

POORSCHE

928 S

Driver's Manual · Maintenance Record '83



WKD 471 820

1.3 M 7/82

1983 Edition

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Printed in Germany.

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Due to the continuous development of our vehicles variations may occur between the equipment and specification of your vehicle, and the description in the Drivers Manual.

Some of the equipment described in the Drivers Manual is not standard. Your authorised Porsche dealer will be pleased to advise you on later installation possibilities.

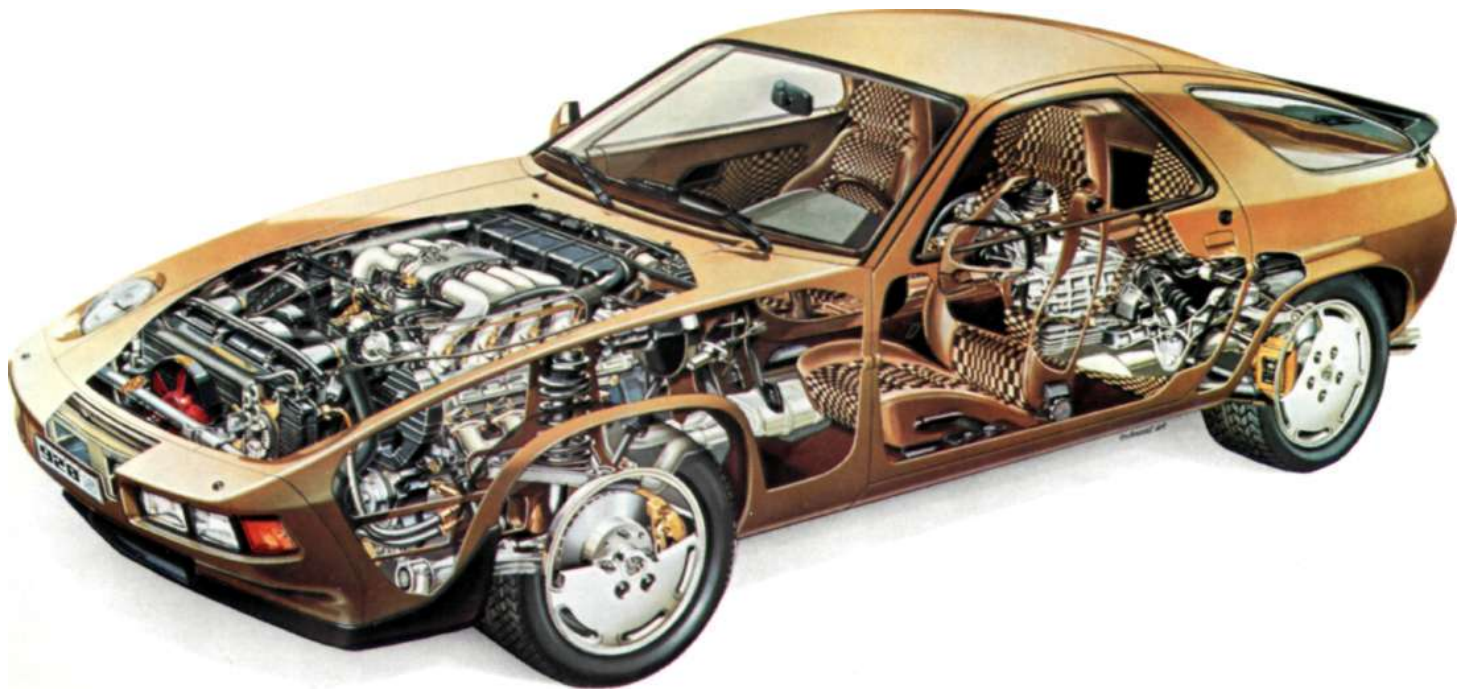
Should your Porsche be fitted with equipment not described in this handbook, please refer to your Porsche dealer.

Because of different legal requirements in individual countries, the equipment of your vehicle may vary slightly from that shown in the Drivers Manual.

You have chosen a Porsche.
This choice indicates a special class
of driver. Fairness on the road, con-
sideration, ability and a technical
interest would be characteristic
of you. We have therefore set out

in this manual all the information
you need to know to drive your
Porsche. We wish you many miles
of safe and pleasurable driving
in your

PORSCHE



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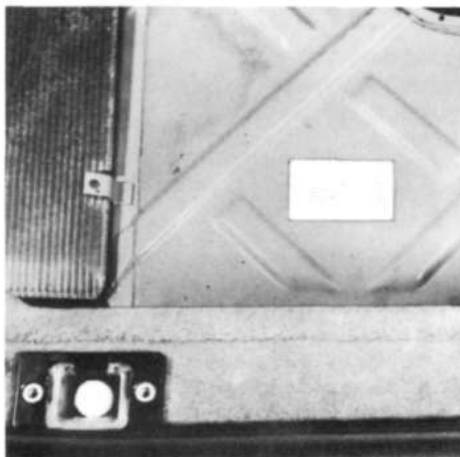
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Location of Identification Plate, Chassis Number, Engine Number and Paint Number



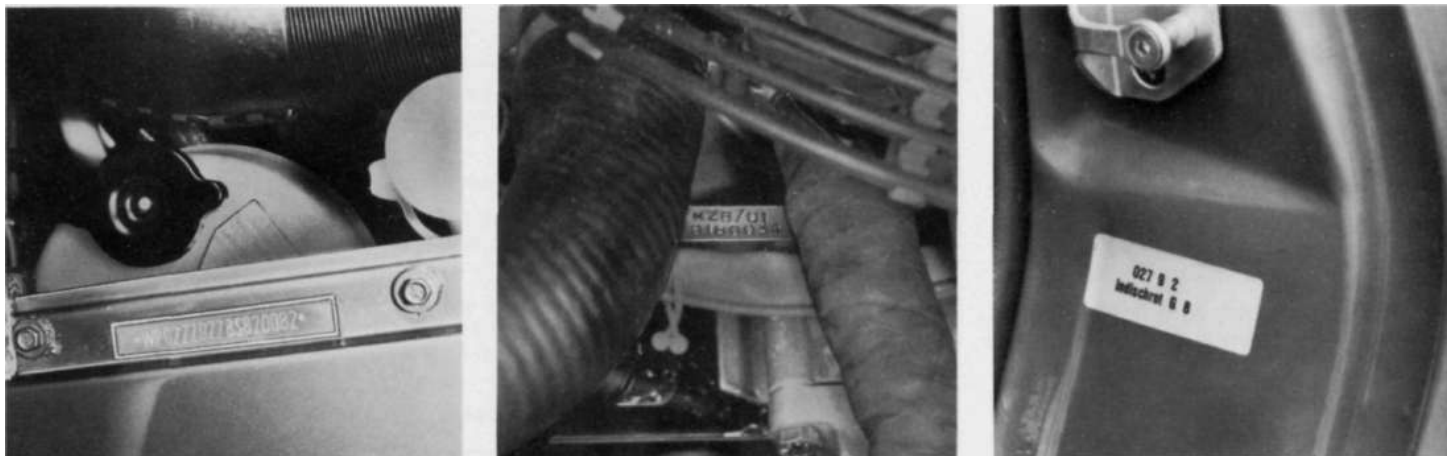
Data bank

When ordering spare parts or submitting inquiries, always quote chassis and engine numbers to ensure correct and prompt service.

The data bank is fixed on the floor in the rear of the luggage compartment next to the spare wheel well.

Identification plate

The identification plate is riveted on the front cross member, behind the bonnet lock.



Chassis number

The chassis number is stamped on the top of the right wheel arch in the engine compartment and is visible through a cut-out in the wing flansch.

Engine number

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

Paint number

The paint number plate is fixed on the left hand door lock pillar.

For your own safety, you should, before a journey,

check pressures and condition of the tyres

clean the windows and light lenses, front and rear

turn the ignition on, and check that headlamps and turn indicators are functioning

take note of the central warning light

adjust rear view mirrors to give uninterrupted rear vision

fasten seat belts, so should the passengers.

Have the oil level in the automatic transmission checked regularly, even in-between the recommended maintenance intervals.

Keys

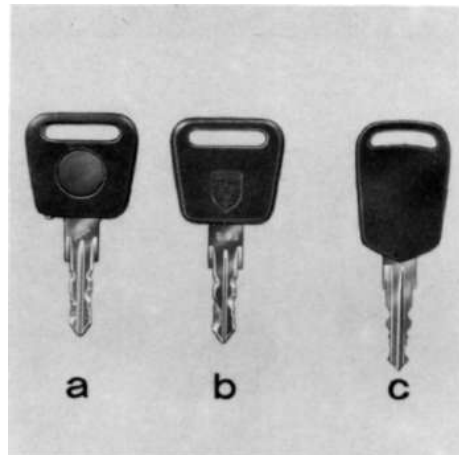
With the vehicle you receive two master and two auxiliary keys. The two master keys fit all locks, the auxiliary keys do not fit the glove compartment lock.

Vehicles with a rear seat storage compartment receive two additional keys for the compartment **lock**.

One master key has a built-in flash light. The light is on as long as the contact button is depressed.

When the light begins to fade, the battery must be replaced with one of the same type. A discharged battery could leak and damage your clothing.

By virtue of the new format for the master and auxiliary keys, the unauthorised manufacture of keys is almost completely eliminated. This means however, that you yourself will not be able to get replacement keys **cut**, you must order them from the manufacturer.



a Master key
b Auxiliary key
c Rear seat storage compartment key

Should you need new keys, you must give the key number. This number is noted on the plastic tab, that you receive with the keys. Keep this tab somewhere safe, **not** in the vehicle.

S-Key		Application Positions
	Door Locks	Switching Alarm system on and off. Locking and unlocking the doors.
	Steering/Starter ignition switch	Lockable.
	Luggage Compartment Door Lock	Switching alarm system on and off. Opening luggage compartment door.
	Tank Filler Cap	Only lockable with an auxiliary key. The S-Key should, for reasons of safety, not be lent out to other persons
	Glove Compartment	Lockable.

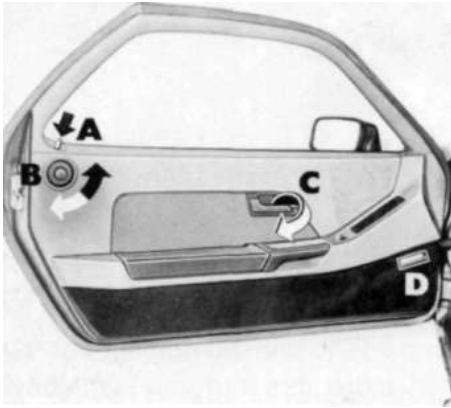
Alarm system

If your car is equipped with an alarm system you will have received two S-keys instead of the normal master keys. The alarm system can be activated only with the S-key by locking the doors or closing the luggage compartment door and turning the key to the left. If the doors are locked with the auxiliary key then the door will be mechanically locked but there is no contact to activate the

alarm. The alarm system is switched off automatically when a door or the luggage compartment is opened with the S-key. If the luggage compartment door is opened while the alarm system is switched on, the key must be turned to the left to reactivate the alarm system. If the drivers or passenger side door, engine compartment hood or the luggage compartment door is opened while the

alarm is activated a specially protected siren will sound for about 30 seconds. The engine cannot be started.

In the interest of safety the S-Key should never be lent out to other persons. For this reason the fuel filter cap can only be locked with the auxiliary key. This key can be used as a "workshop key" and can also be handed over at filling and service stations.



Doors

The doors are opened from the outside by pulling the inset door handle, and from inside, by pulling lever (C).

Access to the storage compartments in the door is obtained by pressing the safety knob, and tipping the armrest outwards.

The window regulators are operated by the rocker switches in the middle console.

Warning: To avoid injury to unknowing occupants of the vehicle, (e. g. children) by the closing of the windows, the ignition key should always be withdrawn when leaving the vehicle, if only for a short period.

The **footwell lights (D)** mounted forward in the lower part of the door trimcone on, with the switch in the appropriate position, when the door or the luggage compartment door is opened. Each light can also be switched on or off individually by means of the integrated switch.

Central door locking

By means of the central door locking system both doors are electrically locked or unlocked by operating one lock.

When the doors are locked the locking buttons (A) must be fully retracted. If this is not the case the lock on that door is not properly engaged. Re-open the door, close it properly and re-lock it.

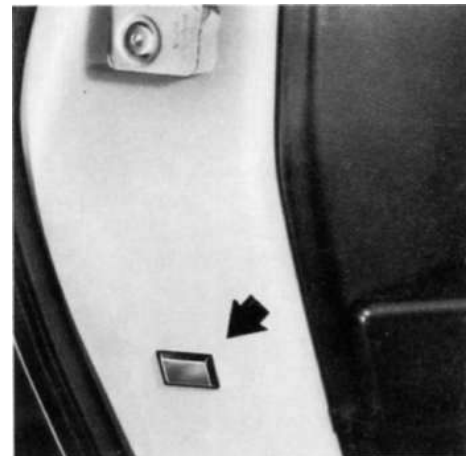
On vehicles with central locking the passenger door can be locked and unlocked by turning the knob (B) as well as with the key.

To prevent being accidentally locked out of the vehicle it is impossible to lock the door, while open, either using the knob (B) or with the key.

Central locking is only possible when both driver and passenger doors are closed. If one door is locked before the other is closed it will automatically unlock when the other door is closed.

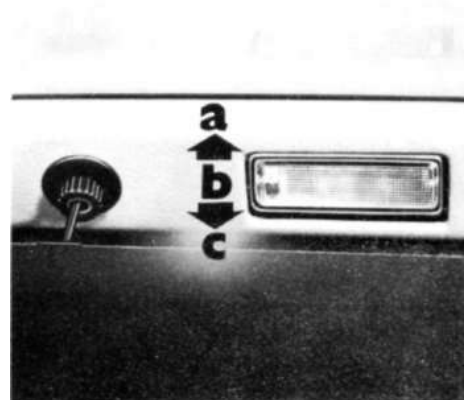
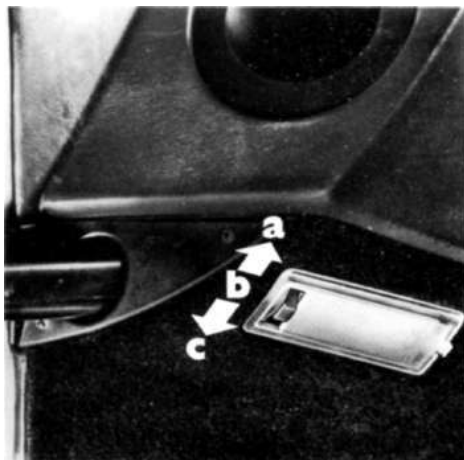
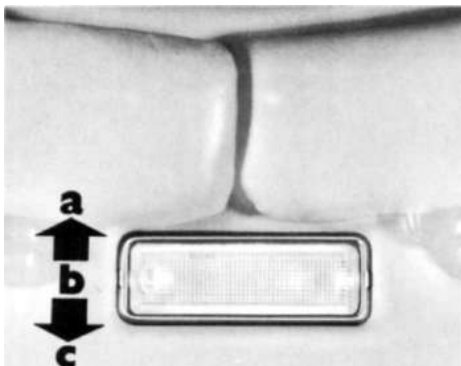
A mechanical locking or unlocking of the individual doors is only possible when the ignition is switched on or when the ignition key is turned to pos. 1. This cut out of the electrical function prevents the doors from locking in the case of a short circuit or if deformed in an accident.

When the ignition is switched off but with the key still in the ignition lock the doors can be centrally locked using either the key or the knob (B).



Door guard lights

The door guard lights come on when a door or the luggage compartment door is opened.



Interior lights

The interior lights, which are independent from one another, come on, with the switch in the appropriate position, as soon as a door or the luggage compartment door is opened. The interior lights mounted in the roof lining can be switched as following by tipping the light cover:

- a - light switched on permanently
- b - light switched off permanently
- c - light comes on only when a door or luggage compartment door is opened.

The **footwell lights** mounted forward in the lower part of the door trim have following switch positions:

- a - light comes on only when a door or luggage compartment door is opened
- b - light switched off permanently
- c - light switched on permanently.

The **luggage compartment light** in the rear lid has the following switch positions:

- a - light comes on only when a door or luggage compartment door is opened
- b - light switched off permanently
- c - light switched on permanently.

Front seats

Correct seat positioning is imperative for safe and tireless driving. To enable individual seating comfort, the seats are adjustable for and aft and the backrest angle is adjustable. To find the most suitable seat position, we suggest the following procedure:

- 1 Pull the locking lever at the front of the seat upwards, and slide the seat until your leg is straight when fully depressing the clutch pedal. You should not however have to outstretch your foot to reach this position. Let the locking lever down, and ensure that the seat is locked in a ratchet on the seat slides. Never try to adjust the seat whilst driving, as a sudden change of seat position could cause you to lose control of the vehicle.
- 2 Grip the top half of the steering wheel. Then set the backrest angle so that with fully outstretched arms, your shoulders still contact the backrest.



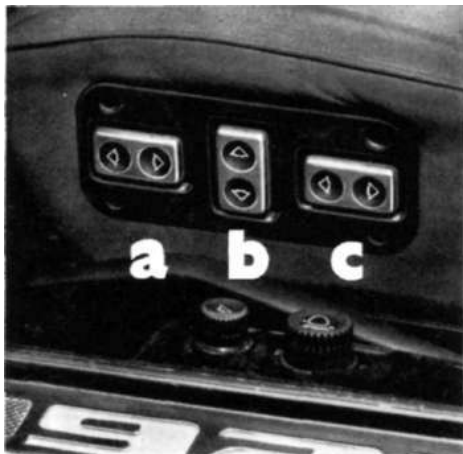
Then check the steering wheel position, and view of the instruments.

For optimum legroom and view of the instruments, the steering wheel and instrument console can be released, adjusted, and then re-locked.



The backrests are secured in position to stop them tipping forward during braking; to release, press the button on the side of the backrest.

Similarly, the **rear seat** backrests can be released, and tipped forward, thereby giving more luggage room in the rear.



- a - For and Aft adjustment
- b - Height adjustment
- c - Backrest adjustment

Electric seat adjustment

In vehicles fitted with electrical seat adjustment, the controls for the electric motors which adjust the seat for/aft, height, and rake angle can be found mounted in the outside flanks of the seats.

To prevent damage to the belt lock and to the seat cover, care should be taken that the belt lock is pushed outwards so that it cannot jam between the seat and seat backrest when the seat is moved forward.

Hand operation

Manual operation of the seat is also possible in case of possible electrical malfunction. To do this pull the locking lever at the front of the seat upwards and slide the seat to achieve the desired seating position, then release the lever.



Rear view mirrors

Before beginning a journey you should ensure that the rear view mirrors are properly adjusted.

The **interior rear view mirror** is stuck directly on the windscreen. This enables a very short mirror stem to be used thereby obviating vibration, and a blurred image.

The mirror is adjusted to the anti-dazzle position by pressing the lever underneath it.

The electrically adjustable **wing mirrors** can be set with the switch in the driver's door. The passenger door wing mirror is adjustable by the same switch, by pressing the rocker switch beside the adjuster switch into the appropriate position.

When necessary, the wing mirrors can also be adjusted by hand.

The wing mirrors are also electrically heated when the rear window heating is turned on.

Safety belts

Your Porsche is equipped with safety belts as standard fittings. All occupants of the car should wear safety belts for their own safety, on every journey. To remind you of this, a warning light in the middle console comes on for approx. 6 seconds, every time the ignition is turned on.



The lap and shoulder belts as fitted are not suitable for children under 140 cm (4 ft. 6 ins.) tall. To stop them distracting the driver's attention, and for their own safety, children under 12 years old should always travel in the rear seats.

Never use one seat belt for two people.

Loose clothing affects the fit of the seat belt. You should therefore take your coat off, because a correct seating position and freedom of movement are important for comfort and safety.

Do not run the belt over fragile objects in your pockets, e. g. spectacles, pens or a pipe etc. as these could represent additional hazards.

Please remember when driving abroad, that in some countries the wearing of seat belts is compulsory.



Putting on the belts

Decide the best seating position for yourself. Take hold of the sliding buckle and pull the belt firmly over chest and hips. Press the buckle into the respective anchor point until you hear that the latch is locked. Slide the plastic loop up to the buckle.

Avoid twists in the webbing when putting on the belt.



The lap part of the belt must always stay taut over the pelvis. After putting the belt on, you should therefore pull the shoulder part of the belt upwards as shown in the picture. Now and again during the journey, you should repeat this procedure to ensure that the lap belt is always taut.

The locking mechanism in the roll-up unit is so designed, that by rapid acceleration or braking, cornering or driving on steep in-



clines, the belt is locked. This locking system reacts more quickly to the retardation of the car than to any pull on the belt.

Releasing the belts

To release the belt, press the red button marked "press". The buckle then springs out of the anchorage, whether there is any loading on the belt or not.

Make sure that the belts are always fully retracted when not in use. This will prevent them becoming dirty and avoid unnecessary damage to the belts themselves. You should check your seat belts regularly for signs of damage to the webbing. Make sure that the locks and anchorage points are in good condition. If the belts have been subjected to high loads or stretched in an accident, have them replaced in the interests of your own safety.

Back seat safety belts

The back seats are equipped with automatic lap belts. Do not twist the belt when putting it on. The belt is released by pressing the red button.

Warning. Please do not make any alterations or additions.

In case of doubt please consult your authorized dealer or, if you live in Great Britain contact

Porsche Cars Great Britain
26-30 Richfield Avenue
Reading
Berkshire RG1 8PH



Handbrake

The handbrake is cable operated to the rear wheels only. It is applied by pulling the lever upwards.

To release the brake, the lever must be pulled upwards whilst pressing the button in the end of the lever until the ratchet is cleared, and then letting the lever downwards.

The central warning light and the handbrake warning light will go out when the brake lever is fully released. (See Automatic warning unit.)

Footbrake

To reduce the pedal effort necessary when braking, your Porsche has a brake servo unit. The vacuum necessary to operate this unit is taken from the engine inlet manifold, when the engine is running.

Please note that with a defective servo unit, or when the vehicle is being towed with the engine turned off, the braking effort required is considerably increased as soon as the vacuum reservoir is used up.

With properly bled and functioning brakes, the free movement at the brake pedal will remain constant. This free travel before the brakes start to operate can be 20 mm (0.8 ins.).

Should this free travel suddenly become bigger, either air has entered the system, or one of the brake circuits has malfunctioned.

