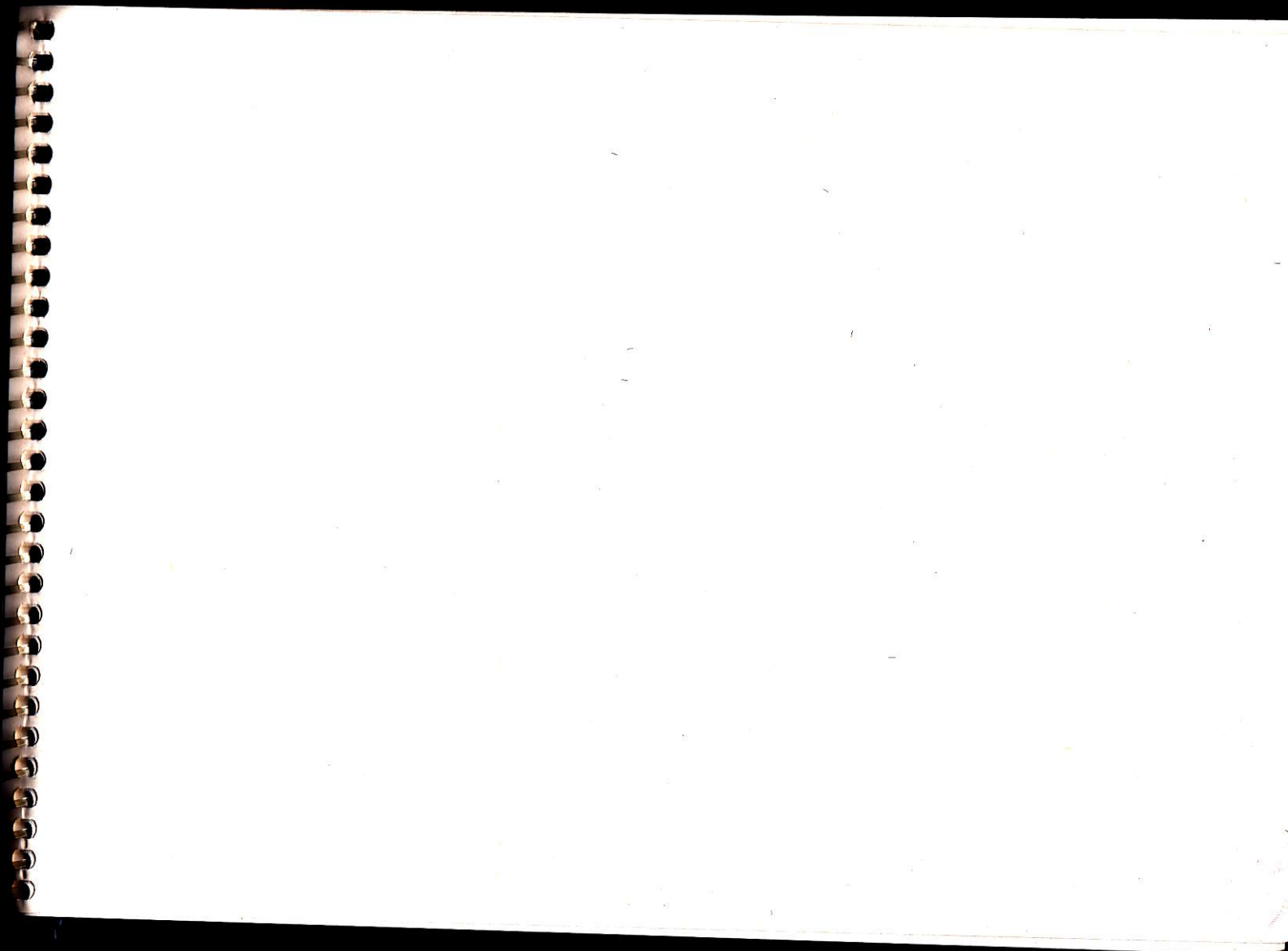
Maintenance, Car Care

Practical Tips, Emergency Service

Vehicle Identification, Technical Data

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Pocket for Additional Information



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Dear Porsche Owner

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

the safe driver ...

who knows his car and all controls

who maintains his vehicle properly

who uses his driving skills wisely, and who 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 these 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 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 engine 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 when starting the engine.
- 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.

Driving in wet weather requires caution and reduced speeds, particularly on roads with standing water, as the handling characteristics of the vehicle may be impaired due to tire aquaplaning.

Also, when crossing stretches of deeper water there is a danger that too high of a speed can cause water to enter the engine combustion chambers through the intake air system and/or water may strike the cooling fan causing cooling system damage. In order to avoid possible engine or cooling system damage when driving

through deep water, the vehicle should be driven at a walking speed in first gear.

- Observe speed limits and obey road signs.
- When tired, get well off the road, stop and take a rest. Turn the engine off. Do not sit in the vehicle with engine idling. See WARNINGS on "Engine Exhaust".
- When parked, always set the parking brake. Move 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 observing 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 possess 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.

New tires

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

Engine Oil Consumption

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

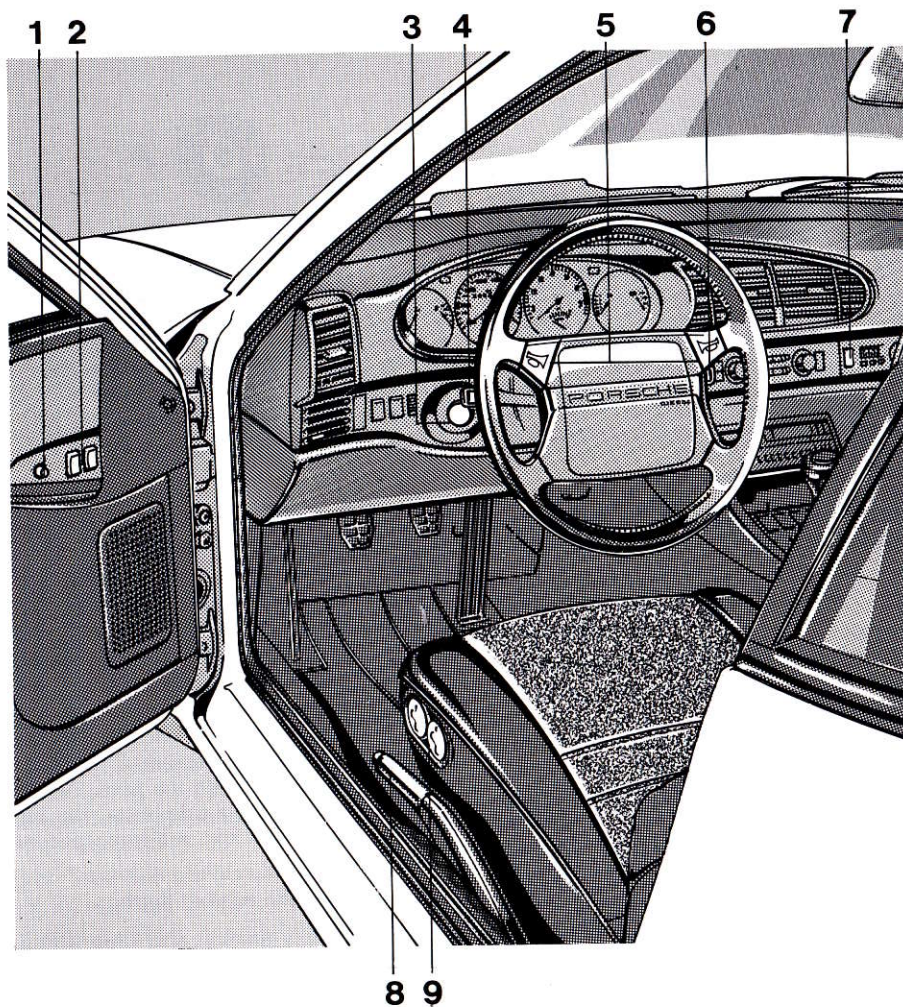
As always, the rate of oil consumption depends on the quality and viscosity of oil, the speed at which the engine is operated, the climate, road conditions as well as the amount of dilution and oxidation of the lubricant.

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

Engine Exhaust

WARNING

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

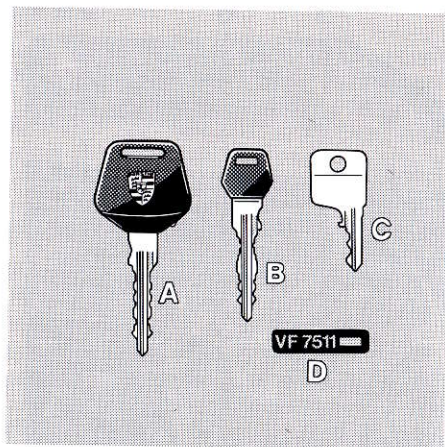


- 1 Outside mirror control
- 2 Switches for power windows
- 3 Light switch
- 4 Turn signal, headlight dimmer and flasher lever
- 5 Horn
- 6 Wiper/washer lever
- 7 Emergency flasher switch
- 8 Parking brake lever
- 9 Electric seat adjustment

NEVER invite car theft!

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

A steering wheel lock and a buzzer alarm are standard equipment in your Porsche. The buzzer 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.

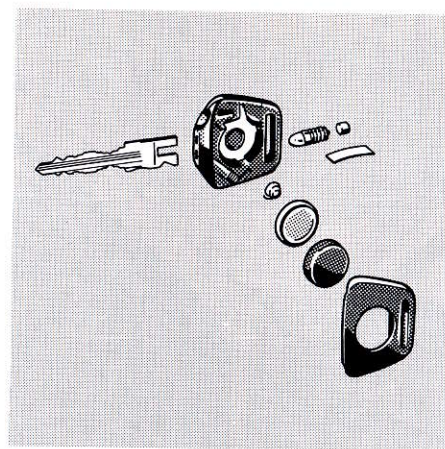


- A Master key with battery light
- B Flat key
- C Key for lockable wheel nuts
- D Key number

Keys

The vehicle is supplied with three keys fitting all locks. All keys are symmetrical so that there is no wrong way of inserting them in the locks. Two keys (A) are fitted with a battery light which is integrated in the plastic handle and lights up upon pressing the contact button. The third key (B) is flat and should be kept as an "emergency key", for instance, in your purse.

After pulling the plastic head off the flat key, you can snap on a luminous plastic handle available from your Porsche dealer.



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.

Key number

The key number is impressed on a plastic tag (D) which comes with the keys. Detach this tag and keep it in a safe place. The key numbers of the other keys are embossed on the key heads.

For your protection against theft:

- Record the key number and keep it in a safe place, such as your wallet. Do not keep it in the vehicle.

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.

- If you should lose a key, provide your Porsche dealer with the key number to obtain a duplicate key.

For the lockable wheel nuts, three identical keys (C), plus four wheel nuts with lock sleeve, 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 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.

When the key bulb becomes weak, you should install a new battery of the same voltage. Acid leaking from a discharged battery might damage your clothing.

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

Anti-theft alarm

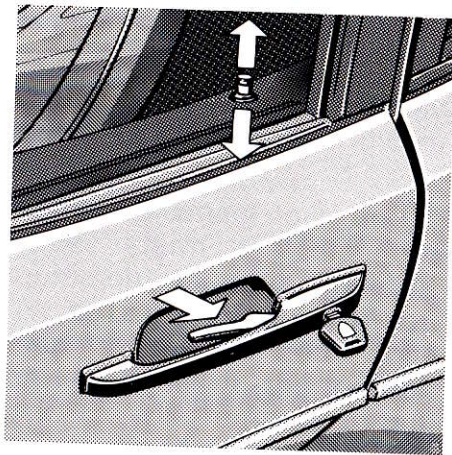
The lock for the anti-theft alarm system is integrated in the door lock. The alarm system is primed when one of the doors is locked with the key. Light-emitting diodes in the locking buttons flash to indicate that the alarm is primed.

When a door lock is unlocked, the alarm system is unprimed and the light-emitting diodes go out.

If the hatchback is opened with the alarm primed, this alarm status is automatically interrupted until the hatchback is reclosed.

When the alarm system is activated, and an attempt is made to open either door, or to lift the engine hood or the rear hatch, the alarm will be triggered and will produce an intermittent high-pitched noise for about 90 seconds. Additionally the fog lights and stop lights will flash intermittent for the same time period.

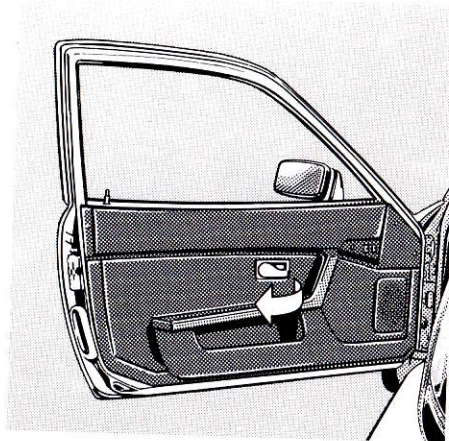
Should an attempt be made to start the engine, the alarm will also be set off. However, when the alarm system is activated, it is impossible to start the engine.



Doors

To lock, unlock and open doors from the outside

- All doors can be locked with the ignition key.
- The passenger door can be locked without a key by first depressing the locking knob and then closing the door.
- The driver's door can only be locked from the outside with the key. This precaution was taken to prevent locking the driver's door while the key is still inside the car.
- Squeeze trigger in door handle to open door.



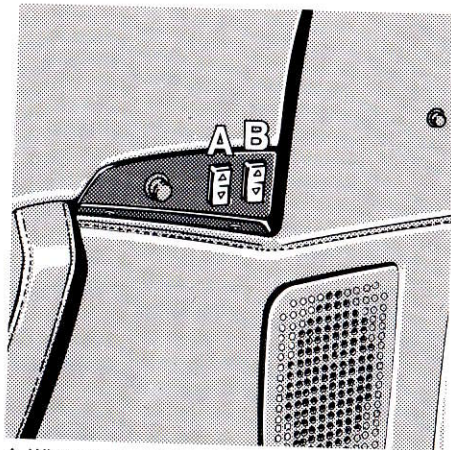
To lock, unlock and open doors from the inside

- Lock or unlock door by depressing or raising the locking knob.
- Open door by pulling inside door handle located above the armrest.

Power Windows

To open or close windows, depress the rocker switches located in the door panels. The door window on the passenger's side can also be operated from the driver's side.

The power windows are operational when the ignition switch is turned to positions 1 or 2. Information regarding ignition switch pos-



A Window on driver's side
B Window on passenger's side

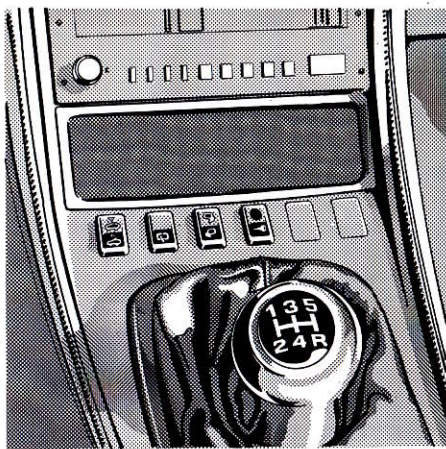
itions will be found in section titled, "Ignition/starter switch with steering lock".

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

WARNING

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

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



Central Locking

By means of the central locking system both doors are electrically locked or unlocked (locking button lowered or raised) when a door lock is turned with the key. Before locking, make sure that both doors are properly closed.

When the doors are locked, the removable roof is also locked at the same time.

If the roof is open, it is not affected by the central locking system.

Both doors can be individually locked from inside by pressing the locking button. If the locking button is used to unlock one door, the second door is also automatically unlocked.

To prevent you from locking yourself out of the vehicle, it is not possible with the driver's door open to lock the door lock with the locking button.

Should the central locking fail, both doors can be opened and closed mechanically.



Central Locking Switch

By pressing the central locking switch in the centre console it is possible with the ignition key in position 2 to lock or unlock both doors electrically. As a check, if the doors are locked, a red indicator lamp in the switch lights up.

If one of the doors has been locked manually, the red indicator lamp lights up. By pressing the switch, the door is unlocked; when pressed again, both doors are locked.

With the ignition key removed, locking is possible by means of the central locking switch. To unlock, the ignition must be switched on or the locking button raised.

Front seats

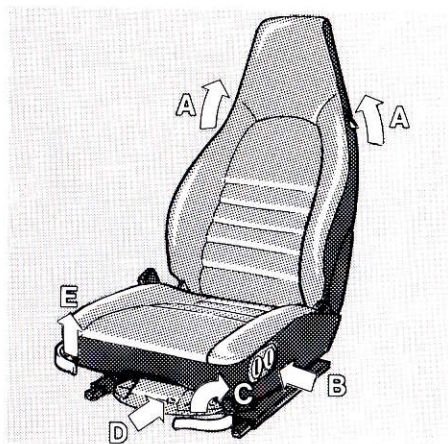
The correct seating position is all-important for safe and fatigue-free driving.

In order to satisfy individual requirements, the seat has infinitely variable adjustment.

The rocker switches for the height adjustment are located at the outboard side of the seat.

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

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.



- A Backrest lock
- B Electric seat adjustment
- C Longitudinal adjustment
- D Emergency adjustment
- E Backrest adjustment

Seat Adjustment (C)

The seats permit individual longitudinal adjustment. After pulling up the locking lever on the outboard side of the seat, the seat can be repositioned forward or rearward.

WARNING

Do not adjust seats while the vehicle is in motion. The seat may move unexpectedly which could cause sudden loss of vehicle control or personal injury.

Backrest Lock (A)

The backrest is locked to prevent it from tilting forward when you are forced to brake hard. For unlocking, pull up the knob on the left or right side of the backrest.

WARNING

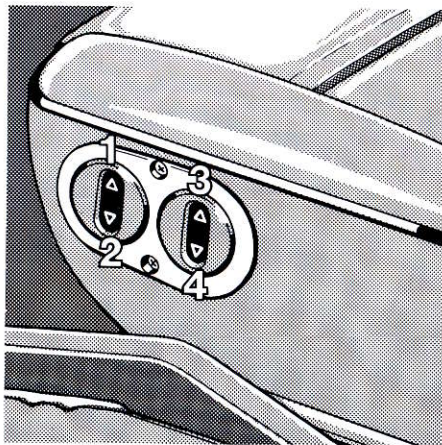
For driver and passenger protection, backrest locks must be engaged at all times while the vehicle is in motion.

Backrest Adjustment (E)

The backrests can be adjusted forward or rearward by pulling up the locking lever on the inboard side of the seat.

WARNING

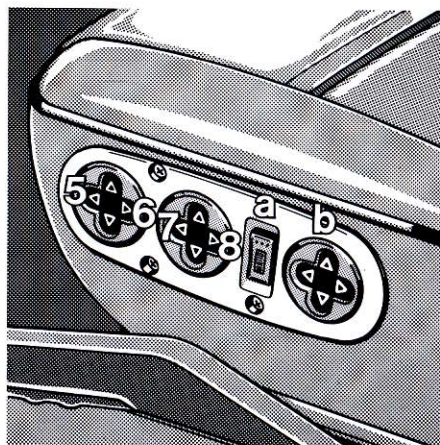
Front seat passengers should not ride in a moving vehicle with the backrest reclined. Safety belts only offer protection when the backrest is upright and the belts are properly positioned on the body. Improperly positioned safety belts can cause serious personal injury in an accident.



Electric Seat Adjustment (B)

The lifting controls are designed for front and rear vertical adjustment by pressing a rocker switch.

- 1 Front end up
- 2 Front end down
- 3 Rear end up
- 4 Rear end down



Vehicles with electric backrests and fore-and-aft adjustment are equipped with rocker switches with two additional functions.

- 5 Move seat forward
- 6 Move seat rearward
- 7 Move backrest forward
- 8 Move backrest rearward

Emergency Adjustment (D)

In the event of a failure of the electrically operated seat adjuster, fore-and-aft adjustment of the seat can be obtained using the Allan key contained in the tool kit. The seat is adjusted by turning the servo motor located at the front on the seat using the Allan key.

Seat Heating System (a)

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

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

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

Turn knurled knob up to increase temperature

Turn knurled knob down to reduce temperature

Lumbar Support (b)

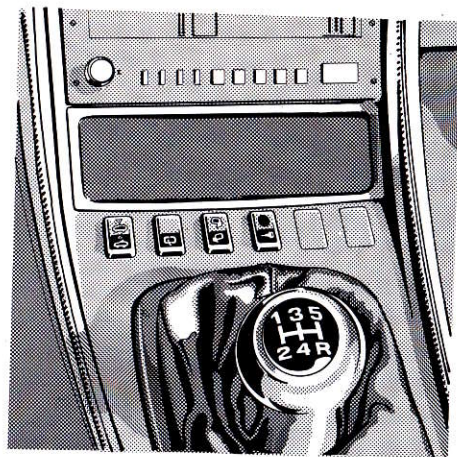
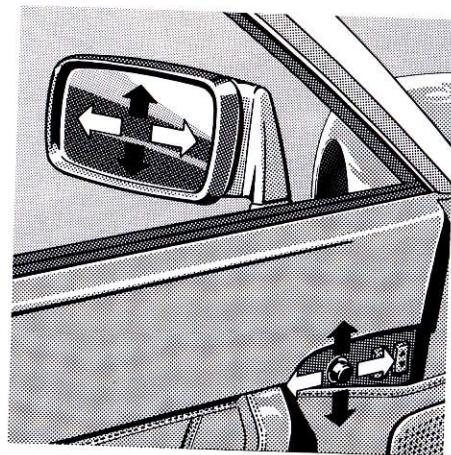
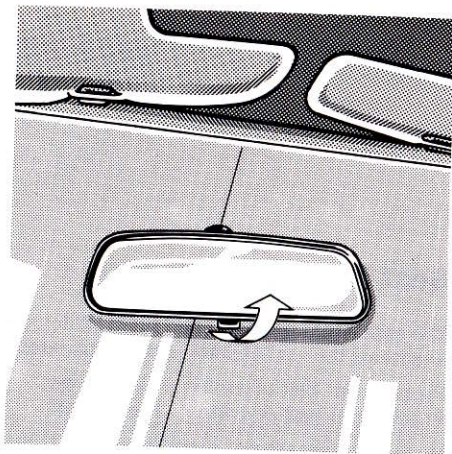
In order to facilitate a comfortable sitting position, the curvature of the backrest can be adjusted vertically and horizontally to any position thereby providing individual support for the spine.



Horizontal adjustment



Vertical adjustment



Rear View Mirrors

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


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

Inside day-night mirror

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

Heated outside mirrors with remote control

When you turn on the rear window defogger, the outside rear view mirror is also heated. The outside mirrors are adjustable from inside of the vehicle by a four direction switch located on the left door and a rocker switch located on the center console ahead of the gear selection lever.

 **The rocker switch** selects either the left or right mirror for adjustment. Push the rocker switch forward to select the left mirror, and rearward to select the right mirror. Then the four direction switch will adjust the selected mirror in any of the four directions.

The mirror housing is hinged and can be folded flat against the car in either direction to prevent damage in tight parking spots. If necessary, the outside mirrors can also be adjusted manually.

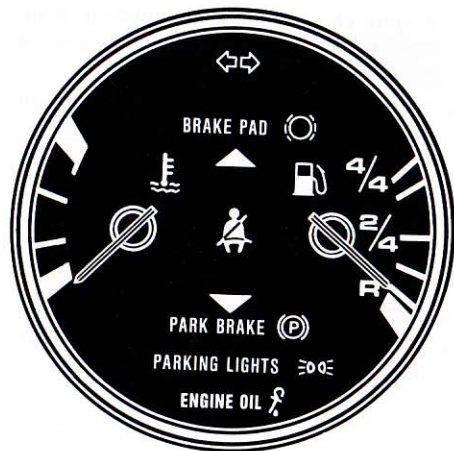
Safety Belts

WARNING

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

Instructions

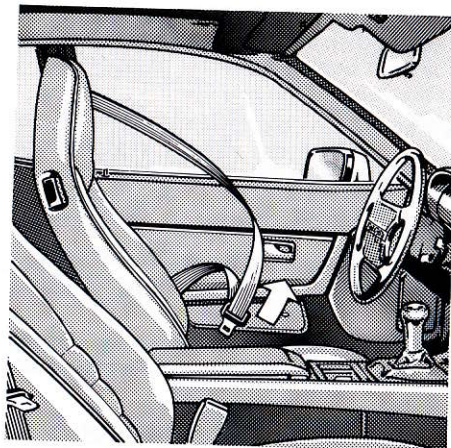
- For your and your passengers' protection, use safety belts at all times while the vehicle is in motion. Use child safety seats for all small children.
- Safety belts must be properly positioned on the body. Improperly positioned safety belts can cause serious personal injury in case of an accident.
- 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 pelvic crest.
- Belts should not be worn twisted.
- Do not wear belts over rigid or breakable objects in or on your clothing, such as eye glasses, pens, keys, etc. as these may cause injury.
- Several layers of heavy clothing may interfere with proper positioning of belts.
- Belts must not rub against sharp objects.
- Keep belt buckles free of any obstruction that may prevent secure locking.
- Make sure that belt of the unoccupied passenger seat is fully wound up on its retractor so that the belt tongue is in its stowed position.
- Belts that have been subjected to 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 left instrument cluster comes on for about 6 seconds to remind driver and passenger to buckle up. If the driver does not fasten the safety belt, the buzzer will continue for the duration of this six second period. The buzzer will go off as soon as the driver has buckled up.

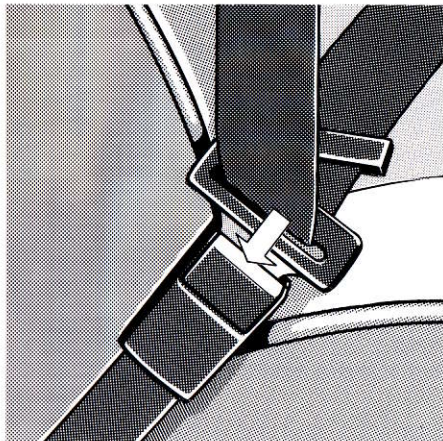


Inertia reel retractor

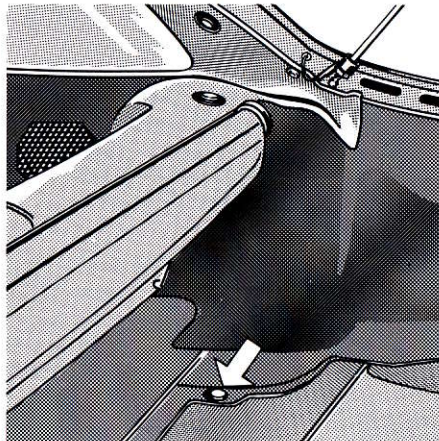
The combination lap/shoulder belt with inertia reel locking mechanism adjusts automatically to your size and movements as long as the pull on the belt is slow.

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 (arrow) to make sure belt fits snugly across the hips.
- Belts should fit snugly across the pelvis and chest. Make sure any slack is wound on the retractor.



- To unfasten belt, push in release button on buckle. Belt tongue will spring out of buckle.
- To release a locked belt, lean back to take the body pressure off the belt.
- To store lap/shoulder belt, allow belt to wind up on retractor as you guide belt to its stowed position.



Child restraint anchorages (Canada Models)

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.

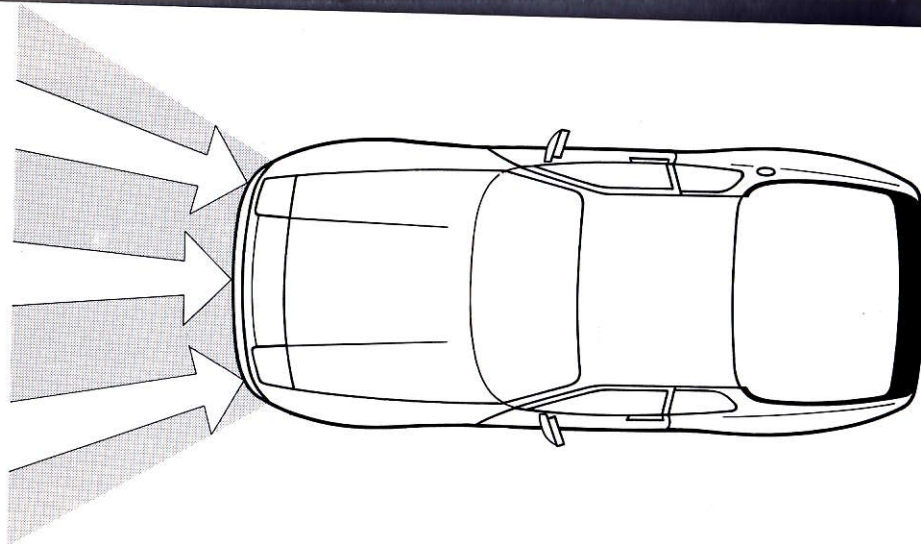
If a child restraint system is to be used, the necessary upper anchorage fitting must first be mounted on the respective anchor point.

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 igni-

tion mechanism. In the ignition process, a solid propellant in the gas generator is combusted in a fraction of a second. This combustion generates the gas quantity and pressure necessary to fill the air bag.

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

Range of Effectiveness

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

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

Maintenance / Monitor Lights

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

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

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

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

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

WARNING

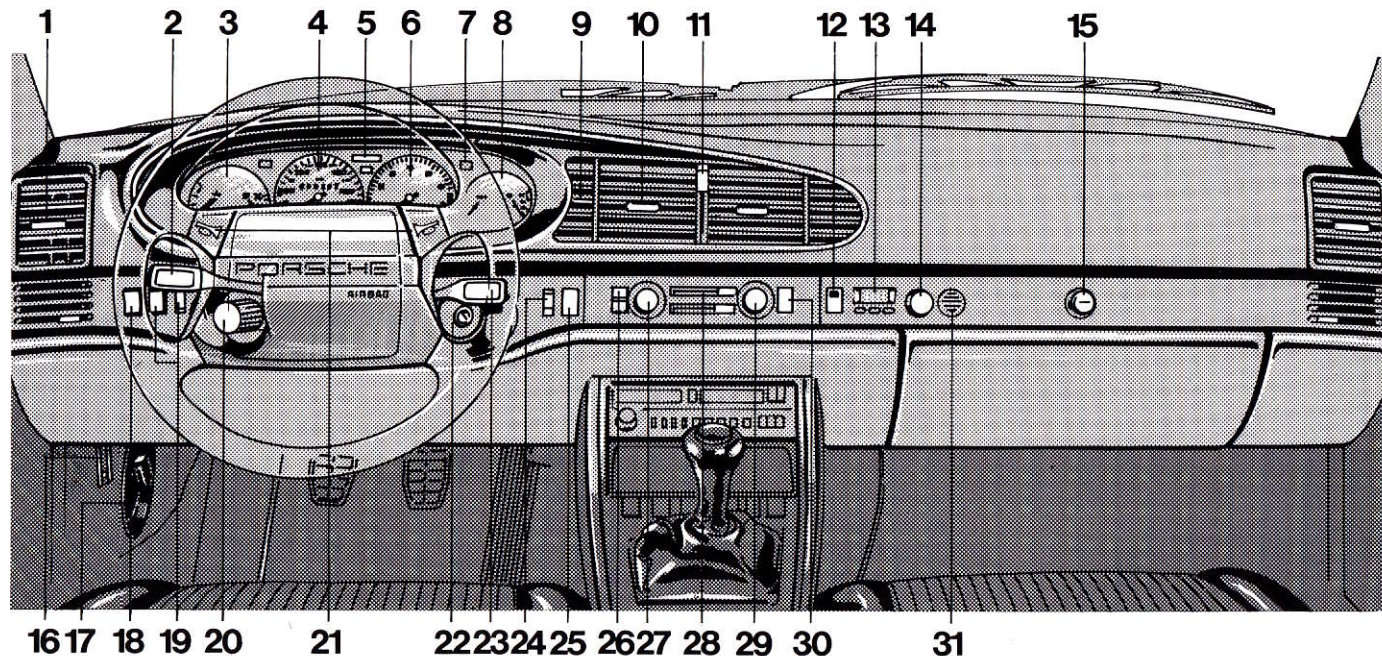
- No changes must be made to the wiring or components of the air bag system. Do not add any additional coverings or stickers to the steering wheel or in the area of the passenger side air bag. Doing so may adversely affect the functioning of the air bag system.

- Do not undertake any wiring for electrical accessory equipment in the vicinity of the air bag wiring harness. Doing so may disable the air bag system.
- The actuation of the air bag requires the immediate inspection of the system and replacement of some parts of the system. See your authorized Porsche dealer.
- Defects should be repaired immediately. See your authorized Porsche dealer.
- When disposing of a used air bag unit, our safety instructions must be followed. These instructions can be obtained at any authorized Porsche dealer.

Important:

If you sell your Porsche, notify the purchaser that the vehicle is equipped with an air bag, and refer him or her to the chapter, "Air Bag System", in the owner's manual (safety and disposal rules).

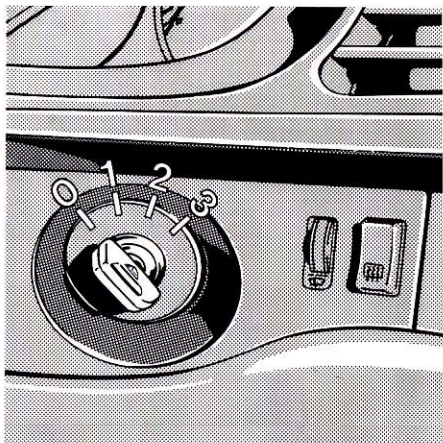
Further information on the air bag system can be found on stickers in the glove compartment, at the windshield, as well as on all air bag components.



- 1 Side-window vents
- 2 Turn signal / headlight dimmer and flasher lever
- 3 Left instrument cluster / coolant temperature gauge and fuel gauge
- 4 Speedometer
- 5 Central warning light, Turn signal indicator
- 6 Tachometer
- 7 High beam indicator light
- 8 Right instrument cluster / oil pressure gauge and voltmeter
- 9 Trip odometer reset

- 10 Fresh air vents
- 11 Center dashboard vent cut – off slide
- 12 Emergency flasher switch
- 13 Clock
- 14 Cigarette lighter
- 15 Glove compartment lock
- 16 Hatchback release switch
- 17 Front hood release
- 18 Fog light switch
- 19 Instrument illumination dimmer control
- 20 Light switch
- 21 Horn

- 22 Ignition / steering lock
- 23 Wiper / washer lever
- 24 Intermittent wiper control
- 25 Rear window defogger switch
- 26 Recirculation switch / defroster switch
- 27 Fan control switch knob
- 28 Heating and ventilation control levers – dashboard / floor
- 29 Temperature rotary switch
- 30 Air conditioning switch
- 31 Temperature sensor



Ignition/Starter Switch with Steering Lock

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

Switch positions

- 0 The steering is blocked by the steering lock: all circuits wired through the ignition are switched 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 **Position for radio.** Steering unlocked. If it is difficult to turn the key, gently move the steering wheel until the key turns freely.

Note: all circuits which are disconnected in position "3" can be switched on.

To conserve battery power, switch off other electrical consumers while playing radio in position "1".

- 2 **Ignition on.** All electric circuits are operational. With the engine stationary, the central warning light and all individual warning lights located in both combination instruments will light up for a **bulb check**.

- 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 central and individual warning lights should go out (see "Central warning light").

To conserve battery power, the electric circuits for headlights, rear window defogger/defroster, temperature control 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 guards against starter damage.

To remove the key and to lock the steering wheel, turn the key back to position "0" and pull 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.

Instrument panel lights

Warning lights for alternator, oil pressure, and brake system will light up for a bulb check when the ignition is turned on. They should go out after the engine is started. The **brake warning light** will go out after the **parking brake has been fully released**. See "Warning lights" for more details.

Buzzer

If you leave the key in the ignition/steering lock, the buzzer 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.

Automatic Transmission – Start with selector lever in Park.

Manual Transmission – Start with gearshift lever in Neutral.

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

Therefore, do not 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 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 buildup before turning off engine.

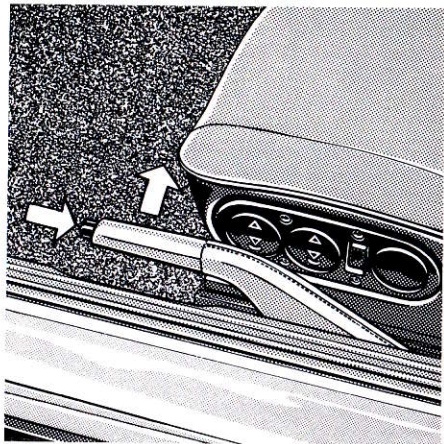
WARNING

- 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 thermost 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.



Parking Brake Lever

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

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

To set the parking brake,

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

To release the parking brake,

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

The brake warning light on the dashboard will go out after the 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. One brake circuit operates the front and the other the rear axle.

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 failure of a brake circuit is indicated by the lighting up of the dual-circuit brake indicator lamp. See also brake fluid warning lamp.

With correctly adjusted brakes the pedal travel to the point of brake actuation should be $1\frac{3}{16}$ " to $1\frac{1}{2}$ " (30 to 40 mm). Whenever the brake pedal travel is greater, have the brake system checked.

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

Brake Booster

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 tire traction. Moisture on brakes from road water, car wash, or coating of road salt may affect braking efficiency. Cautiously apply brakes to test them after being exposed to such conditions. When the vehicle is driven on salted roads for extended periods, the brakes should be hosed down thoroughly about every 2 weeks. An automatic 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; longer if fewer stops are realized.

Clutch Pedal

Due to the hydraulic operation of the clutch, pedal play should be 0.1" or 2.5 mm.

To check the play, depress the clutch pedal. Excessive play or tightness indicate a malfunction of the clutch. Both conditions can lead to severe damage. Contact your Porsche dealer promptly to have the cause located and corrected.

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

ABS Brake System

(Antilock brake system)

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

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.

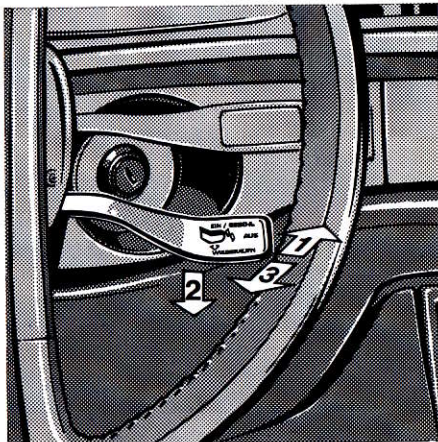
If your ABS system should ever malfunction, the ABS system is automatically switched off, but the normal brake system, without ABS, would remain fully operational. Such a malfunction would be indicated by the illumination of the central warning light, as well as the "ANTILOCK" light on the right hand side of the instrument cluster.

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 sizes. If non-standard tires are fitted, the control unit may misinterpret the speed of the vehicle, because of the variant data it receives from the sensors on the axles.

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



- 1 Set/accelerate
- 2 Reset
- 3 Cancel

Automatic Speed Control

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

While driving with the automatic speed control set at speeds above 25 mph (40 km/h), do not bring shift lever into 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: If 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. Press the lever

down (arrow 2), and the preset speed will be resumed.

Switching system off: To switch off the automatic speed control, 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.

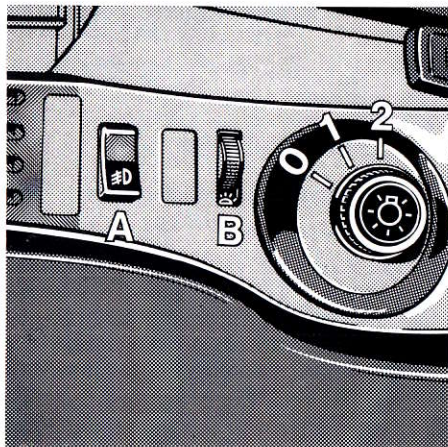
As an alternative, you can hold the lever in the front position (arrow 1), without depressing the accelerator pedal. The car will accelerate on its own. When the desired speed is reached, release the lever.

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, shift to a lower gear to avoid stalling the engine.



Light Switch

Parking light – 1st position

Headlights – 2nd position (with ignition key in switch position “1”).

Tail lights, side marker lights, license plate and instrument lights are on in both switch positions.

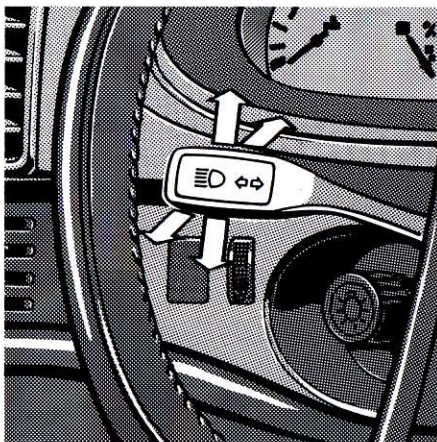
The retractable headlights open when turning the switch to the second position.

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



Instrument illumination

The instrument illumination goes on when the vehicle lights are turned on. Turn the



knob “B” to the left of the light switch for infinitely variable brightness control.

Turn Signal/Headlight Dimmer Switch Lever

(ignition on)

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 fails, the indicator light flashes about twice as fast. The light bulb may have to be replaced.

Lane changer

To indicate your intention when changing lanes on the highway, slightly push the turn signal switch lever up or down to the point of resistance. The lever will return to the OFF position when released.

Headlight dimmer

With the light switch at stage 2, high beam is switched on by pressing the lever towards the instrument panel, and low beam is switched on by pulling the lever towards the steering wheel. When high beams are on, the blue indicator light between the tachometer and the right instrument cluster will light up.

You can flash signal other motorists by repeatedly pulling and releasing the lever just up to the point of resistance.

Headlight flasher

During daylight, you can flash signal with your foglights (in lieu of horn) by repeatedly pulling and releasing the lever just up to the point of resistance.



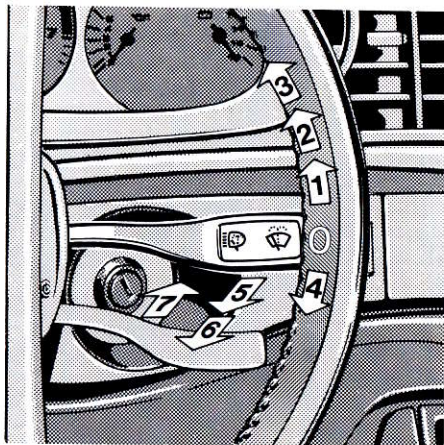
Fog lights – with ignition on

Turn on the fog lights by depressing the rocker switch “A” on the dashboard. A green light in the switch glows when the fog lights are turned on.

Parking lights – with ignition off

Lever up – right side parking lights on

Lever down – left side parking lights on



Lever for Windshield Wiper/Washer and Headlight Washer

The windshield wiper/washer switch has seven positions:

- 1 – Low speed
- 2 – Normal speed
- 3 – High speed
- 4 – Intermittent wiper operation
- 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.

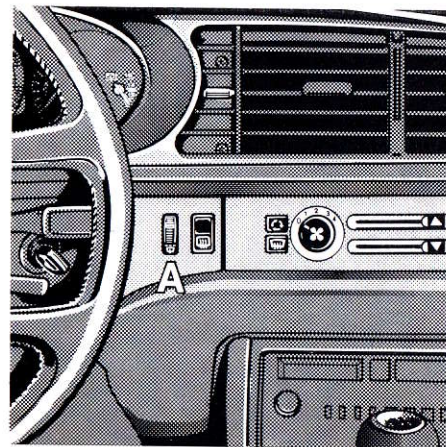
When the ignition is switched on, the washer nozzles are heated.

7 – Headlight washer

To operate the headlight washer, push the washer lever in the direction of the dashboard. The system only operates when the headlights are switched on.

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.

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

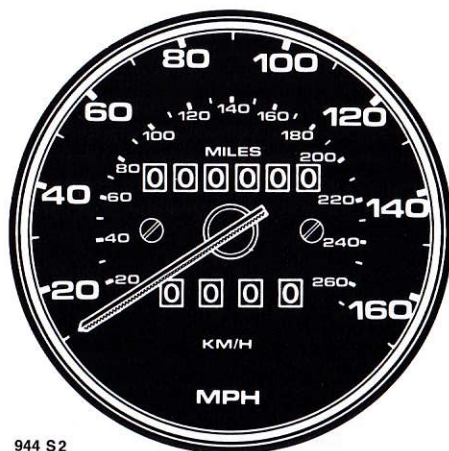
The wiper interval can be adjusted by turning the thumbwheel "A".

Instruments

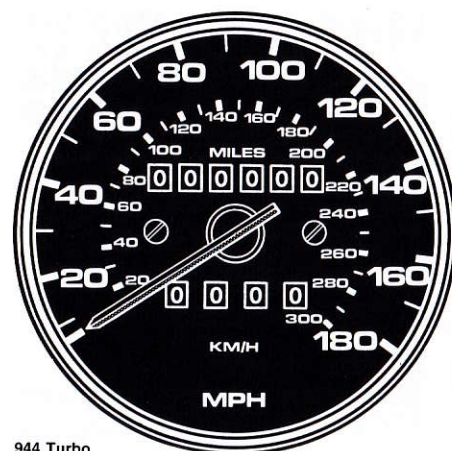
Gauges

Warning Lights

Indicator Lights



944 S2



944 Turbo

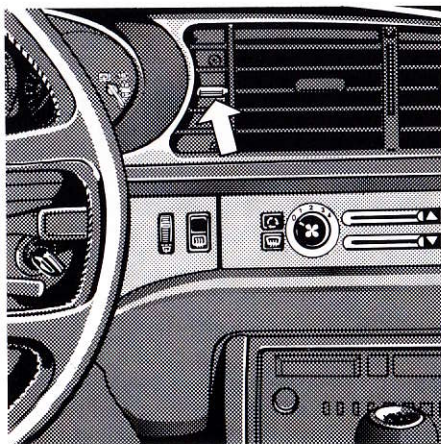
Speedometer

The speedometer indicates driving speed per hour.