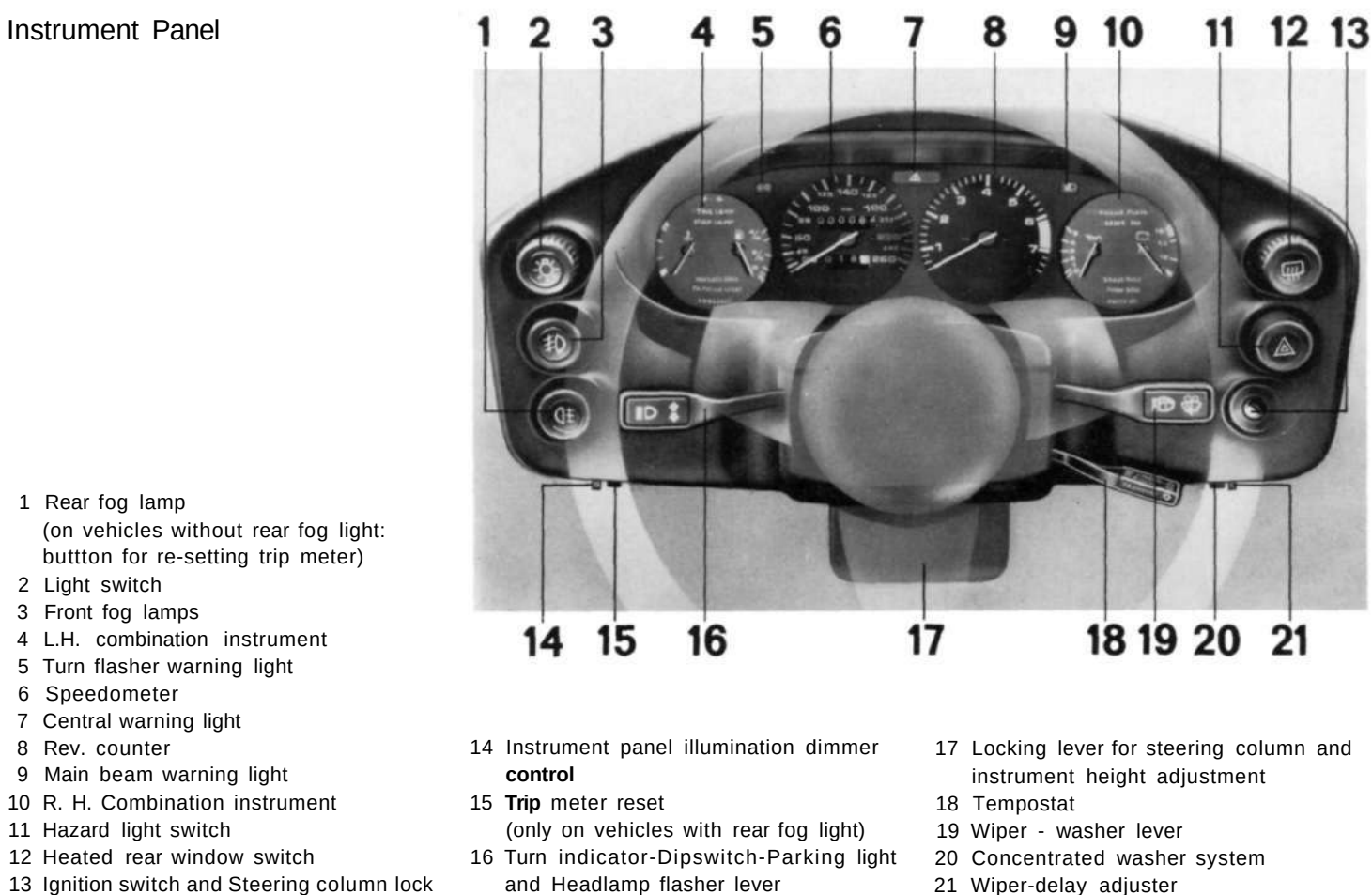
A malfunction of one of the brake circuits or the loss of brake fluid would cause the central warning light to blink. (See Central warning unit.)

Clutch

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

Should this free travel suddenly become bigger, it could mean a malfunction of the clutch. Please consult your workshop for rectification.

Instrument Panel



- 1 Rear fog lamp
(on vehicles without rear fog light:
button for re-setting trip meter)
- 2 Light switch
- 3 Front fog lamps
- 4 L.H. combination instrument
- 5 Turn flasher warning light
- 6 Speedometer
- 7 Central warning light
- 8 Rev. counter
- 9 Main beam warning light
- 10 R. H. Combination instrument
- 11 Hazard light switch
- 12 Heated rear window switch
- 13 Ignition switch and Steering column lock

- 14 Instrument panel illumination dimmer
control
- 15 **Trip** meter reset
(only on vehicles with rear fog light)
- 16 Turn indicator-Dipswitch-Parking light
and Headlamp flasher lever
- 17 Locking lever for steering column and
instrument height adjustment
- 18 Tempostat
- 19 Wiper - washer lever
- 20 Concentrated washer system
- 21 Wiper-delay adjuster



1 -Steering unlocked, and all electrical circuits are operational except direction indicator - reversing lights, wing mirror adjustment, rear screen heating and fresh air fan.

2 -Ignition is switched on. All circuits can now be operated. **With the** motor stationary, the central warning light and the individual lights are on for control purposes.

3 - By turning the key to the right, the starter motor is operated. As soon as the engine fires, release the key. It will spring back to position 2. With the engine running, the central warning light and the other warning lights should go out except the brake warning light, which will go out after the first application of the brakes (see central warning unit). During the operation of the starter motor, the items with heavy electrical consumption, e. g. headlights, rear screen heating, wipers/ washers, will be interrupted.

The starter motor should not be operated for longer than 10-15 seconds. If the engine does not fire, repeat the starting procedure after a pause of approx. 10 seconds. Every time the starter motor is operated, the key must be returned to position 1 before trying again, as a device is built into the ignition switch to prevent inadvertent operation of the starter motor whilst the engine is running.

Steering lock and ignition switch

The ignition key has 4 positions:

- 0 -The steering is locked. All circuits connected to the ignition switch are **off**. This is the only position in which the ignition key can be withdrawn, and the steering lock only operates after the key is withdrawn.
The parking lights can be operated with the switch in this position by using the direction indicator lever.

Starting the engine

Warning: Never turn the key back to position 1 whilst the vehicle is moving.

It is in your own interest to always remove the ignition key when leaving the vehicle, if only for a short period, and to ensure that the steering lock is fully engaged. This is done by rocking the steering wheel left and right. This might also be necessary to release the lock when turning on the ignition.

When the **engine is cold**, component parts being controlled in dependence of the temperature automatically provide the correct fuel-air mixture required for starting.

Therefore, special starting instructions are not necessary.

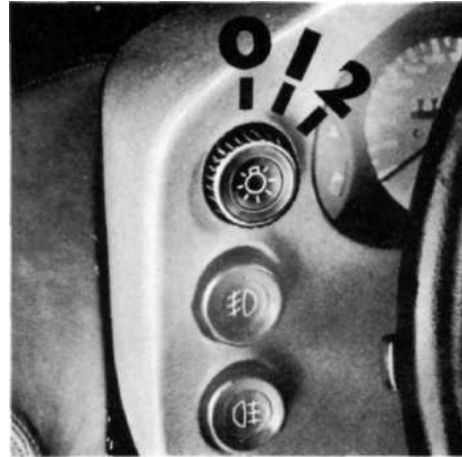
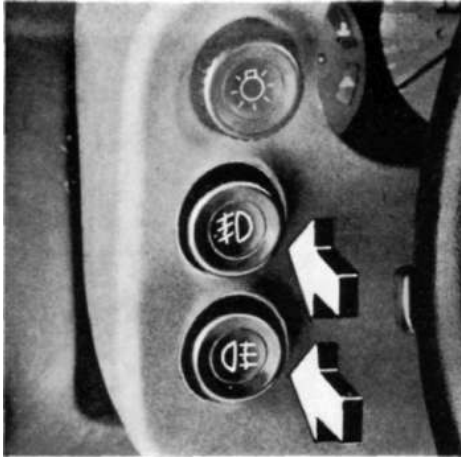
With a hot engine we recommend that you fully operate the accelerator when starting. Do not allow the engine to warm up in

neutral, but drive off immediately while avoiding high rpm and full throttle until the engine has reached its normal operating temperature.

By cold weather, it is recommendable to depress the clutch pedal when starting the engine, even when the vehicle is in neutral.

Never start the engine or let it run in confined spaces. The exhaust contains the colourless and odourless gas, carbon monoxide, which is poisonous, even in small quantities.

Please take note of the hints on running-in.



Fog lights

Rear fog lights

(on vehicles without rear fog light: . button for re-setting trip meter)

The fog lights and the rear fog light can be switched on in addition to the headlights by pressing the respective switch. The lamp built into the switch comes on when fog lights are switched on. (The rear fog light operates only when the front fog lights are switched on.)

Note: Take account of the varying laws in different lands controlling the use of fog lights.

Light switch

Switch in position 1: Sidelights

Switch in position 2: Headlights

In both of the switch positions the following are also on: Backlights, Number plate lights and instrument illumination. With the ignition turned on, and the switch in position 2, the headlights are elevated.

Instrument illumination

When the headlights are switched on the instrument illumination and Automatic gear selector illumination (vehicles fitted with automatic transmission) comes on automatically.

The illumination intensity of the instruments is controlled by turning the knurled wheel under the instrument panel.



Revolution counter

The transistorised revolution counter indicates the number of thousands of revolutions per minute of the engine.

The red range on the scale of the instrument is a visible warning of the maximum permitted revolutions per minute. Should you inadvertently, during acceleration, exceed these revolutions, a built in governor in the distributor cuts out the ignition current.



Speedometer

The electronic speedometer shows the speed in miles and kilometres per hour.

The upper odometer registers the total mileage driven. The trip odometer can be set back to zero when the ignition is on, by pressing the button under or in the left hand side of the instrument console.

Main beam warning light

The main beam warning light in the instrument console lights when the headlamps are on main beam. It goes out when dipped beam is selected.

Blinker warning light

The blinker warning light flashes at the same frequency as the blinker lights. Should one of the blinker lights fail, the flashing is noticeably quicker.



Central warning light

The central warning light in the instrument console lights when a fault occurs in one of the systems in the vehicle. See "Automatic warning unit".



Cooling fluid Temperature Gauge

White Range - engine cold

Avoid over-revving the engine or labouring

Middle Range - normal

The temperature gauge needle should normally stay in this range. It is not unusual, when the engine is being highly stressed, that the needle tends towards the red range, but it should return to the middle when the engine loading is reduced.

Red Range-Warning

If the needle goes into the red range it means that the engine is being overloaded (by high outside temperatures) and the warning light will come on.

Warning light

If the warning light comes on, check that the cooling fan is working. If the fan is not rotating, the V-belt may be slack or broken; if so, it must either be tightened or renewed. In cars with air-conditioning, the electric fan located in front of the air-conditioning condenser must also operate. If it does not, there is a fault in the power supply or the temperature switch.

Allow the engine to cool down and drive to the nearest authorized workshop, keeping a constant check on the temperature gauge.

Avoid idling, crawling and engine speeds over 4000 rpm.

Consult the chapter on the cooling system.



Fuel Gauge

With the ignition turned on the gauge shows the amount of fuel in the tank. If the level is too low the fuel warning light comes on.

Warning light

The warning light comes on when about 8 liters (7 Imp. qts) are left in the tank. The tank should be filled at the next opportunity.

Warning Lights

(see also Central Warning Unit)

TAIL LAMP

The warning light comes on when a tail light ceases to function.

STOP LAMP

The warning light comes on when the ignition is switched on and must go out after the first brake application. If a brake light bulb is defective the warning light will not go out.

WASH FLUID

The warning light comes on before the screen-wash water runs out, indicating that about 2 liters (1.75 Imp. qts.) of water remain.

COOLANT

The coolant warning lamp lights up as soon as the coolant level in the expansion tank drops below the minimum permissible level. The warning lamp may come on when the car is started and then go out again after a short time. This is due to the volume of the coolant increasing as it warms up, and thus exceeding the minimum permissible coolant level.

It is essential to top up the coolant and, if necessary, to have the cooling system checked for leaks.

Consult the chapter on the cooling system.

PARKING LIGHTS

This light comes on in the Combi-Instrument when the sidelights are turned on and goes out again when the headlights are turned on.

Trailer Indicator Light

The blinker warning light for the trailer operation flashes at the same frequency as the blinker lights. Should a trailer blinker fail the frequently is noticeably quicker.



Oil Pressure Gauge

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

Should the oil pressure suddenly drop while driving or should the red oil pressure warning light come on, the engine should be turned off immediately. If the oil level is correct the next workshop should be called in to rectify the fault.

Warning Light

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

In this case stop immediately.

If the oil level is correct the next workshop should be called in to rectify the fault.



Voltmeter

The voltmeter shows the overall condition of the charging system. The needle should normally stay in the range 12-14 volts when the engine is running. A temporary drop under 12 volts when starting the engine is normal.

Warning Light

The warning light checks the function of the alternator. It comes on when the ignition is

turned on and goes out as soon as engine rpm. are high enough. If the warning light flickers or comes on during driving, it can mean that the fan belt is loose or broken. The fault could also lie however in the regulator or the alternator.

In the latter cases the journey can be continued but only to the next workshop. Electrical consumption should be kept to a minimum.

Warning Lights

(see also "Central Warning Unit")

BRAKE FLUID

The warning light blinks when the fluid level drops below the allowable minimum.

BRAKE PAD

The light comes on when brake pads are worn down to the allowable minimum.

BRAKE PR

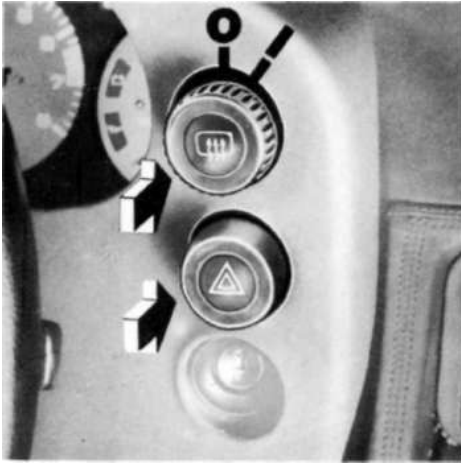
The light blinks when one brake circuit fails.

PARK BRAKE

The light comes on when the handbrake is on or not fully released.

ENGINE OIL

With the vehicle level and the ignition turned on, the warning light will come on if there is less than 6 liters (1.32 Imp. galls.) of oil in the sump.



Rear screen heating

The heating for the rear screen and outside mirrors is operated by the combined twist-push-pull switch in the instrument panel. The switch is illuminated when the heating is on.



Hazard light switch

When the hazard light switch is operated, all 4 flashing lights flash simultaneously.

The hazard light switch is operative in any of the ignition switch positions.

Switch in pulled-out position

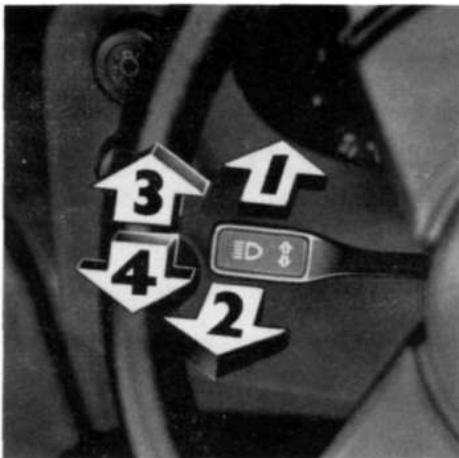
0 - Rear screen heating **off**.

1 - Rear screen heating on. The heating is so regulated that the rear screen will not mist up.

Switch in the pushed-in position

0 - Full heating for de-icing. After approx. 15 minutes the heating turns off, automatically.

1 - Full heating for de-icing. After approx. 15 minutes a relay switches the heating down to demisting power.



Direction indicator- Dip - Parking light - Headlight flasher switch

This switch operates the headlight flasher, the dipped and main beams, the direction indicators and the parking lights.

Direction indicator

Push the lever upwards beyond the over-centre position - Right blinker.

Push the lever down beyond the over-centre position - Left blinker.

If the lever is only pushed to the over-centre position, the blinkers only operate until the lever is released.

The malfunction of a blinker light is apparent by a faster flashing rate. The direction indicators only operate when the ignition is on.

With the ignition key removed, the lever in the up position turns the right hand parking lights on, and in the down position the left hand parking lights.

Parking lights are the front and rear sidelights of the respective side.

Main and dipped beam

With the light switch in position 2, main beam is selected by pushing the lever towards the instrument panel, and dipped beam by pulling the lever back towards the steering wheel. With main beam selected, the blue light in the instrument panel comes on.

Headlight flasher

The headlight flasher is operated by pulling the lever right back towards the steering wheel, and the headlights stay on as long as the lever is held in this position. The headlight flasher operates also when the vehicle lighting is not on.



- 1 Set/accelerate
- 2 Reset
- 3 Cancel

Tempostat (Automatic speed control)

The Tempostat will maintain any desired speed with the range 50-200 km/h (30 to 120 mph) without your foot being on the accelerator. Independent of this, you **can** brake, change gear and accelerate as normal.

The operation of the Tempostat is controlled by the antenna lever behind the wiper antenna.

The speed being travelled at any point in time can be fed into the electronic control unit by moving the lever forwards (position 1).

You can then take your foot off of the accelerator and this speed will be maintained.

By braking or stopping, the unit cuts itself out, but the last speed fed into the unit remains registered. This registered speed can be recalled by moving the lever downwards (position 2). However, should the ignition be turned off, the registered speed is cancelled from the unit.

If the registered speed is too low, you can increase speed with the accelerator or by moving the lever forwards to position 1 and holding until the desired speed is attained, and then letting the lever free. This speed is now fed in to the unit and registered.

If the registered speed is too high, pull the control lever towards the steering wheel (position 3) or brake; this interrupts the Tempostat control, until the required lower speed is attained, and then move the lever

forwards to position 1. Again this new speed is registered and maintained.

Note: When you depress the clutch, the speed control is interrupted, but when the clutch is released, the speed control takes over again.

To avoid accidentally overrevving the engine, do not move the gearshift lever into neutral at road speed above 50 km/h (30 mph) while the cruise control is engaged.

If you exceed the speed registered in the control unit, e.g. during overtaking by using the accelerator, as soon as you come off of the accelerator, the registered speed will be automatically resumed. On a steep incline either up or down, it is possible that the vehicle will not maintain the registered speed in a high gear, then you must change down, to avoid labouring the engine by uphill, or to ensure sufficient engine retardation by down hill driving.

We do not recommend use of the tempostat in heavy traffic or when road conditions are unsuitable (eg. winding or slippery roads).



Wipe-wash lever

The wipe-wash lever has 6 switch positions.

0 Wipers off

1 Slow wipe

2 Fast wipe

3 Very fast wipe

4 Delay wipe. The wipers operate automatically at regular intervals. The delay interval can be adjusted by turning the knurled knob A under the right hand side of the instrument panel.

5 Wipers and washers. By pulling the lever towards the steering wheel, the electric washers as well as the wipers are switched on.

6 Head lamp washers. By pushing the lever towards the instrument panel, the head-lamp washers are operated, but only when the headlights are on. Refer to paragraph on headlamp washers.



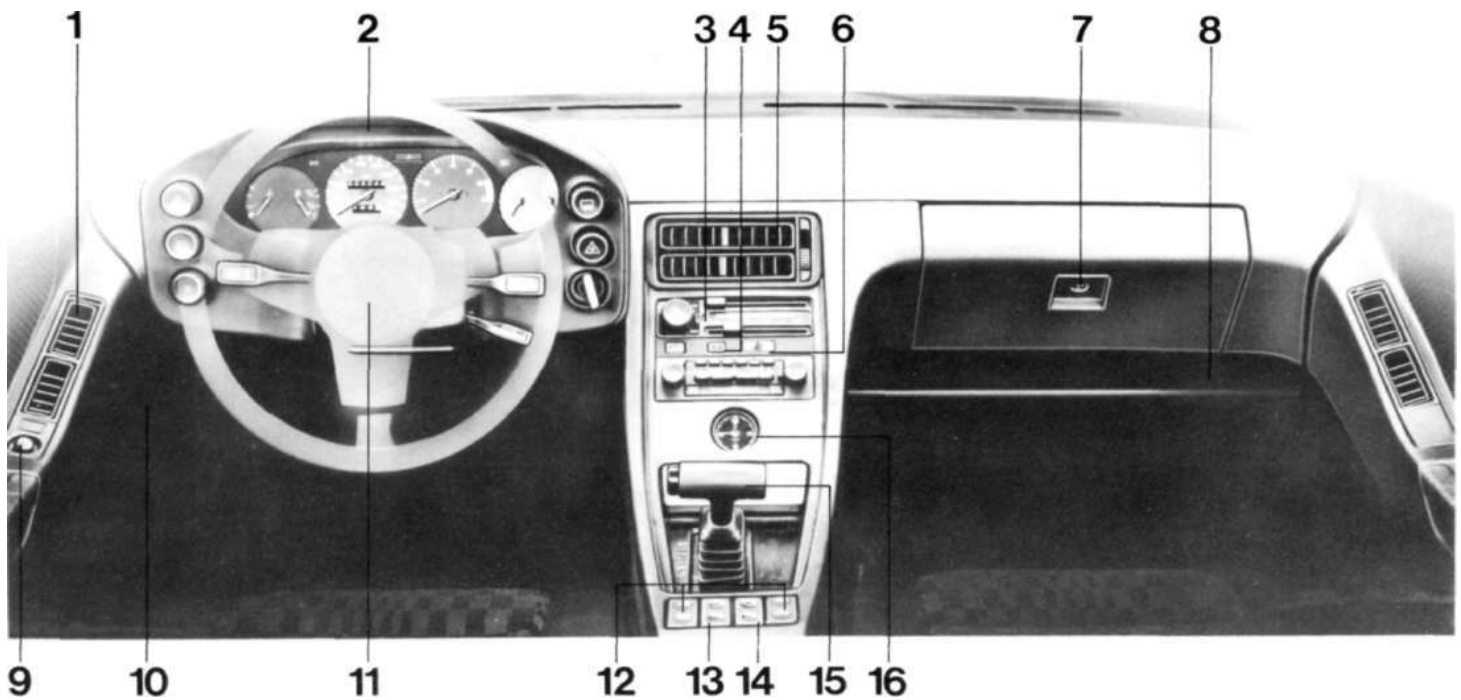
Concentrated washer system

With the concentrated washer system, even dirt embedded in silicon-based polishes can be removed from the screen.

A short press on the switch B under the right hand side of the instrument panel causes the concentrated Porsche cleaning solution to be pumped onto the screen. The duration of the spray is controlled by a time relay to avoid too heavy consumption of the solution. If necessary the operation can be repeated.