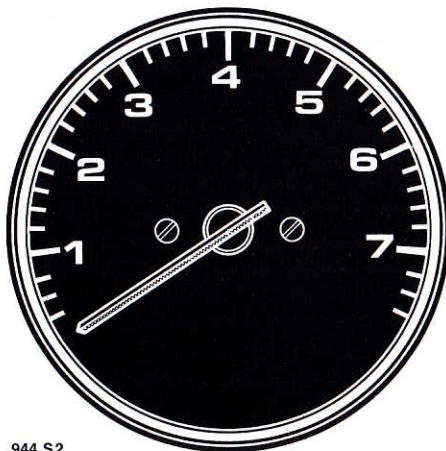
In USA: Miles per hour and
Kilometers per hour

In Canada: Kilometers per hour

The upper odometer records total distance driven and cannot be turned back.



The **trip odometer** in the lower part of the speedometer can be turned back to zero by pressing the reset-button (arrow), located in the left section of the center dashboard vent. The ignition must be on.



944 S2

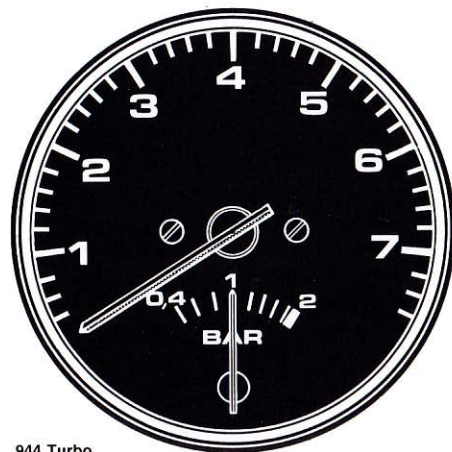
Tachometer

The tachometer shows the 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.

The speed limiting governor prevents the engine from being overrevved under load.



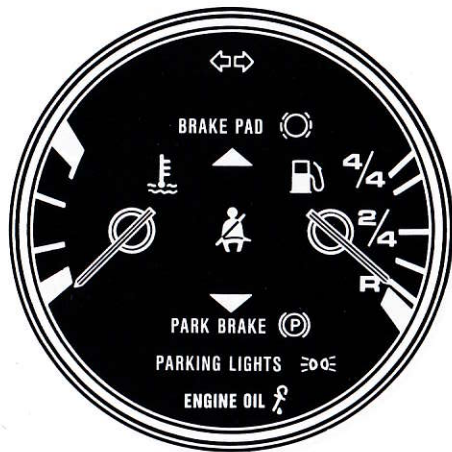
944 Turbo

Boost Pressure Gauge

On the 944 Turbo there is a boost pressure gauge in the lower part of the tachometer. This instrument indicates the pressure in the intake manifold.

With the ignition on and the engine stopped, the indicated pressure corresponds to the ambient air pressure (atmospheric pressure) of approx. 1 bar.

Should an excessively high boost pressure occur as a result of a defect, the fuel supply is cut off automatically.



Left Instrument Cluster

The left instrument cluster includes the coolant temperature and fuel gauges as well as warning lights for coolant temperature, fuel reserve, brake-lining wear, safety belt, parking light and parking brake. The two arrows at the top are turn signal indicators for vehicles with trailer coupling.

Coolant temperature indicator

Needle in lower field – engine is cold

Avoid high speeds and high engine rpm. During cold engine operation, engine response and power levels will vary from that

of a warm engine. Due caution and notice of these engine characteristics will ensure safe operation of the vehicle.

Needle in center field – normal

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

Needle in upper field – warning

If needle enters the upper field the engine is overheating the warning light comes on. Reduce speed and engine rpm. The needle should return to the center field and the indicator light goes out.

If the needle does not return to the center field, and the indicator light does not go out, the **radiator fan** may not be working to provide sufficient engine cooling. Pull off the road and turn off the engine. The fan should still be running for a while. Failure to do so may result in severe damage to the 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 spon-

taneously when the termoswitch turns the fan on.

- Be careful if you have to remove the cap from a hot coolant fluid reservoir. Protect your hands, arms and face against scalding. Use a thick rag and open the cap carefully one turn to allow excess pressure to escape before removing the cap.

If the fan is not working, the fuse for the fan may be burned out, or the relay may be defective. See “Fuses and Relays”.

After the engine has cooled down, check the coolant level (see “Cooling System”). If the coolant level is low, top it up with water. Check for possible leaks.

If the coolant level is normal, proceed to the nearest workshop. **Avoid idle speed and stop-and-go driving.** But with an inoperative fan, the coolant will heat up again. When the needle enters the upper field, stop again and let the engine cool down before you continue driving.

Coolant system malfunctions should be remedied by the nearest Porsche dealer, as severe engine damage may occur.



Fuel Gauge and Fuel Reserve Indicator

When the ignition is turned on, the amount of fuel in the tank is indicated by the fuel gauge in the right part of the dial.

If the needle enters the area in the bottom and the fuel reserve indicator lights up, there is only a reserve of about 2.1 U.S. gal/8 liters left in the tank. Time to refuel at the next gas station.

Warning Lights

BRAKE PAD

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

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

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



SAFETY BELT WARNING LIGHT

When the ignition is turned on the light will come on for about 6 seconds to remind driver and passenger to buckle up. **See "Safety Belts" for more details.**

PARKING BRAKE

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.

PARKING LIGHTS

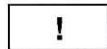
The parking light indicator at the bottom in the left instrument cluster lights up when the parking lights are switched on.

ENGINE OIL

If the warning lamp fails to go out once the engine starts, the engine-oil level has dropped near the min. mark on the dipstick. In this case, switch off the ignition to stop the engine.

After waiting for approx. 2 minutes (to allow the oil to drain back into the sump), check the oil level at the dipstick and top up to the max. mark.

See "Oil-Level Warning System" for details.



Central Warning Light

The central warning light between speedometer and tachometer comes on after turning on the ignition. This light monitors all functions displayed by the instruments. If one of

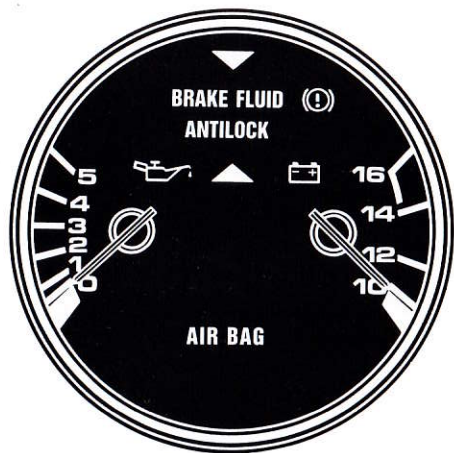
these functions fails, the central warning light and the pertinent indicator light come on until the malfunction has been corrected. The vehicle should immediately be taken to the nearest authorized workshop.

Turn Signal Indicator Light

The turn signal indicator light, which is located below the central warning light, will flash at the same frequency as the turn signals. If a turn signal fails, the control light flashes at about twice the normal frequency. Have your dealer check and repair it for you.

High Beam Indicator Light

The high-beam indicator light, which is located at the top between the tachometer and the right instrument cluster, will light up when you switch on the high beams or when you flash signal. The indicator goes out when you switch to low beam.



Right Instrument Cluster

The right instrument cluster combines the oil pressure gauge with the oil pressure warning light, the voltmeter with the alternator warning light as well as the brake fluid warning light.



Oil Pressure Gauge

Engine oil pressure is shown in bars.

At 5,000 rpm, with the engine at normal operating temperature (approx. 90°C / 194°F), the pressure should be approx. 4 bar. A slight drop in oil pressure is normal under certain operating conditions such as prolonged highway driving in hot weather.

At idle speed, with the engine oil hot, the oil pressure can sink to 0.5 bar – this does not indicate any loss of engine performance.

However, if the oil pressure drops suddenly while you are driving, or if the warning light comes on, pull off the road, **stop the engine and wait for it to cool down**. Check the engine oil level. If the oil level is normal, contact the nearest dealer.

Oil Pressure Warning Light

The oil pressure warning light comes on when the ignition is turned on. It should go out when the engine is started and has reached the correct oil pressure.

If the oil pressure warning light **does not light up** when turning the ignition on, or if it **does not go out** after starting the engine, contact your Porsche dealer immediately.

If the oil pressure warning light comes on while you are driving, pull off the road and **stop the engine**.

Check the oil level to make sure you have enough oil. If oil level is correct and the oil pressure warning light is still on, do not drive the vehicle as severe engine damage may result. Contact your nearest Porsche dealer for assistance.

An occasional brief flickering of the oil pressure warning light at idle speed and normal engine temperature is no cause for concern if the light goes out upon acceleration.

The oil pressure warning light is not an indicator for low engine oil level. To check the oil level, always use the dipstick.

Make it a habit to have the oil level checked with every fuel filling.



Voltmeter

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.

Alternator Warning Light

The alternator warning light comes on when the ignition is turned on. It should go out after the engine is started.

If the alternator warning 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 alternator warning light comes on while you are driving, pull off the road and stop the engine.

Check whether the Polyrib-belt is slipping or broken. The Polyrib-belt not only drives the alternator for battery charging, but also the air conditioner compressor.

If the light just flickers lightly, the Polyrib belt may be loose and is slipping.

The belt should be tightened or replaced before you continue driving.

Warning Lights

BRAKE FLUID (①)

The brake fluid warning light monitors the hydraulic dual-circuit brake system. It lights up when the ignition is turned on and should go out after the engine has been started.

If the brake warning light fails to light up when the ignition is turned on, or if it fails to go out after the engine is started, there may be a malfunction in the electrical system. Let your Porsche dealer locate and correct the condition promptly.

Should the light come on while driving, the brake fluid level in the reservoir could be too low, or one of the dual brake circuits may have failed. In either case, the brakes will function but a much longer distance and a far greater pedal pressure are required to bring the car to a halt. **See "Brakes" for more details.**

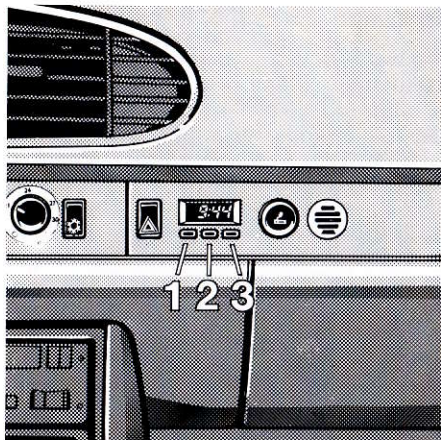
Carefully pull off the road and stop. Have your car towed to the nearest dealer for repair. Continued operation of a car with defective brakes is dangerous.

ANTILOCK

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 your authorized dealer for service immediately.**

AIR BAG

See "Air Bag System" for details.



Clock

Setting the time of day

- 1 – Press button ② until the display 12 H or 24 H flashes. By pressing button ① you can select either the 12 hour or 24 hour display mode.
- 2 – Press button ② again. The hour display flashes and can be set by means of button ①.
- 3 – Press button ② again. The minute display flashes and can be set by means of button ①.

Press button ③ to start the clock accurate to the second. The clock can also be started during the individual stages.

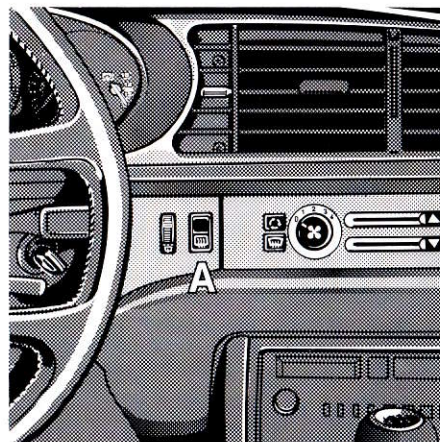
Stopwatch

The stopwatch can only be started if the clock is in normal time mode.

Switch on stopwatch – Press button ③,
Start stopwatch – Press button ①,
Stop time – Press button ①.

It is possible to add further times by pressing button ① again.

Set stopwatch to "0" – Press button ②.
Press button ③ to return the clock to normal operation. If the clock is returned to normal operation when the stopwatch has been activated, the stopwatch continues to run.



Rear Window Defogger

The rear window defogger works only with the ignition key in positions 1 and 2.

The rear window defogger, together with the flow through ventilation, will help to keep the inside of the rear window clear of condensation and frost in the winter.

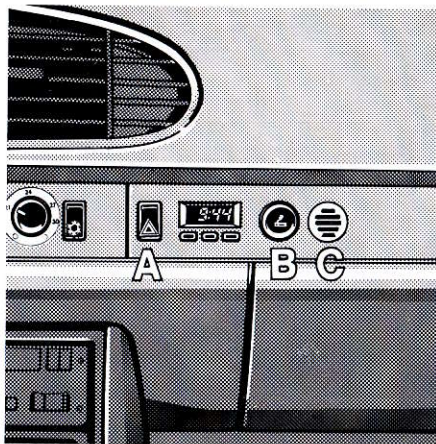
Depress the switch "A" to turn on the rear window defogger and the outside mirror.

The control light in the switch will light up to remind you that the defogger is switched on. After the rear window has been cleared, switch off the rear window defogger to avoid unnecessary drain on the battery.



Cigarette Lighter

Push knob "B" on console in. When ready for use, the lighter will snap back. With the lighter removed, the socket may be used for small appliances, such as shaver, hand vacuum cleaner or air compressor to inflate the collapsible spare tire. Maximum rating of such equipment should not exceed 120 W/12 Volt. **Do not damage the socket by trying to insert plugs of the wrong design.**



Emergency Flasher

If your car is disabled or parked under emergency conditions, depress the switch "A" 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.

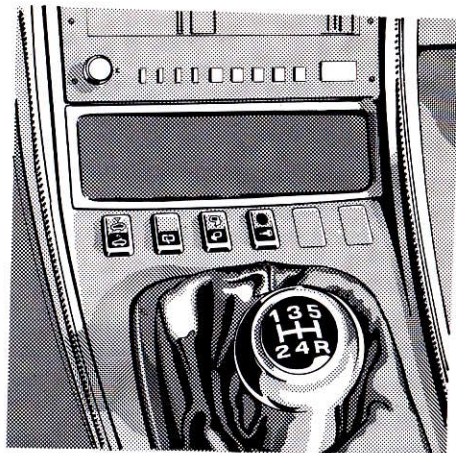
WARNING

- 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 coolant fan is thermostatically controlled and may come on at anytime, regardless of ignition switch position.

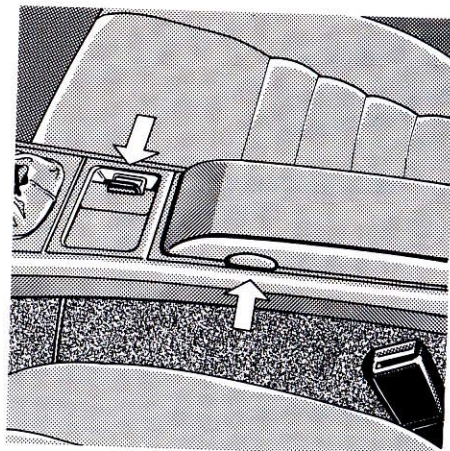
Passenger Compartment Temperature

The temperature sensor "C" for automatic temperature control is situated to the right of the cigarette lighter.



Rear Window Wiper

To operate the wiper, depress the rocker switch on the center console. The rear window must be sufficiently wet to prevent the glass surface from being scratched.



Ashtray

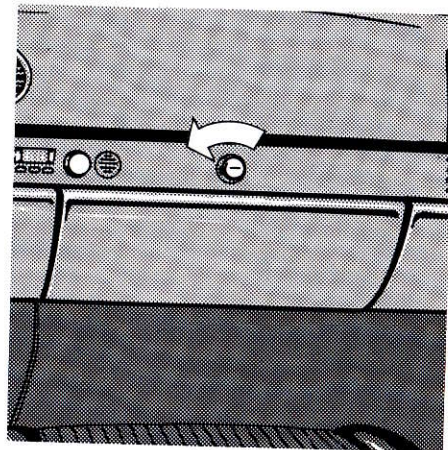
The ashtray is in the center console. To empty the tray, pull it out of its well.

WARNING

Never use ashtray as waste paper disposal.
Fire hazard!

Cubby

The cubby, which can be used for storing tapes, coins for parking meters etc. is opened by pressing the locking button (arrow).



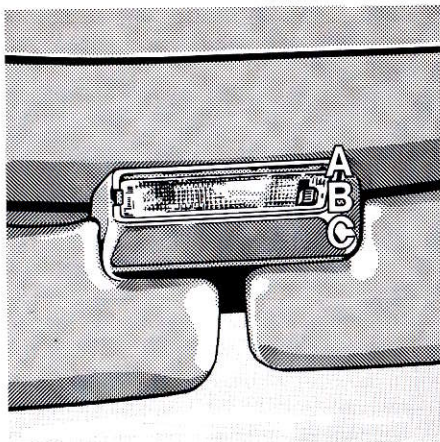
Glove Compartment

To open the glove compartment turn the locking button counterclockwise. With the car lights turned on, the glove compartment light is automatically switched on when the glove compartment is opened.

The compartment is lockable with the ignition key to help prevent theft.

WARNING

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



Overhead Interior Light

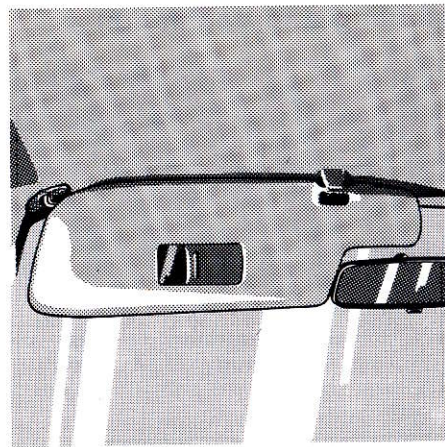
Located between the two sun visors the interior light has a three position switch.

Switch Positions

Rearward (A) – on continuously

Center (B) – off

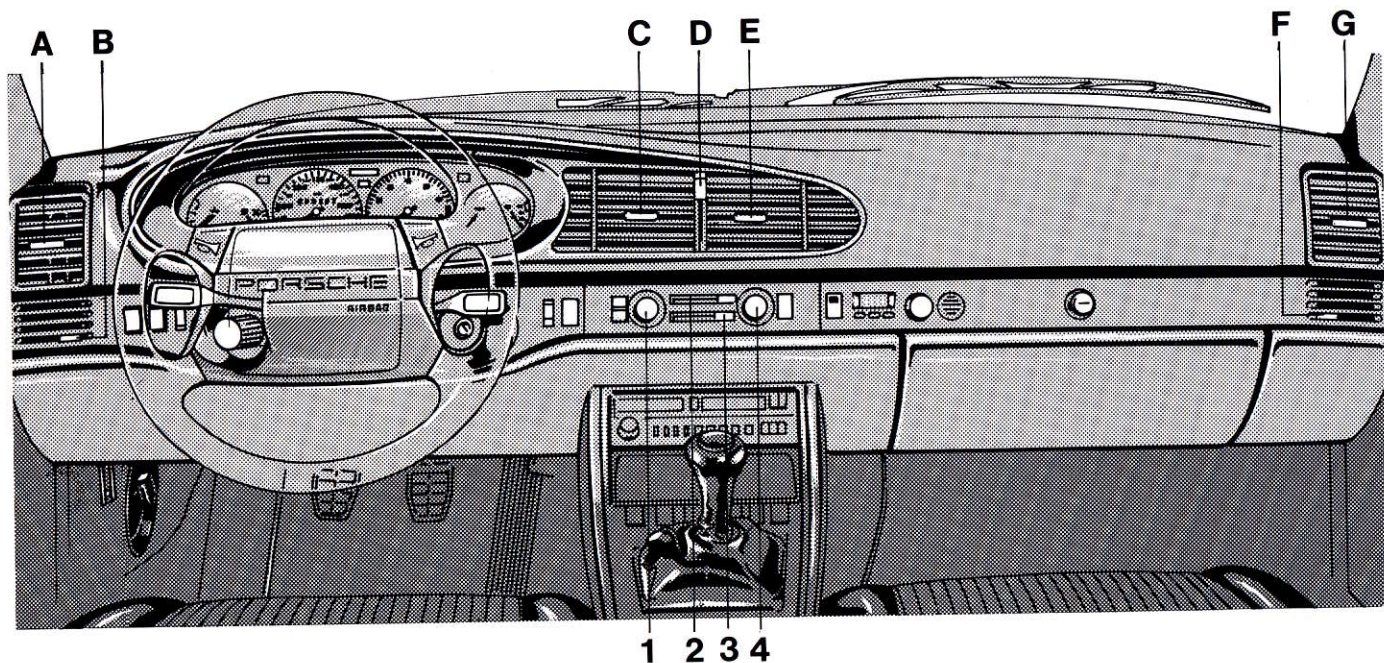
Foreward (C) – on, only with doors open



Sun Visors

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

The make-up mirror on the rear of the visor is fitted with a protective sliding shutter.



Heating Ventilation System

- 1 Fan switch
- 2 Air distribution to windshield
- 3 Air distribution to footwell outlets
- 4 Temperature switch

- A Air outlet – left side dashboard vent
- B Open and close – left side dashboard vent
- C Air outlet – center dashboard vent, left section
- D Open and close – center dashboard vent

- E Air outlet – center dashboard vent, right section
- F Open and close – right side dashboard vent
- G Air outlet – right side dashboard vent

Heating and Ventilation

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.

Before turning on the air conditioner, move the two air distribution control levers to their center positions, and move the temperature control knob to the extreme counterclockwise position.

Should you suspect that the air conditioner is damaged, have it checked promptly. Leaks must be sealed immediately, since loss of refrigerant may result in serious damage to the air conditioner system.

The upper lever (2) controls the air flow to the windshield (right position: open, left position: closed).

The lower lever (3) controls the air flow to the footwell outlets (right position: open, left position: closed).

The center dashboard vent can be opened or closed by operating the lever (D). For closing, the lever is pushed all the way up. For opening, push the lever downward for the desired air volume.

The direction of the air outlet is controlled by means of handles (C, E) on the vents.

The side dashboard vents are opened or closed by means of the lower levers (B, F) (○ – open, ● – closed). Again, the air outlet direction is controlled by means of handles (A, G) on the vents.

Heater Control

Activation of the heater control system ensures temperature control in the passenger compartment in accordance with the temperature range preset by the temperature knob. The passenger compartment temperature is kept constant under varying climatic conditions.

Fan Control Switch Knob

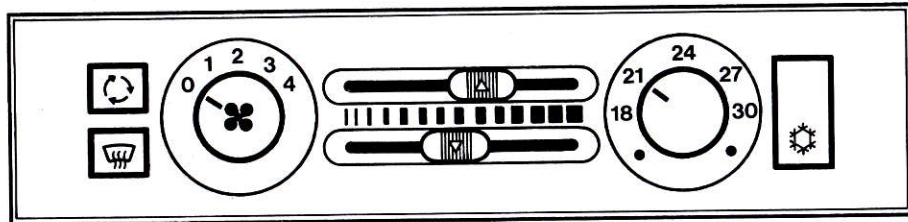
In order to ensure air circulation even with the vehicle standing or moving at low speed, the fan is running at low speed even at switch position 0. If you desire more air flow, the fan can be switched to steps 1 through 4.

Defroster Switch

Since the effectiveness of the heating depends on the cooling water temperature, the full heating power is not available until the engine has reached its normal operating temperature. To achieve the best defroster effectiveness, the center dashboard vent must be closed entirely (push lever to its extreme top position). Then press the defroster button – indicator light comes on. Independent of the position of the upper and lower levers, high/low temperature switch and the fan control switch knob, the system automatically switches to maximum heating power at fan stage 4 and the full air flow is directed to the windshield and the side dashboard vents.

Recirculation Switch

By pressing the circulation switch you can prevent unpleasant-smelling outside air (e.g. exhaust gases from vehicles in front) from entering the vehicle. The fresh air supply is then interrupted and air from inside of the vehicle will be recirculated. **The recirculation effect should be utilized for only a short period of time to prevent windshield misting!**



Automatically Controlled Air Conditioner



The air conditioning system works only when the engine is running. Its refrigerating capacity depends on engine speed. If a high refrigerating capacity is desired, it is necessary to rev up the engine — particularly in city or bumper-to-bumper traffic.

The air conditioning system can be turned on at any air distribution position by pressing the air conditioner switch. When the system is turned on, the air conditioning compressor is activated via a magnetic clutch.

Optimal cooling is achieved when the fan control switch is at position 4, the windows are closed and the lateral as well as the

center dashboard vents are fully opened and the temperature switch is set at maximum cooling power.

After prolonged exposure to sun, it is recommended that you ventilate the passenger compartment with the windows down and air conditioning on.

Should the air conditioning system fail, i. e. uncooled air flows through the vents while the system is switched on, have it checked in an authorized workshop.

Functioning

The automatic system controls the passenger compartment temperature in accordance with the temperature preset by the temperature knob.

The passenger compartment temperature is kept constant under varying climatic conditions.

Cold and warm air is automatically mixed by means of air flaps operated by a servo motor. The servo motor is controlled by a passenger compartment temperature sensor, an ambient temperature sensor and a temperature sensor located in the air conditioner.

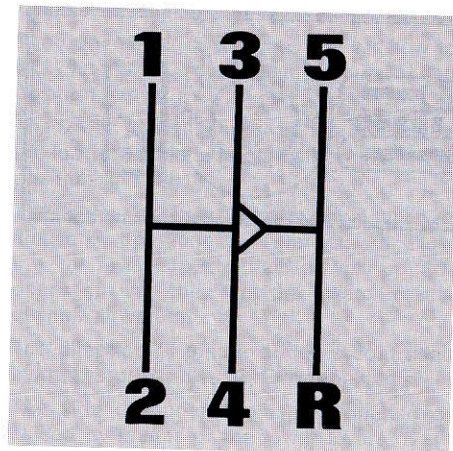
There are several options to satisfy the requirements of individual comfort with an automatically controlled air-conditioning system:

The upper lever (2) is operated to direct the air flow towards the windshield (right position: open; left position: closed).

The lower lever (3) can be used to direct the air flow to the footwell outlets (right position: open; left position: closed). The positions of these two levers are infinitely variable and can be set independently of one another.

A higher or lower temperature range can be preselected by means of the temperature control knob.

Gearshifting Manual Transmission



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

Reverse

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

The clutch pedal must be depressed and the vehicle must be stationary before shifting into reverse; only then move the gearshift lever to the right (overcoming the spring resistance) and then to the rear.

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

For smooth shifting, observe the following shift points:

The specified maximum rpm figures should not be exceeded when shifting down, as otherwise the engine speed would be too high. This applies to standard gear ratios only.

Please observe all local and national speed limits!

Maximum downshift points

5th to 4th gear

944 S2 112 mph/180 km/h or 4700 rpm

Turbo 130 mph/210 km/h or 5000 rpm

4th to 3rd gear

944 S2 84 mph/135 km/h or 4700 rpm

Turbo 96 mph/155 km/h or 4500 rpm

3rd to 2nd gear

944 S2 57 mph/ 91 km/h or 4300 rpm

Turbo 65 mph/105 km/h or 4250 rpm

2nd to 1st gear

944 S2 34 mph/ 55 km/h or 3700 rpm

Turbo 38 mph/ 62 km/h or 3700 rpm

Minimum upshifting points

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

944 S2 2900 rpm

Turbo 2850 rpm

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

944 S2 2750 rpm

Turbo 2400 rpm

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

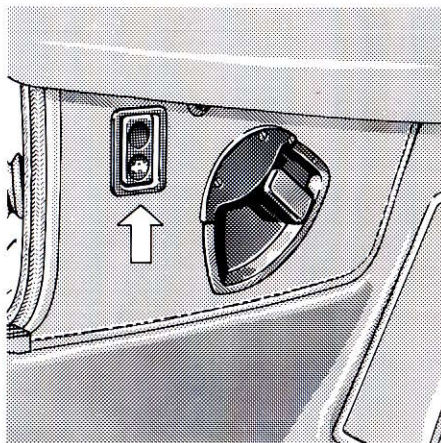
944 S2 3000 rpm

Turbo 2750 rpm

4th to 5th gear at 48 mph/77 km/h or

944 S2 2700 rpm

Turbo 2300 rpm



Hatchback

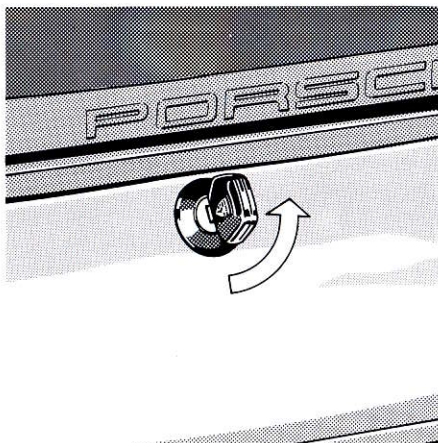
(If vehicle is equipped with an anti-theft alarm see "Anti-theft alarm".)

Release switch

To unlock the hatchback, operate the control switch on the left side underneath the dashboard. On the Cabriolet only possible in ignition lock position "1".

If the hatchback does not open of its own accord, it must be raised by hand.

Never operate the switch while the vehicle is in motion.



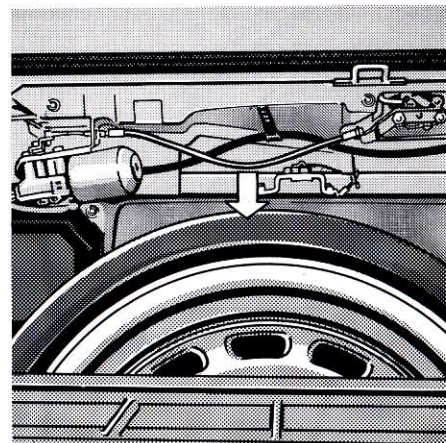
Lock

The hatchback can also be opened with the ignition/door lock key. Turn key counter-clockwise and lift hatchback up.

To close, push hatchback down firmly until both locks snap shut. Pull up on hatchback to make sure it is securely locked.

Keep the hatchback locked at all times to prevent unauthorized access to the vehicle.

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



Manual operation

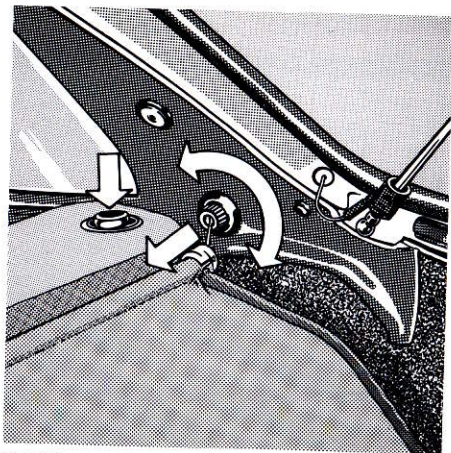
If the electric release mechanism fails, the hatchback can be opened manually.

Remove luggage-compartment panel and pull loop, located next to the electric motor (arrowed) until hatchback is released.

For your convenience, the electric release mechanism should be repaired as soon as possible by your authorized Porsche dealer.

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.



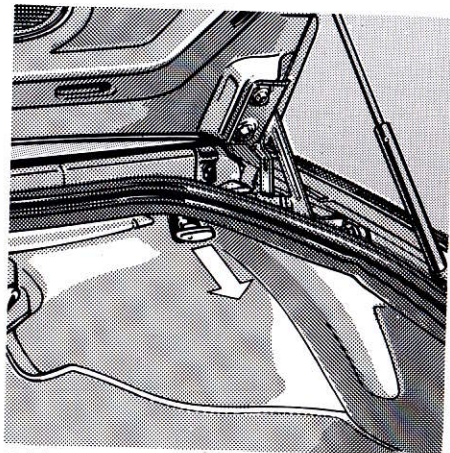
Coupé

Luggage Compartment

Luggage and other belongings should be protected from the sun and "inquisitive eyes" by pulling the rolled-up luggage cover from behind the rear seat back and hooking it into the eyelets on the rear cross wall. When unhooked, the cover rolls itself up automatically.

In vehicles with split rear seat backrests, turn the end sleeves of the hangers to release the luggage cover.

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



Cabriolet

Luggage space

Luggage space can be increased by folding the rear seats forward. In the case of the Coupé, the corresponding locking button in the backrest must be pressed.

In the case of the Cabriolet, pull the corresponding knob in the luggage compartment.

Luggage compartment light

The light is located on the left side of the luggage compartment. The light can be switched on or off, regardless of ignition or vehicle light switch positions.

Roof racks

(Coupé-Vehicles only)

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

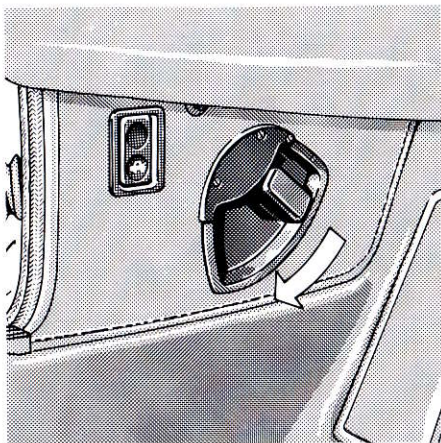
When installing the **Genuine Porsche Roof-rack** available up till now, the maximum permissible weight load of 75 lbs or 35 kg must not be exceeded.

The "**New Genuine Porsche Roofload Transport System**" provides for maximum permissible weight loads of up to 165 lbs or 75 kg.

Your Porsche dealer will be glad to advise you about which type of roof rack can best serve your individual needs and load carrying requirements.

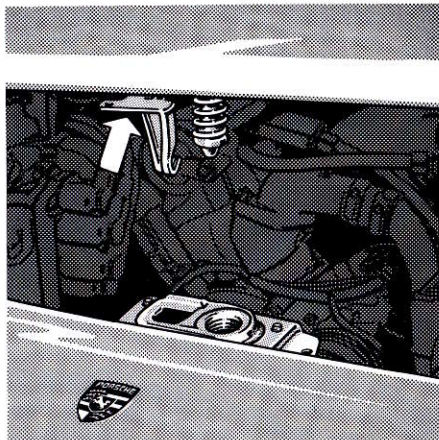
WARNING

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



Engine Hood

To unlatch the engine hood, pull the release lever on the left underneath the instrument panel.



Opening the hood

Lift hood slightly and pull up on handle (arrow) to disengage safety catch. Then lift up the hood.

Make sure the windshield wipers are not tilted forward.

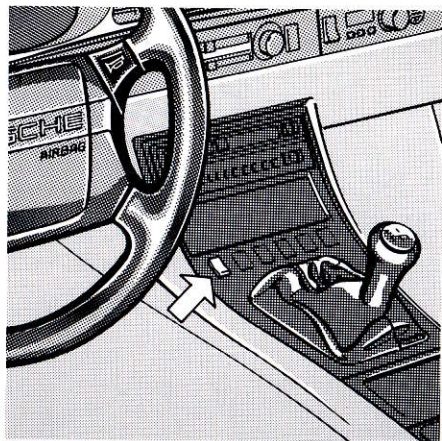
The engine compartment light on the hood will come on when the vehicle lights are turned on.

Closing the hood

Lower the hood and press it down on the hood latch until you hear an audible click.

WARNING

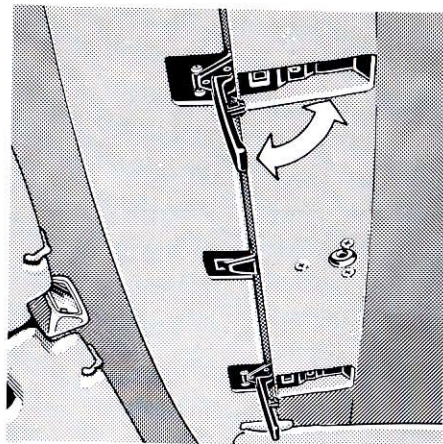
Should you notice at any time while driving that the hood is not secured properly, please stop at once and close it.



Electric/removable Prop-up Roof

With the **ignition on**, you can raise or lower the roof at the rear by depressing the front or rear half of the rocker switch in the center console.

To open – press rear half of rocker switch
To close – press front half of rocker switch



Removing roof

Clean the roof prior to removal to avoid scratches and soiling your clothes.

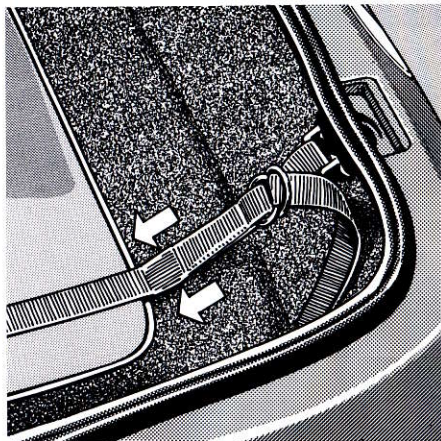
1. Turn the ignition switch to position 1 (see ignition/starter switch section). Depress rear half of rocker switch until the prop-up linkage mechanism unlocks the roof.
2. Loosen front holding clamps.
3. Lift up and remove roof.



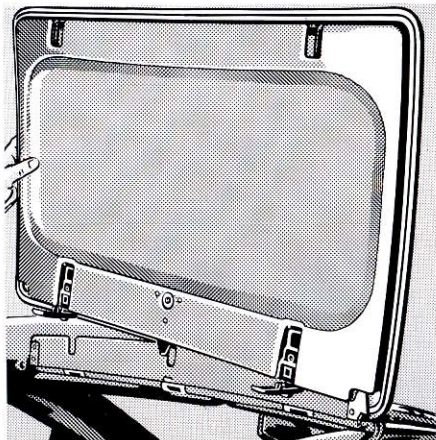
Stowing and securing roof

To preclude any risk of injury to the occupants of the car, the prop-up roof **must** be stowed in the luggage compartment and secured with the aid of the straps which you will find in a pocket in the side stowage compartment.

1. Lay straps along floor of luggage compartment and attach to hatchback locks (as illustrated).

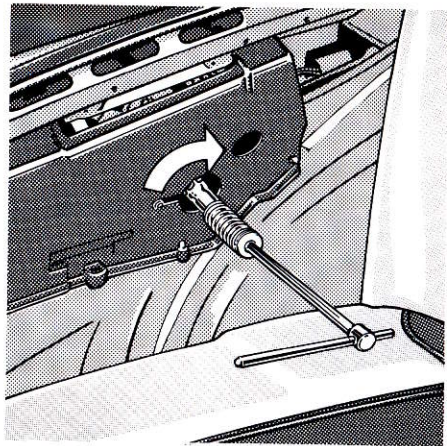


2. Place prop-up roof in position and tighten straps with locking loops (arrowed).



Installing roof

1. Remove straps from roof and place straps in the side stowage compartment.
2. From above hold roof at a slight angle and insert in wind deflector grooves and front guides.
3. Lower roof toward rear.
4. Turn the ignition switch to position 1. Depress front half of rocker switch until the prop-up linkage mechanisms has locked the roof.
5. Secure the front holding clamps.



Manual operation

If the electrical drive mechanism should fail, the roof can be closed manually. The motor for electrical operation is located at the left sidewall of the luggage compartment, behind the carpeting.

1. Remove the clips from the carpet and fold back the carpet.
2. Take off the cover from the side panel.

3. With the spark plug spanner turn the now visible hexagon nut clockwise until the roof is closed.
4. Replace cover for screw.

Do not operate the rocker switch. Let your Porsche dealer take care of the necessary repair.

Cabriolet

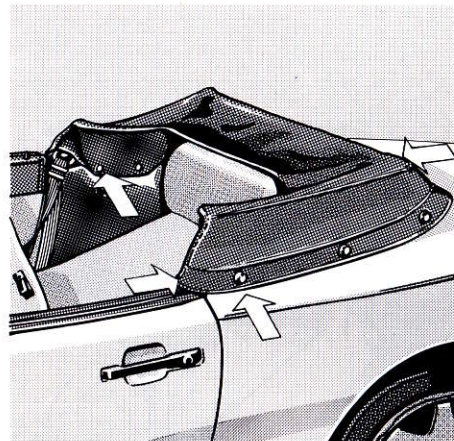
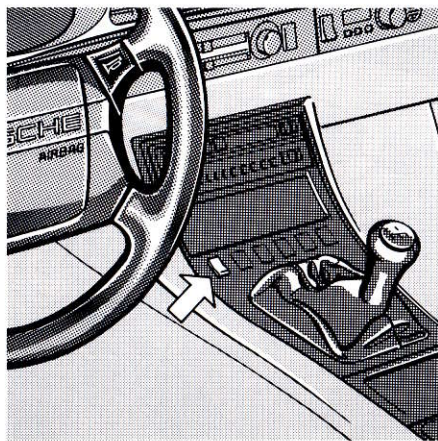
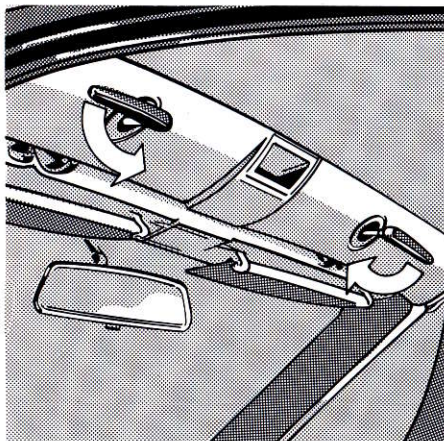
The construction of the weatherresistant convertible top enables you to open and close the top with ease. A brief operational procedure can be found in the handle cover in the convertible top frame.

WARNING

The convertible top should never be opened or closed while the vehicle is in motion. Serious property damage or personal injury could result.

When opening or closing the convertible top, ensure that fingers, hands, hair etc., do not get caught between the linkage or between the convertible top and the windshield frame, as this may result in injury.

Do not leave the convertible top open over long periods of time (several days). If possible, close the convertible top overnight, as this protects the material and the rear window.



Opening Top

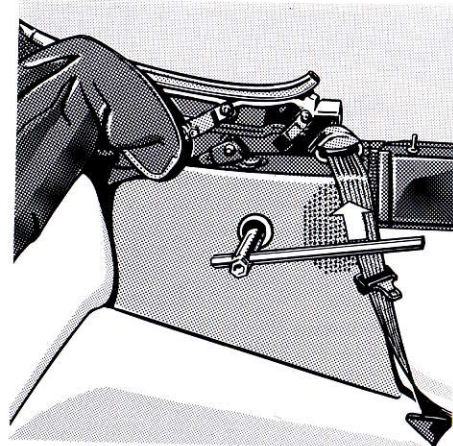
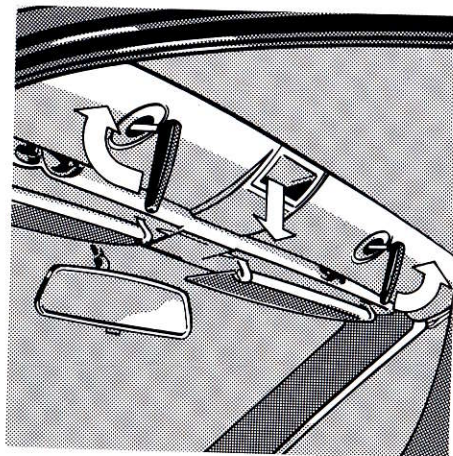
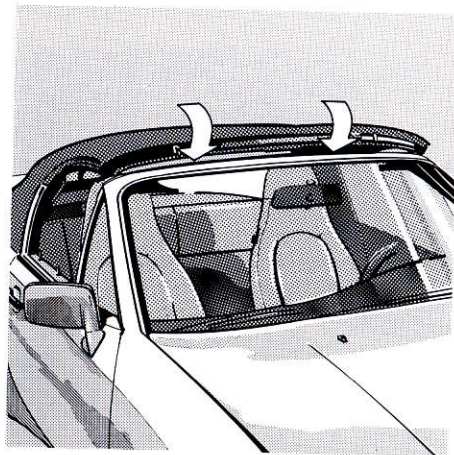
Note:

To avoid scratching, it is advisable to rinse the rear window with clean water if it is heavily soiled or dusty before opening the convertible top.

1. Remove both handles from the glove compartment and insert in the slots provided on the left and right hand sides of the front roof frame. The handles must point outwards (see diagramm near lock mechanism).
2. Turn handles through approx. 60° downwards.
3. Remove handles and push top upwards out of guide.
4. Turn ignition key to ignition lock position "1".
5. Press rocker switch in center console and hold until the convertible top is in final open position.

6. Open the luggage compartment and unlock the rear seat rests. Place the covering boot in position and secure it using the press studs or so-called Tenax studs. The cover is fixed at the front behind the rear seat rests. Pull the Tenax button while fastening over the Tenax stud.

Do not drive with convertible top down without the covering boot. The force of the wind could loosen the padding and cause damage.



Closing Top

Note:

Avoid opening or closing top when vehicle is not relatively level. All four wheels should be on an even plane. Otherwise, damage to top mechanism could occur.

Do not operate the top if the vehicle is standing on the jack or on a floor jack. Lower vehicle before operating top.

1. Remove cover.
2. Turn ignition key to ignition lock position "1".
3. Press rocker switch in center console and hold until the convertible top is in final closed position. The side windows will open by a few centimetres.