The windscreen washers and wipers can then be operated to finish off the cleaning process.

The windscreen should be sufficiently wet before the wipers are actuated to avoid scratching it. The wiper blades should be checked regularly, and replaced at least once a year.



Cockpit Layout

1 Side window demisting

2 Instrument panel

3 Air conditioning

4 Cancelling button for Auto. Wash unit

5 Center vent

6 Safety belt warning light

7 Glove compartment lock

8 First aid box holder

9 Wing mirror adjuster

10 Bonnet lock

11 Horn

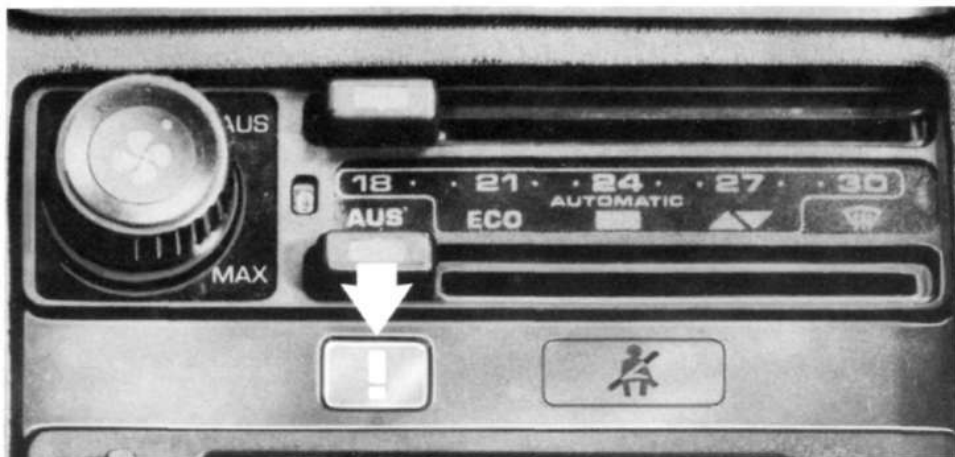
12 Power window switch

13 Sunroof switch

14 Rear screen wiper switch

15 Selector lever

16 Clock



Central Warning Unit

To increase driving and operational safety an automatic warning system has been developed, that shows the driver, via an unmistakable warning light that comes on in the instrument panel, that there is a possible malfunction. This is done automatically without the driver having to do anything.

The warning lights for the various functions are located in the Combi-instruments.

Should a malfunction occur the central warning light in the instrument console will come on. At the same time the light for the individual function will also come on, indicating what is malfunctioning.

The function control is divided into two priority groups. Functions that are essential for driving and operational safety **are**:

Priority 1 - The central warning light flashes together with the individual warning light.

The following functions have priority 1:

Brake circuit failure, Brake fluid level, Oil pressure, Oil level.

If a malfunction is indicated here the vehicle must be stopped and turned off immediately. The fault must be rectified.

Functions that do not require immediate attention are:

Priority 2 - The central and individual warning lights come on continuously.

The following functions have priority 2:

Brake pad wear, Hand brake, Cooling fluid level, Cooling fluid temperature, Fuel tank reserve, Screen washer water level, Brake lights, Tail lights.

These functions show the need for part replacement, re-filling, change of driving mode or release of the handbrake, but not **for** an immediate halting of the journey or visit to a workshop.

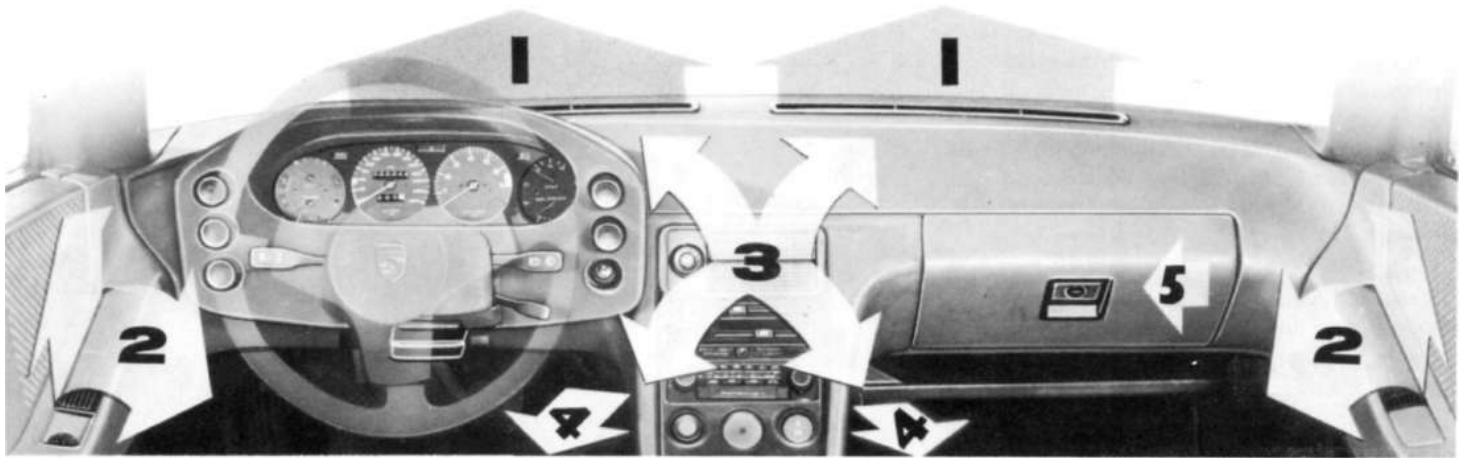
With the ignition turned on (engine not running) all individual warning lights and the central warning light must come on to indicate operational readiness. If the engine oil level is too low the central warning light will flash, (lack of engine oil can, in comparison with all other functions, only be checked with the engine turned off and with the vehicle level.)

The warning light for the brakelights must go out with the first brake application. The remaining lights go out when the engine is started.

By pressing the button (arrow) in the middle of the console the central warning light can be turned off in the case of priority 2 malfunctions. It cannot be turned off in priority 1 cases because immediate action is necessary to rectify the fault.

When the handbrake is applied or not fully released the central warning light cannot be turned off. Only when the handbrake is fully released does the central warning light go out.

Note: If the vehicle is tow or roll started the warning lights will not go out. The engine must be turned off and restarted with the ignition key.



Ventilation grills

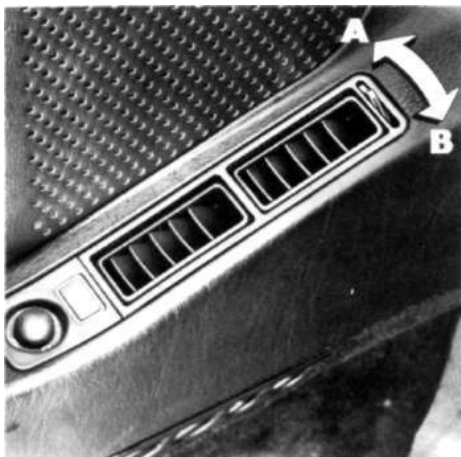
- 1 De-icing jets for windscreen
- 2 De-icing jets for side windows
- 3 Fresh air jets for passenger compartment
- 4 Fresh air jets for footwells
- 5 Air jet in glove box

The height of the jet stream can be altered by tipping the horizontal bars in the grill. The lever in the grill adjusts the lateral air flow.

Central air inlet grills

The central air inlet grills provide ventilation for the interior. If the air flow should become uncomfortable the central air inlet grills can be closed by means of a lever mounted at the side of the grills.

In the defrost position the grills are closed automatically.

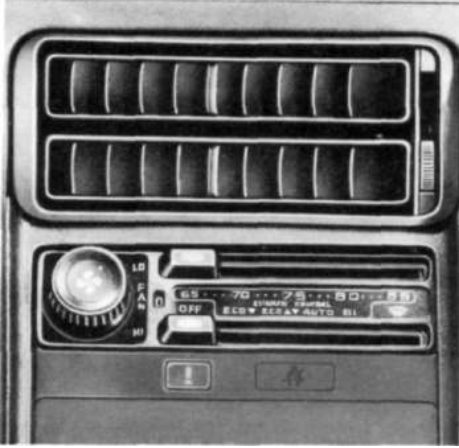


Side air inlet grills

To avoid misting up of the side windows, air inlet grills are built into the door trim panels. The direction of the air stream can be adjusted by the grills, and the airflow can be regulated by a lever.

A- Air inlet grill closed

B- Air inlet grill open



Automatically controlled air conditioning

The air conditioning only functions with the engine running. The cooling efficiency is dependent on engine revolutions. If more cooling is required it is necessary - especially in city or stop-go conditions - to increase engine rpm.

By automatically controlled air conditioning the air conditioner compressor is switched on automatically in position AUTO and BI. The engine runs at a higher idle speed in this position.

A maximum cooling effect is achieved with the fan switch at pos. 4, the windows closed and the side and center vents fully open. When the air conditioner is switched on additional cooled air is fed via a vent to the glove compartment.

If the vehicle has stood for a long time in direct sunlight, it is recommended that the air conditioning be turned on with the windows open, to provide through ventilation.

The air conditioning must be operated for a short period at least once a month.

This is especially important during the cold weather when the air conditioning is not needed.

This operation is necessary to lubricate the expansion valve and the seals on the mainshaft.

Should the air conditioning become defective, that is to say if warm air comes from the inlet grills, the air conditioning must be turned off immediately or otherwise the cooling compressor can be damaged.

The automatic controls the temperature inside the car according to the programme chosen and the temperature control lever position.

The interior temperature is kept constant even under changing climatic conditions. Cold and warm air is blended automatically by means of air mixer valves which are operated by a servo motor. The servo motor is switched and controlled via inside and outside temperature sensors as well as the coolant thermometer.

The following controls make an individual regulation of the air conditioning possible:

Temperature control lever for adjusting the required interior temperature with temperature scale. The adjusted temperature is equal to the temperature in the middle of the vehicle interior.

As heat output is dependent on the coolant temperature, the full heating capacity is delivered only after the engine has reached normal operating temperature.

Programme control lever to enable the automatic air conditioner to meet individual requirements several programmes are available.

OFF Air conditioner and blower fan switched off.

ECO ▼ Automatic heater control. No cooling is possible on this position because compressor is switched off for fuel ECONomy. This programme is recommended when outside air temperatures are below +5° C (40° F).

ECO ▲▼ as for **ECO ▼**: An airstream is also directed toward the windshield.

AUTO Automatic temperature control. Heating and cooling (during normal weather conditions). Air is distributed according to a predetermined programme to suit the outlet temperature. The center vent may be closed manually.

BI Same as position **AUTO** in addition the defrost vents are opened. This position is recommended during wet and humid weather (rain, heavy snowfall) to prevent the windscreen from fogging up. It also provides better cooling at head level and in the footwells when outside air temperatures are very high.



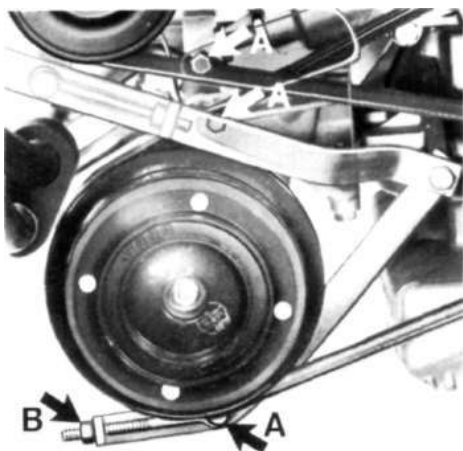
Defrost position: provides fastest possible defrosting of the iced or fogged up front screen and side windows. With this programme the

maximum heating effect and highest blower fan speed are switched on automatically and the full air flow is directed to the windscreen and the side vents. The center vent is closed automatically.

To prevent uncomfortable draughts, in positions **AUTO**, **ECO ▼**, **ECO ▲▼** and **BI** the automatic control first comes into operation at coolant temperatures above approx. 45° C. Below these temperatures the uncooled fresh air is prevented from entering the footwell by a cold start shut off device.

Blower fan switch

To provide air circulation when the vehicle is standing still or at low speeds the blowerfan runs at low speed even when the switch is in the 0 position. Should you require increased air flow the blower fan can be switched from positions 1 to 4.



Tensioning the V-belt

The tension of these compressor V-belt is checked every 20.000 km. If the airconditioner is used frequently the V-belt tension should also be checked between the service intervals.

The three mounting bolts (A) must be loosened for tensioning the V-belt. Correct the V-belt tension with tensioning nut (B) and tighten the mounting bolts (A). The V-belt is correctly tensioned when it can be depressed approx. 5 mm using thumb pressure, between both V-belt pulleys.



Checking cooling medium level

Due to the fact that the system loses coolant it is necessary to check the coolant level at the reservoir at least once a year.

Should air bubbles be visible at the inspection glass of the reservoir (arrow) for an extended period, with the air conditioner switched on, this indicates a lack of coolant. Air bubbles will be normally visible for a short time.

If necessary have the system re-filled in an appropriately equipped service workshop.



Position		Load condition
	0	1–2 persons
	1	4 persons (luggage up to permissible rear axle load)
	2	2 persons and luggage up to permissible rear axle load
	3	1 person and luggage up to permissible rear axle load

Headlight beam regulator

The height of the headlight beams can be regulated to the laden condition of the vehicle with the knob (B). This enables maximum road illumination without dazzling other road users.

The normal headlight beam setting is obtained by turning the rotary knob as far as the noticeable stop, i. e. the white dot must be in line with "0" (see also "Headlight adjustment").

The beam setting must be corrected as shown in the table when the vehicle load is increased. Turning the knob clockwise raises the beams and vice versa. The correction should be checked by observing the dipped beam cut-off (e. g. on the back of the vehicle driving ahead of you).

Loudspeaker balance control

The volume of the loudspeakers in the door and in the rear of the vehicle can be balanced by turning the loudspeaker balance control knob (A).



Clock

The left-hand push-button beneath the display is used for setting the hour. The right-hand push-button is used for setting minutes.

A brief press of a button (best done with a ball point pen) will put the time forward by one hour or one minute.

Prolonged pressure on the button(s) will cause the hours and/or minutes to be displayed in sequence.

In order to set the time accurate to the very second, press the minute button at the very moment you hear the time signal on your car radio.



Cigarette lighter

The element is heated by pushing the lighter in. When the correct temperature is reached, the lighter springs out to the normal position. With the lighter out, the socket can be used for electrical auxiliaries such as compressor or handlamp, with a consumption of up to 120 watts at 12 volts.

Ashtray

The ashtray is mounted in the middle console in front of the gear lever. To empty the ashtray pull the tray upwards out of the housing.

Rear seat storage compartment

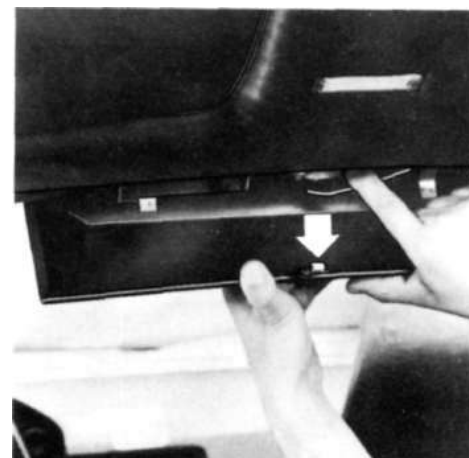
The storage compartment is opened by pressing the button and lifting the lid. For security reasons, the storage compartment is lockable.

On vehicles with a rear seat storage compartment a second ashtray can be found on the tunnel in front of the compartment.



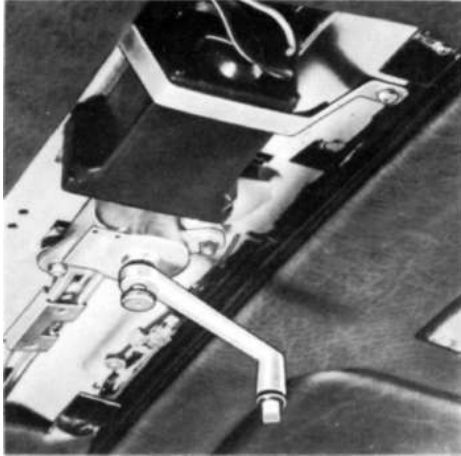
Electric Sliding Roof

The sunroof is operated by a spring loaded rocker switch on the middle console. Appropriate movement of the switch opens or closes the sunroof. When released the switch returns to the neutral position and the roof stops in the required position. The drive mechanism is equipped with a safety clutch which disengages when a certain resistance is met, thus excluding the possibility of accidental injuries.



Manual Operation

A hand crank is provided for manual operation in the event of an electrical failure. To do this the cover of the sunroof drive must be removed. Pull the cover down at the rear and unhook the spring. Unscrew the now visible slotted screw with the screwdriver tip of the hand crank. Before inserting the fork-end of the crank remove spacers which were under the screw. Turn the knurled screw of the crank into the threaded hole in the drive



Rear screen wiper

shaft making sure that the lugs engage in the slots. The roof can then be moved by turning the crank.

If the roof is only about half open, it is recommended that you close the roof by turning the slotted screw instead.

The rear screen wiper is switched on by a press switch in the middle console. To prevent the rear screen from becoming **scratched** it should be sufficiently wet before operating the wiper.

The wiper motor is mounted in the bodywork of the vehicle and not in the luggage compartment door, and drives the wiper with a clutch, that disengages and engages automatically when opening or closing the door.



Glove box

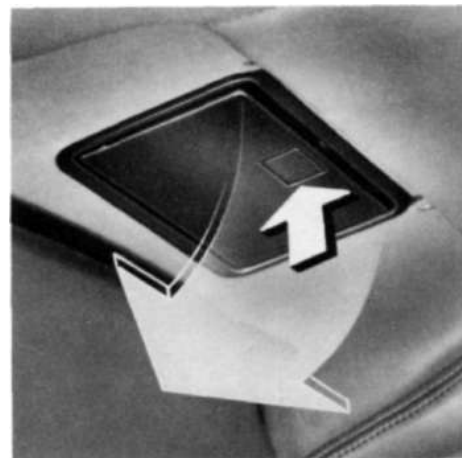
The glove box is opened by pulling the handle set into the lid. For security reasons, the glove box is lockable.



Sun visors

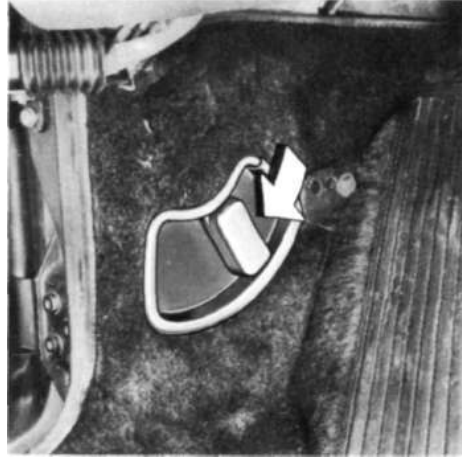
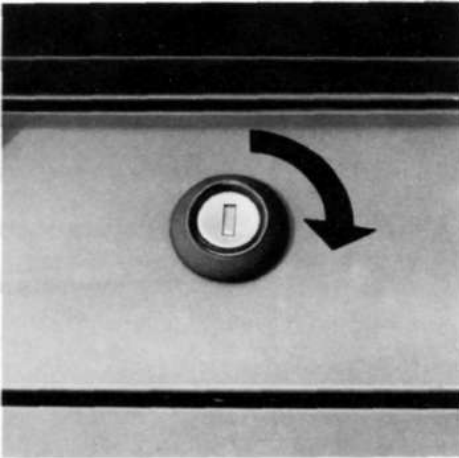
The front sun visors can be either pulled down in front of the screen or swung to the side in front of the door windows to prevent dazzle from the sun.

The rear sun visors can be swung back to the rear window.



Make up mirror

The make up mirror can be found on the rear side of the passengers sun visor. On vehicles with leather interior a lighted make up mirror is installed in the roof lining behind the passengers sun visor (except on vehicles with sun roof). By pressing the button the mirror swings out from the roof lining.



Luggage compartment door

(See notes under "Alarm system" if your car is equipped with an alarm system.)

To open the door

Insert key into the lock and turn it to the right and lift the door. Two gas-struts will then open the door fully.

To close the door

Push the door down until it can be heard to lock.

Never drive with the luggage compartment door ajar or open, as then exhaust fumes could enter the vehicle.

Engine compartment Hood top

To release the hood

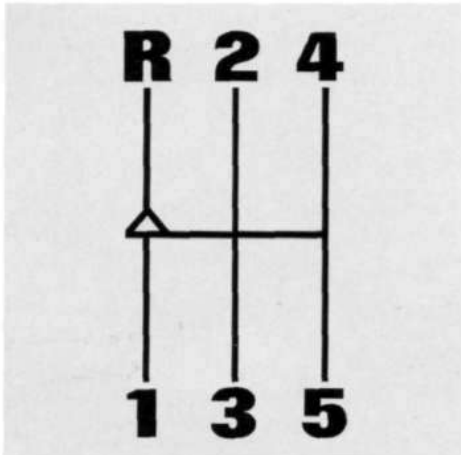
Pull the lever on the left hand cowl side panel underneath the instrument panel.

To open the hood

Lift the hood top slightly and release the safety catch by pressing the lever upwards.

Make sure the windscreen wipers are not tilted forward!

When the vehicle lights are on, a lamp on the underside of the hood top lights automatically.



Manual gearbox

The fully synchronised gearbox permits rapid gear changes without the need to double declutch. Be sure however that the clutch is fully depressed before engaging or disengaging a gear.

The gear positions are shown in the diagram on the right.

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

To shift from 1 st into reverse gear, the gearshift lever must first be moved into neutral position between 4th and 5th gear.

With the ignition on, the reversing lights come on automatically when reverse gear is selected.

Permissible rpm before shifting down.

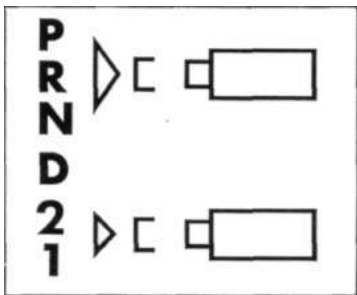
5-4 gear.	4800 rpm
4-3 gear.	4800 rpm
3-2 gear.	4700 rpm
2-1 gear.	4400 rpm

Automatic gearbox

The automatic gearbox facilitates the driving of the vehicle. The individual gears are selected automatically, depending on the position of the gear selector lever, the speed of the vehicle and the position of the accelerator.

For safety reasons, the motor can only be started with the selector lever in positions P or N.

The selector lever has six positions, and is fitted with a mechanical lock-out, to avoid inadvertent selecting of the wrong gear.



The lock-out button must be pressed when changing from

P	... to ...	R
R	... to ...	P
N	... to ...	R
?	... to ...	1

At speeds in excess of 15 km/h (10 mph) a hydraulically operated mechanical lock-out avoids changing into R or P.

The selector-lever console is illuminated.

Operation

Before selecting a gear with the engine running and the car stationary, either the hand-brake must be on, or the footbrake operated. The brakes should only be released when you wish to drive away, as the vehicle will creep as soon as gear is selected. Do not accelerate while selecting a gear.

At speeds in excess of 50 km/h (30 mph) N should not be selected. Should however N be selected inadvertently during driving, the accelerator should be released to allow the engine to attain tick-over revolutions, before the gear is selected again. This avoids overloading the fluid clutch.

It is extremely important for correct functioning of the automatic gearbox, that the correct fluid level is maintained. For this reason you should check the fluid level frequently, between the normal servicing of the vehicle.

If there is no automatic transmission fluid in the gearbox or the torque convertor, the engine must not be started, nor must the vehicle be towed.

The automatic gearbox and the torque convertor are both filled with ATF, simultaneously. The back axle is filled with Hypoid oil. For filling amounts see the chapter "Filling capacities".

Selector positions

D

This is the gear to select for normal driving. The three forward gears are automatically engaged, according to the load on the engine and the speed of the vehicle.

2

This is the gear to select for mountainous terrain, as well as for long uphill or downhill stretches. The engine's power is better utilised, and also the retardation affect of the engine is greater. The vehicle pulls away in 1st gear and changes automatically into 2nd gear. 3rd gear is locked out. During driving, this position can be selected, even with the accelerator depressed. However, as 2nd gear is then immediately engaged, this should not be done at speeds in excess of 150 km/h (90 mph).

1

This position should be selected when it appears advisable to hold the vehicle in 1st gear, e. g. steep up- or downhill stretches, or when operating with a trailer in mountainous terrain.

The vehicle remains in 1st gear, and 2nd and 3rd gears are locked out.

This position can be selected from position 2 during driving by pressing the lock-out button, but should only be done at speeds lower than 60 km/h (35 mph).

P

Must only be selected when the vehicle is stationary.

In this position, the driving wheels are mechanically locked. To select P the lock-out button must be pressed.

P should only be selected **after** the handbrake has been applied, and should be disengaged **before** the handbrake is released. The engine can be started in this position.

N

In this selector position, no gears can be engaged. It is the same as neutral in a manual gearbox, and should be selected when the vehicle is stationary for any length of time, e. g. traffic jam. This position should only be selected when the engine r. p. m. are at tick-over.

The engine can be started in this position.

R

This position must only be selected at tick-over, and with the vehicle stationary. The lock-out button has to be pressed to select R. At speeds in excess of 15 km/h (10 mph) a hydraulically operated lock-out prevents R and P from being engaged. With the ignition on, the reversing lights come on automatically when R is selected.

Waiting

For short waiting periods, e. g. traffic lights, the vehicle can be left in gear, and held stationary with the footbrake.

For longer waiting periods, with the engine running, position N should be selected. Never hold the vehicle stationary on a hill with the accelerator. Always apply the hand- or footbrake.

This avoids unnecessary warming up of the torque converter or gearbox.

Stop start driving

For stop start driving, e. g. traffic jam, position 1 should be selected.

Parking

When parking, or manouvering in confined spaces, the speed can be adjusted with the brakes, and very little acceleration is required.

Trailer operation

Selector position 2

For inclines, up or down, select position 1 in good time, to attain maximum engine power or retardation, and thereby reduce the loading on the brakes. For mountainous terrain only use selector position 1.

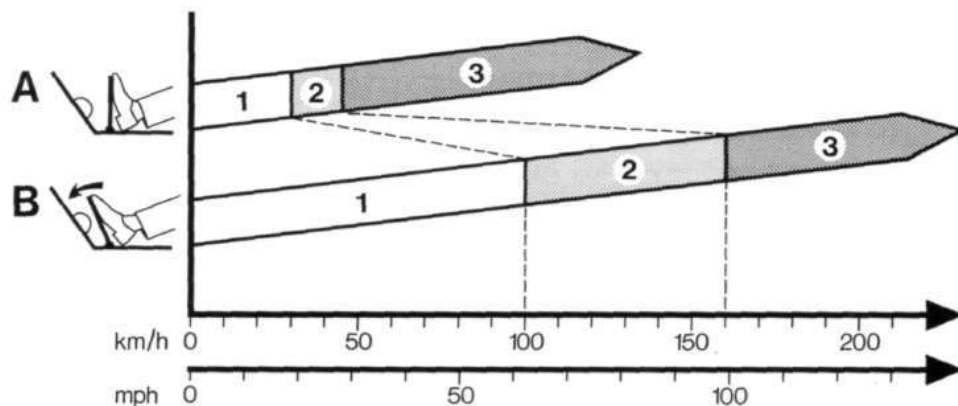
Being towed

When the engine is not running, the oil pump for the automatic gearbox is not driven, and therefore the gearbox is not lubricated. The following points must therefore be noted:

1. Selector in position N.
2. Towing speed must not exceed 50 km/h (30 mph).
3. Maximum towing distance 50 km (30 miles).
4. For greater distances, the vehicle must be transported on a trailer.

Tow or push starting

If your Porsche is fitted with automatic gearbox, it cannot be tow or push started.



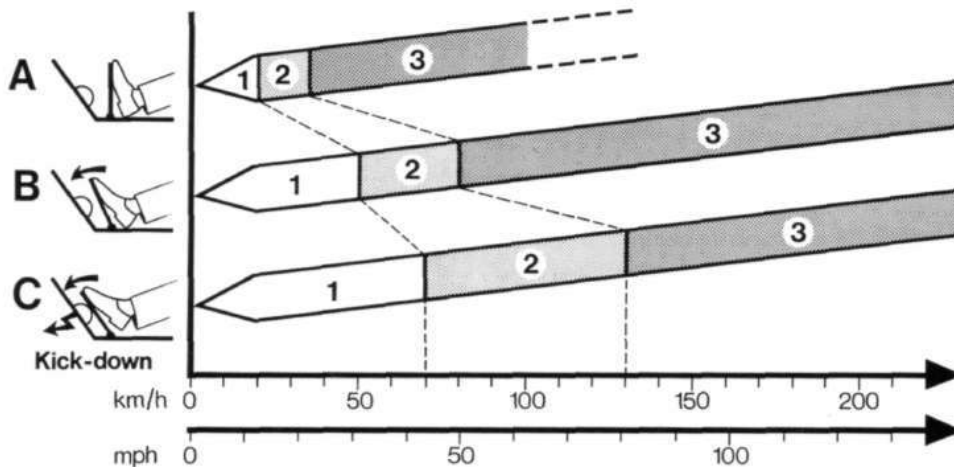
The shift points given here are theoretical road speeds. There may be certain variations in practice as a result of manufacturing tolerances, the temperatures of components and automatic transmission fluid as well as tyre slip.

Up shifts

In selector position "D" the automatic up and down shifts are dependent on a combination of road speed and accelerator pedal position. The shift points vary between the part throttle and full throttle positions.

A) When you drive with a **gentle pressure on the accelerator pedal** the transmission shifts from 1st to 2nd gear approx. 30 km/h (20 mile/h) and into 3rd gear approx. 45 km/h (28 mile/h) in order to preserve fuel and reduce noise levels.

B) During **full throttle acceleration or kick-down** the transmission holds 1st and 2nd gears longer for better acceleration. It then shifts from 1st to 2nd at approx. 100 km/h (60 mile/h) and into 3rd gear at approx. 160 km/h (100 mile/h).



The shift points given here are theoretical road speeds. There may be certain variations in practice as a result of manufacturing tolerances, the temperatures of components and automatic transmission fluid as well as tyre slip.

Down shifts

A) When you drive with **gentle pressure on the accelerator pedal** the transmission shifts down from 3rd to 2nd gear at approx. 35 km/h (23 mile/h) and into 1st gear at approx. 20 km/h (12 mile/h).

B) When you drive at **full throttle** the transmission shifts down from 3rd to 2nd gear

at approx. 80 km/h (50 mile/h) to provide better acceleration or hill climbing ability on gradients and then shifts to 1st gear at approx. 50 km/h (30 mile/h).

C) If you press the accelerator pedal down **beyond the pressure point** to actuate the **kick-down** switch, the down shifts take

place at higher road speeds to provide maximum acceleration. The down shift from 3rd to 2nd gear takes place at approx. 130 km/h (80 mile/h) and 1st gear is selected at approx. 70 km/h (45 mile/h). The up-shift points for kick-down acceleration are the same as those given for full throttle acceleration.

Tips for "Running-in"

There are no particular rules to be observed when "running-in" your new Porsche, however the following tips will be helpful in obtaining the optimum running properties.

Despite the most modern manufacturing methods with their high precision, it cannot be completely avoided that the moving parts have to wear in with each other. This wearing-in occurs mainly in the first 1000 km (600 miles).

Oil consumption can be somewhat higher than normal during the "running-in" period.

Therefore you should

never over-rev a cold engine, either in neutral or in gear,

continually change the demands made upon the engine and transmission,

never exceed 5000 rpm in the individual gears,

always change gear in good time, and thereby keep the engine in the optimum revolution range (note the Transmission diagram). This of course also applies after running-in.

Maximum permitted revolutions

The red range on the rev-counter scale is a visual warning.

When the maximum permissible engine speed is reached, the governor built into the distributor cuts off the ignition current, and thereby prevents the engine from being overrevved during acceleration.

Bedding-in new brake pads

New disc pads have to bed-in, and do not therefore have the full braking ability in the beginning. To compensate for this reduced braking ability for approx. the first 200 km (120 miles) a little more pedal pressure is necessary. This also applies after having the disc pads renewed at a later date.

Please note: New tyres do not possess their full road-holding ability. Therefore only drive at lower speeds for the first 200 km (120 miles).

Roof Racks

Normal commercially available roof racks **cannot** be fitted.

If an original Porsche rack (as available hitherto) is fitted, the permissible roof load is 35 kg. With the "New Porsche Roof Transport System" you can transport a wide variety of sports and hobby equipment, up to a roof load of 75 kg. There are many different racks to choose from.

Your Porsche dealer will be glad to advise you on the versatility of the "New Roof Transport System".

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

When the roof rack is loaded, the recommended maximum speed depends on the nature, size and weight of the load. You should not however exceed a speed of 140 km/h at any time. Make sure that the load is firmly and securely fastened.

Tips for winter operation

Engine oil

Before the onset of the colder weather, have the engine filled with oil of the correct viscosity. See chapter on "filling capacities".

Battery

The battery capacity drops with lower temperatures, but the demands made upon the battery generally increase. Therefore, have the battery checked and charged, if necessary, in good time. Also have the acid content checked, and the terminals greased. See chapter "Check and care of battery".

Corrosion protection

The salt spread on winter roads can have a detrimental effect on your car's bodywork. You should therefore wash the car as often as convenient in accordance with our care instructions. Have a preservative applied and the underseal checked in an authorized workshop before and after the cold weather season.

Cooling fluid

The vehicle should not be driven without anti-freeze at temperatures below freezing point. The all-season cooling fluid in the cooling system, put in by the manufacturer, offers protection down to -30°C (Northerly lands -40°C).

Nevertheless it is advisable to have the cooling fluid checked to make sure that the necessary protection is afforded, at the onset of colder weather. When necessary, top up with antifreeze. For amounts see chapter "Filling capacities".

Brakes

After driving for extended periods on salt covered roads a film can form on the brake discs and pads which considerably reduces friction and thus the braking effect.

Door and window seals

To prevent the freezing of the rubber seals on the doors and hood top, they should be treated with talcum powder or glycerine.

Door locks

To prevent the door locks freezing up, the lock cylinders should be masked when washing the vehicle, to avoid ingress of water. Should however the locks still freeze up, a proprietary de-icing solution can be used to free them. A warmed-up key can also be useful, but never use force.

Water reservoirs

To ensure the function of the screen and headlight washers under frost conditions, anti-freeze should be added to the water. A mixture of one part household spirit to three parts water also works very well.

Winter tyres and snow chains

Due to the reduced effectiveness of summer tyres in winter we recommend the fitting of special winter tyres when snow and ice are expected.

If M + S tyres are used in the winter, they must be fitted to all 4 wheels. Be acquainted with the different laws in different lands governing maximum speeds with these tyres.

Snow chains can only be mounted on the driving wheels, and only the fine link chains recommended by Porsche for the normal series tyres should be used. This ensures that the clearance between the wheel and wheelhouse is maintained. However, note the chain manufacturers recommendations. Your authorized dealer will be pleased to advise you in choosing the appropriate winter tyres and snow chains.

Additional equipment

It can be helpful during winter to keep a handbrush and scraper in the vehicle, to clear the screens of ice and snow, as well as a board to put under the jack and some dry sand to help traction when pulling away on icy slopes.

Car care instructions

Regular and correct care helps to maintain the value of your car and is also a precondition for the long-life guarantee.

Washing

The best method of protecting your car from the damaging effects of the environment is frequent washing and the re-application of a preservative.

The **salt** spread on winter roads, road dust and dirt, airborne industrial emissions, dead insects, bird droppings etc. can have a damaging effect on the bodywork if allowed to remain on the car for a long time.

Salts have a particularly corrosive effect on body seams, flanges and joints.

It is therefore necessary to clean such areas thoroughly with a sponge when you wash the car - **or after going through an automatic car wash**, then rinse them with water and rub dry with a leather.

New cars should be washed carefully with plenty of clear water to protect the fresh paintwork. Dark paint finishes show up the smallest of surface damage (scratches) more readily than light colors. Dark colors are also slightly more susceptible to scratches because the composition of their pigments and therefore require special care and attention.

Use an abundant supply of water, a soft sponge or wash brush and a suitable, mild car shampoo. Begin by spraying the body thoroughly with water to rinse away loose dirt. Do not wash your Porsche in bright sunlight or while the bodywork is still hot. After washing, rinse the car plenty of water and then leather dry. Remember to clean the seams, flanges and joints!

Do not use the same wash leather for rubbing down 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 test the brakes a few times after washing your car to make sure they are properly dried off.

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

Preservation

The paintwork contains certain fats which maintain its high lustre and prevent it becoming brittle. Climatic effects can remove these fats from the paintwork. This should be counteracted by applying a paint preservative in good time to restore the fats and thus retain the high lustre.

Please use only the preservatives and washing agents recommended by your Porsche dealer. 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 paint preservative after the car wash and polish it dry to obtain a bright finish or simply add a preservative to the final rinse water and rub down with a leather.

Polishing

The use of polishes is recommended only after 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 stresses, 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.

Matt painted parts should not be treated with preservatives or polishes as this will spoil the matt 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 a suitable cleaner (tar, stain or 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 paint **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 (applicator or aerosol) and finish off with a top coat. The paint code and color number are found on a label close to lock on the left door pillar.

Undersealing

The underside of the car is durably protected by a factory-applied undersealing material.

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 the cold season and again in the spring - and the undersealing repaired as necessary.

The oil industry has developed undersealing and rust-proofing compounds based on bitumen or wax. Unlike conventional spray oils, these preservatives 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.

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.

Your 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.

Cleaning and preserving engine compartment

The engine compartment and the surface of the engine are treated with a corrosion inhi-

bitor at the factory. If grease solvents are used for cleaning the engine compartment or the engine itself, they invariably destroy the corrosion inhibiting coating. It is then absolutely necessary to have a durable preservative applied to all surfaces, body seams, joints and components in the engine compartment.

Grease the return springs of the accelerator cable after every engine wash.

Effective rust-proofing is particularly important during the cold weather season. If the car is driven frequently in areas where salt has been spread on the roads, the whole engine compartment should be cleaned thoroughly after the cold weather season to prevent the salt causing any lasting damage. A full underbody wash should 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 gives off deposits, particularly in strong sunlight, which collect on the insides of the windows. These deposits are augmented by impurities in the air which enter the car through the fresh air vents.

A luke-warm soap and water solution or a normal window cleaner can be used for cleaning the insides and outsides of win-

dows. Remember to clean the wiper blades as well. 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. Use a special sponge for removing dead insects from the windshield.

In winter a cleaning and anti-freeze agent must be added to the water used by the windscreen washer system. These agents are to be added in the ratio specified by the manufacturer.

Lights, plastics

Use only a 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 finishes.

Door, lid and window seals

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

Aluminum wheels

Pitting can occur if metallic particles which cause contact corrosion (e. g. brass or copper in brake dust) are allowed to remain on the aluminum 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. Non-acidic cleaning agents with a maximum pH of 10 may be used for this purpose.

Every three months you should coat the wheels with a non-corrosive grease (vaseline) after cleaning. Use a clean cloth to thoroughly rub the grease into the surface. Polishes which dissolve oxide, as frequently used for other metals, or abrasive tools or agents are unsuitable because they break down the paint-resp. oxide film.

Leather care

Cleaning is best performed with a white, soft woolen cloth and a weak soap and water solution. Don't use aggressive cleaners and rough cleaning materials. Take special care not to dampen the other side of perforated leather trim. Once you have cleaned the leather (especially the very stressed leather seats) treat it with »Karneol« preservative - Porsche part-No. 000.043.007.00 -. Ask your Porsche dealer for further details.

Leather should be cleaned and treated several times a year, depending on how quickly it becomes dirty. We recommend that "Karneol" be applied initially after the first few weeks or after the car has covered a few thousand miles.

The natural surface markings of leather skins, such as creases, healed scratches, insect bites and slight variations in shade and grain add to the attractiveness of the real leather product.

Fabric upholstery, carpets

Use only a vacuum cleaner or a medium stiff brush. Remove stains and spots with a lukewarm soap and water solution or a reputable spot remover.

Care of seat belts

If it becomes necessary to clean the belts, you can use any mild washing agent. Allow the belts to dry, 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.

Cleaning the antenna

To ensure perfect radio reception and smooth action, the telescopic antenna must be cleaned regularly (weekly) with a soft cloth moistened with oil. Operate the antenna several times while cleaning it. Use only light, non-resining oil, e.g., sewing machine oil, or special antenna cleaning cloths.

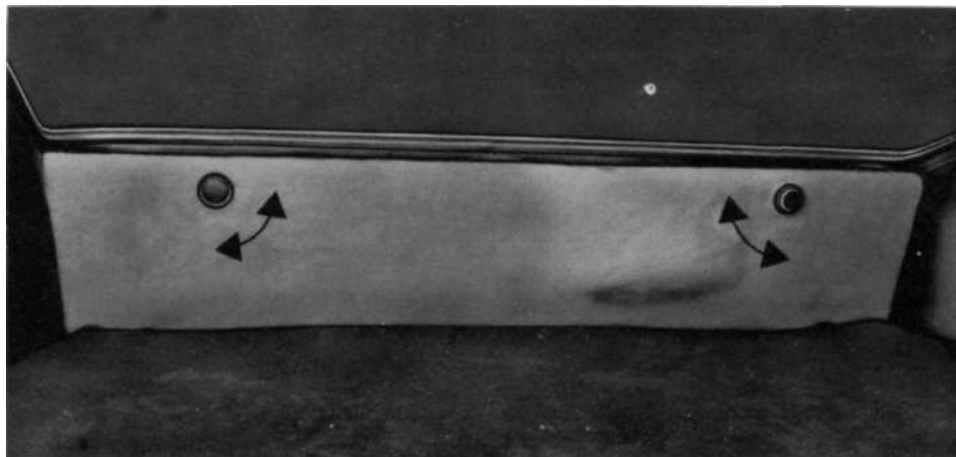
Storing your car

If you intend to store your Porsche for a prolonged period, please consult your Porsche dealer. He will be glad to advise you on the most suitable and necessary methods of corrosion protection.

Advice on maintenance and breakdowns

It is strongly recommended that all the necessary work on your vehicle be carried out by authorised workshops. The training and experience of the workshop personnel, the technical information from the manufacturer and the special tools and apparatus provide a good basis for the correct treatment of your Porsche.

When, however, you wish to work on your vehicle, this should only be done with great care. Only then, is the safety of your vehicle ensured. The engine should always be turned off and cool, before starting work on it.



Tool-kit

Before undertaking an oil-change on your vehicle, you should know how to dispose of the old oil. Under no circumstances should it be tipped into the drainage system, over the ground or into the waterways. If you cannot dispose of the oil properly, then let your workshop do the oil-change.

The tool-kit is in the tray fitted to the back panel of the vehicle. To remove the panel covering the tool-kit, both knobs must be turned through 90°. It contains all the tools necessary to remedy small faults and to enable you to do your own servicing. The jack is by the spare wheel.

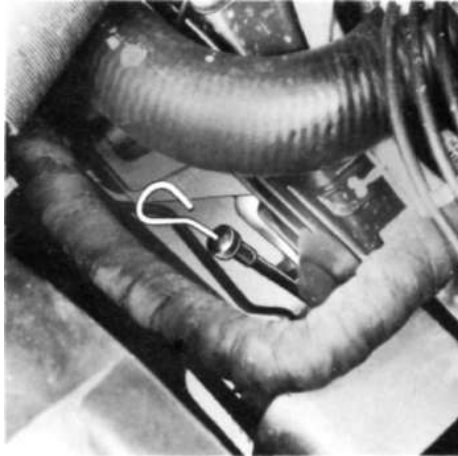
Some lands require that additional tools and replacement parts be carried in the vehicle. Please enquire before driving abroad.

The jack supplied with the vehicle should only be used when changing the wheels on the vehicle. When working under the vehicle, it should be supported on purpose-made stands for safety.

Engine oil level

The oil level should be between the two marks on the dipstick. If the oil level sinks below the lower mark, the central warning light will flash when the ignition is turned on. (See Central warning unit.) The actual oil level can only be determined however when the vehicle is standing horizontal.

It is incorrect to check the oil level immediately the engine has been turned off, because the circulating oil takes a few minutes to flow back to the sump. If the level is on the lower mark, only enough oil should be added to ensure that the level does not fall below this mark before oil is checked again. When the engine is heavily stressed, as in summer on the motorways with constant high speeds, or in the mountains, the oil level should be maintained near the upper dipstick mark as the oil has more cooling to do.



Checking oil level

1. Pull dipstick out and wipe with clean cloth.
2. Push the dipstick fully in, and then pull out and read the level. The difference between the upper and lower marks is approx. 1,5 liter.

Topping up engine oil

1. Unscrew the cap and pull out the dipstick.
2. Top up with an oil of the same quality and of a recognised brand.
3. Check oil level on dipstick, it should not be over the top mark.
4. Screw the cap up tightly.