4. Insert both handles.
5. To lock the top into place pull the handle shell downwards with one hand and turn the handle until it points directly outwards. Repeat the procedure on the other side.
6. Remove both handles and place them in the glove compartment. Close the side windows.

WARNING

Remove handles before driving off to prevent injury during a collision.

Emergency Operation

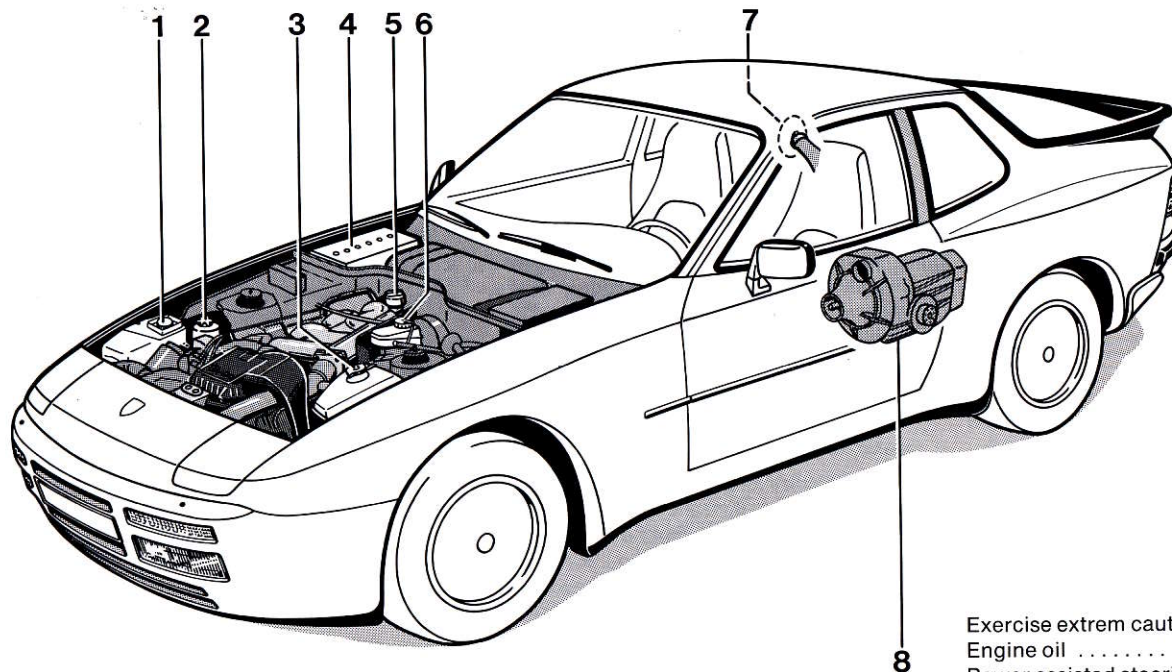
with top open

If the electric convertible top positioning mechanism should fail the convertible top may be closed manually.

1. Remove the covering caps from the rear side trims.
2. Loosen both bolts using lugnut wrench. Turn approx. 4 full turns counterclockwise (see picture).
3. Raise top and lock using handles.

The malfunction should be immediately repaired by an authorized Porsche dealer.

Maintenance, Car Care



- 1 Water for windshield/headlight washers
- 2 Hydraulic fluid for power steering
- 3 Coolant
- 4 Battery electrolyte
- 5 Engine oil
- 6 Brake fluid
- 7 Fuel
- 8 Manual transmission oil or ATF

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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 vehicles 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 the 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.

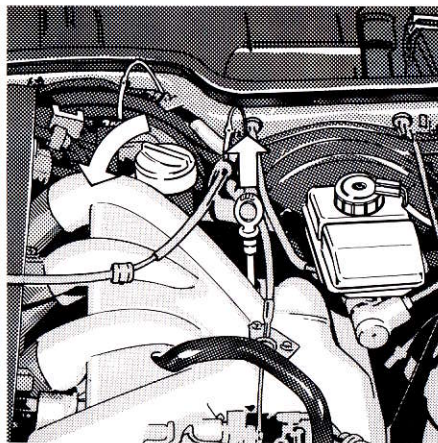
Engine Oil Level

Engine oil consumption

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

Because of these variables, no standard rate of oil consumption can be established, but drivers should expect 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.**



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 "max" and "min" marks is about 1.6 U.S. quart or 1.5 liter.

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 and remove dipstick.
2. Top up with quality oil labeled "API Service SE or SF".
3. Check oil level with the dipstick. The "max" mark should not be exceeded.
4. Replace cap and tighten securely.

WARNING

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

Oil-Level Warning System

The float of the oil-level warning system measures the level of engine oil in the sump. If the oil level is too low, the central warning light and the oil-level warning lamp in the left instrument cluster light up once the engine is running. For correct measurement, the vehicle must be standing **level**.

Method of Operation

The oil level is measured with the ignition on before the engine starts. The warning lamps light up at the same time to indicate correct operation.

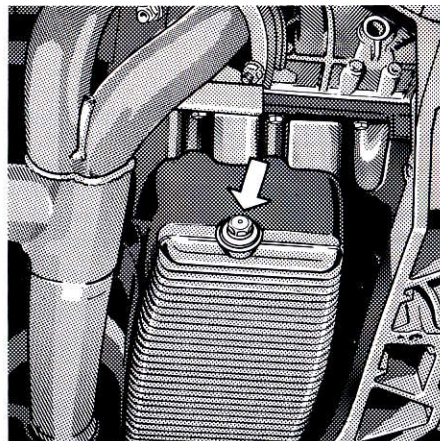
When the engine starts the warning lamp goes out if the oil level is correct. A repeat-measurement inhibitor means that no further measurement can be made for some 1.5 to 2 minutes.

If the warning lamp fails to go out once the engine starts, the engine-oil level has dropped near the min. mark on the dipstick. In this case, switch off the ignition to stop the engine.

The first measurement indicating "oil level too low" is stored in the control unit, which means that the warning lamp will not go out even if the engine is started several times in succession.

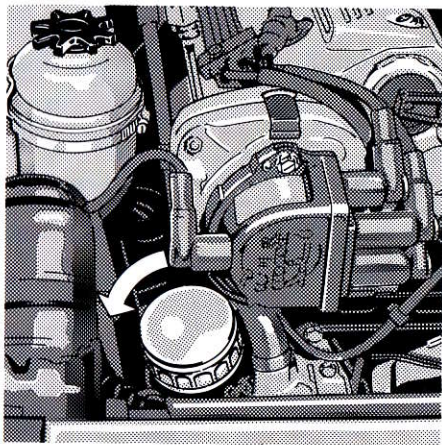
After waiting for approx. 2 minutes (to allow the oil to drain back into the sump), check the oil level at the dipstick and top up to the max. mark. The warning lamp will go out once the engine is started.

If the warning lamp remains lit even after the oil level has been topped up, seek the assistance of an authorized Porsche dealer.



Changing Engine 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.**



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, can be carried out in the proper manner. Under absolutely no circumstance should used oil find its way into the sewage system, soil, rivers, ponds, or other environmentally damaging areas. If there is no possibility of disposing of used oil in the proper manner (when in doubt, consult local authorities), please have the oil changed by your dealer or 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.

When changing the engine oil and the oil filter, the splash shield under the car has to be removed first.

Drain the oil when the engine is still warm.

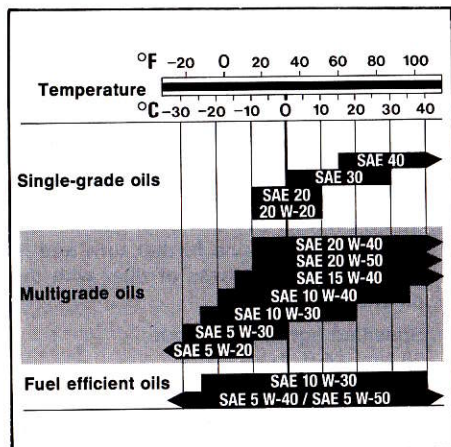
The oil filter should be changed at the intervals listed in your **Maintenance Schedule**.

1. Unscrew the oil drain plug (arrow), remove the oil filler cap and allow oil to drain completely.
2. Loosen oil filter element with appropriate wrench and remove.
3. Lightly coat new filter seal with engine oil.
4. Screw on filter by hand until gasket contacts, tighten by one further turn and finally recheck tightness of filter with the oil filter wrench.

Specified tightening torque:
20 Nm (14 ft. lb.).

5. Clean oil drain plug. Always use a new gasket when reinstalling the plug. Do not overtighten the plug. Correct tightening torque is 43 ft. lb. or 60 Nm.
6. Fill the crankcase with the required amount of engine oil labeled "API Service SE or SF" (see "Filling Capacities"). **Do not overfill.**
7. Check oil level with dipstick. Top up if necessary. Reinstall oil filler cap and tighten securely.
8. Run the engine at various speeds for 3–5 minutes and check for leaks.

See Exercise Extreme Caution.



Examples of approved viscosity classes

Engine Oils



Look for
this label

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 a 100% efficient engine oil.

Engine oil performance class

Engine oil is not only a lubricant, but also serves to keep the engine clean, to neutralize the dirt which penetrates into the engine through combustion and to protect the engine against corrosion. To perform these functions, the oil 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 oils) 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

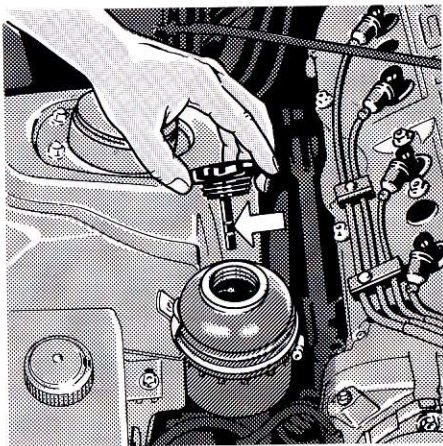
Oils with two viscosities are called multigrade oils; oils with only one viscosity are termed single-grade oils.

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 require 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.



Power Assisted Steering

The hydraulic assistance system allows effortless steering under all driving conditions. Slight hissing or squeaking sounds during sharp turns (turning steering wheel from lock to lock) are normal and do not indicate a defective steering mechanism.

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

Checking the fluid level

The hydraulic fluid level should be checked at regular intervals. The fluid reservoir is mounted on the right wheel housing in the engine compartment.

1. Unscrew cap from reservoir and wipe dipstick with a lintfree cloth.
2. Let engine run at idle speed. Reinstall cap and unscrew again. The fluid level should be between the upper and lower mark on the dipstick.

If necessary, top up with ATF-Dexron®.

3. Reinstall cap and handtighten securely.

Manual Transmission Oil

Both transmission and final drive are combined in one housing. The lubricant used is hypoid oil.

The manual transmission oil should be checked and changed by your Porsche dealer and at the intervals specified in your **Maintenance Schedule.**

Cooling System

Only use additives recommended for aluminium engines and radiators. Your Porsche dealer will be able to advise you.

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

-31°F / -35°C

Because of its anti-corrosion properties, antifreeze should also remain in the cooling system for summer operation. Cooling system capacity and specified antifreeze 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 engi-**

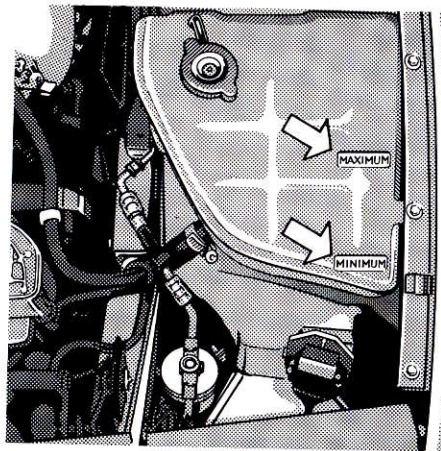
nes and radiators may cause corrosion of the cooling system, leading to engine overheating and damage.

Only for topping up coolant, a small amount of anti-freeze containing ethylene glycol and phosphates may be used if recommended anti-freeze is not available.

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

WARNING

The radiator fan is electrically driven. It is switched on automatically when the coolant reaches 198°F / 92°C. Even when the engine is turned off, the fan will continue running, until the coolant temperature has



dropped to 189°F / 87°C and until the engine itself has cooled down sufficiently.

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 engine compartment (see illustration). Since the expansion tank is transparent, the coolant level can be checked visually without removing the filler cap.

When the engine is cold, the coolant level should be between the minimum and maximum mark on the expansion tank.

Since the closed cooling system loses almost no coolant, **topping up** is normally not required. An obvious loss of coolant indicates leakage. In this case contact your dealer.

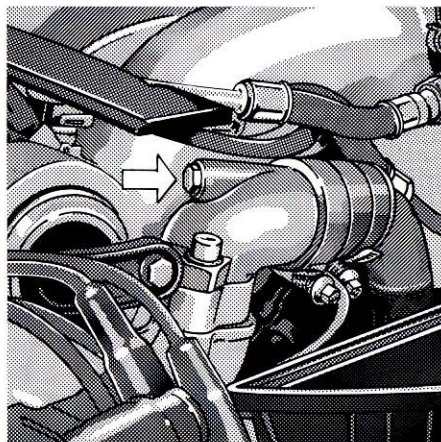
WARNING

- 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 appreciably below the minimum mark. Too much added coolant will escape through the pressure cap when coolant warms up.

If more than about 1.06 U.S. qt or 1 liter must be added, the cooling system should be bled by an authorized Porsche dealer.



Winter operation

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

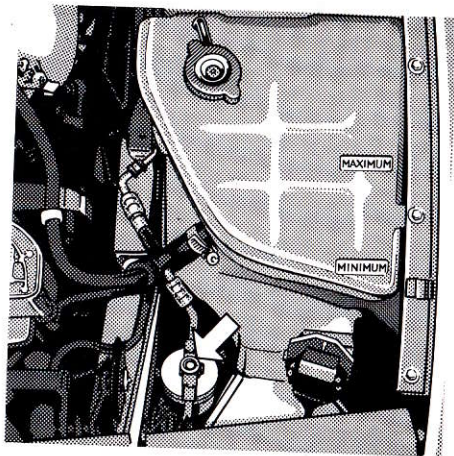
The ratio between water and anti-freeze necessary to prevent freezing depends on the anticipated outside temperatures. The ratios can be taken from the mixing chart listed under "Filling Capacities" or from the container of the antifreeze manufacturer.

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

Bleeding cooling system and topping up coolant

1. Move temperature control lever to "warm".
2. Unscrew the vent plug (arrow) and remove.
3. Remove the expansion tank filter cap and slowly pour coolant into the tank. Stop pouring as soon as fluid runs out of vent plug opening.
4. The expansion tank should only be about half full so as to prevent any overflow once the engine is warm.
5. Screw in the vent plug loosely.
6. Start the engine. Let engine run at increased idle until it has reached operating temperature (the radiator fan will turn on and off).
7. When air bubbles at vent plug disappear, tighten the plug (required torque is 15–18 Nm or 11–13 ft lb).
8. Check coolant level in tank and top up to "max" mark, if necessary.
9. Reinstall the expansion tank filler cap. After a test drive recheck the coolant level.

See "filling capacities" for amount required.



Air Conditioning System Maintenance

The air conditioning system must be turned on for a short period of time at least once a month. This instruction should be observed particularly during the cold season to ensure proper lubrication of the sealing rings and compressor bearings.

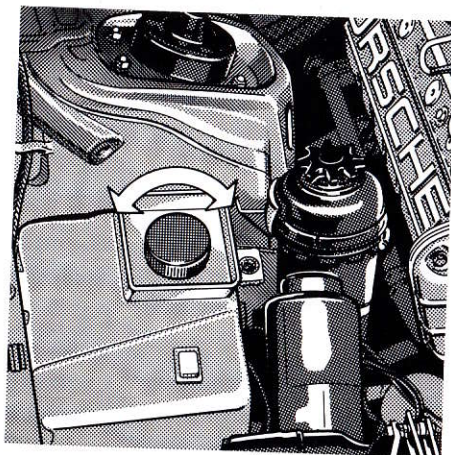
For this purpose, set the temperature control knob at maximum cooling temperature (extreme counterclockwise position).

Check the compressor polyrib belt for proper tension during regular maintenance.

Due to the loss of refrigerant, which is technically inevitable, the refrigerant level in the fluid reservoir should be checked at least once a year.

If gas bubbles are visible over an extended period of time in the inspection window of the fluid reservoir (arrow) while the air conditioner is running, there is a deficit of refrigerant in the air conditioning system. The brief appearance of gas bubbles is due to technical reasons.

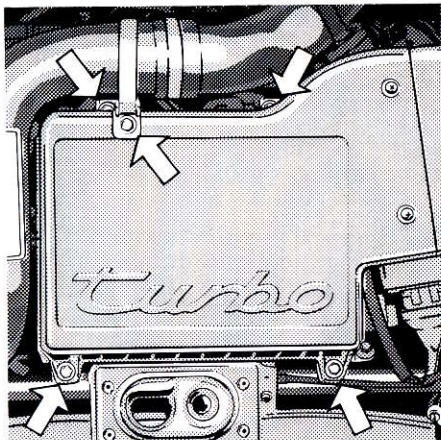
Should the air conditioning system fail, i. e. uncooled air flows through the vents while the system is switched on, have it checked by your Porsche dealer.



Reservoir for Windshield and Headlight Washer System

The transparent reservoir is on the front right inside the engine compartment. As clear water is usually inadequate for cleaning windshield or headlights, add a cleaning solution, such as windshield washer solvent and antifreeze offered by your dealer. To assure that the system also functions at freezing temperatures, antifreeze must be added to the water beforehand. Follow the instructions on the can for the right amount to be used (also see "Filling Capacities"). **Do not use engine coolant anti-freeze or any other solution that can damage the car paint.**

To drain the reservoir, unscrew the plug in the underside of the reservoir.



944 Turbo

Air Filter

A dirty air cleaner not only reduces engine performance, but can lead to premature engine wear. If driving is mostly done in areas where the air is very dusty, the air cleaner must be checked and cleaned frequently, perhaps daily.

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.

To clean or replace the filter element

1. Loosen hose clamp at filter housing cover and pull off hose.
2. Loosen mounting screws (arrows) with screw driver and lift up filter housing cover.
3. Remove filter element and clean inside of housing with a slightly oiled, lint-free cloth.
4. Replace filter element or shake out dirt to clean.

5. Assemble the housing cover carefully, tighten fastening screws, connect hose and secure hose clamp.

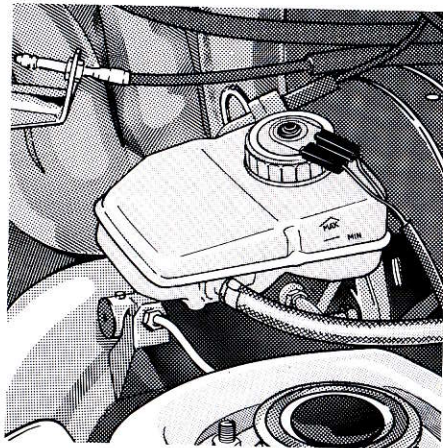
On account of its design, the air cleaner element in the 944 S2 should be changed by your authorized Porsche dealer.

Brake Fluid Reservoir

The brake fluid reservoir is in the engine compartment. The reservoir has two chambers, the rear chamber for one brake circuit and the front chamber for the second brake circuit and the hydraulic clutch.

The fluid level should be checked regularly. If the level drops below the "min" mark on the transparent reservoir, the cause should be located and corrected by your dealer.

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



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.

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 accelerator 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

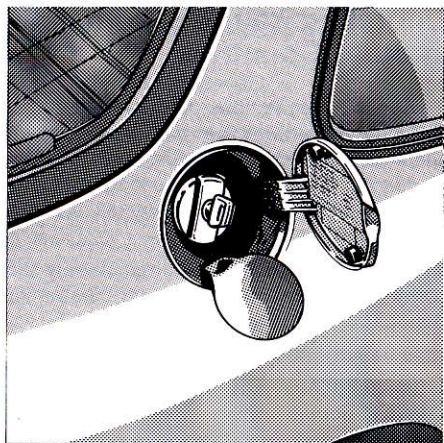
Government regulations in the United States and Canada require that automobiles meet specific emission regulations and safety standards. Therefore cars built for the U.S. and Canada differ from vehicles sold in other countries.

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 considerably lower octane rating. Excessive engine knock and serious damage to both engine and catalytic converter could result;
- service may be inadequate due to lack of proper service facilities, tools or diagnostic equipment;
- replacement parts may not be available or very difficult to get.

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

If you bought your car abroad and want to bring it back home, be sure to find out about shipping and forwarding requirements, as well as current import and customs regulations.



Fuel Filler Cap

The lockable (with ignition key) fuel filler cap is on the right side panel of the car. When putting the cap back on, twist it clockwise until it stops with an audible click.

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

Fuel tank capacity is listed under "Filling Capacities".

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 Recommendation

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

Minimum octane rating is 95 RON (90 CLC or AKI rating on US fuel pumps).

If unleaded premium fuel is not available, a built-in "knock control" makes it possible for temporary use also to refuel with unleaded regular fuel with at least 91 RON (87 CLC or AKI).

Federal law prohibits use of leaded fuel in this vehicle.

The use of **UNLEADED FUEL ONLY** is critically important to the life of the catalytic converter. Deposits from leaded gasolines will ruin the converter and make it ineffective as an emission control device.

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

Unleaded 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 "knock" and possible engine damage.

The 95 RON octane rating of your car is based on the research method. The CLC (U.S. Cost of Living Council octane rating) or AKI (antiknock index) 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
91 RON equals 87 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.
- Always use unleaded fuel with octane ratings of at least 95 RON or 90 CLC or AKI.

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 to switch 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.

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 damages (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.

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 shades as continuous sunshine will attack the top material, rubber and color.

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

Open convertible top only when it is completely dry, otherwise damp stains and scrub marks may occur which cannot be removed.

Before washing, or if the convertible top is dusty, brush with a soft brush in the direction of the line of the fabric. Clean rear window with a soft, antistatic cloth or with the Porsche spray-on window cleaning agent. The convertible top does not have to be washed each time the car is washed.

It is usually sufficient to spray or wash it with clean water. Only if the convertible top is extremely dirty, wet with lukewarm soapy water (e.g., washing agent for delicate fabrics)

using a sponge or soft brush and rub gently. Then spray the convertible top with clean water until there is no soapy solution left on it.

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

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

The convertible top must remain closed while drying.

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 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 caus-

ing 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 cleaner or hard objects.

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

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

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

Fabric, upholstery and carpets

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

The Porsche range of accessories includes

floormats to protect the carpets in Summer and Winter.