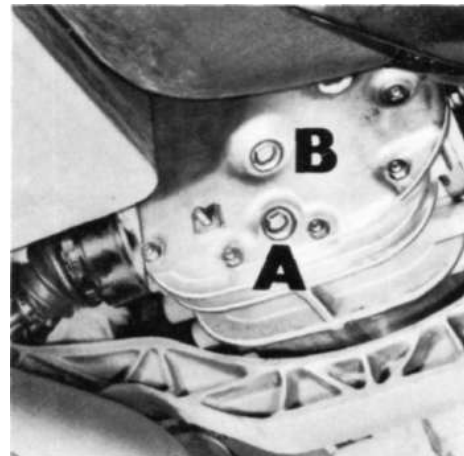
Engine oil change

For the intervals between oil changes see the maintenance plan.

The refill quantity is ca. 7.5 liters.

1. With the engine warm, remove the oil filler cap and the oil drain plug.
2. **Let** all the drain out and renew the filter. When renewing a filter, no undue force should be used to tighten it, (lightly oil the sealing ring) as it will then be very difficult to remove when doing the next filter change.

3. Screw the filter element up until it contacts **the** sealing ring.
4. Screw the filter element a further half a turn.
5. Clean the drain plug and replace it, using a new sealing ring.
6. Pour the new oil in, check the level and replace filler cap.
- 7 Run the engine and check for leaks.
8. Run the motor and check for leaks.

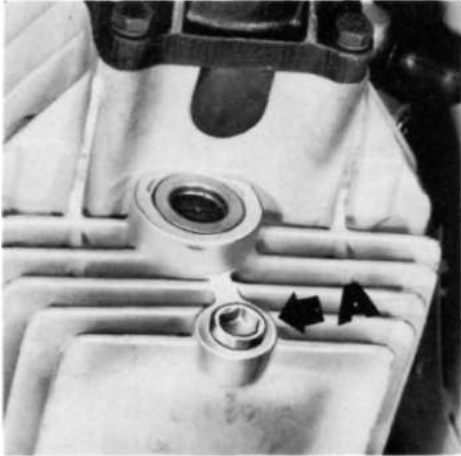


Oil level in gearbox

To check the oil level in the gearbox, the plug (B) must be wiped clean and removed by unscrewing.

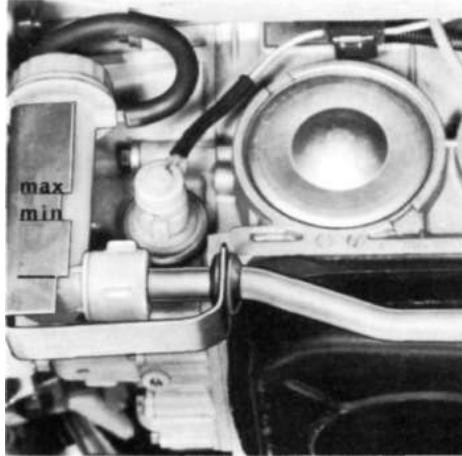
With the vehicle standing horizontally, the oil (cold) should be topped up to the lower lip of the hole.

To refill the gearbox, only use the oils recommended in the table "Filling quantities".



Manual gearbox Oil change

To change the gearbox oil, both drain plugs (A) must be removed by unscrewing. They are to be found at the front and back of the gearbox.



Automatic gearbox

Checking oil level

The level of the oil should be checked regularly, even between services.

The level can be seen through the transparent reservoir, that is mounted on the back end of the gearbox housing. The fluid level must be between the max. and min. marks when at normal operating temperature.

To check the level, the vehicle must be standing level. The selector must be in position N and the engine running at tick-over.

The difference between the two marks is ca. 0.2 liter (1/2 pint).

Should oil leakage be visible the next workshop should be called in to rectify the fault.

Oil change

When changing the oil, ca. 5.5 liters (1.25 Imp. galls.) are required to fill the gearbox and torque convertor.

The filter must be renewed at every oil change, and the level must be up to the mark underneath the min. mark.

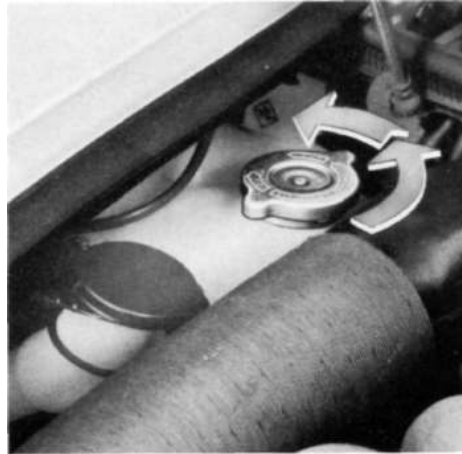
To refill, only use the oils recommended in the table "Filling quantities".

For fluid changing intervals see the maintenance plan.

If too much oil is added, inadvertently, it must be removed.



Right-hand drive



Left-hand drive

Cooling system

The cooling system capacity is approx. 16 liters. The cooling fluid is a mixture of approx. 8.8 liters softened water and approx. 7.2 liters of cooling fluid additive, and gives frost protection down to -30°C , as well as protection against corrosion. For greater frost protection, see the chapter "Filling capacities".

Therefore, if the needle on the coolant temperature gauge moves into the red zone, for example when driving fast in very hot weather, it is advisable to reduce engine speed intermittently.

Cooling fan

The cooling fan is driven by a V-belt through a temperature-controlled, speed-governing visco-coupling. When the engine is cold, the fan speed is only a fraction of the engine speed; when the cooling system is warm, fan speed is the same as engine speed up to approx. 3500 rpm. The fan speed does not exceed this value, even at higher engine speeds.

Topping up the coolant

There must always be some coolant in the expansion tank.

Since the expansion tank is transparent, there is no need to remove the cap to check the coolant level.

When cold (approx. 20°C) the coolant should be up to the level of the joint in the expansion tank. When the engine is warm, the coolant level should be above this line.

As engine temperature rises, superfluous coolant is discharged through the pressure relief valve in the tank cap.

WARNING: Do not remove the expansion tank cap when the engine is hot, otherwise you may be scalded.

To remove the cap proceed in two steps: When the engine is hot release excess pressure by turning the cap to the first stop. Protect your fingers! The cap can then be turned further to remove it.

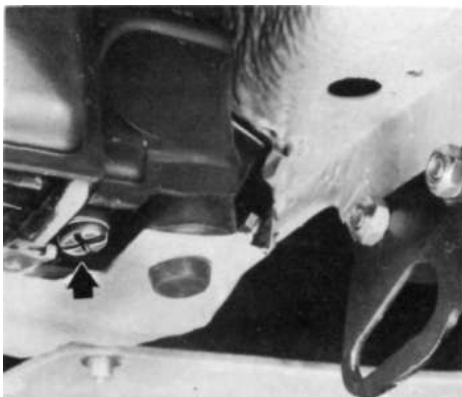
When the coolant level drops below a certain level the central warning light on the instrument panel will light up; the coolant level must then be topped up.

To guard against corrosion, the mixture strength of the cooling fluid should not be altered, **so even in warm weather, never top up the system with just water.**

The system should only be topped up with a mixture of soft water and cooling system additive. For mixing ratios see the chapter "Filling capacities".

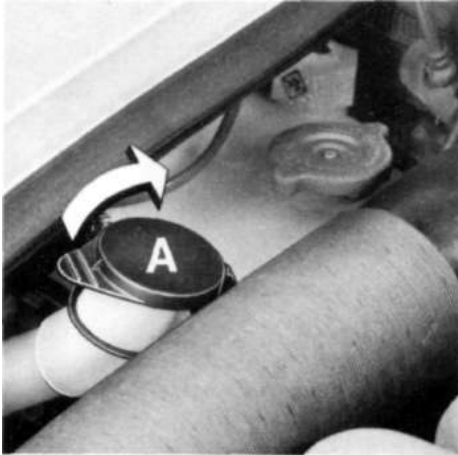
To avoid damaging the engine, **cold** fluid should only be added to a **cold** engine.

Note: There should seldom be need to top up this sealed cooling systems. If there is a considerable fluid loss, it probably means a leak in the system. This should be checked immediately by an authorised dealer.



Draining and refilling the cooling system

1. With the engine cool, set the heating lever to "**warm**" and remove the cap from the expansion tank.
(On cars with automatic air conditioning, set temperature slide control to 30°C (86°F) and switch on the ignition).
2. Remove the drain plug from the radiator, and catch the fluid.
3. Remove the two drain screws located left and right in the engine and catch the fluid.
4. Renew the sealing washers on the drain plug for the radiator and the two engine drain screws, and refit.
5. With the engine stationary, refill the system as full as possible.
6. Run the engine until it reaches normal operating temperature, checking the fluid level constantly. If necessary, top up the level in the expansion tank to the middle line.
7. Refit cap to expansion tank.



Left-hand drive

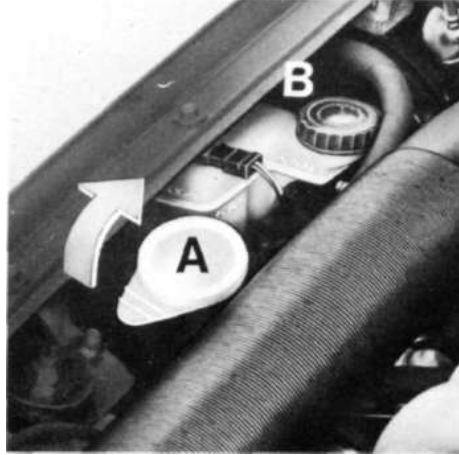
Screenwash water container (A)

The transparent water container is in the right hand side of the engine compartment and has a capacity of approx. 8 liters.

It is advantageous when you add a screen cleaning and anti-freeze agent, in the ratio recommended by the manufacturer, to the water. Clear water is in general not sufficient to clean the windscreen and the headlights.

Brake fluid reservoir (B)

The brake fluid reservoir is mounted in the engine compartment. It has three cham-



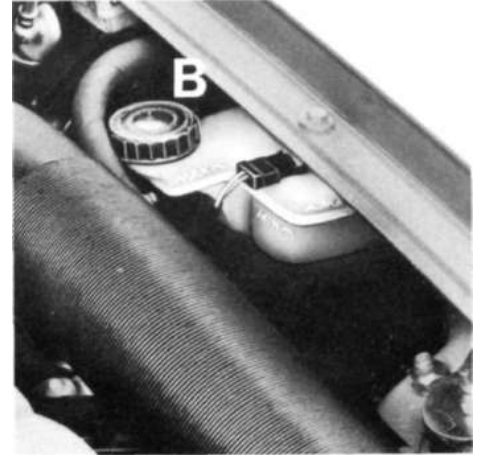
Right-hand drive

bers: one for each of the two brake circuits, and one for the clutch. The screw cap for the combined filler neck has a ventilation hole, which must always be kept free.

The reservoir is transparent, so that the fluid level can be controlled from the outside. The level should always be between the max. and min. marks.

A nominal dropping of the fluid level will occur during the use of the vehicle as the brake disc pads wear and automatically adjust. This is quite normal.

Should the fluid level drop appreciably, the central warning light will come on. (See cen-



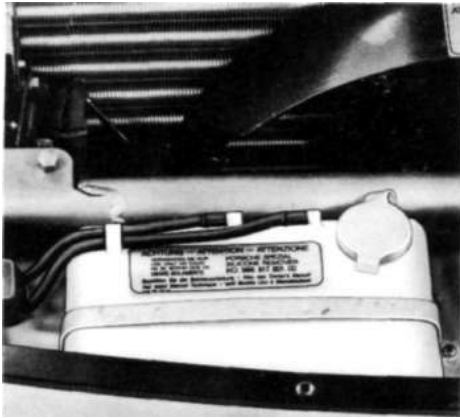
Left-hand drive

tral warning unit.) Consult an authorised dealer immediately and have the braking system checked.

Brake fluid is hygroscopic! A too high water content in the brake fluid adversely affects the braking system, and therefore the brake fluid should be changed every two years by an authorised dealer.

To top up the level, only use new (unused) brake fluid. For specification and amounts see the chapter "Filling quantities".

Note: Brake fluid is corrosive, and attacks paintwork.



Container for concentrated wash system

The fluid reservoir is mounted at the right on the front bonnet lock cross member and holds approx. 0.6 liters of cleaning fluid. To avoid damage to the paintwork, only "Porsche special silicone remover" should be used. Other cleaning agents are not suitable for the concentrated washer system, but if this special solution is not obtainable, a proprietary solution can be used, following the manufacturers recommendations for mixing quantities. "Porsche special silicone remover" is proof against frost down to -25° C.



Fuel tank

The fuel tank filter is set in the rear quarter panel behind the right hand rear wheel.

An extra area is built in to stop the fuel from overflowing when it warms up. This area should not be filled when filling up with fuel. After filling up, the filler cap should be screwed on until it is felt to be fully home.

When refuelling, the engine should always be turned off.

The fuel tank holds approx. 86 liters (19 galls.). When the central warning light and the fuel tank warning light in the instrument

console come on, you should refill the tank. You have only about 8 liters (7 Imp. qts.) fuel left.

Fuel

Your Porsche will run on any grade of fuel with an octane rating of 98 or higher.

To prevent ignition knock (pinging) when driving in countries with low-octane fuel, you should accelerate gently, change speeds in good time and avoid driving at top engine speeds. If you intend to stay in one of these countries for some time, you should consult your Porsche dealer regarding adjustment of the ignition timing.

Power assisted steering

With power-assisted steering, the turning action on the steering wheel is assisted by a hydraulic mechanism. At low engine speeds, e. g. when parking or when driving slowly, the power-assisted steering is fully effective. The power assistance reduces with increasing engine revolutions or increasing vehicle speed and has the effect of producing increasingly positive steering action.

The audible rushing noise that occurs at full steering lock is a characteristic of the construction and does not indicate a fault in the steering assembly.

Note that when the engine is not running (when being towed) or when the hydraulic steering mechanism is faulty, there is no power-assist action present. In this case, a greater effort is required to steer the vehicle.



Container for hydraulic fluid

The reservoir is mounted on the left hand inner wheelhouse in the engine compartment.

To check fluid level:

1. Remove cap from reservoir.
2. With the engine running, the fluid level should be up to the mark in the reservoir. If necessary top up with hydraulic fluid. To refill, only use the oils recommended in the table "Filling quantities".
3. Replace cap on reservoir, ensuring that the sealing ring sits properly.



Changing air filter

1. Release the fixing clips and remove top of filter housing complete with filter element.
2. Clean out filter housing and renew the filter element.
3. Carefully replace top of filter housing and element, and refasten fixing clips.

Tyres and tyre care

Steel braced radial-ply tyres are high quality engineering products. The life of your tyres depends not only on correct inflation and wheel alignment but also on your style of driving: Full throttle acceleration, very high cornering speeds and hard braking increase tyre wear. Moreover, tread wear is greater on rough road surfaces and in very hot weather. Like the engine, tyres need to be run under the correct operating conditions at all times. If treated properly they will be a long lasting safety element on your car. The following points demonstrate what is necessary. Your tyres will thank you for regular care.

1 Tyre pressure

It is absolutely essential to keep your tyres at the right pressure.

The tyre pressures are shown in the "Technical data" and must always be regarded as minimum pressures!

Always check pressures when the tyres are cold. Never let air out of hot tyres!

The maximum air pressure of 36 psi stamped on the tires only applies to the U.S. classification is not to be confused with normal service pressures. In Europe, the tire can be inflated to higher pressures.

Check regularly every 14 days.

2 Valve caps

Valve caps protect the valve against dust and dirt as well as leaks. Always screw the caps firmly into position and replace missing ones immediately. Check every 14 days.

3 Load and speed

Do not overload your car. Never exceed the specified roof and trailer coupling loads. A combination of overload + low tyre pressures + high speed + high ambient temperatures is extremely dangerous.

4 Winter tyres

Do not exceed the maximum speed limit (e. g. 160 km/h /100 m.p.h. for M+S [Q] radial-ply tyres).

An appropriate sticker must be affixed in the driver's field of vision if the tyre's maximum speed is less than the car's maximum speed.

5 Tread

The risk of aquaplaning increases as the tread depth decreases. Appearance of the wear indicators (webs in tread grooves 1.6 mm high) should be taken as a signal for early tyre replacement.

Check regularly, particularly before and after long journeys.

6 Lateral and radial run-out

Take the precaution of having the tyres balanced in spring (summer tyres) and before the start of winter (M+S tyres). Note that only the specified weights may be used for balancing. (Self-adhesive weights must not come into contact with cleaning agents as they might otherwise drop off.) Uneven tread wear indicates that the wheel is not running true. A specialist should be consulted in such a case.

See also "Wheel alignment".

Uniform tyre wear can be achieved by periodically changing round the wheels (e. g. after 5000 km/3000 miles or longer). But only change the wheels at one side from front to back and vice versa so that the tyres always run in the same direction.

Balancing and checking should be performed by a specialist workshop.

7 Tyre damage

Examine tyres at regular intervals for foreign matter, nicks, cuts, cracks and bulges (side-walls). In case of tyre damage where it is uncertain whether there is a break in the ply with all its consequences or tyre damage caused by thermal or mechanical overloading due to a loss of pressure or any other prior damage, we recommended that the tyre be replaced for safety reasons.

If one faulty tyre is replaced it should be no-

ted that the difference in tread depth on one axle must not be more than 30%.
Visual inspection.

8 Tyre replacement

The tyres approved for your car are listed in the vehicle log book. Only buy new tyres of the same make and type which comply with these specifications. Always replace the tyres on one axle at a time because

- a) the rear axle is more critical from a stability point of view and
- b) in wet conditions it is the front wheels which hit deep water first, while the rear wheels run mostly in the track of the front ones.

Make sure that new valves are fitted whenever the tyres are changed. During their initial break in period new tyres do not have their full grip. It is therefore necessary to run them at only moderate speeds during the first 100-200 km (60-120 miles). Never use different types of tyre. Have tyres fitted by a specialist.

9 Curbs

Hard impact against curbs (traffic islands too) is dangerous. It can result in hidden tyre damage which only becomes noticeable later on (risk of high speed failure); tyres have a memory!

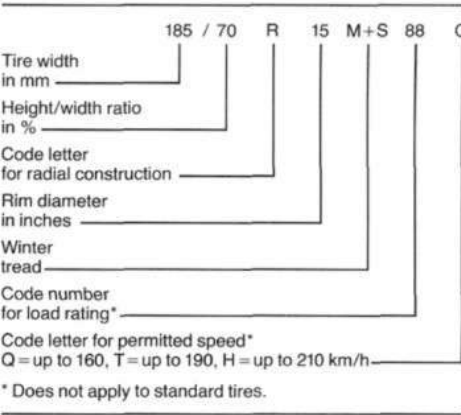
For this reason you should only drive over curbs slowly and preferably at right angles. Take care when parking at or on curbs.

10 Tyre storage

Always store tyres in a cool, dry and dark place. Tyres not on rims should be stood up. Avoid any contact with fuel, oil or grease.

Tyre designations

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



During the transitional period tires may bear a dual designation, e. g., 185/70 SR 15 M + S Q. If so, the valid designation is the new one.

The old designation continues to be used for VR tires, e.g., 225/50 VR 16 (VR = code letter for radial tires for speeds above 210 km/h).



Spare wheel

The spare wheel is in the luggage compartment under a cover plate. Behind the spare wheel is the jack, and in the spare wheel is the compressor and a plastic sack in which the put the changed wheel to avoid making the luggage compartment or car interior dirty.

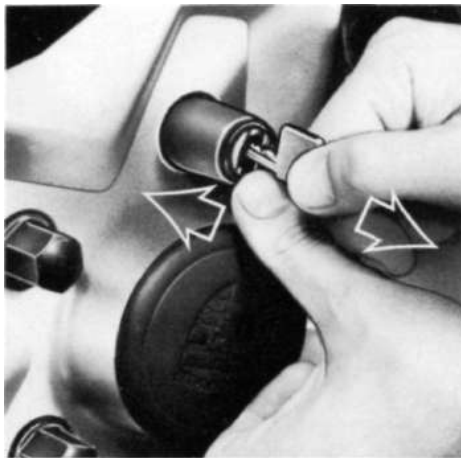
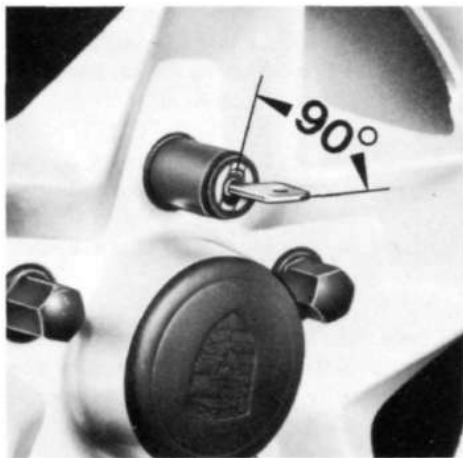
The spare wheel is fitted with a collapsible tyre, and when it is needed, it must be inflated with the electric compressor to a pressure of 2.2 bar (32 psi).

The collapsible tyre must only be mounted on the front axle, which means that if a rear tyre punctures, the front tyre on that side of the car must be mounted on the rear, and the spare wheel at the front. This gives better handling properties for the vehicle, and reduced tyre wear. This is especially so for vehicles with limited slip differentials.

The collapsible tyre expands through warming up as it is used. When deflating the tyre, (completely remove the valve core) it requires several hours to cool down and thereby assume its original form, before it can be replaced in the well in the luggage compartment.

The collapsible tyre can be neither repaired nor mounted in a normal workshop. All work on these tyres must be left to the manufacturer.

The spare wheel with the collapsible tyre may only be used in an emergency, for short distances, and then only on the front axle. The maximum speed for this tyre is 100 km/h (60 mph) and this speed must not be exceeded because of the changed handling characteristics of the vehicle, and the wearing properties of the tyre. The same law applies to depth of tread for this tyre, as for the normal tyres.



Lock-up wheel nuts

The wheels of your vehicle can be made 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 same lock is used on all four wheels.

To remove the wheel nut lock, take off the plastic cap, insert the key as far as it will go into the lock, turn approx. 90° to left or right and remove the sleeve with the key.

To **fit** the wheel nut lock, insert the key as far as it will go into the lock and slip the sleeve on to the wheel nut.

Before removing the key check whether the sleeve is up against the shoulder of the wheel nut.

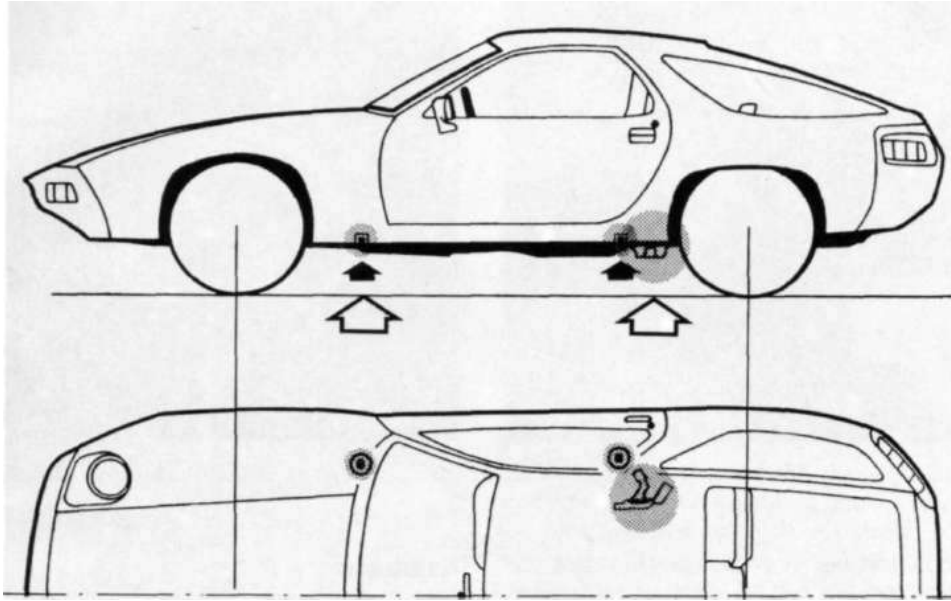
When removing the key press the sleeve against the wheel nut. Fit the plastic cap.

It is not usually necessary to re-balance the wheels.

Puncture

When a tyre is punctured, drive as far over to the offside of the road as possible, and if necessary turn the hazard warning lights on and set up a warning triangle at the correct distance behind the car.

The ground should be firm and even before jacking up the car. The handbrake must be firmly applied, and the wheels on the other side of the car should be chocked.



Black arrows: Jacking points for vehicle jack
 White arrows: Lifting points for inspection platform or workshop jack

Order of working

1. Loosen front wheelscrews slightly.
2. Insert the car jack, with it tilted slightly away from the bodywork, in the respective jacking point (black arrow).
3. Jack the car up until the wheel to be changed is clear of the ground.
4. Remove wheelscrews, remove wheel and mount the spare wheel on the front axle.

In the case of a defective rear tire jack the rear of the car up, after changing the front wheel, and replace the defective rear wheel with the front wheel.

5. When replacing the wheelscrews, do not tighten too hard yet, and make sure that the round surfaces of the screws sit properly in the depressions in the wheel, which should be clean.
6. Screw the compressor hose first onto the tyre valve, then plug the compressor into the cigarette lighter socket. The necessary tyre pressure is reached in a few minutes.
7. Check tyre pressure with pressure gauge.
8. Let the car down from the jack, and remove jack. Tighten the wheelscrews.

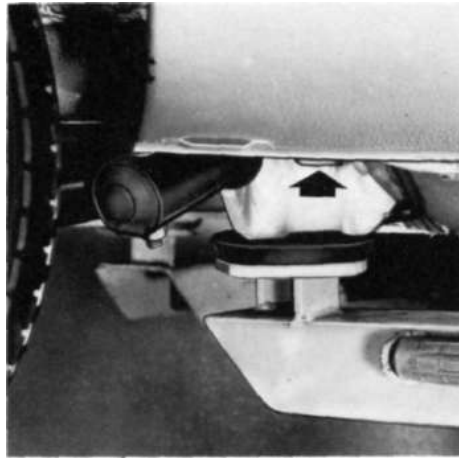
After changing a wheel, the wheelscrew torque must be checked with a torque wrench as soon as possible. (Tightening torque 130 Nm, 13 kpm.)



Lifting the vehicle with its own jack

The jack may only be used at this point.

Warning: The jack is only provided to lift the vehicle. If work is to be carried out under the vehicle, the vehicle must be supported on suitable chassis stands or similar.



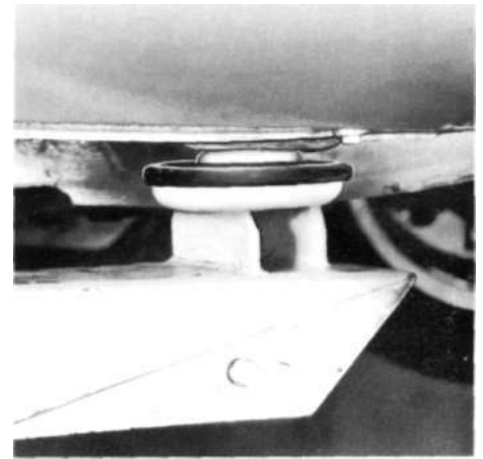
Lifting the vehicle with a lifting platform or trolley jack

Before driving over the lifting platform, ensure that there is enough clearance between the underneath of the vehicle and the lifting platform.

The car may only be lifted from the points shown in the pictures.

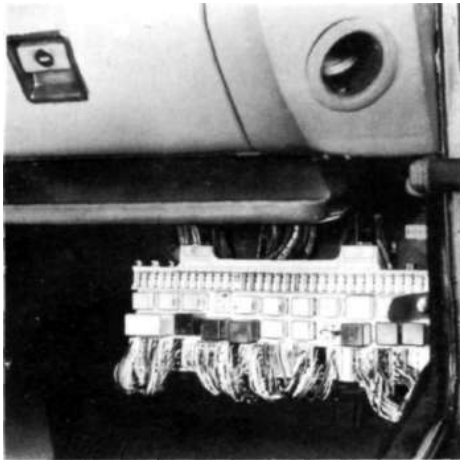
Front: The normal jacking point.

Rear: Bearing bracket for back axle control arms.



A trolley jack may only be used at the same 4 points as for the lifting platform, and also under the middle of the back axle. To avoid damaging these lifting points, a wooden block or a rubber pad should always be inserted between the vehicle and the jack.

The vehicle should never, under any circumstances be jacked up from under the oil sump or the gearbox, as this could cause severe damage.



Fuses and relays

To avoid short circuit or overloading damage to the electrical cables or apparatus, the individual circuits are protected by fuses.

The main fuse box is mounted in the passenger footwell under the floor panel. To change a fuse or relay, the carpet must be folded back, and the floor panel hinged upwards. If a considerable amount of work is necessary on the fuse box, the battery earth cable should be disconnected.

Changing a fuse

Switch off the affected system.

A blown fuse is evident from the burnt through wire. To replace the fuse, it must be pulled out of the clips. The fuse should only be replaced with a fuse of the same rating.

Fit the new fuse with the wire visible. When fitting, avoid touching the wire or bending the clips that hold the fuse. The fuse must sit firmly in the clips.

Warning: Never repair a fuse with wire or silver foil as serious damage could result. Should a fuse blow several times, an authorised workshop should be consulted.

At the top edge of the fuse box is space for spare fuses. It is advisable to carry spare fuses of the different ratings in the vehicle. Fitted underneath the fuses are relays for various electrical switching functions. Changing of defect relays should be left to an authorised workshop.

Relay function

- I + II Double relay for rear screen heating
- III Not used
- IV Not used
- V Flasher unit
- VI Window regulator
- VII Headlight washer pump
- VIII Not used
- IX Not used
- X Horns
- XI Not used
- XII Fog lamps
- XIII Wiper delay
- XIV Starter relay
- XV Concentrated wash system
- XVI Not used (on US vehicles relay for L-Jetronic)
- XVII Fuel pumps
- XVIII Blower fan for additional air con. cooler
- XIX+XX Double relay for retractable headlights
- XXI Fresh air blower
- XXII Defrost pos. (blower pos. 4)

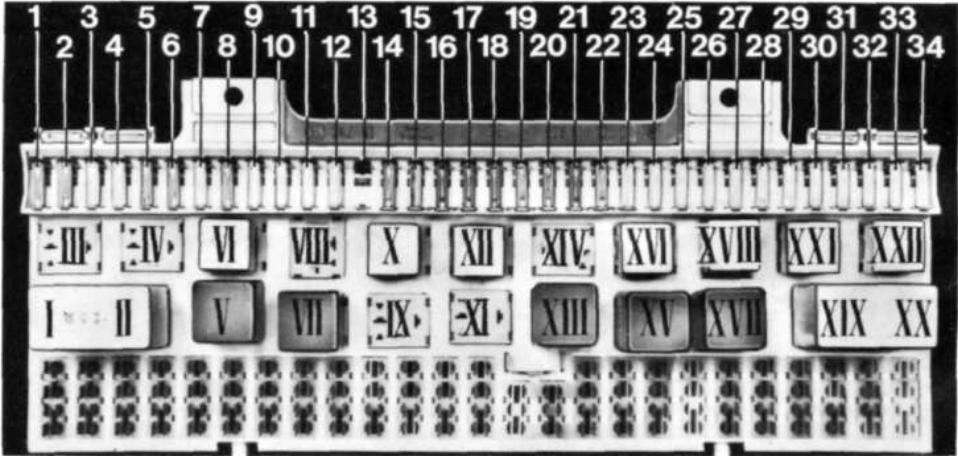
The time relay for the seat belt warning is in the middle console in front of the radio.

The relay for the rear screen wiper is at the rear left behind the tool tray. The relay for the automatic seat movement (forwards) is under the seat.

Table of fuses

Fuse function Amps.

1	Foglamps	16
2	Aux. driving lamps	16
3	Engine compt. & No. plate lights	8
4	Switch illumination	8
5	Cigarette lighter	16
6	Windscreen wipers, concentrated wash system	16
7	Not used	
8	Sliding roof	16
9	Reversing lights, mirror adjustment, rear screen wiper	8
10	Brake lights & Tempostat	8
11	Instrument-& switch illumination	8
12	Combination instruments & warn, lights	8
13	Not used	
14	Seat adjustment	25
15	Horns, aerial motor & reset for rear screen wiper	16
16	Aux. cooling fan for air conditioning	25
17	Fresh air fan	25
18	Rear screen heating	25
19	Headlight motor	16
20	Headlight wash pump	16
21	Window regulators, central door locking	25



22	Fuel pump	16
23	Int. lighting clock	8
24	Main beam left	8
25	Main beam right	8
26	Dipped beam left	8
27	Dipped beam right	8
28	Side marker light left	8
29	Side marker light right	8
30	Blinker left front	8
31	Blinker left rear	8
32	Blinker right front	8
33	Blinker right rear	8
34	Rear fog lamp	8

Should you require a wiring diagram your Porsche dealer will be pleased to assist you.

Two 400-mA-fuses for the electric central locking system are fitted above the central electric board.

Battery check and care

Because of the danger of short circuiting, the battery should always be disconnected before starting any work on the electrical system. Disconnect the battery earth strap as shown by the arrow in the picture.

Disconnecting the battery whilst the engine is running destroys the alternator. This applies also to vehicles with a built in battery disconnection switch.

Remember that only a well charged battery can deliver the necessary energy to start the engine. The condition of the battery should therefore be checked regularly. The battery is located in the back of the vehicle, and is reached via a flap in the spare wheel well. Before the battery is to be charged with a heavy duty charger, it must be disconnected, or otherwise the alternator can be destroyed.

The battery capacity is reduced by lower temperatures. However, during the winter months, the demands made upon the battery increase because of the need for more lighting, heating fan, windscreen wipers etc. Therefore check, especially when only making short journeys, that all unnecessary electrical systems are turned off.

Checking the acid level

With the vehicle standing level, remove all the battery stoppers, and check that the acid level in every cell reaches the full mark. If the battery has to be topped up, use only distilled water, not acid. During the summer months, and in warmer climates, the battery level should be checked more often.

Checking the specific gravity of the acid

In a battery in good condition, the state of charge of the battery can be determined by the specific gravity of the acid, which is measured in Kg/dm^3 , determined with the use of a hydrometer.

Checking the voltage of the battery

The voltage of a battery can only be measured with a special instrument, and should therefore be left to an authorized workshop.

Care of the battery

The battery poles must be kept clean. They should be smeared with a suitable grease, and check that the battery terminals are properly fitted.

Check that the battery stoppers are seated correctly, and that the vent holes in them are not blocked.

Never let any acid come into contact with clothing, or any parts of the vehicle. Should



battery acid be splashed or spilled, it should be immediately neutralised with a soda solution.

Due to the explosive gases given off by a battery, never go near it with a naked flame or fire.

A battery loses its charge when not being used, so if the vehicle is laid up for any period, the battery should be charged approx. every 6 weeks, to keep it in good condition. A battery left discharged for a length of time will be ruined. Check, and if necessary top up the acid level, every time the battery is charged.

Renewing bulbs

To avoid short circuits when changing bulbs, the respective circuit should be turned off.



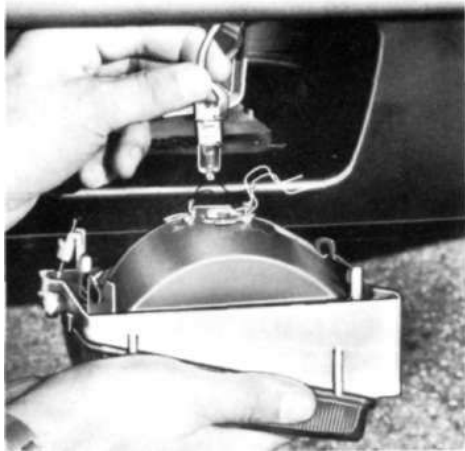
Bulbs should be clean and grease free, therefore never touch the glass with your bare hands, always use a cloth or a soft piece of paper.

For safety reasons, you should always carry spare bulbs in the vehicle, so that any bulb can be immediately renewed when it blows. Remember when travelling abroad, that in some countries it is compulsory to carry spare bulbs with you.

Only use soapy water to clean plastic light lenses, never a chemical detergent.

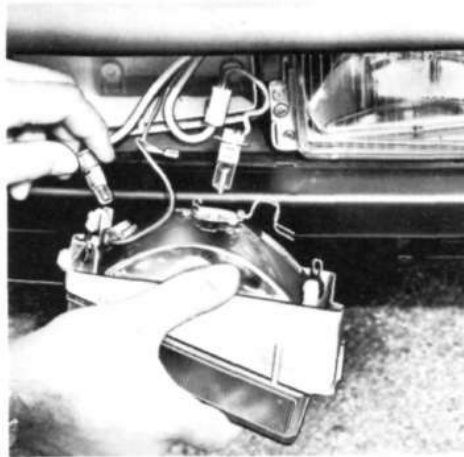
Headlights

1. Elevate the headlights by turning them on, and then turn the ignition off. Remove the screws from the headlight housing and then the housing itself.
2. Remove the spring holding the bulb cover, and remove the bulb cover.
3. Pull back the spring holding the bulb, and remove bulb.
4. When fitting the new bulb, ensure that the tag on the bulb fits in the cutout in the lamp surround. Refit bulb retaining spring and bulb cover with it's spring.
5. Refit headlight housing and check that the light functions, and that it is properly adjusted.



Auxiliary driving lamps

1. Remove screws from lamp surround and remove surround.
2. Remove the **lamp fixing screws** (see arrows) and pull out the complete lamp.
3. Remove cable socket and bulb retaining spring. Refit new bulb ensuring that it sits properly.
4. Refit bulb retaining spring and cable socket.
5. Refit the lamp and the fixing screws. Check that the lamp functions and that it is properly adjusted.



Front side light

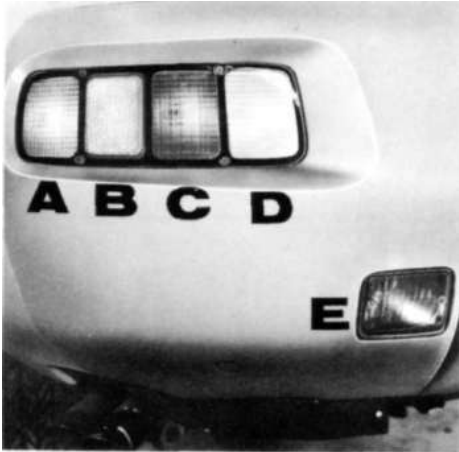
The front side light is built into the outer auxiliary driving lamp.

1. Remove complete lamp, and then the sidelight bulbholder.
2. Refit new bulb and replace lamp.
3. Check function of light.



Front blinker light

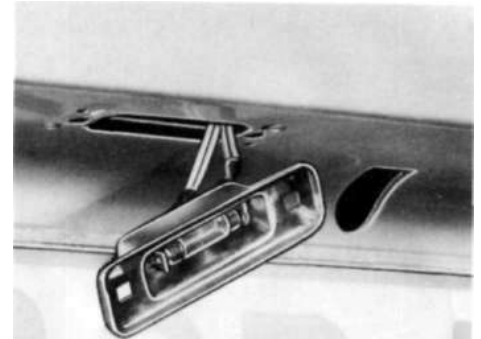
1. Remove screws holding the lens, and remove lens.
2. Remove bulb from bulbholder, and fit new bulb.
3. Replace lens, and refit screws, tightening gradually in sequence.
4. Check function of light.



Rear lights

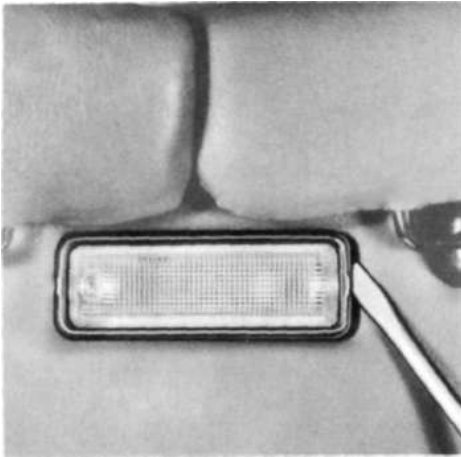
A-Blinker light
B-Back light
C-Brake light
D-Reversing light
E- Rear fog light

1. Remove Phillips head screws and light lens.
2. Remove old bulb and replace with new.
3. Replace lens and tighten up diagonally opposed screws gradually.
4. Check that the light functions.



Number plate light

1. Remove both screws and lamp housing.
2. Replace defective bulb and refit housing, ensuring that it sits properly on the gasket.
3. Check that the light functions.



Interior lights

The following description applies to the interior lights mounted in the roof lining and the footwell lights mounted forward in the lower part of the door trim.

1. Prise the complete light out of the cutout in the headlining carefully with a screwdriver.
2. Remove the defective bulb from the spring clips and refit new bulb.
3. Carefully press the light, first one side, then the other, into the headlining cutout. Check the function of the light.

Ashtray lights

1. Remove the two screws in the ashtray housing and pull the ashtray upwards and out. Slide the bulbholder with bulb out of the housing.
2. Pull out defective bulb and replace with new. Slide bulbholder back into the housing.
3. Check that the light functions by turning on the vehicle lights.
4. Refit ashtray.

Bulb table

Function	Wattage	Specification	Format	Socket
Headlight	60/55 W	Headlight bulb H4	1 R+1R	P43t-38
Aux. driving lights	55 W	Headlight bulb H3	YC	PK22s
Headlight LHD*	60/50 W	Sealed beam 7"	SAE	(6014)
Headlight RHD*	60/45 W	Sealed beam 7"	SAE	(7002)
Side- and additional blinker lights	4 W	Tubular bulb	HL	BA9s
Sidelights & side marker lights*	5 W	Round bulb	R19/5	BA15s
Number plate light & make-up mirror	5 W	Soffit bulb	L	SV8.5-8
Interior and luggage compartment lights, footwell lights	10 W	Soffit bulb	K	SV8.5-8
Glove comp. light	3 W	Soffit bulb		SV7-8
Blinker, brake, reversing and rear fog light	21 W	} ** Single filament	P25-1 (RL)	BA15s
Blinker, brake, reversing and rear fog light*	32 cp		SAE	(1073)
Back light, engine compartment light	10 W	} ** Round bulb	R19/10(G)	BA15s
Back light*	6 cp		SAE	(89)
Cigarette lighter, clock	2 W	Instrument bulb	J	BA7s
Belt warning light, ill. switch lights	1.2 W	Instrument bulb	WT5/1.2(W)	W2x4.7d
Combination instrument illumination, alternator warning light	3 W	Instrument bulb	WT10/3(VA)	W2.1x9.5d
Instrument warning lights	1.2 W	Instrument bulb	W5	
Door guard lights	2 W	Tubular bulb	H	BA9s

* Valid for some export models only

** Only use bulbs of the same type in pairs



Upper adjustment screw = lateral adjustment
Lower adjustment screw = vertical adjustment

Headlight adjustment

Your Porsche is fitted with a headlight beam adjustment device inside the vehicle, so that optimum headlight illumination can be obtained irrespective of the loading of the vehicle, and without dazzling oncoming drivers.

The basic adjustment of the headlights can only be performed on a special machine. This should be carried out on the vehicle in a ready to drive condition, and a full fuel tank. The driver's seat must be loaded with a 75 kg weight, or with a person, and the tires must

be inflated to the manufacturers specifications. With the vehicle in this condition, it must be rolled several meters to allow the road springs to settle, before starting to adjust the lights.

The adjuster knob for the interior headlight setting must be in the neutral position, i.e. the white mark on the knob directly over the mark "O" on the rosette (see headlight beam regulator). To adjust the headlights, the screws must be removed from the headlight housings, and the housings removed.

Adjusting screws

Each headlight has two adjusting screws, one for lateral setting, and one for vertical. By turning these screws left or right, the corresponding adjustment in beam position is effected.

Adjustment of auxiliary driving lamps

The auxiliary driving lamps are adjusted such, that the centre of the light beam is the same height as the centre of the lamp.



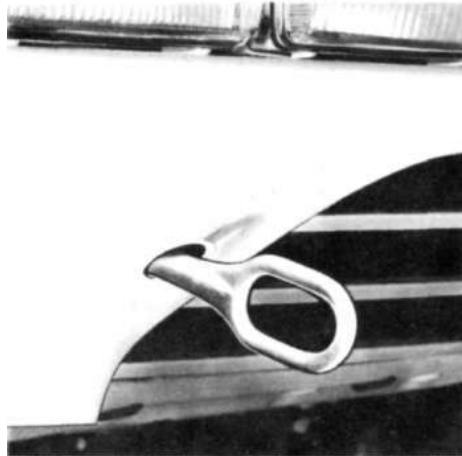
Manual operation of the headlights

If your vehicle is equipped with asymmetrical dipped beam headlights, and you travel abroad, where the traffic drives on the other side of the road, you should stop at the border, and blank off the prism section of the light diffusing lens with opaque adhesive strip. The dipped beams will then be symmetrical, and will not dazzle oncoming drivers.

If, by reason of a malfunction in the headlight elevating motor, the headlights cannot be raised or lowered, the knob on the driveshaft of the elevating motor can be manually turned, to raise or lower the headlights. **The** elevating system is so designed that, to raise or lower the headlights, only one turn to the left with the knob is necessary.