Care of the seat belts

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

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

Storing your Porsche Vehicle

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

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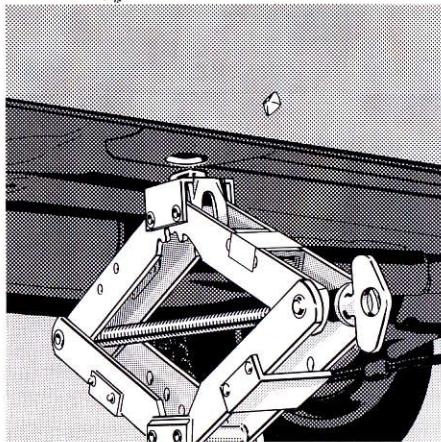
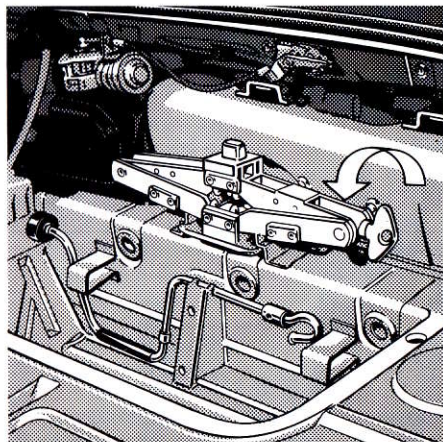
Exercise Extreme Caution when Working under the Engine Hood

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 vehicles 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 the 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 and Car Jack

The tool kit and jack are stored in the luggage compartment under the floor mat.

The car jack must be screwed open a little before it can be removed from the holder.

The **tool kit** contains tools needed for minor emergency roadside repairs, adjustments and wheel changing.

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

WARNING

- Use the jack only for changing a tire. 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 and wheel rims on your Porsche comply with all applicable Federal Motor Vehicle Safety Standards.

For your driving safety remember the following:

- Wheel rims and wheel bolts are matched to fit your Porsche.
- If you intend to use other than original equipment wheels, be sure that they conform to Porsche specifications for your model.
- The use of wheel rims and wheel bolts that do not meet specifications of the original factory installed equipment will affect the safe operation of your vehicle.
- Before you plan on exchanging wheels, or winter 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

WARNING

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

Always use an accurate tire pressure gauge when checking inflation pressures. Do not exceed the maximum tire inflation pressure listed on the tire sidewall. (Also refer to "Technical data"). Cold tire infla-

tion pressure means: when a car has not been driven for at least 3 hours or less than 1 mile. Never let any air out of warm tires to meet cold tire pressure specifications.

Tire traction

WARNING

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

Tire Life

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

Inspect your tires at least every 2,000 miles or 3,000 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 ft lbs (130 Nm) (see "Changing wheels").

The supposition that tire durability and performance are immune to the effects of storage and age is unfounded. Chemical additives, which make the rubber elastic, lose their effectiveness in the course of time and the rubber becomes brittle and cracks.

Therefore, the tires, especially the collapsible spare tire, should from time to time undergo a visual check. To accomplish this, pump up the collapsible spare tire.

Under no circumstances should tires older than 6 years be used on your Porsche. The age of the tire can be obtained from the "DOT" code number. If, for example, the last three numbers read 128, then the tire was produced in the 12th week of 1988.

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 $\frac{1}{2}$ in (12 mm) bands when the tire tread depth is down to $\frac{1}{16}$ of an in (1.6 mm).

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

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

WARNING

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

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 replacement

In the interest of maximum safety and best all-around car handling, always buy replacement tires that have the same specifications with regard to tire size, design, load carrying capacity, tread pattern, tread depth etc. This also applies to Porsche recommended alternate replacement tires. 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.

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 be more than 30%.

Tire specifications are imprinted on the sidewall of the tires. If in doubt, check with your Porsche dealer.

When replacing tubeless tires, always install new valve stems. When replacing tires requiring an inner tube, always install new tubes.

New tires do not possess maximum traction. They tend to be slippery. Break new tires in by driving at moderate speed for the first 60–120 miles or 100–200 kilometers.

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 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 con-

form 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 and the position relative to the hub should be clearly marked on all tires before removing them for storage, to make sure they are mounted and run in the same direction as before.

Store tires in a cool and dry place. Tires without rims upright! Avoid contact with oil, grease or gasoline. When remounting, put tires with the most tread depth at the front (possible only with tires and rims of same size on front and rear axles).

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.

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.

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

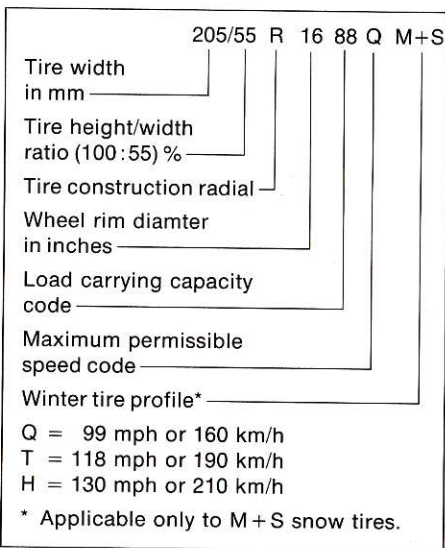
Drive wheels must rotate freely with chains mounted to prevent damage to body, axle or brake components. Follow instructions issued by the supplier of the chains. Remove chains as soon as roads are free of ice and snow.

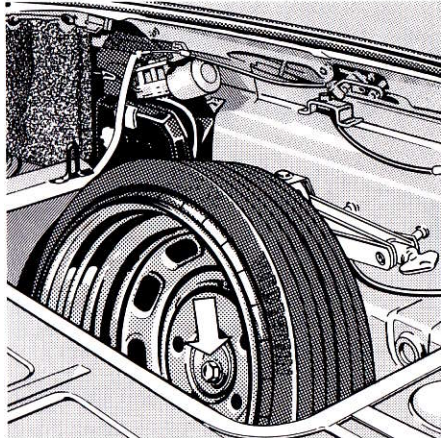
New Tire Identifications

The European tire manufacturers have changed their tire identification system for SR and HR-tires pertaining to maximum permissible speed and maximum load carrying capacity for belted tires. The following is an example only.

During the transition period some tires might show both old and new identification codes, such as: 215/60 SR 15 M+S 88 Q. In this instance, the new codes apply.

The identification codes for ZR tires remain unchanged; for example: 205/55 ZR 16. (Z = maximum permissible speed for radial tires, i.e. over 149 mph or 240 km/h).





Collapsible Spare Tire

The spare tire is stored underneath the luggage compartment cover.

The socket wrench for the mounting bolt of the spare tire (arrow) can be found in the tool kit.

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.

The wheel nuts for the light alloy wheels of the vehicle can be used to mount the spare wheel. This applies to emergency use and short distances only.

2. Attach hose to tire valve. Insert plug of electric cord into cigarette lighter socket.
3. **The required tire pressure is 36 psi or 2.5 bar/atm (front or rear). Check pressure with tire pressure gauge.**
4. Disconnect hose and electric cord and store air compressor.
5. Have flat road tire repaired and re-mounted 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 luggage compartment.

The collapsible spare tire cannot be repaired or mounted on the rims with stan-

dard 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

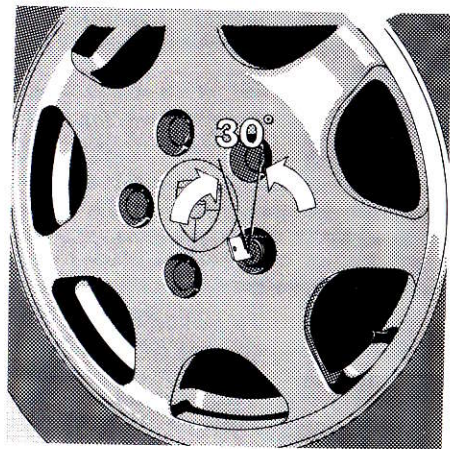
... Check if tobacco or any other foreign matter is lodged in the cigarette lighter socket. Remove carefully with a wooden pick. Do not use metal object to prevent short circuit.

... 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 theft-proof 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.

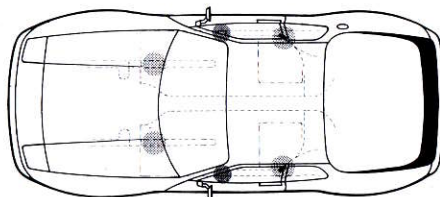
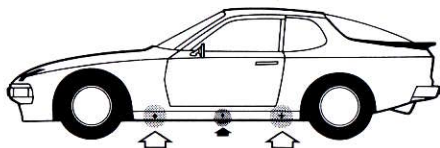
In case of loss, duplicate keys cannot be furnished by your Porsche dealer. Do not leave these keys in the vehicle. Keep them in a safe place.

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.

To lock a wheel

1. Turn the key again approx 30° to the right and remove.
2. Push the lock onto the wheel nut until you can feel it latch.
3. Check whether the sleeve (of the lock) is up against the collar of the wheel nut.



Changing a Tire

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 materials on fire, thereby causing both property damage and severe or fatal physical injury.
- Passengers must not remain in the vehicle when it is jacked up.
- Before you change a tire, be sure the ground is level and firm. If necessary,

Jack support points

Black arrow: Jackport for car jack

White arrows: Lift points for workshop hoist or floor jack

front on the inboard side members

rear on the side reinforcement brackets

Jacking at any other place may damage the vehicle or may result in personal injuries.

use a board under the jack to ensure that the jack does not sink into the ground.

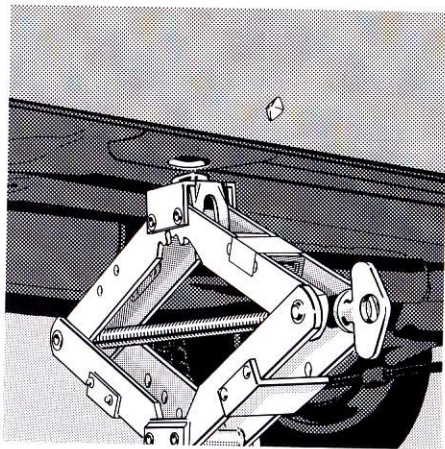
- **Set the parking brake and block the wheels opposite the flat tire on the other side of the vehicle.**
- **The jack is only to be used for changing a tire. Do not use it as a support to work under the car.**
- **Never jack the car up by the body or the bumpers.**

Sequence of operations:

1. Loosen all wheel nuts. Do not yet remove nuts.
2. Securely place the jack in the jack support at the indicated point. Place the jack at an angle so that the jack base rests firmly on the ground. If the ground is not firm under the jack, use a board.
Do not raise the vehicle until you are sure the jack is securely engaged.
3. Raise the car by turning the handle clockwise. Only raise the car as much as is needed to change a wheel.

4. Fully unscrew wheel nuts and remove wheel.
5. After you have mounted the spare wheel, insert the wheel nuts and handtighten them crosswise. Inflate the collapsible spare tire with the air compressor. Check pressure with tire pressure gauge. Snug wheel nuts with socket wrench and breaker bar.
6. To lower the car, turn the handle counterclockwise till tire touches ground.
7. Then go crosswise from one nut to another tightening them firmly with the socket wrench and breaker bar.
8. Fully lower the vehicle and remove jack.
9. Correct the air pressure of the tire you have just put on. Have flat tire repaired at next service stop.

Correct tightness of the wheel nuts is important. The torque of 94 ft lb (130 Nm) can be obtained with a socket wrench and breaker bar by any person of average strength. If in doubt about the correct tightness of the wheel nuts, have it checked with a torque wrench by your dealer or a service station.



Lifting Vehicle

The jack ports are located below the middle of the door underneath the left and right rocker panels, hidden from view.

Lifting with car jack

The car jack must never be used as a support to work underneath the vehicle. If the jack is accidentally dislodged, you could be seriously injured. When working under the vehicle always use safety stands specifically designed for this purpose.

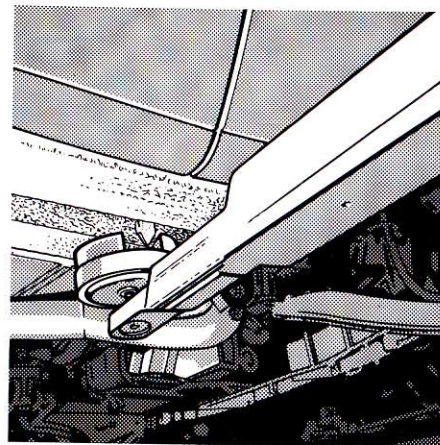
WARNING

- 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.



Coupé front

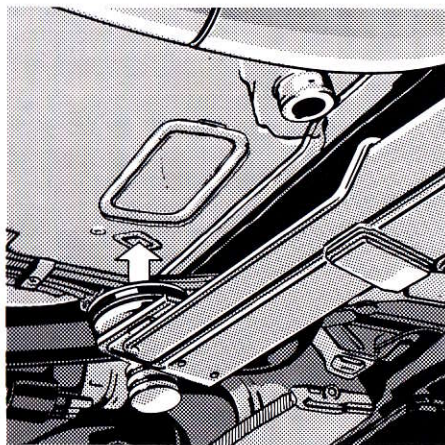
Lifting with workshop hoist

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 illustrated.

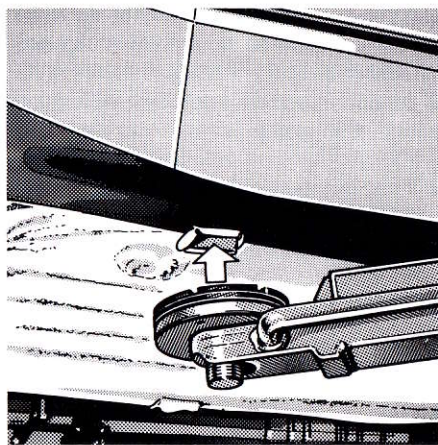
The front lift points are located on the in-board side members of the underbody.

The rear lift points are located on the side reinforcement brackets of the underbody.

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



Cabriolet front



rear

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.

Lifting with floor jack

The same lift points as illustrated for the hoist also apply when using a floor jack. To avoid damage to the underbody or chassis frame, it is necessary to insert a rubber pad between the floor jack and the lift points.

Battery – 12 Volt

The battery is located under the front hood in the cowl area.

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 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 of the **944 S2** is disconnected, the data for the engine electronics stored in the control unit are erased. When the battery is re-connected, the engine must 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

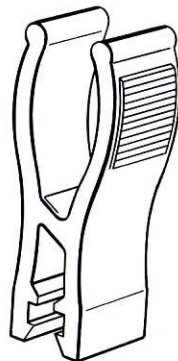
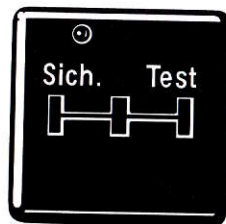
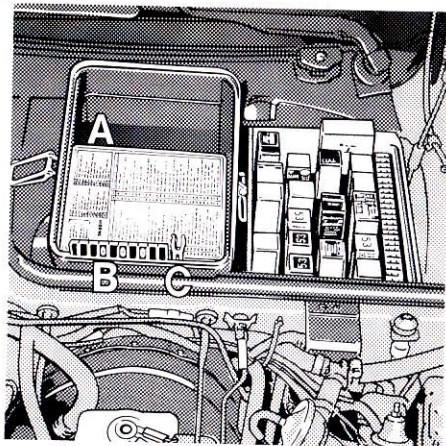
Heed all warnings and follow instructions that come with your battery charger.

- 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.
- Tighten the vent caps and reinstall battery.



Fuses and Relays

The individual circuits are protected by fuses to prevent damage to electrical leads and components due to short-circuits and overload.

The fuse box with a black plastic cover is located on the left side in the engine compartment directly in front of pivot point for left windshield washer arm.

The use of the fuses and relays is shown in a list "A" on the inside of the cover of the fuses and relays.

Replacing a Fuse

Before replacing a fuse, turn off all electrical components and the ignition; remove

the key. Replacing a fuse or relay with the engine running or the ignition on could cause electrical shock.

A blown fuse indicates an overload in the circuit. When a fuse is blown it is not sufficient to merely replace it. The cause of the short circuit or overload must be located. **Never try to "repair" fuses: you may cause serious damage to other parts of the electrical system.**

Open snap-on latches and remove plastic cover.

To find out whether a fuse is serviceable, pull it out with the plastic pliers "C" specifically provided for this purpose. Insert the fuse at the test point on relay (G 3). If the fuse is in proper condition, the green indicator light will come on.

If it fails to light up, the fuse is defective and must be replaced. Space for spare fuses is provided in the lid "B".

The central electrical system contains plug in relays for various electrical switching functions.

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

To prevent damage to the electrical system we recommend having all work – including the installation of electrical accessories – carried out by your authorized Porsche dealer.

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, flame 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

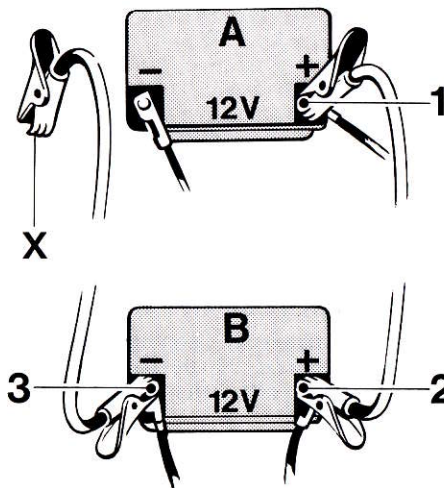
- To avoid serious personal injury and damage to the vehicle, heed all warnings and instructions of the jumper cable manufacturer.
- The jumper cables must be long enough so that neither vehicles nor cables touch another.
- Only jumper cables of adequate diameter cross-section and fitted with insulated alligator clips should be used.
- 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 ground on engine block.

1. Connect clamp of plus-cable to positive (+) terminal of discharged battery (1).
2. Connect clamp on opposite end of cable to positive (+) terminal of booster battery (2).
3. Connect clamp of minus-cable to negative (-) terminal of booster battery (3).
4. Connect clamp on opposite end of cable to a bare metal part bolted directly to the engine block or to the engine block itself (X) 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.

Replacing Bulbs

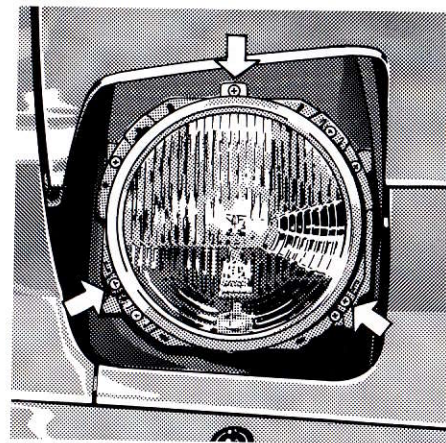
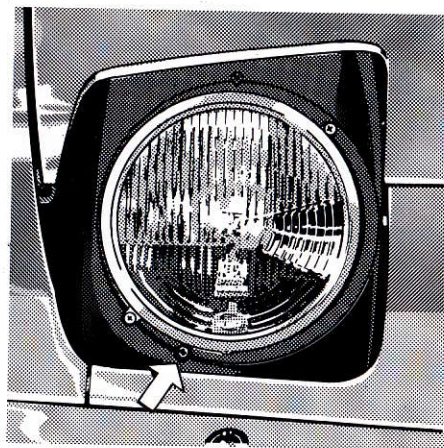
To avoid short circuits, turn off the respective electrical components when changing light bulbs.

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

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

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

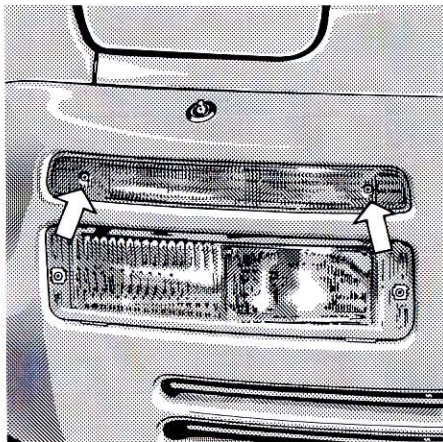
When traveling abroad don't forget that some countries require spare bulbs as part of the safety equipment.



Sealed Beam Headlights

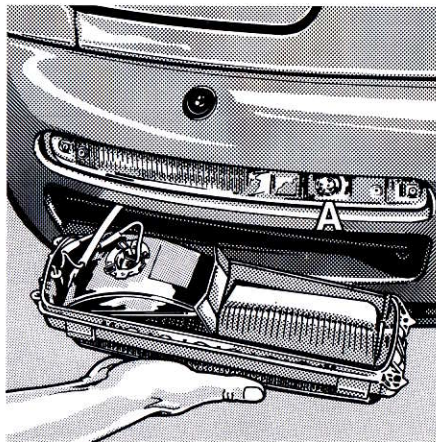
Replacing light units

1. Turn on the ignition and turn the light switch to the second stop to raise the concealed headlights. Then turn off the ignition.
2. Remove Phillips screw from headlight trim (arrow), take off the plastic cover.
3. Remove only the three recessed screws (arrows) which secure the lamp unit retaining ring, remove retaining ring, and take out sealed beam unit.
4. Disconnect plug from rear of unit.
5. Attach plug to rear of new unit.
6. Insert sealed beam unit and retaining ring, tighten hold-down screws.
7. Check headlight adjustment.
8. Install headlight trim and tighten retaining screw.

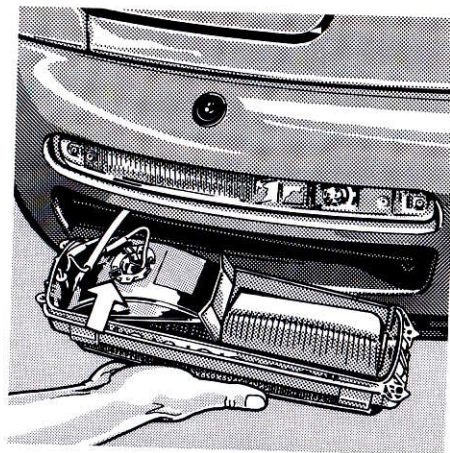
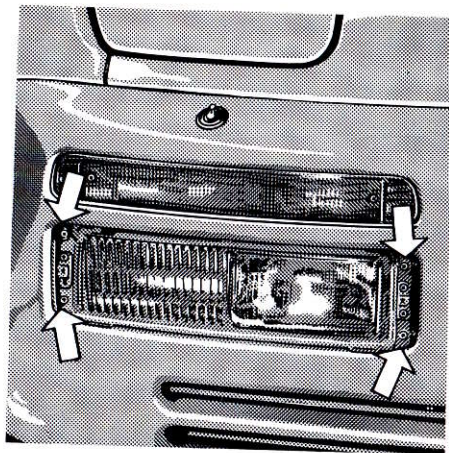


Front – Turn Signal Lights / Parking Lights

1. Remove the Phillips screws (arrows) from lamp lens and remove lens.
2. Push bulb "A" into holder and twist to the left (bayonet mount).
3. Remove bulb.
4. Insert new bulb and turn to the right so that it snaps into position.



5. Install lamp lens and tighten the retaining screws evenly, alternating from one to the other. **Do not overtighten screws as this may crack the lens.**
6. Check lights.