Do not try to turn the elevating motor knob when the headlights are functioning normally from the light switch as they should, because of the danger of being injured.

By virtue of the switching principle, the elevating motor drives the elevating mechanism another half a turn (180°) that is to say that after several turns of the knob a contact is closed so that when the headlights are functioning normally, they go up and come down immediately.



Remember, when the engine is not running, that no servo assistance is given, and more power is required by braking and steering.

For towing vehicles fitted with automatic transmission please adhere to the regulations to be found in the sections "Automatic Transmission".

Towing

The towing eye is located in the tooltray in the rear of the car.

To tow another vehicle, the towing eye must be screwed into the hole in the rear bumper above the rear number plate. Always screw the towing eye right in.

Should it be necessary for your Porsche to be towed, the towing eye must be screwed into the right hole beside the cooling radiator, at the front of the car. The plastic stopper must first be removed.

Always take into account the necessary laws governing towing.

When you tow another vehicle, it must not be heavier than your Porsche.

During towing, always keep the towrope taut, but avoid sudden jerks on the rope. The vehicle being towed should have the ignition turned on so that the brake and direction indicator lights function, and that the steering lock is released.

Tow-starting

Vehicles with automatic transmission cannot be tow-started. If the battery is faulty or completely flat, the engine can only be started after replacing the battery or by using jump leads.

If your vehicle is tow- or roll-started the central warning light and the individual warning lights can only be turned off by switching the engine off and restarting it with the ignition key (see also "Warning Unit").



Emergency Starting

Should the engine not start because the battery is flat e. g. in winter or after the vehicle has stood for a long period, the battery from another vehicle can be used with the aid of an auxiliary battery cable. The following points should be observed:

1. Both batteries must be 12 volt. The capacity (Ah) of the battery supplying current should not be significantly below that of the discharged battery.
2. Only battery cables with adequate diameters should be used. Observe manufacturers specifications.
3. A discharged battery can freeze at -10°C . A frozen battery must be thawed out before connecting the battery cables.
4. There should be no contact between the two vehicles otherwise current may flow when the positive pole is connected.
5. The discharged battery must be correctly connected to the vehicle electrical system.
6. Run the engine of the vehicle supplying the current.
7. **Connect the auxiliary battery leads in the following order:**
First fix one end of the (+) lead to the (+) clamp on the right at the front of the engine compartment (arrowed). Then connect the other end of the lead to the (+) terminal of the feed battery.
Now clamp one end of the (-) lead to the (-) terminal of the feed battery, then attach the other end to the cylinder block or the transverse strut in the engine compartment (arrowed).
8. Start engine as described in the section "Starting the engine".
9. When the engine is running disconnect the cables in the reverse order.

Care should be taken that the cables do not make contact with each other and that the positive cable does not come into contact with other electrical terminals - danger of short circuit!

Technical data

Engine M 28.11/12

No. of cylinders	8
Bore	97 mm / 3,82 ins.
Stroke	78,9 mm / 3,11 ins.
Displacement	4664 cm ³ / 284,60 cu in.
Compression ratio	10:1
Horsepower DIN rated	221 kW (300 H.P)
at revolutions/min	5900
Torque DIN rated	385 Nm (39,2 kpm)
at revolutions/min	4500
Fuel octane rating	98 RON (premium)

		Manual Transmission	Automatic Transmission
Fuel consumption	at 90 km/h	9,7	10,0
in 1/100 km	at 120 km/h	12,8	12,6
(according to ECE A 70)	city conditions	19,7	18,2
Oil consumption (approx.)	31/2 pts/1000 miles		
Max. permissible engine speed	6500 - 4 % governor built into distributor		
Spark plugs	Bosch W 7 D (W175 T 30), Beru 14-7 D (175/14/3 A)		
Spark plug gap	0,7 mm (,28 ins)		
Battery	12 V, 88 Ah		
Alternator	1260 W/90 A AC		
Firing order	1 - 3 - 7 - 2 - 6 - 5 - 4 - 8		
Ignition timing	26° before T.D.C. at 3000 r.p.m, with distributor vacuum disconnected (23° before T.D.C. at 3000 r.p.m, with distributor vacuum disconnected, for vehicles with Australian specifications)		
Fan belt	Alternator 9,5 x 875 LA; cooling fan and air pump 12,5 x 1040 LA-FD moulded tooth; air conditioning pump 12,5 x 1125 LA; Servo pump 12,5 x 975 LA		
Valve clearance	self-adjusting hydraulically operated		

Engine construction

Configuration	8 cylinders in V configuration
Work cycle	4 stroke otto-cycle
Cooling	water-cooled
Lubrication	pressure-fed from sump
Cylinder block and head	Light metal alloy
Valve operation	2 over head camshafts
Camshaft drive	Toothed V-belt
Crankshaft	Forged
Fuel supply	electric pump
Fuel injection system	K-Jetronic

Power transmission

	No. of teeth	Gearbox ratio	Total ratio	Automatic gearbox ratio
1st gear	$\frac{32 \cdot 44}{23 \cdot 17}$	3.6010	9.9028	2.306:1
2nd gear	$\frac{32 \cdot 39}{23 \cdot 22}$	2.4664	6.7826	1.460:1
3rd gear	$\frac{32 \cdot 34}{23 \cdot 26}$	1.8194	5.0033	1 :1
4th gear	$\frac{32 \cdot 28}{23 \cdot 29}$	1.3433	3.6942	
5th gear	$\frac{1}{1}$	1	2.7500	
Reverse	$\frac{32 \cdot 50}{23 \cdot 22}$	3.1621	8.6957	1.836:1
Back axle ratio	$\frac{33}{12}$		2.7500	2.750:1
Clutch	double dry plate			
Power transmission	Half shafts with double C.V. joints to rear wheels			

Tyres, Rims, Wheel adjustment

Summer	tyres.....	225/50 VR 16 on 7 J x 16 H 2 rims
Winter	tyres.....	185/70 R 15 M+S 90 Q or T on 7 J x 15 H 2 rims or 205/55 R 16 M+S 88 Q or T on 7 J x 16 H 2 rims
Collapsible tyre.		165-15 4 PR 83 P on 5 J x 15 H 2 rim, max. speed 100 km/h
Tyre pressure (cold tyres).		2,5 bar (36 psi) front, 3,0 bar (44 psi) rear, 2,2 bar (32 psi) for space saver tyre
Snow chains.		Fitting is possible only on the driven wheels for all given tyre sizes.
Wheel camber*.		Front -30'±10'. Rear -40'±10'. Max. difference left to right 10'
Toe-in*.		Front 0°±5' under 150 N (33 lb) pressure. Rear +10'±5' per wheel
Castor*.		3°30'±15' difference left to right max. 20'
Angular difference between wheels.		at 20° steering lock -1°±20'

* Vehicle unladen as specified by DIN (vehicle empty, but with a full tank)

Weights

Unladen weight as spec, by DIN.	1450 kg (3190 lbs)	up to 1540 kg; including extras; the loading capacity is reduced.
Max. permissible weight.	1870 kg (4114 lbs)	accordingly.
Max. axle load, front*.	900 kg (1980 lbs)	
Max. axle load, rear*.	1100 kg (2310 lbs)	
Permissible trailer weight (unbraked)**.	750 kg (1650 lbs)	
Permissible trailer weight (braked)**.	1600 kg (3520 lbs)	
Permissible roof-rack load***.	75 kg (165 lbs)	
Permissible trailer-nose weight.	50 kg (110 lbs)	
Total perm. pulling weight (vehicle+trailer)	3470 kg (7634 lbs)	

* Do not exceed max. permissible weight.

** Gradient up to 12%

*** 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).

Performance*

Manual gearbox

Automatic gearbox

Maximum speed.	250 km/h (155 m.p.h.)**	245 km/h (152 m.p.h.)*
Acceleration 0-62 m.p.h. (0-100 km/h).	6,6 secs.	7,2 secs.
Standing start kilometer.	25,9 secs.	26,8 sees.

* Measured at curb weight to DIN, with vehicle carrying half payload and without extras which diminish performance.
** The top speed of vehicles which have no spoiler is 5 km/h (3 m.p.h.) lower.

Hill climbing performance

Manual gearbox

Automatic gearbox

1st gear.	approx. 70 %	approx. 43 %	63 %
2nd gear.	approx. 44 %	approx. 22 %	36 %
3rd gear.	approx. 30 %	approx. 13 %	24 %
4th gear.	approx. 19 %		
5th gear.	approx. 12 %		

* Short duration performance (calculated performances by DIN rating and half loaded vehicle).

Brake system

Hydraulic dual circuit system each circuit working on diagonally opposed wheels
Disc brakes front and rear
Pneumatic brake booster
Mechanical handbrake to rear wheels only

Filling capacities

Engine	ca. 7,5 liters (the criterion is the dipstick). The difference between the Max. and Min. marks on the dipstick is ca. 1,5 liter. Only use oils tested and recommended by Porsche. Your authorized dealer will gladly advise you.
Cooling system including heating.	ca. 16 liters of cooling fluid; factory filling frost protection down to -30° C (northerly lands -40° C). Use only specially developed anti-freeze and anticorrosion agents for light-alloy engines and radiators, which have been approved by Porsche. Your authorized dealer will be glad to advise you.
Manual gearbox with differential.	approx. 3,8 liters hypoid gear oil SAE 75 W-90 of AP classification GL 5 (Mil-L 2105 B). When multi-grade gear oils are not available use ATF (Dexron).
Automatic transmission with torque converter..	Total capacity of system: ca. 6 liters (1 1/3 Imp. galls.). After oil change 5,5 liters (1 1/4 Imp. galls.) ATF (Dexron).
Differential of automatic transmission.	ca. 2 liters hypoid gear oil SAE 90 of API classification GL 5 (Mil-L 2105 B).
Powersteering.	ca. 0,7 liter hydraulic fluid ATF (Dexron).
Fuel tank.	ca. 86 liters incl. 8 liters reserve (ca. 19 Imp. galls, incl. 7 Imp. qts. reserve). Use premium petrol, 98 octane (RON).
Brake fluid reservoir.	ca. 0,2 liter (ca. 1/3 pint). Only use brake fluid conforming to specification SAE J 1703 or DOT 3.
Screen and headlight washers.	ca. 8,0 liters (ca. 2 Imp. galls.).
Concentrated wash system.	ca. 0,6 liter (ca. 1 pint). Use only "Porsche special silicone remover".

Cooling system mixing chart

(Average values)

Anti-freeze-Water	Temp, down to	Anti-freeze	Water	Anti-freeze	Water
	-30° C	45 %	55 %	7,2 liters/6,3 Imp. qts.	8,8 liters/7,7 Imp.qts.
Consult your authorized dealer on the approved anti-freeze mixtures.	-35° C	50 %	50 %	8,0 liters/7,0 Imp. qts.	8,0 liters/7,0 Imp.qts.
	-40° C	55 %	45 %	8,8 liters/7,7 Imp. qts.	7,2 liters/6,3 Imp.qts.

Motor Oils

Use only branded HD oils which satisfy the API classification API SE or SF for gasoline engines. These classifications are often given together with the classifications for diesel engines, e. g., SE/CC, SF/CC or SF/CD.

Single-grade, multigrade and fuel-economy oils can be mixed provided the viscosity grades correspond to outdoor temperatures.

Single-Grade Oils

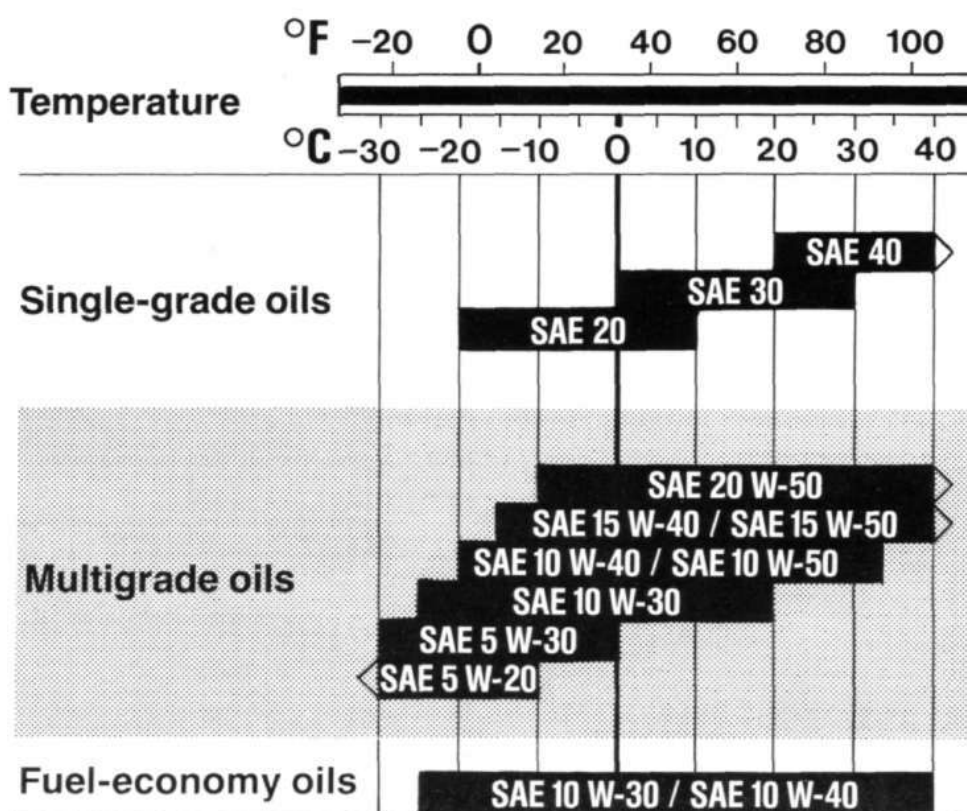
Single-grade oils may only be used when multigrade oils are not available and the car is being used under normal conditions. To prevent damage, the oil must be changed as required when temperatures change considerably.

Multigrade Oils

The oil change intervals given in the service schedule apply when multigrade oils are used. For all-season use only the multigrade oils indicated the table opposite may be used, in accordance with prevailing air temperatures.

Fuel-economy Oils

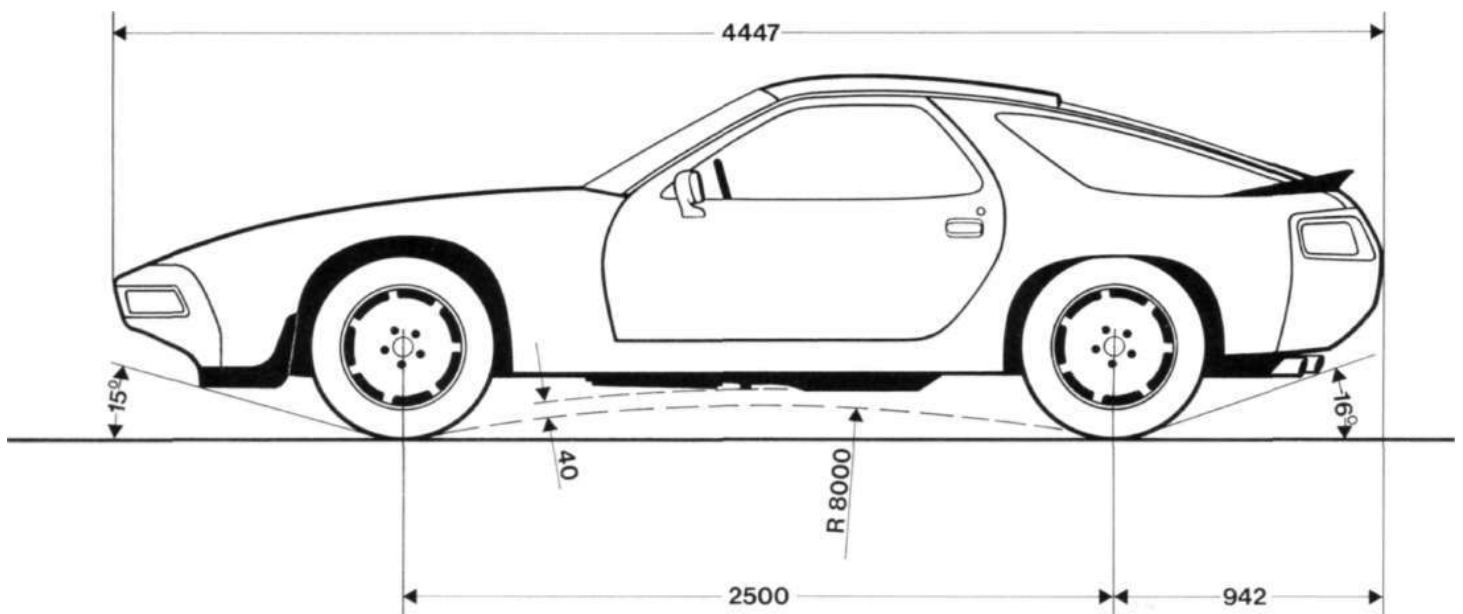
In addition to single-grade and multigrade oils, "fuel-economy" oils are available (developed for all-year round use). Before using these unconventional oils, consult your authorized Porsche dealer.



Dimensions

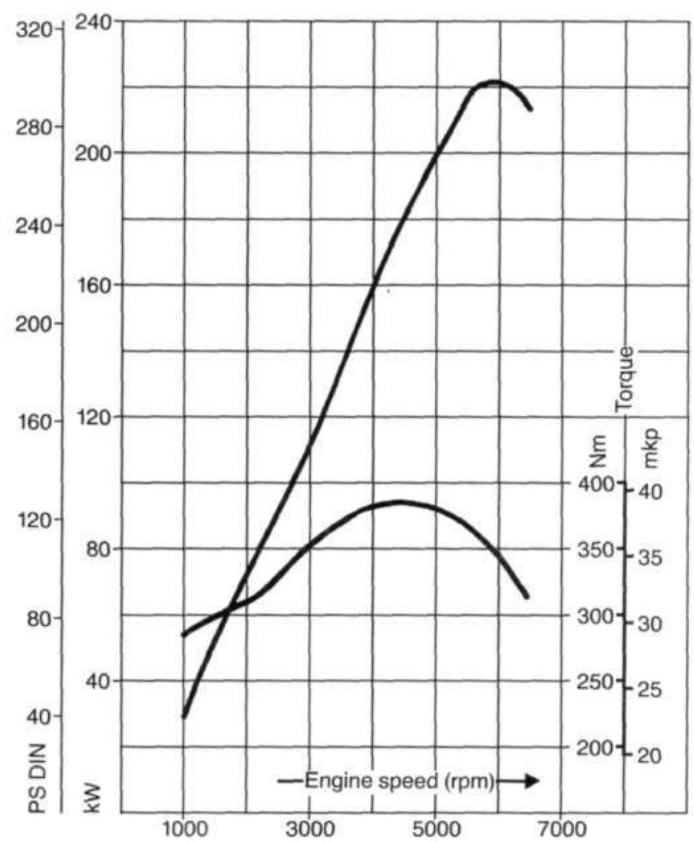
(with maximum permitted load)

Wheelbase	2500 mm (98.42 ins)	Overall width	1836 mm (72.28 ins)
Front track	1552 mm (61.10 ins)	Height (unladen)	1282 mm (51.47 ins)
Rear track	1529 mm (60.20 ins)	Ground clearance	120 mm (4.72 ins)
Overall length	4447 mm (175.07 ins)	Turning circle (approx.)	11.5 m (37 ft 7 ins)