Fog Lights

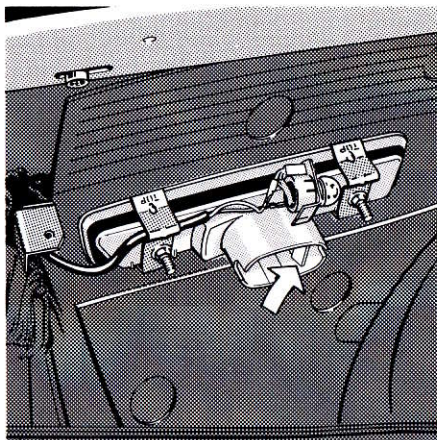
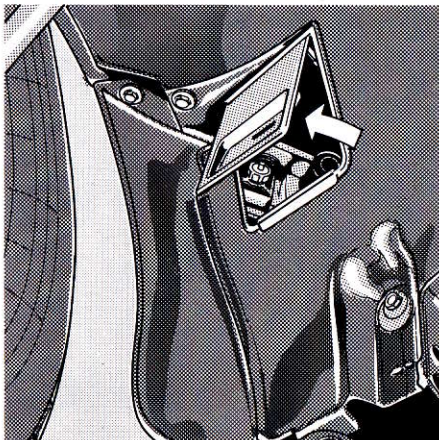
1. Loosen the transparent side parts which are secured with Phillips-head screws (2 arrows).

2. Loosen screws (4 arrows) on light and remove light.

3. Remove the socket of the defective bulb. Press back the retainer strap (arrow).

4. Replace bulb and install light.

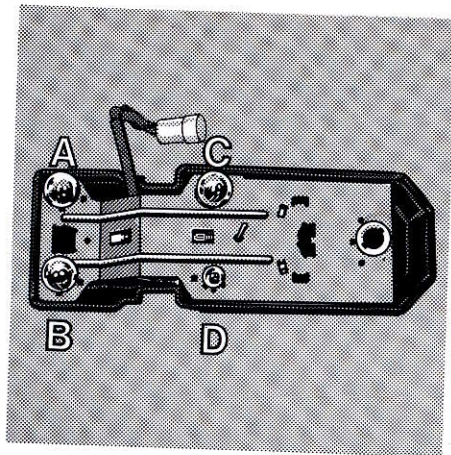
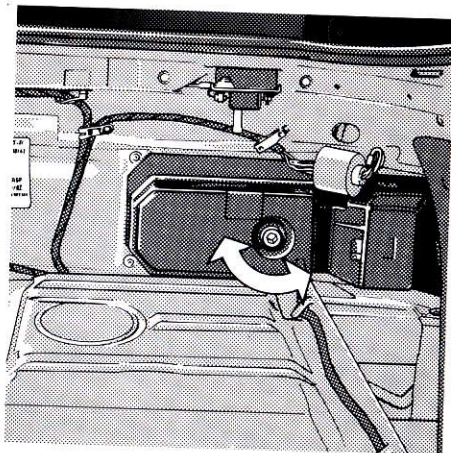
5. Fit transparent side parts and check lights for correct operation.



Side Marker Lights

To change the bulb, open the flap at the front of the plastic shell beneath the fender. The rear housing is in the stowage well beneath the mat.

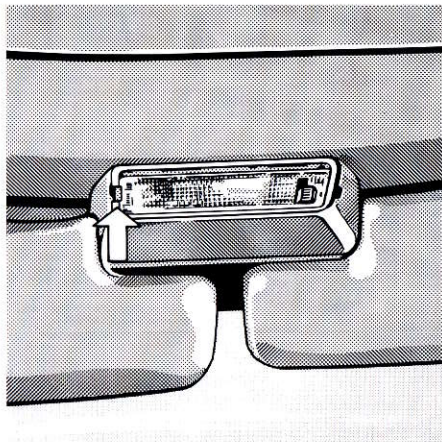
1. Unscrew knurled nut and remove the plastic cover.
2. Unclip lamp socket (arrow), remove defective bulb and fit replacement (bayonet mount).
3. Clip socket into place and refit plastic cover.
4. Check that light is functioning correctly.



- A Turn signal light
- B Stop light
- C Back-up light
- D Parking light

Rear Lights

1. Open the hatchback and loosen the luggage compartment panel.
2. Remove the knurled nut (arrow).
3. Take off the bulb bracket from the inside and replace defective bulb (bayonet mount).
4. Install light, tighten knurled nut and check operation of lights.



Interior Light

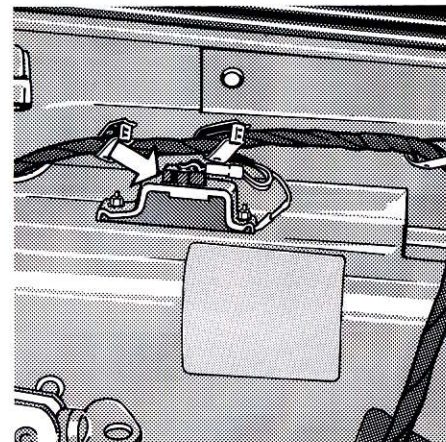
1. Carefully insert small screwdriver at cut-out (arrow) and pry out the whole lamp-housing.

Note: When removing lamp, retaining clip may fall out.

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

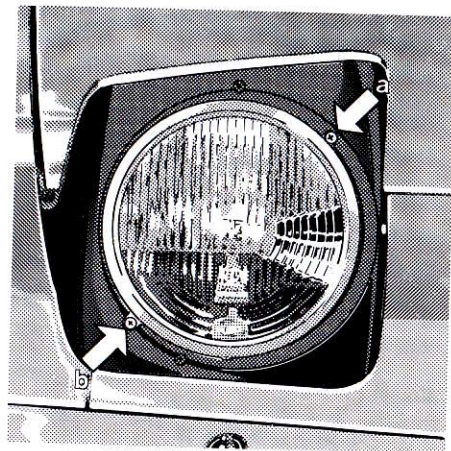
Ashtray Light

1. Remove ashtray by pulling it up.
2. Push lamp holder with bulb out of support (towards the front).
3. Replace defective bulb with new bulb.
4. Check bulb for operation with lights turned on.



Licence Plate Light

1. Open the hatchback and loosen the luggage compartment panel.
2. Carefully press the bulb bracket (arrow) out of its mounting using a screwdriver.
3. Replace defective bulb and mount the bulb bracket.
4. Mount the luggage compartment panel and check operation of bulb.



a = Lateral adjustment
b = Vertical adjustment

Adjusting the Headlights

Headlight adjustment should be done with a headlight aiming device under the following conditions:

At curb weight of car (i. e. car ready for use and with full fuel tank).

Driver's seat should be occupied by a person or a weight of approx. 165 lbs (75 kg).

Tire pressure must be correct.

Roll car forward a few feet so that the suspension seeks its normal position.

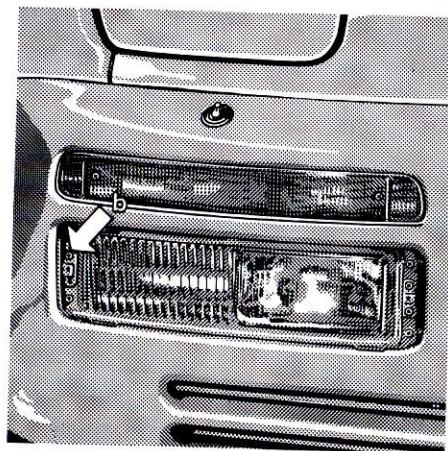
Headlight adjustment screws

Screw "a" (lateral adjustment)

right turn = beam moves right
left turn = beam moves left

Screw "b" (vertical adjustment)

right turn = beam moves up
left turn = beam moves down



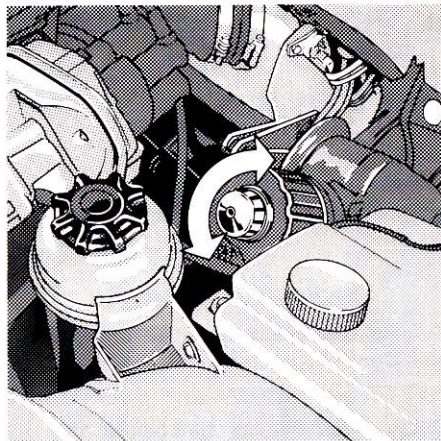
Adjusting the Foglights

The foglights are fitted with a vertical adjusting screw only.

Replace the transparent side parts.

Screw "b" (vertical adjustment)

right turn = beam moves down
left turn = beam moves up



Manual Operation of Retractable Headlights

If the retractable headlights do not open, they can be operated manually by turning the knob on the end of the motor drive shaft located in the front of the engine compartment. The connecting rod assembly is designed in such a way that it need only be turned to the left to either close or open 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 first whether the motor will work by turning on the ignition and by turning the light switch to the second stop.

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 (NOx) contribute to engine emissions. They, too, are formed during the combustion process and discharged into the exhaust system.

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

Oxygen Sensor

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

Crankcase Ventilation

Through Crankcase Ventilation undesirable emissions from the engine crankcase are not permitted to reach the outside atmosphere. These emissions are recirculated from the crankcase to the air intake system. From here the emissions mix with the intake air and are later burned in the engine.

Catalytic converter

The catalytic converter is an efficient "cleanup" device built into the exhaust system of the vehicle. The catalytic converter burns the undesirable pollutants in the exhaust gas before it is released into the atmosphere.

The exclusive use of unleaded fuel is critically important for the life of the catalytic converter. 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.

The Emission Control System and its other related components are illustrated and described on the following pages.

Fuel Evaporation Control

Fuel Tank Venting

The expansion chamber and the roll over 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 nonlevel position. The safety valve works as a restrictor in the tank vent line between the expansion chamber and the 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 via a roll over valve to the activated carbon canis-

ter where they are stored as long as the engine does not run. During engine operation, the vapors are stored in the activated carbon canister as long as the control valve I (ON/OFF valve) is in the OFF-position.

The control valve I stops purging of the canister during all other operating 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 ambient of the carbon canister or fuel vapors from the fuel tank. The vapors will be directed via a control valve I and control valve II to the air intake system housing.

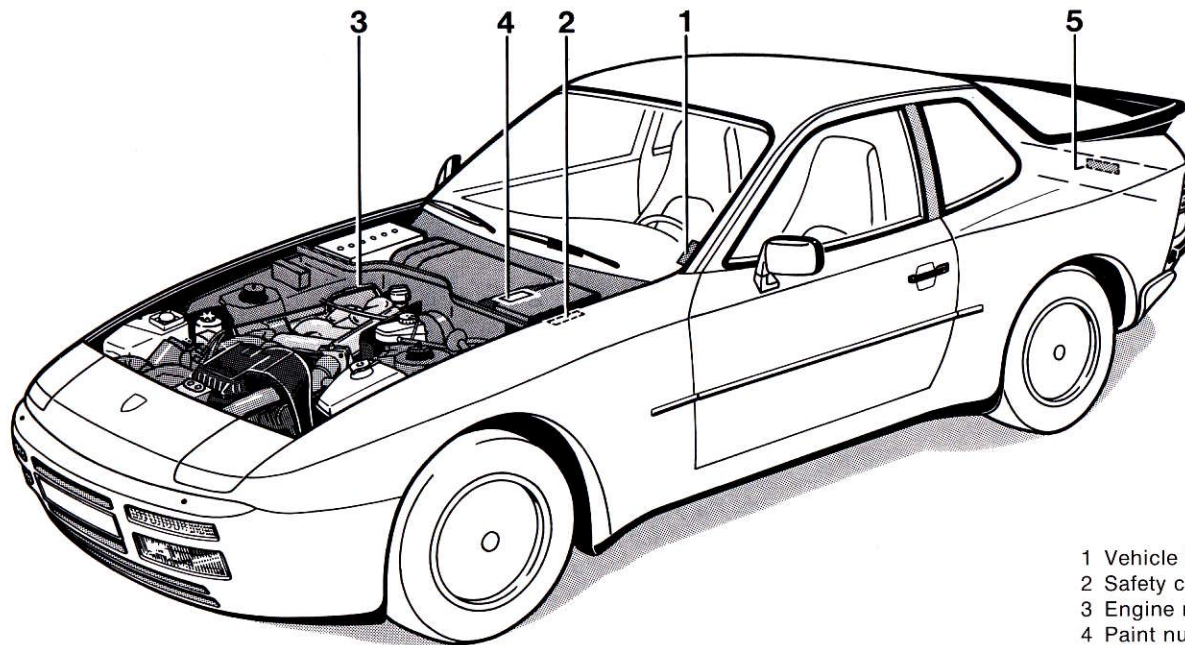
The control valve I has the following functions:

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 operating conditions of the engine.

The control valve II controls the vapor flow to the engine.

Vehicle Identification, Technical Data



- 1 Vehicle identification number
- 2 Safety compliance stickler
- 3 Engine number
- 4 Paint number
- 5 Vehicle identification label

Vehicle Identification

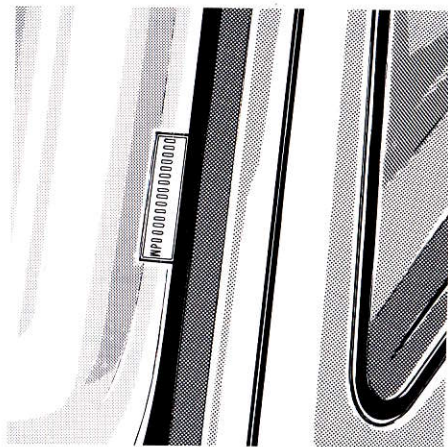
When ordering spare parts or submitting inquiries, always quote vehicle identification and engine number to assure correct and prompt service.

By law, labels are attached to some vehicle parts, which also bear the vehicle identification number.

Do not remove the labels.

Radio number

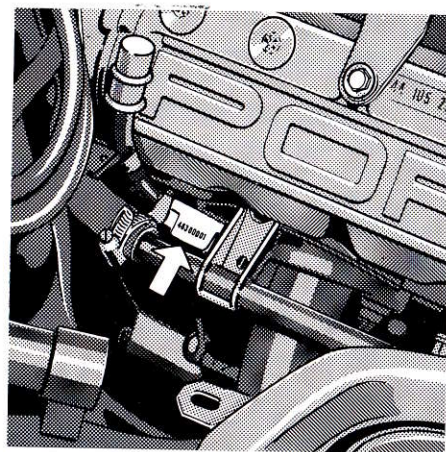
The radio number is on the bracket for the center console, in the radio slot.



Vehicle Identification number

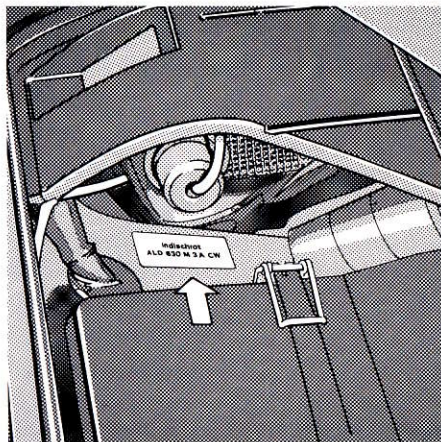
In accordance with Federal Safety Regulations, the vehicle identification number of your car is located on the left* windshield pillar and can be seen from the outside.

* 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.



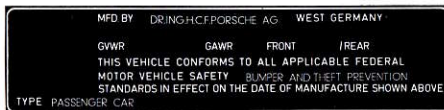
Engine number

The engine number is stamped on the rear right of the crankcase.



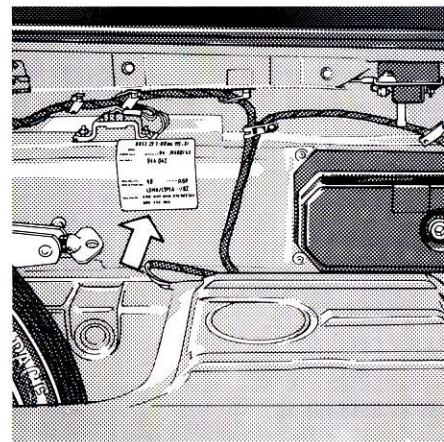
Paint number

The paint number sticker is on the left side of the engine compartment, to the right of the central electric box.



The **Safety Compliance Sticker** is your assurance that your new Porsche complies with all applicable Federal Motor Vehicle Safety Standards which were in effect at the time the vehicle was manufactured. This sticker is located on the left side of the engine compartment to the left of the central electric box.

The sticker also shows the month and year of production and the vehicle identification number of your car as well as the **Gross Vehicle Weight Rating** and the **Gross Axle Weight Rating**.



The **Vehicle Identification Label** is located under the luggage compartment carpeting and attached to the rear panel next to the left tail light housing. 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.

Technical Data Engine

944 S2

Number of cylinders	4
Bore	4.09 in. / 104 mm
Stroke	3.46 in. / 88 mm
Displacement	182.5 cu. in. / 2990 cm ³
Compression ratio	10.9:1
SAE net-power	208 hp / 155 kW at 5800 rpm
SAE net-torque	207 ft lb / 280 Nm at 4100 rpm
Output per liter	69.6 SAE net-hp / 51.8 SAE net-kW
Max. permissible rpm	6500
Fuel octane rating	Unleaded fuel only 95 RON (90 CLC or AKI $(\frac{R+M}{2})$ rating on fuel pumps in U.S.A.)
Spark plugs	Bosch WR 5 DC
Electrode gap	0.028 + 0.004 in. / 0.7 + 0.1 mm
Battery capacity	12 volts, 63 Ah
Alternator output	1610 W / 115 A
Firing order	1 - 3 - 4 - 2
Ignition timing	Self-adjusting DME (Digital-Motor-Electronic)
Ignition	Transistorized ignition system with breakerless distributor
Belt for alternator	Polyrib K6 1000 Lw
Belt for servo pump	9.5 × 950 LA
Valve clearance	Hydraulic valve clearance compensation

Number of cylinders	4
Bore	3.94 in. / 100 mm
Stroke	3.11 in. / 78.9 mm
Displacement	151 cu. in. / 2479 cm ³
Compression ratio	8.0:1
SAE net-power	247 hp / 184 kW at 5800 rpm
SAE net-torque	258 ft lb / 350 Nm at 3500 rpm
Output per liter	99.6 SAE net-hp / 74.2 SAE net-kW
Max. permissible rpm	6500
Fuel octane rating	Unleaded fuel only 95 RON (90 CLC or AKI ($\frac{R+M}{2}$) rating on fuel pumps in U.S.A.)
Spark plugs	Bosch WR 7 DC
Electrode gap	0.028 + 0.004 in. / 0.7 + 0.1 mm
Battery capacity	12 volts, 63 Ah
Alternator output	1610 W / 115 A
Firing order	1 - 3 - 4 - 2
Ignition timing	Self-adjusting DME (Digital-Motor-Electronic)
Ignition	Transistorized ignition system with breakerless distributor
Belt for alternator	Polyrib K6 1000 Lw
Belt for servo pump	9.5 x 950 LA
Valve clearance	Hydraulic valve clearance compensation

Engine Design Specifications

Design	4-cylinder, in-line engine, front mount with two balance-shafts
Operating cycle	4-stroke
Lubrication	Pressure oil circulation from oil sump, full flow filter
Cylinder block	Light metal
Cylinder head	Light metal
Valve operation	Overhead camshaft (944 S2: two overhead camshafts)
Camshaft drive	Spur belt drive
Crankshaft	Forged, 5 main bearings
Fuel injection	AFC (Air Flow Control)

Power Train

Manual transmission

	Gear ratio 944 S2	Gear ratio 944 Turbo
Gear ratio 1st gear	3.500 : 1	3.500 : 1
2nd gear	2.059 : 1	2.059 : 1
3rd gear	1.400 : 1	1.400 : 1
4th gear	1.034 : 1	1.034 : 1
5th gear	0.778 : 1	0.829 : 1
Reverse gear	3.500 : 1	3.500 : 1
Axle ratio	3.875 : 1	3.375 : 1
Clutch	Single plate dry disc, hydraulically operated	
Power transmission	Double constant velocity joints and drive shaft	

Filling Capacities

Engine oil

With filter change approx. 6.87 U.S. qts. or 6.5 liters.

Vehicles with plastic oil sump approx. 7.9 U.S. qts. 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. qt. or 1.5 liter.

Only use brand name oil which has been tested and approved by Porsche.

Your authorized Porsche dealer will be glad to advise you.

Porsche does not recommend the use of oil additives. See also "Engine Oils".

Cooling system with heating

Approx. 8,2 U.S. qts. or 7,8 liters. Factory filled to -31°F (-35°C). **Only use phosphate-free anti-freeze containing ethylene glycol recommended for aluminum engines and radiators.**

Manual transmission

Approx. 0.53 U.S. gal. or 2.0 liters. Use hypoid oil SAE 80 labeled "For Service API/GL 4 or Mil-L 2105".

Power steering

Approx. 0.63 U.S. qts. or 0.6 liter ATF Dexron®

Fuel tank

Approx. 21.1 U.S. gals. or 80 liters including a reserve of 2.1 U.S. gals. or 8 liters.

Unleaded fuel only! Minimum octane rating 95 RON (90 CLC or AKI ($\frac{R+M}{2}$) rating on fuel pumps in U.S.A.)

Brake fluid

Approx. 0.42 U.S. pint or 0.2 liter. Only use brake fluid conforming to specifications SAE J 1703, DOT 3 or DOT 4.

Windshield washer system

Approx. 0.8 U.S. gals. or 3.0 liters; approx. 1.6 U.S. gals. or 6.0 liters if headlight washer system fitted.

Refrigerant for air conditioning

Approx. 33.5 oz or 950 g. Refrigerant R 12 (CCl_2F_2)

Cooling system mixing chart

(Approximate values)

Anti-freeze-Water

Consult your authorized dealer about the approved anti-freeze mixtures.

Temp. down to	Anti-freeze	Water	Anti-freeze	Water
-13°F (-25°C)	40%	60%	3.1 liters / 3.3 U.S. qts.	4.7 liters / 5.0 U.S. qts.
-23°F (-30°C)	45%	55%	3.5 liters / 3.7 U.S. qts.	4.3 liters / 4.5 U.S. qts.
-31°F (-35°C)	50%	50%	3.9 liters / 4.1 U.S. qts.	3.9 liters / 4.1 U.S. qts.

Tires, Rims

944 S2 (without sports chassis)

Tires, Rims	205/55 ZR 16 on rims 7 J × 16 H2 (55 mm* or 52.3 mm*) front and 225/50 ZR 16 on rims 8 J × 16 H2 (52.3 mm*) rear
Snow tires	205/55 R 16 88 Q M+S on rims 7 J × 16 H2 (55 mm* or 52.3 mm*) front and 205/55 R 16 88 Q M+S on rims 8 J × 16 H2 (52.3 mm*) rear or 205/55 R 16 88 Q M+S on rims 7 J × 16 H2 (55 mm* or 52.3 mm*) front and 225/50 R 16 92 Q M+S on rims 8 J × 16 H2 (52.3 mm*) rear The load rating and identification letter for allowable maximum speed (e.g. 88 Q/ZR 16) represent minimum requirements.
Collapsible spare tire	165-15 8 PR 89 P on rim 5½ J × 15 H2
Cold tire pressure	Tire pressure always 36 psi (2.5 bar/atm.), front or rear use. Maximum speed is 50 mph (80 km/h). front 36 psi (2.5 bar) rear 44 psi (3.0 bar)
Snow chains	Should snow chains be necessary, they must be mounted on the drive wheels only. Maximum speed is 30 mph (50 km/h). Always use Porsche – approved snow chains. Snow chains cannot be fitted to 225/50 (Z)R 16 tires mounted on 8 J × 16 H2 rims.