Full-power Curves

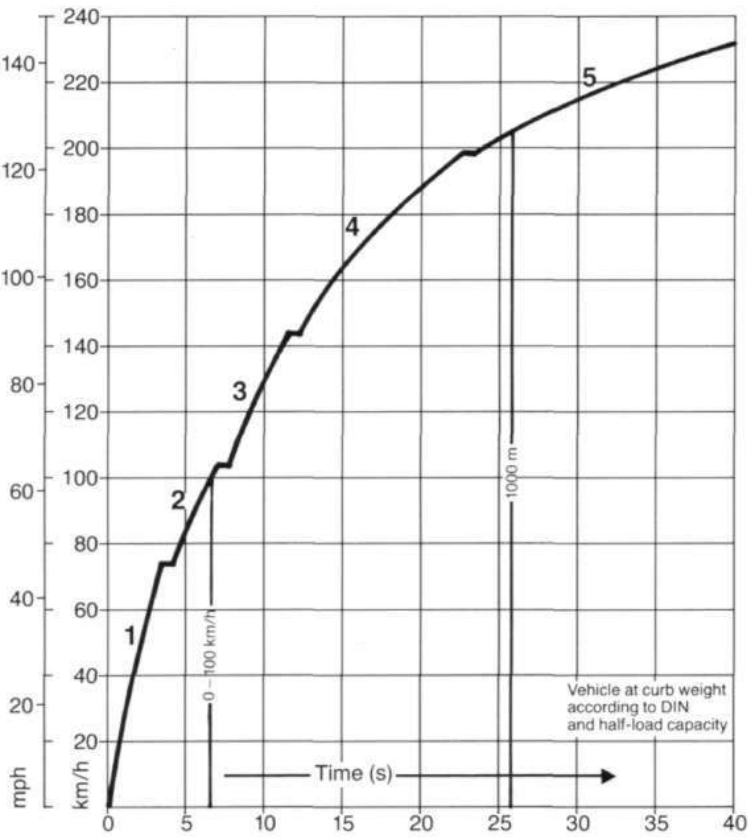
9285



Acceleration Curve

Manual gearbox

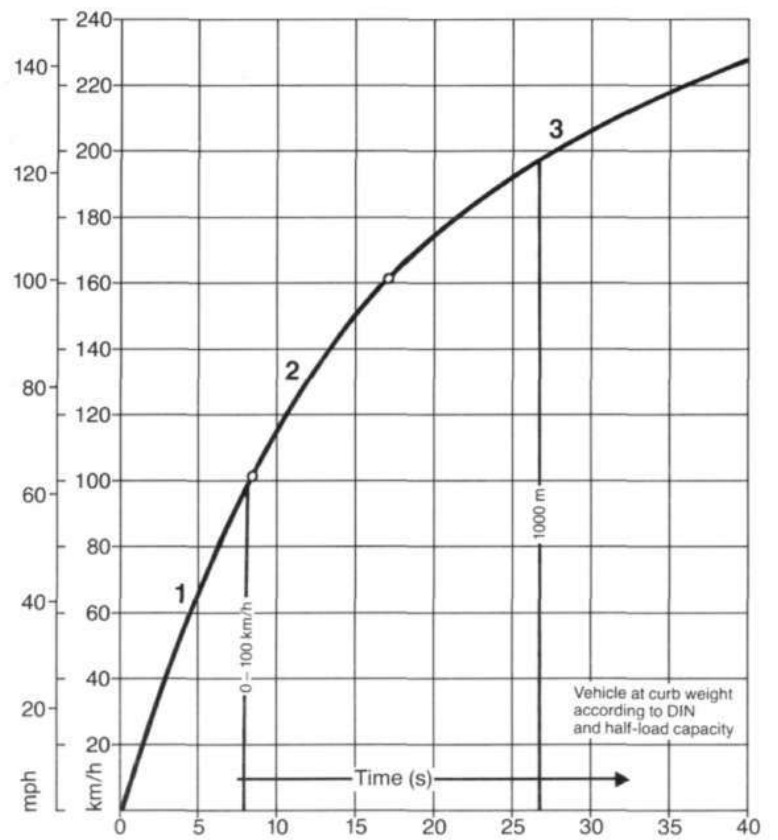
9285



Acceleration Curve

Automatic

9285

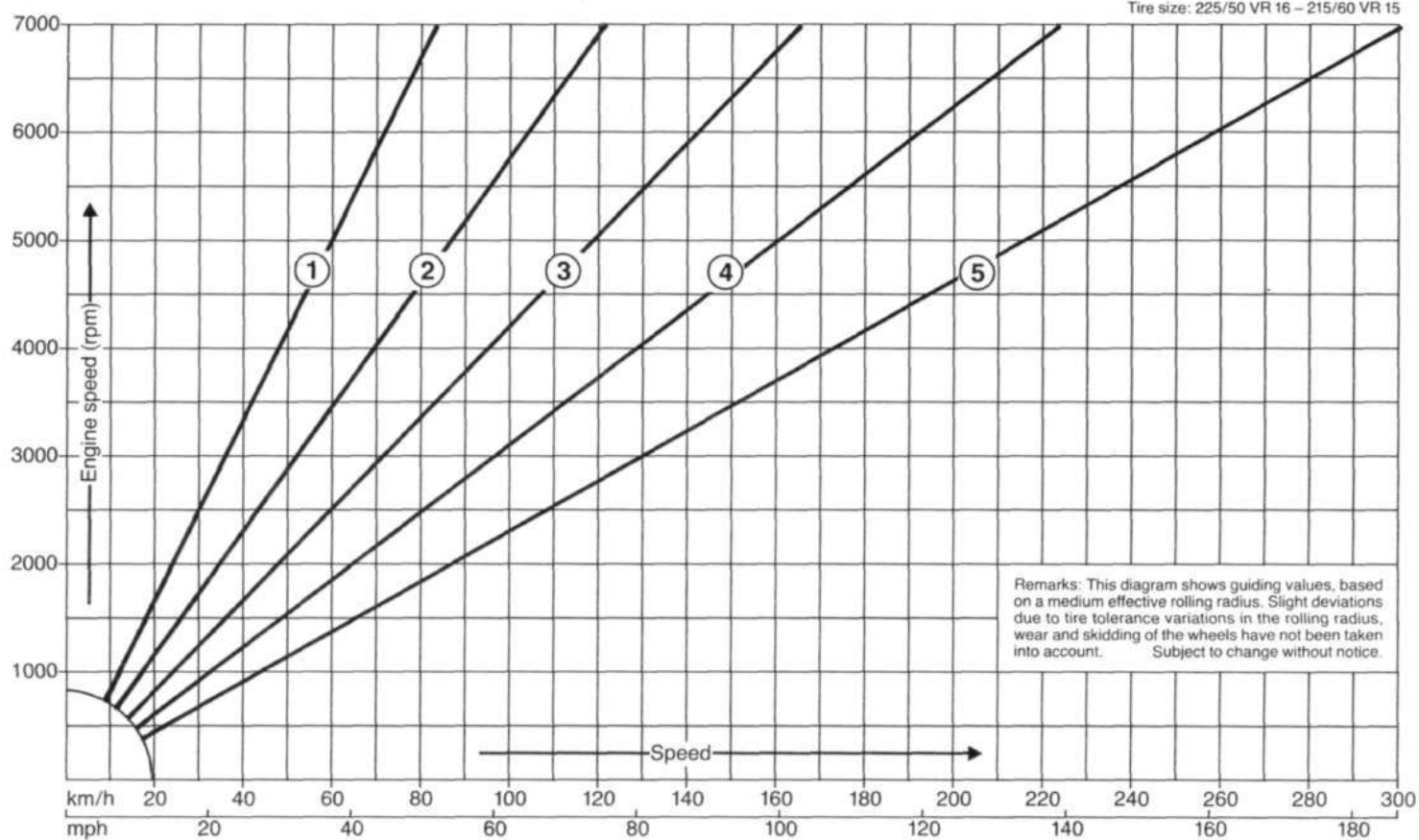


Transmission Diagram

Manual gearbox

9285

Tire size: 225/50 VR 16 – 215/60 VR 15

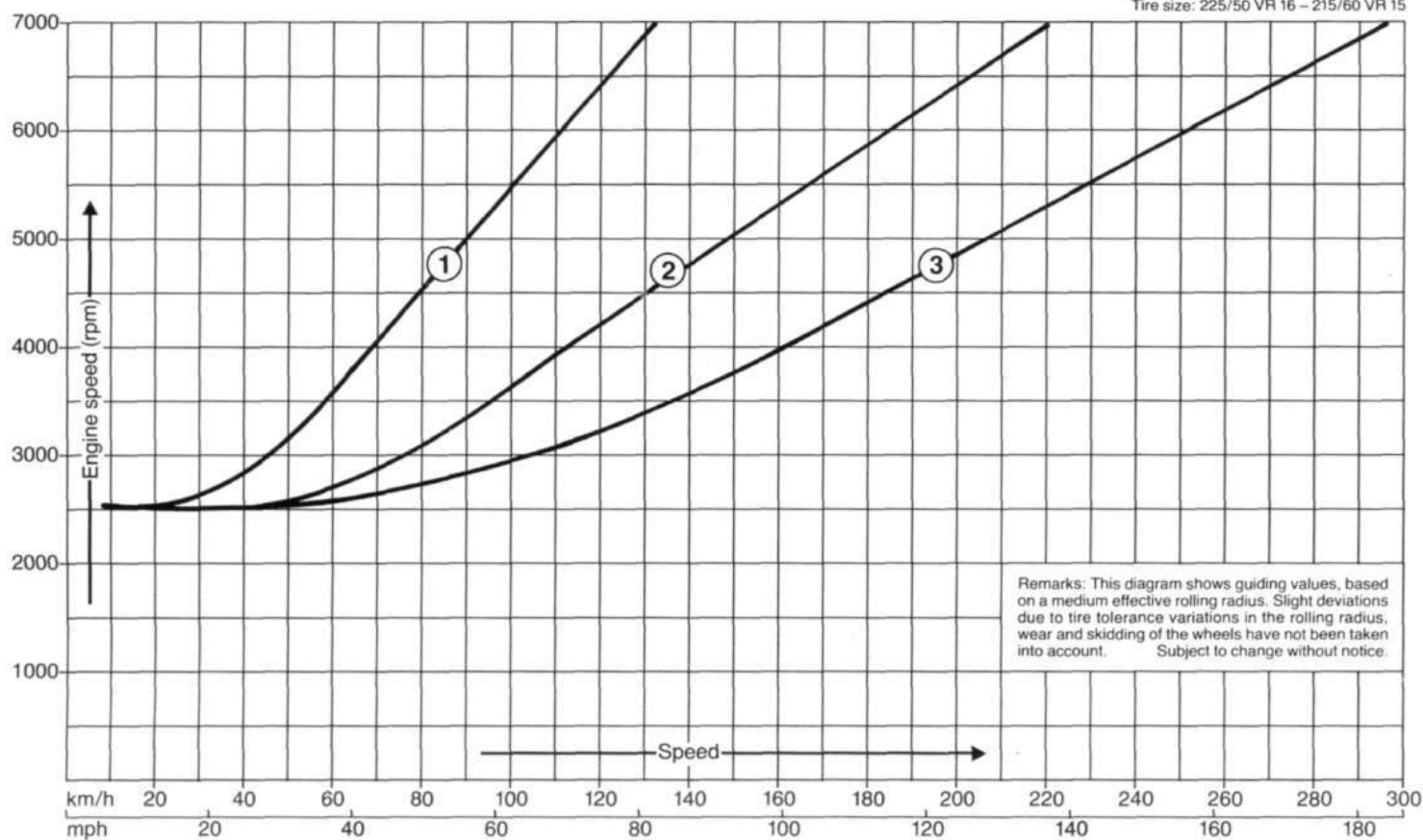


Transmission Diagram

Automatic

928S

Tire size: 225/50 VR 16 – 215/60 VR 15



PORSCHÉ

928 S

Maintenance Record

Dear Owner,

Your vehicle was carefully assembled at the factory by experienced personnel. It is reliable and high spirited, and will provide utmost satisfaction, whether used for private or business purpose; for long journeys or for driving as a sports car.

This **Maintenance Record** will always show the care your vehicle has received, if you continue to have the inspection and services carried out regularly, and recorded here, after, as well as during the guarantee period.

A world wide service organisation is at your disposal.

What is the purpose of the green cards?

By change of address or change of ownership, you are requested to completely fill out the customer card, and send it to us. Your new address should also be simultaneously entered in the next page.

It is important for the customer **service workshop**, that the correct data is on the card, thereby facilitating the processing of your requirements.

With the properly filled out **customer cards**, we can keep our customer files up to date. We are then in the position to stay in contact with our customers, and send them any useful information.

We thank you in advance for your assistance.

Dr. Ing. h.c. F. Porsche Aktiengesellschaft

Delivered on:

Dealer's stamp

Chassis no.

[illegible]

Model no.

--	--	--	--	--	--

Engine no.

--	--	--	--	--	--	--

Paint code/
interior trim

--	--	--	--

Optional
equipment

Surname, Christian name

House no., StreetPost Code, Town

Surname, Christian name

House no., StreetPost Code, Town

Surname, Christian name

House no., StreetPost Code, Town

Surname, Christian name

House no., StreetPost Code, Town

Maintenance schedule

The recommended service intervals apply under normal driving conditions and do not take into account any optional equipment. Dusty areas require more frequent checking and possible replacement of the air filter element. Tyre, clutch and brake wear as well as the condition of the engine oil are all largely dependant on driving habits, and are also affected by arduous operating conditions; this could mean shorter intervals between services and replacement of parts. This applies naturally, also for the battery.

All the moving parts on the chassis and suspension are also subject to an running in period, and it is therefore recommended that the wheel and suspension alignment be checked after the first 5000 km (3000 miles).

The vehicle should be serviced at least once a year. Corrosion prevention treatment should be carried out before the onset of winter. The brake fluid and the cooling fluid should be changed every 2 years.

500-2000 km (300-1200 miles)		then at and every 20000 km (12000 miles)
	Renew air filter element. Clean the flame guard cartridge in the crankcase breather and check all hose connections. Renew filter element in the auxiliary air pump.	
	Renew sparking plugs.	
	Check cooling fluid level (frost protection and corrosion resistance) cooling and heater systems. Check for leaks and exterior blocking of the radiator.	
	Check accelerator cable for smooth action; grease return spring. Grease the headlight operating rods.	
	Check brake fluid level, and thickness of disc pads. Check free play in the pushrod between the brake pedal and the brake servo unit. Check the free play in the footbrake pedal and the handbrake. Visually check the brake pipes and all hoses and connections for damage or corrosion as well as leaks. Check braking system with a test drive or on a brake test machine.	
	Check condition and tension of fan belts and toothed belt. New fan belts must be re-tensioned after the first 1000 km (600 miles).	
	Check free play in clutch and wear of clutchplate (not at 2000 km, 1200 miles). Check clutch system for leaks.	

500-2000 km
(300-1200 miles)

then at and every
20000 km (12000 miles)

Change engine oil and filter.

Manual gearbox: Change oil

every 80000 km (50000 miles)

Manual and automatic gearboxes: Check oil level

Automatic gearbox: Change oil, replace filter

every 40000 km (24000 miles)

Automatic gearbox: Check level of hypoid oil in differential housing, oil change every 80000 km

Check engine and gearbox for leaks.

Steering: Check tightness and function of all connections to steering gear, trackrods, and idler arms and also check the condition of the protecting covers.
Check fluid level in steering servo unit, and check unit for leaks.

Exhaust system: Check flanges for proper seating.

Check for leaks in exhaust system.

Check play in front wheel bearings.

Fuel system: Renew fuel filter and check fuel lines for leaks.

Check tyre pressure.

Check ignition timing.

Check carburation with exhaust gas analyzer.

Check battery acid level. Check headlight adjustment and function of blinker, brake and back lights, as well as wipers and horn. Check washer jets and fluid level in wash system (anti-freeze). Top up wash system solution.

Treat the door, hood and roof seals after removing the ground away rubber particles. Check door check-straps.

Check function of central warning unit.

Check function of heating, ventilation and air conditioning, both driver and passenger sides.

PORSCHE

Long-Life Guarantee

for your Porsche vehicle

This vehicle has been built using aluminum as well as galvanized steel sheet for the body and by applying the latest anti-corrosion techniques. This means that the appearance of your car will not be detrimentally affected by climatic conditions or chemical action for many years to come, provided you observe our **"Car Care Instructions"**.

Therefore Porsche grants you a

7 Year

guarantee against rust holes in the bodyshell of your vehicle as per the terms on the next page.

Dr. Ing. h. c. F. Porsche Aktiengesellschaft



Porsche Long-Life Guarantee

1. Porsche offers a guarantee against rust holes in the bodyshell of the vehicle for a period of seven years from the date of delivery. (Long-Life guarantee).
2. The guarantee is valid only if the vehicle is properly maintained (paintwork, original underseal and protective coatings). Any damage to the paintwork or protective coatings must be repaired properly without delay.
3. The Long-Life guarantee does not apply to rust holes which occur primarily as a result of traffic accident or mechanical damage to the bodywork, paintwork or protective coatings. All body repairs must be performed in accordance with Porsche's specific instructions regarding bodywork, paintwork, corrosion-proofing and preservation.
4. Prior to starting repair work under this guarantee, a person authorized by Porsche must inspect the vehicle.
5. Unless stipulated otherwise in the foregoing, the conditions of guarantee apply in accordance with the "Porsche Conditions of Sale" upon which the purchase agreement between the first purchaser and the authorized Porsche dealer were based.

Guarantee work

The guarantee is based on the Conditions of Guarantee which form a part of the Purchase Agreement concluded between the initial purchaser and the authorized Porsche dealer. Claims under the guarantee shall only be made upon the vendor. The guarantee for your car begins on the date of delivery to the initial purchaser and is valid for one year.

If you have to take advantage of the guarantee, even though your car has been carefully maintained, this Passport to Service must be presented to the service organization, approved by Porsche, to which the car is taken.

It is in your own interest to have your vehicle serviced and maintained in accordance with the guidelines in this manual and maintenance record. Proper car and a complete record showing that all the specified servicing has been carried out by approved workshops are the prerequisites for upholding the validity of guarantee claims in respect of damage to parts subject to maintenance work or servicing.

Please note that all matters relating to your vehicle can be processed quickly and correctly only if you quote the engine and chassis serial numbers.

Maintenance and lubrication

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

Please present this maintenance record to your own or any appointed Porsche dealer at home or abroad, and you will then be assured that the tasks prescribed in the maintenance or lubrication schedules will be carried out to our standards.

Cleanliness is a prerequisite to high quality work.

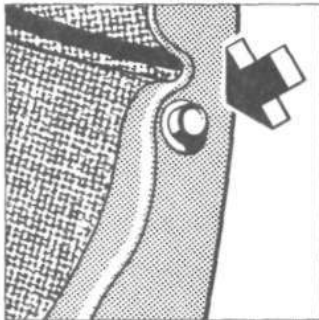
Short Tips for Servicing

Because your service station attendant may not be familiar with your Porsche we have listed the basic information necessary to carry out service work. More detailed information can be found in the drivers manual.



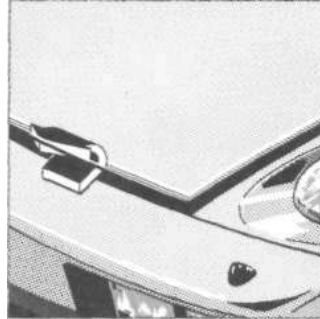
Seat Adjustment

Pull the lever at the front outside of the seat upwards.



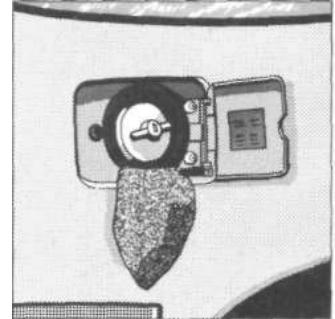
Backrest

To fold the backrest push in the knob on the side of the backrest



Engine Compartment Hood

To release the hood pull the lever on the left hand side under the instrument panel. Release the safety catch by pressing the lever upwards.



Fuel tank

Use only with an Octane rating of 98 or higher. The tank holds 86 liters (19 gallons) of which approx. 8 liters (7 Imp. qts.) are reserve.

Battery

The battery is mounted under the rear of the vehicle and is attainable through a cover in the spare wheel well. Check that the battery acid in each individual cell is sufficient. Never disconnect the battery while the engine is running otherwise the alternator may be damaged. Disconnect the battery before charging with a fast-charge unit.

Fuses, Relays

The Main Fuse Box is located in the passengers footwell under the floor panel.



Engine Oil Level

The oil level must be between the max. and min. marks on the dipstick. The difference between the two marks is approx. 1.5 liter.

Engine

Use only HD Brand oils for Otto engines according to API classification SE or SF. For all years round driving use Multi-Grade oils. When using Single-Grade oils attention must be paid to the additional seasonal oil changes. Filling capacity is 7.5 liters. Check the oil level on the dipstick.

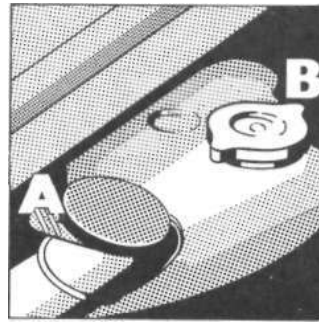
Manual Gearbox

For gearboxes with gear oil API classification GL 5 (Mil-L 2105 B) use SAE 75 W-90 viscosity. Filling capacity approx. 3.8 liter.

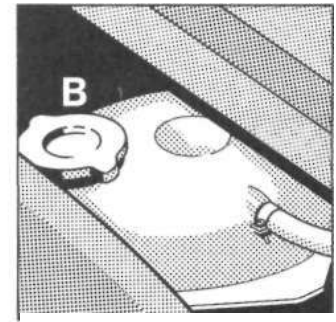
Automatic Transmission

For gearboxes with torque converter only use the oils recommended in the table "Filling quantities". Filling capacity approx. 5.5 liter.

Caution: Never overfill, check the oil level in the reservoir. The difference between the two marks is approx. 0.2 liter. The differential holds approx. 2 liter hypoid gear oil SAE 90 of API classification GL 5 (Mil-L 2105 B).



Left-hand drive



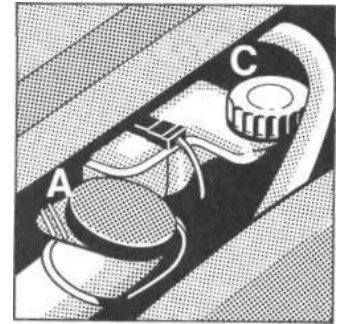
Right-hand drive

Cooling Fluid (B)

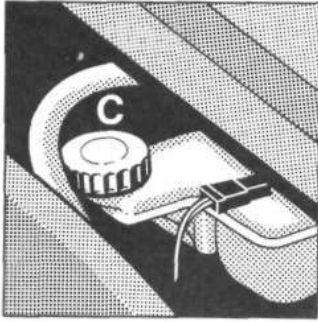
The cooling fluid level must reach the level mark on the expansion tank (engine cold). Caution: When the engine is hot open the filler cap to the first stage to release pressure before removing. Danger of scalding.

Screen wash Water Container (A)

The container for the screen and headlamp washer fluid is mounted on the right hand side of the engine compartment.



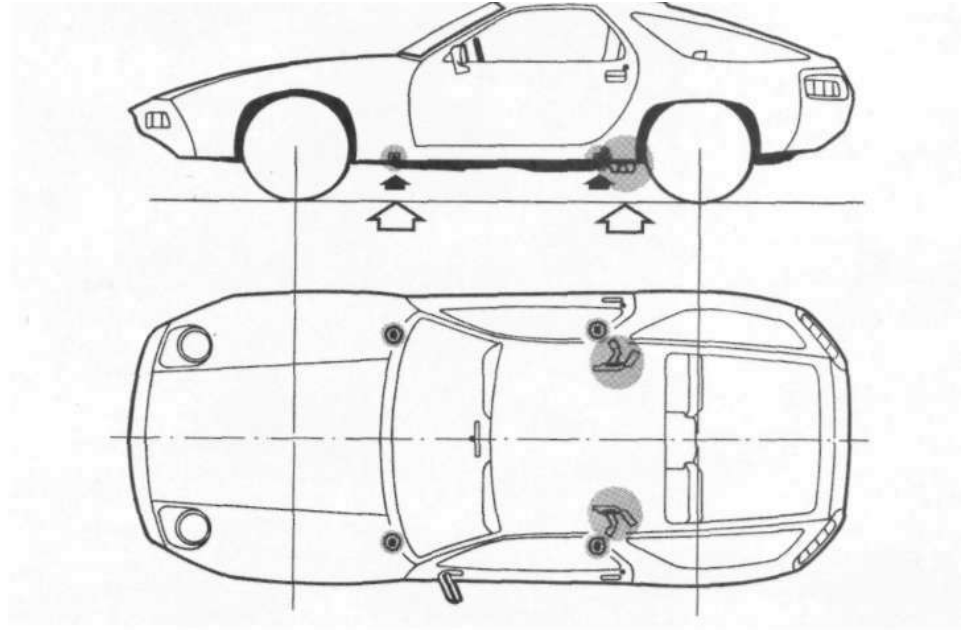
Right-hand drive



Left-hand drive

Brake fluid (C)

The brake fluid reservoir is mounted in the engine compartment. Only use original brake fluid or brake fluid of SAE J 1703 (DOT 3) specification.



Jacking Points:

Black arrow: Jacking points for car jack
 White arrow: Jacking points for hoists and workshop jacks.

Spare Wheel In the luggage compartment under a cover plate.

Car Jack In the spare wheel well in luggage compartment. Car jack is only to be used for changing wheels.

Tool Kit In the tool tray fitted in the back panel of the vehicle.