Important hint:

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.
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.

* Rim offset

Tires, Rims	225/50 ZR 16 on rims 7.5 J × 16 H2 (65 mm*) front and 245/45 ZR 16 on rims 9 J × 16 H2 (52.3 mm*) rear
Snow tires	205/55 R 16 88 Q M+S on rims 7 J or 7.5 J × 16 H2 (65 mm*) front and 205/55 R 16 88 Q M+S on rims 8 J × 16 H2 (52.3 mm*) rear or 205/55 R 16 88 Q M+S on rims 7 J or 7.5 J × 16 H2 (65 mm*) front and 225/50 R 16 92 Q M+S on rims 8 J × 16 H2 (52.3 mm*) rear The load rating and identification letter for allowable maximum speed (e.g. 88 Q/ZR 16) represent minimum requirements.
Collapsible spare tire	165-15 8 PR 89 P on rim 5½ J × 15 H2 Tire pressure always 36 psi (2.5 bar/atm.), front or rear use. Maximum speed is 50 mph (80 km/h).
Cold tire pressure	front 36 psi (2.5 bar) rear 44 psi (3.0 bar)
Snow chains	Should snow chains be necessary, they must be mounted on the drive wheels only. Maximum speed is 30 mph (50 km/h). Always use Porsche – approved snow chains. Snow chains cannot be fitted to 245/45 ZR 16 tires mounted on 9 J × 16 H2 rims, or 225/50 R 16 tires mounted on 8 J × 16 H2 rims.

Important hint:

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.

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.

* Rim offset

Dimensions

	944 S2	944 Turbo / 944 S2 with sports chassis
Length	168.85 in. / 4289 mm	168.85 in. / 4289 mm
Width	68.31 in. / 1735 mm	68.31 in. / 1735 mm
Height	50.20 in. / 1275 mm	50.20 in. / 1275 mm
Wheel base	94.49 in. / 2400 mm	94.49 in. / 2400 mm
Wheel track, front	57.96 in. / 1472 mm	57.40 in. / 1457 mm
Wheel track, rear	57.13 in. / 1451 mm	57.13 in. / 1451 mm
Ground clearance*	4.92 in. / 125 mm	4.92 in. / 125 mm
Turning circle (curb to curb)	33.14 ft. / 10.1 m	33.14 ft. / 10.1 m
Turning circle (wall to wall)	35.27 ft. / 10.75 m	35.27 ft. / 10.75 m
Overhang angle, front*	13.8°	13.8°
Overhang angle, rear*	16.0°	16.0°

Weights

	944 S2	Cabriolet	944 Turbo
Curb weight	2998 lbs. / 1360 kg	3109 lbs. / 1410 kg	3086 lbs. / 1400 kg
Maximum load capacity	639 lbs. / 290 kg	639 lbs. / 290 kg	639 lbs. / 290 kg
Total permissible weight	3637 lbs. / 1650 kg	3748 lbs. / 1700 kg	3725 lbs. / 1690 kg
Maximum axle load, front**	1675 lbs. / 760 kg	1720 lbs. / 780 kg	1741 lbs. / 790 kg
Maximum axle load, rear**	2006 lbs. / 910 kg	2073 lbs. / 940 kg	2028 lbs. / 920 kg
Permissible rack load**/***	165 lbs. / 75 kg	—	165 lbs. / 75 kg

* At total permissible weight.

** Do not exceed total permissible weight.

*** Applies only if the basic rack of the original Porsche Roof Transport System is used. If old type Porsche ski and luggage racks are used the permissible roof weight is 35 kg (77 lbs.).

The vehicle capacity weight (max. load), the Gross Vehicle Weight Rating (GVWR) and the Gross Axle Weight Ratings (GAWR) for front and rear, are listed on the sticker on the left upper side member in the engine compartment.

The gross vehicle weight rating includes the weight of the basic vehicle plus full tank, oil and coolant, plus max. load which combines passenger (150 pounds / 68 kg per designated position) and luggage weight. Luggage weight is not increased by the use of roof, ski or luggage racks, unless passenger capacity is reduced accordingly.

Brake System

Hydraulic dual circuit brake system with
front/rear brake circuits
internally ventilated disc brakes front and rear
Brake power assist
Parking brake acting on rear wheels

Chassis, Suspension

Unitized construction

Front suspension

Rear suspension

Shock absorbers

Stabilizers

Independent coil/shock absorber struts, positive king-pin offset
Independent – diagonal arm, one torsion bar each
Double acting hydraulic shock absorbers, front and rear
Diameter – front: 26.8 mm (optional 30 mm)
rear: 16.0 mm (optional 20 mm)

Performance*

Maximum speed
Acceleration 0–60 mph
Time at end ¼ mile*
Time at end 1 km*

944 S2

149 mph (240 km/h)
6.9 seconds
15.1 seconds
27.2 seconds

944 Turbo

162 mph (260 km/h)
5.7 seconds
13.5 seconds
24.5 seconds

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

Climbing Performance

1st gear
2nd gear
3rd gear
4th gear
5th gear

944 S2

approx. 64%
approx. 47%
approx. 29%
approx. 19%
approx. 12%

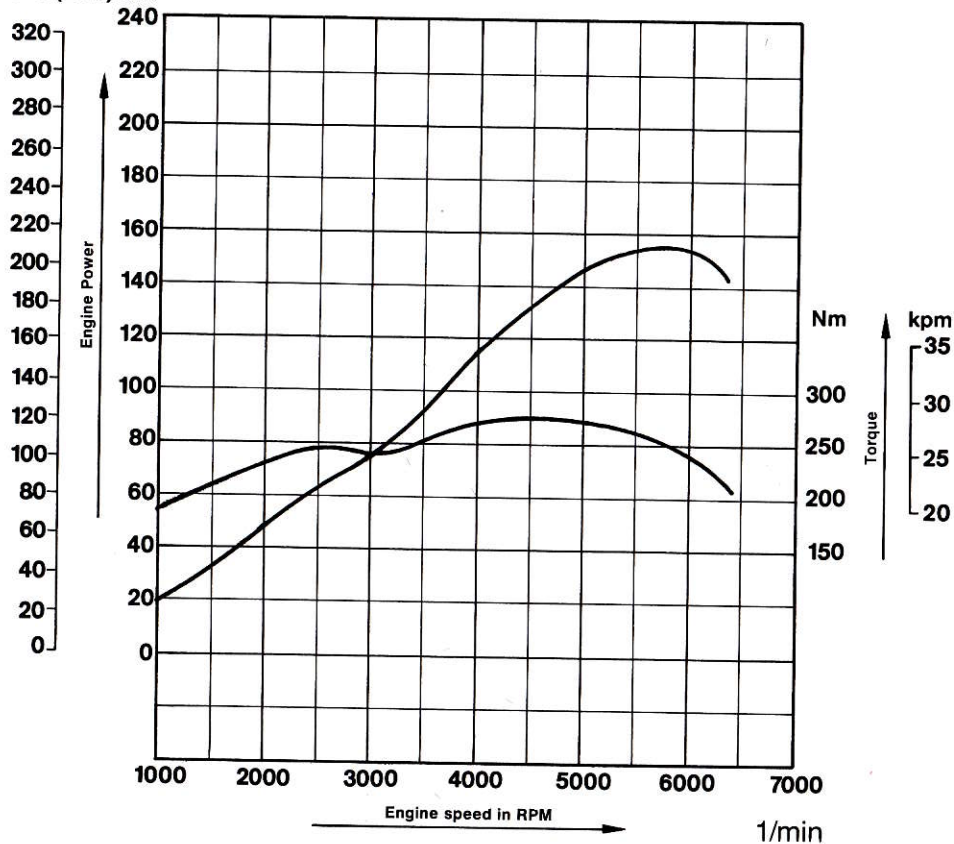
944 Turbo

approx. 64%
approx. 49%
approx. 30%
approx. 20%
approx. 14%

Full-power Curves

944 S2

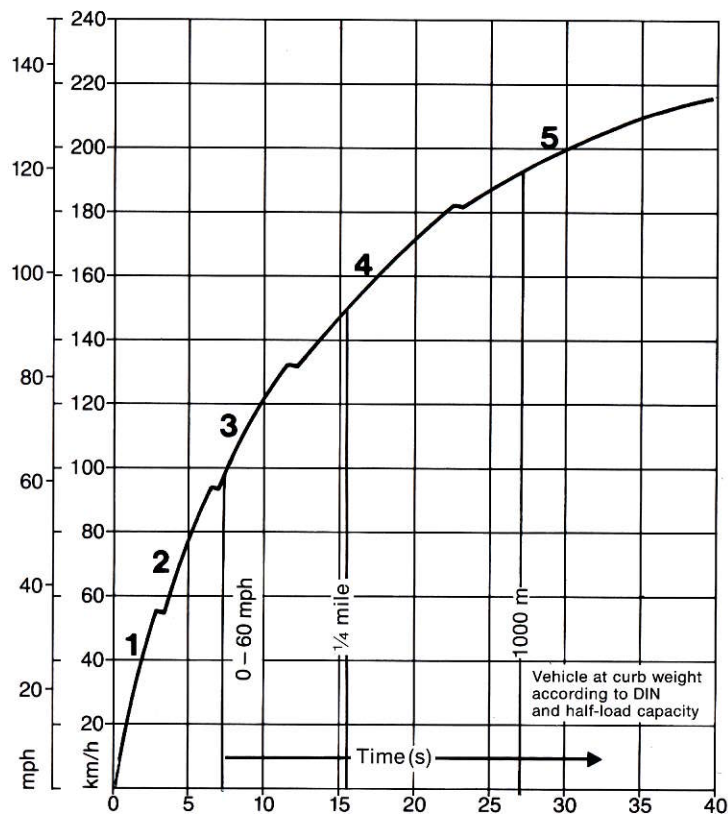
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Acceleration Curve

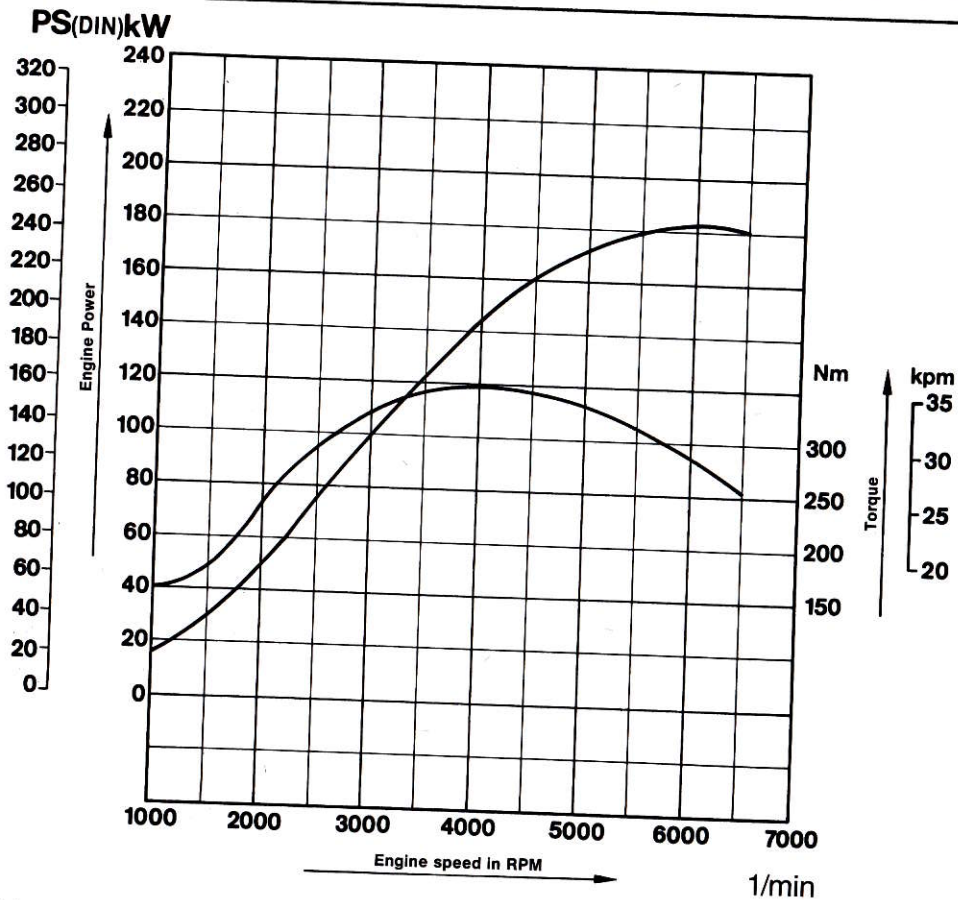
Manual gearbox

944 S2



Full-power Curves

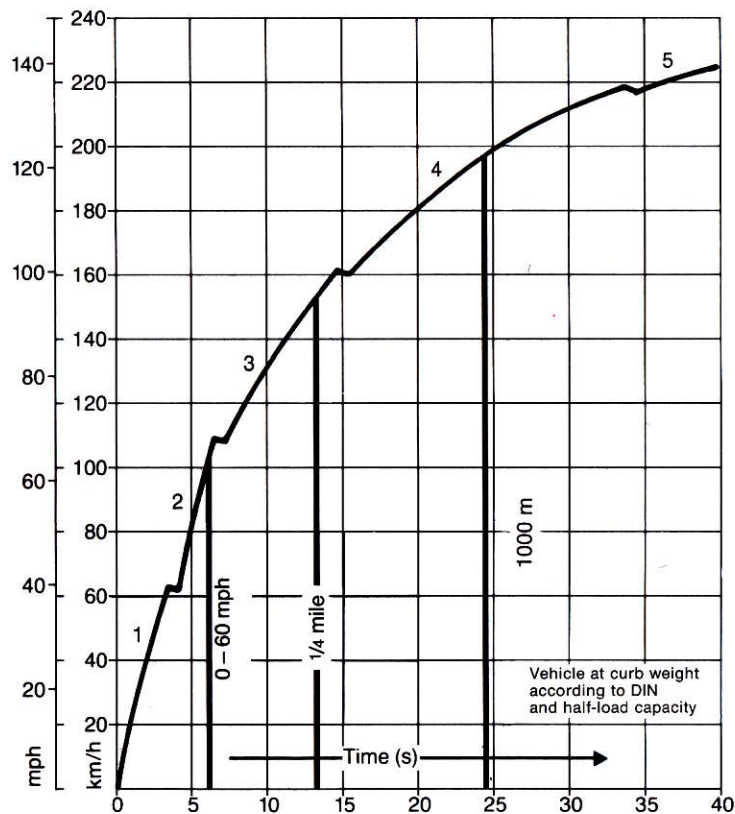
944Turbo



Acceleration Curve

Manual gearbox

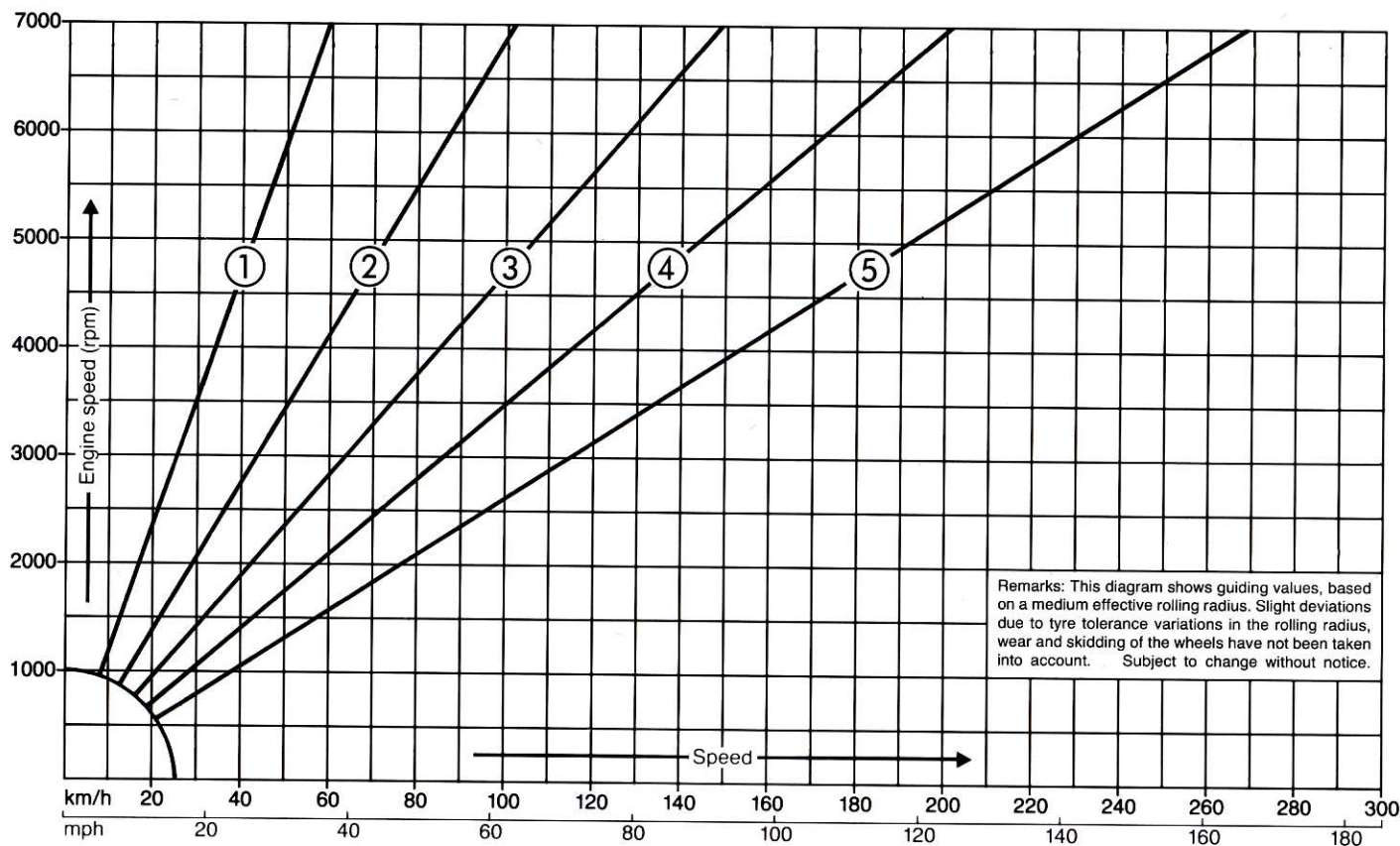
944 Turbo



Transmission Diagram

Manual gearbox

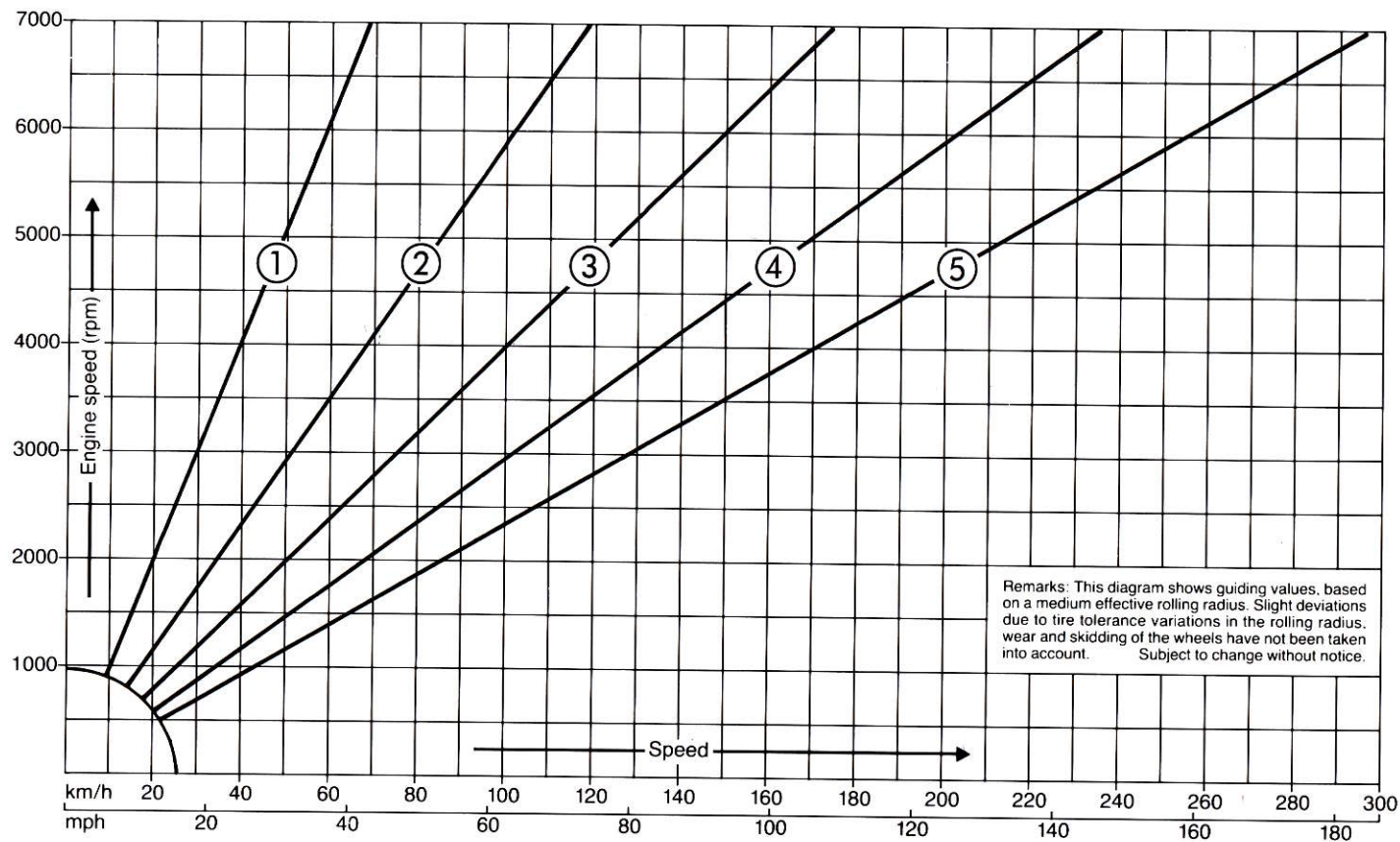
944 S2



Transmission Diagram

Manual gearbox

944Turbo



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